APPENDIX A

Data Quality Assurance Review Memoranda

Quality Assurance Review

Green/Duwamish Water Quality Assessment
Storm and Baseflow Sampling for Metals
Storm Sampling Events #8 through #13
Baseflow Sampling Events #7 through #11

Prepared by: _____
Scott Mickelson
Senior Water Quality Project Manager
King County Department of Natural Resources and Parks
Marine and Sediment Assessment Group

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This quality assurance (QA) review has been prepared to provide data users with a tool for evaluating the usability of metals data from water samples collected for the Green/Duwamish Water Quality Assessment. These data were generated from six storm and five baseflow sampling events conducted between December 2002 and November 2003. The QA review includes a summary table of quality control (QC) issues on a metal-by-metal basis followed by a more in-depth narrative discussion by sampling event. Data usability has been evaluated based on the QC issues of completeness, field contamination, laboratory contamination, accuracy, precision, bias, and sample handling. Metals analyses discussed in this QA review were performed by the King County Environmental Laboratory.

Please note that this QA review is for all metals analyses except ultra-trace level mercury performed by cold vapor atomic fluorescence (CVAF). CVAF analysis of total and dissolved mercury was performed by Frontier Geosciences, a contract laboratory to the King County Environmental Laboratory. This QA review narrative only addresses the QC issues of completeness and field contamination for CVAF mercury analysis. The remainder of the QC information may be found in the individual case narratives provided by Frontier Geosciences, which are included as Appendix A to this QA review.

Completeness
Each data set has been reviewed in terms of "completeness" or the number of parameters reported compared to a standard suite of analytes proposed for the project. The standard suite of analytes for this project includes 49 parameters; total and dissolved aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, silver, sodium, thallium, vanadium, and zinc, along with hardness.

Field Contamination
Each data set has been reviewed to assess the potential impact of field contamination on sample analytical results. Analyte concentrations detected in field blanks have been compared to concentrations detected in associated samples.

Laboratory Contamination

Each data set has been reviewed to assess the potential impact of laboratory contamination on sample analytical results. Laboratory contamination is assessed by reviewing analytical results for *method blanks*. A method blank is an aliquot of clean reference matrix, such as de-ionized, distilled water for water samples, which is processed through the entire analytical procedure. Analysis of method blanks is used to evaluate the levels of contamination that might be associated with the processing and analysis of samples. Method blanks include *filter blanks* for dissolved metals.

When an analyte is detected in a method blank, associated sample data for that analyte are qualified with a "B" flag if the reported sample concentration is less than 10 times the concentration detected in the method blank. Although these sample data are reported as positive results, they should considered "less than the method detection limit" and the reported numeric method detection limit should be raised to a value that is 10 times the analyte concentration detected in the method blank.

Accuracy, Precision, and Bias

Accuracy is an estimate of the difference between the true value and the determined mean value. The accuracy a result is affected by both systematic and random errors. Precision is the agreement of a set of results among themselves and is a measure of the ability to reproduce a result. Bias is a measure of the difference, due to a systematic factor, between an analytical result and the true value of an analyte. Accuracy, precision, and bias for analytical chemistry may be measured by one or more of the following QC procedures.

- A spike blank is an aliquot of clean reference matrix such as de-ionized, distilled water for water samples, to which a known concentration of target analyte(s) has been added. The spiked aliquot is processed through the entire analytical procedure. Analysis of spike blanks is used as an indicator of method performance and can be used in conjunction with matrix spike results as an indicator of sample matrix effects.
- A laboratory control sample is a solution of known analyte concentration(s) that is prepared separately from calibration standard solutions. An aliquot of the solution is processed as a sample through the complete analytical procedure. Analysis of laboratory control samples is used as an indicator of method accuracy and long-term analytical precision.
- A standard reference material is a matrix specific material of known analyte concentration(s) that is certified by an outside source. An aliquot of the standard reference material is processed as a sample through the complete analytical procedure. Analysis of standard reference materials is used as an indicator of method accuracy.
- A matrix spike is a known concentration of a target analyte(s) that is introduced into a second aliquot of a sample that has been submitted for analysis. The spiked sample is processed through the entire analytical procedure. Analysis of matrix spikes is used as an indicator of method accuracy as well as sample matrix effect on the recovery of target analyte(s).
- A laboratory duplicate is a second aliquot of a sample submitted for analysis, processed concurrently and identically with the original sample. Analysis of the laboratory duplicate is used as an indicator of method precision and laboratory subsampling procedures. The laboratory duplicate can also be used to provide information regarding the homogeneity of the sample matrix.

The King County Environmental Laboratory does not assign qualifier flags to analytical data based on issues of accuracy, precision, and bias. The issues, and their impact on data usability, are discussed in this narrative.

Sample Handling Issues

The King County Environmental Laboratory qualifies analytical data with an "H" flag when one or more sample handling criteria have not been met. These sample handling criteria may include: Incorrect sample containers; exceedence of the holding time for sample filtering or preservation; and exceedence of the holding time for sample analysis.

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The following table summarizes QC issues on a metal-by-metal basis and provides a thumbnail assessment of data usability. Full descriptions of QC issues, summarized by sampling event, are provided in the narratives following the table.

Summary Table of QC Issues

Metal	Total	Dissolved
Aluminum	Elevated matrix spike recoveries associated with samples L26466-1 through -19 (Storm #8) and L26567-1 through -11 and L26568-1 through -6 (Baseflow #7). These sample data possibly biased high. Depressed matrix spike recovery associated with samples L27823-1 through –11 and L27825-1 through -6 and field blanks L27823-12 through –14 (Baseflow #9). These sample data possibly biased low. All other data may be used as reported.	No QC issues. All data may be used as reported.
Antimony	Data incomplete, not reported with every sample set. All available data may be used as reported.	Data incomplete, not reported with every sample set. All available data may be used as reported.
Arsenic	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Barium	Elevated matrix spike recovery associated with samples L28444-1 through -10 and field blanks L28444-11 through -13. These sample data possibly biased high. All other data may be used as reported.	No QC issues. All data may be used as reported.
Beryllium	Data incomplete, not reported with every sample set. All available data may be used as reported.	Data incomplete, not reported with every sample set. All available data may be used as reported.
Cadmium	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Calcium	No QC issues. All data may be used as reported.	Elevated relative percent difference for laboratory duplicate associated with samples L26567-1 through -11 and L26568-1 through -6. These sample data should be considered estimated values. All other data may be used as reported.
Chromium	Detected frequently in field blanks when analyzed by low-level ICP-MS (9 out of 11 sampling events). See narratives (under "field contamination") for sample-specific information. All regular ICP-MS data may be used as reported.	Detected in laboratory filter blanks associated with samples L27030-1 through -12 (Storm #11) and L29243-1 through -10 (Baseflow #11). All of these sample data flagged "B" and should be considered "less than the method detection limit" with numeric detection limit raised to 10 times the concentration detected in the filter blank (see narratives). All other data may be used as reported.
Cobalt	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.

Metal	Total	Dissolved
Copper	Detected in one field blank associated with samples L27030-1 through -12 (Storm #11). See narrative for specific information. All other data may be used as reported.	No QC issues. All data may be used as reported.
Iron	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Lead	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Magnesium	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Manganese	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Mercury	Detected frequently in field blanks when analyzed by CVAF (8 out of 11 sampling events). See narratives (under "field contamination") for sample-specific information. All CVAA data may be used as reported with the following exception: mercury analyzed by CVAA was detected in one field blank associated with samples L26885-1 through -40 (Storm #10). See narrative for implications.	No QC issues. All data may be used as reported.
Molybdenum	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Nickel	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Potassium	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Selenium	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Silver	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Sodium	No QC issues. All data may be used as reported.	No QC issues. All data may be used as reported.
Thallium	Data incomplete, not reported with every sample set. All available data may be used as reported.	Data incomplete, not reported with every sample set. All available data may be used as reported.
Vanadium	Data incomplete, not reported with every sample set. All available data may be used as reported.	No QC issues. All data may be used as reported.
Zinc	Detected in two field blanks associated with samples L27030-1 through -12 (Storm #11). See narrative for specific information. All other data may be used as reported.	Detected in laboratory filter blanks for 4 of 13 sampling events when analyzed by low-level ICP-MS. All sample results flagged "B" should be considered "less than the method detection limit." See narratives (under "laboratory contamination") for sample-specific information on adjusted method detection limits.

Storm Sampling Event #8 – December 11 through 13, 2002

Samples L26465-3, -4, -8, -9, -10, -11, -12, -14; L26466-1 through -40; L26467-1 through -12
Field Blanks L26465-15 through -17; L26466-41 through -44

Completeness

Total and dissolved thallium have not been reported for sample L26465-10. A total of 47 parameters (23 total metals, 23 dissolved metals, hardness) are reported for this sample. Data are 100% complete for the remainder of sample set L26465 with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness).

Dissolved metals other than mercury have not been reported for sample L26466-33. A total of 26 parameters (24 total metals, dissolved mercury, hardness) are reported for this sample. Data are 100% complete for the remainder of sample set L26466 with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness).

Data are 100% complete for sample set L26467 with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness).

Data are 100% complete for field blank sets L26465 and L26466 with 24 total metals reported for each field blank.

Field Contamination

Field blank results are less than the method detection limit with the following exception.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.00014, 0.00014, and 0.00016 mg/L in field blanks L26465-15, L26465-16, and L26465-17, respectively. These field blanks are associated with sample set L26465. Total chromium concentrations in these samples range from 0.00019 to 0.00398 mg/L or approximately 1 to 25 times the highest field blank concentration.

Laboratory Contamination

Laboratory method blank results are less than the method detection limit with the following exception.

- Dissolved zinc (analyzed by low-level ICP-MS) was detected at a concentration of 0.00061 mg/L in the filter blank associated with sample L26465-10. The dissolved zinc sample concentration of 0.0589 mg/L is greater than 10 times the concentration detected in the filter blank and may be considered valid as reported.

Accuracy, Precision, and Bias

Spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits with the following exception.

- The 140% recovery for one ICP-MS total aluminum matrix spike exceeds the upper control limit of 120%. This matrix spike is associated with samples L26466-1 through -19. Total aluminum results for these 19 samples may be biased high.

Sample Handling Issues

All analytical data for samples L26466-1, -2, -7, -8, -9, -11, -12, -17, -18, -21, -22, -27, -28, -31, and -32 have been flagged “H” because sample preservation (total and dissolved metals) and filtration (dissolved metals was not completed within the recommended 24-hour hold time.

Storm Sampling Event #9 – January 3 through 5, 2003

Samples L26816-1, -2, -9, -10 -11, -12, -13, -15; L26817-1 through -40; L26819-1 through -12
Field Blanks L26816-16 through -18; L26817-41 through -44

Completeness

Data are 100% complete with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness) and 24 total metals reported for each field blank.

Field Contamination

Field blank results are less than the method detection limit with the following exceptions.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.000088, 0.000100, and 0.000095 mg/L in field blanks L26816-16, L26816-17, and L26816-18, respectively. These field blanks are associated with sample set L26816. Total chromium concentrations in these samples range from 0.000374 to 0.00314 mg/L or approximately 3.5 to 31 times the highest field blank concentration.
- Total mercury (analyzed by CVAF) was detected at concentrations of 0.00000016, 0.00000012, and 0.00000012 mg/L in field blanks L26816-16, L26816-17, and L26816-18, respectively. These field blanks are associated with sample set L26816. Total mercury concentrations in these samples range from 0.00000247 to 0.00000980 mg/L or approximately 24 to 98 times the highest field blank concentration.

Laboratory Contamination

All laboratory blank results are less than the method detection limit.

Accuracy, Precision, and Bias

All spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits.

Sampling Handling Issues

All analytical data for samples L26817-1, -2, -3, -11, -12, -13, -16, -21, -22, -23, -31, -32, and -33 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

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Storm Sampling Event #10 – January 21 through 23, 2003

Samples L26884-1, -2, -7 through -11, -13, -17; L26885-1 through -13 and -15 through -40; L26886-1 through -6 and -8 through -12
Field Blanks L26884-14, -16, -18; L26885-41 through -44

Completeness

Total and dissolved antimony have not been reported for sample set L26884. A total of 47 parameters (23 total metals, 23 dissolved metals, hardness) are reported for this sample set. Data are 100% complete for sample sets L26885 and 26886 with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness).

Total antimony has not been reported for field blank set L26884. A total of 23 total metals are reported for this field blank set. Data for field blanks L26885-41 through –43 are 100% complete with 24 total metals reported for each sample. Field blank 26885-44 includes data only for total calcium, iron, magnesium, mercury, potassium, and sodium.

Field Contamination
Field blank results are less than the method detection limit with the following exceptions.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.00014, 0.00013, and 0.00016 mg/L in field blanks L26884-14, L26884-16, and L26884-18, respectively. These field blanks are associated with sample set L26884. Total chromium concentrations in these samples range from 0.00013 to 0.00397 mg/L or approximately 1 to 25 times the highest field blank concentration.
- Total mercury (analyzed by CVAF) was detected at concentrations of 0.00000010 and 0.000000645 mg/L in field blanks L26884-16 and L26884-18, respectively. These field blanks are associated with sample set L26884. Total mercury concentrations in these samples range from 0.00000286 to 0.0000146 mg/L or approximately 5 to 24 times the highest field blank concentration.
- Total mercury (analyzed by CVAA) was detected at a concentration of 0.0000756 mg/L in field blank L26885-44. This field blank is associated with sample set L26885. Total mercury concentrations in these samples range from 0.0000050 to 0.0000964 mg/L or approximately 0.7 to 1.3 times the field blank concentration.

Laboratory Contamination
Laboratory method blank results are less than the method detection limit with the following exception.

- Dissolved zinc (analyzed by low-level ICP-MS) was detected at a concentration of 0.00019 mg/L in the filter blank associated with sample L26884-17. The dissolved zinc sample concentration of 0.00401 mg/L is greater than 10 times the concentration detected in the filter blank and may be considered valid as reported.

Accuracy, Precision, and Bias
All spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits.

Sampling Handling Issues
All analytical data for samples L26885-1, -4, -5, -6, -7, -11, -15, -16, -17, -21, -24, -25, -26, -27, -31, -33, -34, -35, -36, and -37 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

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Storm Sampling Event #11 – March 8 through 10, 2003

Samples L27030-1, -2, -4 through -10, 12; L27031-1 through -6, -8 through -27, -31 through -40; L27032-1 through –12
Field Blanks L27030-13 through -15; L27031-41 through -44

Completeness
Total and dissolved antimony have not been reported for sample set L27030. A total of 47 parameters (23 total metals, 23 dissolved metals, hardness) are reported for this sample set.

Total antimony has not been reported for samples L27031-22 through -27 and -31 through -40.
Total beryllium has not been reported for samples L27031-1 through -6 and -8 through -21.

Dissolved beryllium has not been reported for samples L27031-1 through -6, -8, -9, -11 through -16, and -21 through -23. Total and dissolved mercury have not been reported for samples L27031-8 through -10.

Total beryllium has not been reported for sample set L27032. A total of 48 parameters (23 total metals, 24 dissolved metals, hardness) are reported for this sample set.

Total antimony has not been reported for field blank sets L27030 and L27031. A total of 23 total metals are reported for both field blank sets.

Field Contamination

Field blank results are less than the method detection limit with the following exceptions.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.000087, 0.000095, and 0.000075 mg/L in field blanks L27030-13, L27030-14, and L27030-15, respectively. These field blanks are associated with sample set L27030. Total chromium concentrations in these samples range from 0.000416 to 0.00907 mg/L or approximately 4 to 95 times the highest field blank concentration.
- Total copper (analyzed by low-level ICP-MS) was detected at a concentration of 0.00032 mg/L in field blank L27030-14. This field blank is associated with sample set L27030. Total copper concentrations in these samples range from 0.000420 to 0.0102 mg/L or approximately 1.3 to 32 times the field blank concentration.
- Total mercury (analyzed by CVAF) was detected at concentrations of 0.000131, 0.00000024, and 0.00000010 mg/L in field blanks L27030-13, L26884-14, and L26884-15, respectively. These field blanks are associated with sample set L27030. Total mercury concentrations in these samples range from 0.00000174 to 0.000244 mg/L or approximately 0.01 to 1.9 times the highest field blank concentration.
- Total zinc (analyzed by low-level ICP-MS) was detected at concentrations of 0.00039 and 0.00031 mg/L in field blanks L27030-14 and L27030-15, respectively. These field blanks are associated with sample set L27030. Total zinc concentrations in these samples range 0.00058 to 0.0678 mg/L or approximately 1.5 to 174 times the highest field blank concentration.

Laboratory Contamination

Laboratory method blank results are less than the method detection limit with the following exceptions.

- Dissolved chromium (analyzed by low-level ICP-MS) was detected at a concentration of 0.000065 mg/L in the filter blank associated with sample set L27030. All samples from this set have chromium concentrations less than 10 times the filter blank concentration and have been flagged “B” These chromium results should be considered impacted by probable laboratory contamination.
- Dissolved zinc (analyzed by low-level ICP-MS) was detected at a concentration of 0.00017 mg/L in the filter blank associated with sample set L27030. Samples from this set with zinc concentrations less than 10 times the filter blank concentration have been flagged “B” and should be considered impacted by probable laboratory contamination. Samples with zinc concentrations greater than 10 times the concentration detected in the filter blank have not been flagged and may be considered valid as reported.

Accuracy, Precision, and Bias
All spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits.

Sampling Handling Issues
All analytical data for samples L27031-1, -2, -11, -17, -21, -26, -27, -31, -32, and -37 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

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Storm Sampling Event #12 – October 16 through 18, 2003

Samples L27767-1, -8 through -12, -14, -18; L27768-11 though -31, -36 through -40; L27769-1 through -7, -9 through -12
Field Blanks L27767-15 through -17; L27768-41 through -44

Completeness
Total and dissolved antimony, total and dissolved thallium, and total and dissolved vanadium have not been reported for sample set L27767. A total of 43 parameters (21 total metals, 21 dissolved metals, hardness) are reported for this sample set.

Total and dissolved beryllium have not been reported for sample set L27768. Total antimony, total molybdenum, and total vanadium have not been reported for samples L27768-25 through -31 and -36 through -40. Dissolved metals have not been reported for sample L27768-15.

Total and dissolved beryllium have not been reported for sample set L27769. A total of 47 parameters (23 total metals, 23 dissolved metals, hardness) are reported for this sample set.

Total antimony, thallium, and vanadium have not been reported for field blank set L27767. A total of 21 total metals are reported for this field blank set.

Total beryllium has not been reported for field blank set L27768. A total of 23 total metals are reported for this field blank set.

Field Contamination
Field blank results are less than the method detection limit with the following exceptions.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.000056 and 0.000054 mg/L in field blanks L27767-15 and L27767-17, respectively. These field blanks are associated with sample set L27767. Total chromium concentrations in these samples range from 0.00019 to 0.00476 mg/L or approximately 3.4 to 85 times the highest field blank concentration.
- Total mercury (analyzed by CVAF) was detected at concentrations of 0.00000020, 0.00000018, and 0.00000020 mg/L in field blanks L27767-15, L27767-16, and L27767-17, respectively. These field blanks are associated with sample set L27767. Total mercury concentrations in these samples range from 0.00000217 to 0.0000189 mg/L or approximately 11 to 95 times the highest field blank concentration.

Laboratory Contamination
All laboratory blank results are less than the method detection limit.

Accuracy, Precision, and Bias
All spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits.

Sampling Handling Issues
All analytical data for samples L27768-11, -12, -16, -17, -21, -22, -27, -28, -31, -37, and L27769-2 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

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Storm Sampling Event #13 – November 17 through 19, 2003

Samples L30141-1, -2, -5 through -9, -11; L30142-11 through –40; L30143-1 through -12
Field Blanks L30141-12 through -14, L30142-41, -42, -44

Completeness
Total antimony has not been reported for sample set L30141. A total of 48 parameters (23 total metals, 24 dissolved metals, hardness) are reported for this sample set.

Total beryllium has not been reported for sample set L30142. Dissolved beryllium has not been reported for samples L30142-11 through -16, -21 through -25, and -31 through -36.

Total beryllium has not been reported for sample set L30143. Dissolved beryllium has not been reported for samples L30143-1 through-8.

Total antimony has not been reported for field blank set L30141. A total of 23 total metals are reported for this field blank set.

Total beryllium has not been reported for field blank set L30142. A total of 23 total metals are reported for this field blank set.

Field Contamination
Field blank results are less than the method detection limit with the following exceptions.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.000069 and 0.000051 mg/L in field blanks L30141-13 and L30141-14, respectively. These field blanks are associated with sample set L30141. Total chromium concentrations in these samples range from 0.00024 to 0.0328 mg/L or approximately 3.5 to 475 times the highest field blank concentration.
- Total mercury (analyzed by CVAF) was detected at concentrations of 0.00000011, 0.00000012, and 0.00000012 mg/L in field blanks L30141-12, L30141-13, and L30141-14, respectively. These field blanks are associated with sample set L30141. Total mercury concentrations in these samples range from 0.00000133 to 0.000071 mg/L or approximately 13 to 710 times the highest field blank concentration.

Laboratory Contamination
All laboratory blank results are less than the method detection limit.

Accuracy, Precision, and Bias
All spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits.

Sampling Handling Issues
All analytical data for samples L30142-11, -14, -15, -17, -21, -22, -24, -25, -26, -31, -32, -34, -35 and L30143-5 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

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Baseflow Sampling Event #7 – December 3 and 4, 2002
Samples L26566-1 through -7; L26567-1 through -11; L26568-1, -3 through -6
Field Blanks L26566-8, -10; L26567-13 through -16

Completeness
Data are 100% complete with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness) and 24 total metals reported for each field blank.

Field Contamination
Field blank results are less than the method detection limit with the following exceptions.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.000053 and 0.000056 mg/L in field blanks L26566-8 and L26566-10, respectively. These field blanks are associated with sample set L26566. Total chromium concentrations in these samples range from less than the method detection limit (0.000050 mg/L) to 0.000433 mg/L or approximately 1 to 8 times the highest field blank concentration.
- Total mercury (analyzed by CVAF) was detected at a concentration of 0.00000010 mg/L in field blank L26566-10. This field blank is associated with sample set L26566. Total mercury concentrations in these samples range from 0.00000027 to 0.00000214 mg/L or approximately 3 to 21 times the highest field blank concentration.

Laboratory Contamination
Laboratory method blank results are less than the method detection limit with the following exception.

- Dissolved zinc (analyzed by low-level ICP-MS) was detected at a concentration of 0.00023 mg/L in the filter blank associated with sample set L26566. Samples from this set with dissolved zinc concentrations less than 10 times the filter blank concentration have been flagged "B" and should be considered impacted by probable laboratory contamination. Samples with dissolved zinc concentrations greater than 10 times the concentration detected in the filter blank have not been flagged and may be considered valid as reported.

Accuracy, Precision, and Bias
Spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits with the following exceptions.

- The 132% recovery for one ICP-MS total aluminum matrix spike exceeds the upper control limit of 120%. This matrix spike is associated with sample sets L26567 and L26568 and field blank set L26567. Total aluminum results for these samples may be biased high.
- The 40% relative percent difference for on set of ICP dissolved calcium laboratory duplicates exceeds the upper control limit of 20%. These laboratory duplicates are associated with sample sets L26567 and L26568. Dissolved calcium results for these samples should be considered estimated.

Sampling Handling Issues
All analytical data for samples L26567-1, -4, -7, and -10 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

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Baseflow Sampling Event #8 – February 12 and 13, 2003

Samples L27034-1 though –4, -6 through -11; L27035-1 through -12; L27036-1 through -6
Field Blanks L27034-12 through -14; L27035-13 through -16

Completeness
Dissolved beryllium has not been reported for sample set L27034. A total of 48 parameters (24 total metals, 23 dissolved metals, hardness) are reported for this sample set.

Data are 100% complete for sample sets L27035 and L27036 with 49 parameters (24 total metals, 24 dissolved metals, hardness) reported for each sample.

Data are 100% complete for field blank sets L27034 and L27035 with 24 total metals reported for each field blank.

Field Contamination
Field blank results are less than the method detection limit with the following exception.

- Total chromium (analyzed by low-level ICP-MS) was detected at concentrations of 0.000076, 0.000088, and 0.000086 mg/L in field blanks L27034-12, L27034-13, and L27034-14, respectively. These field blanks are associated with sample set L27034. Total chromium concentrations in these samples range from 0.000230 to 0.000825 mg/L or approximately 2.6 to 9.4 times the highest field blank concentration.

Laboratory Contamination
All laboratory blank results are less than the method detection limit.

Accuracy, Precision, and Bias
Spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits with the following exception.

- The reported 250% recovery for one ICP-MS total manganese matrix spike exceeds the upper control limit of 120%. This matrix spike is associated with sample sets L27034 and L27036. The manganese concentration in the matrix spike solution, however, was only 4% of the manganese concentration in the original sample and, as such, is inconsequential. Treating the original sample and matrix spike results as laboratory duplicates instead provides a relative percent difference of 10%, which is less than the upper control limit of 20%. Therefore, sample manganese results should not be considered biased based on matrix spike results.

Sampling Handling Issues
All analytical data for samples L27035-1, -4, -7, and -10 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

Baseflow Sampling Event #9 – April 28 and 29, 2003

Samples L27823-1 through -3, -5 through -11; L27824-1 through –12; L27825-1 through -6
Field Blanks L27823-12 through -14; L27824-13 through -16

Completeness

Total and dissolved antimony have not been reported for sample set L27823. A total of 47 parameters (23 total metals, 23 dissolved metals, hardness) are reported for these samples.

Dissolved antimony has not been reported for sample sets L27824 and L27825. A total of 48 parameters (24 total metals, 23 dissolved metals, hardness) are reported for these samples.

Total antimony has not been reported for field blank set L27823. A total of 23 total metals are reported for these field blanks.

Data are 100% complete for field blank set L27824 with 24 total metals reported for each field blank.

Field Contamination

Field blank results are less than the method detection limit with the following exception.

- Total mercury (analyzed by CVAF) was detected at a concentration of 0.00000024 mg/L in field blank L27823-12. This field blank is associated with sample set L27823. Total mercury concentrations in these samples range from 0.00000133 to 0.00000759 mg/L or approximately 6.5 to 38 times the highest field blank concentration.

Laboratory Contamination

All laboratory blank results are less than the method detection limit.

Accuracy, Precision, and Bias

Spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits with the following exceptions.

- The 70% recovery for one ICP-MS total aluminum matrix spike is below the lower control limit of 80%. This matrix spike is associated with sample sets L27823 and L27825 and field blank set L27823. Total aluminum results for these samples may be biased low.
- The reported -265% and 33% recoveries for two ICP-MS total manganese matrix spikes are below the lower control limit of 80%. These matrix spikes are associated with sample sets L27823 and L27825 and field blank set 27823. The manganese concentration in the matrix spike solution, however, was only 4% and 6% of the manganese concentrations in the original samples and, as such, is inconsequential. Treating the original sample and matrix spike results as laboratory duplicates instead provides relative percent differences of 12% and 2%, which are both less than the upper control limit of 20%. Therefore, sample manganese results should not be considered biased based on matrix spike results.

Sampling Handling Issues

All analytical data for samples L27824-1, -4, -7, and -10 have been flagged “H” because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

Baseflow Sampling Event #10 – June 8 and 9, 2003

Samples L28444-1, -2, -4 through -10; L28445-1 through –12; L28446-2 through -6
Field Blanks L28444-11 through -13; L28445-13 through -16

Completeness
Data are 100% complete with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness) and 24 total metals reported for each field blank.

Field Contamination
All field blank results are less than the method detection limit.

Laboratory Contamination
All laboratory blank results are less than the method detection limit.

Accuracy, Precision, and Bias
Spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits with the following exception.

- The 123% recovery for one ICP-MS total barium matrix spike exceeds the upper control limit of 120%. This matrix spike is associated with sample set L28444 and field blank set L28444. Total aluminum results for these samples may be biased high.

Sampling Handling Issues
All analytical data for samples L28445-1, -4, -7, and -10 have been flagged "H" because sample preservation (total and dissolved metals) and filtration (dissolved metals) was not completed within the recommended 24-hour hold time.

• • •

Baseflow Sampling Event #11 – August 26 and 27, 2003

Samples L29243-1, -4, -5, -7, -9, -10; L29244-1 through -3, -7 through -12; L29245-3, -4, -5, -6
Field Blanks L29243-11, -13; L29244-13, -15, -16

Completeness
Data are 100% complete with 49 parameters reported for each sample (24 total metals, 24 dissolved metals, hardness) and 24 total metals reported for each field blank.

Field Contamination
Field blank results are less than the method detection limit with the following exceptions.

- Total chromium (analyzed by low-level ICP-MS) was detected at a concentration of 0.000063 mg/L in field blank L29243-13. This field blank is associated with sample set L29243. Total chromium concentrations in these samples range from 0.000160 to 0.000672 mg/L or approximately 2.5 to 11 times the highest field blank concentration.
- Total mercury (analyzed by CVAF) was detected at a concentration of 0.00000024 mg/L in both field blanks L29243-11 and L29243-13. These field blanks are associated with sample set L29243. Total mercury concentrations in these samples range from 0.00000036 to 0.00000144 mg/L or approximately 1.5 to 7 times the highest field blank concentration.

Laboratory Contamination

Laboratory method blank results are less than the method detection limit with the following exception.

- Dissolved chromium (analyzed by low-level ICP-MS) was detected at a concentration of 0.000056 mg/L in the filter blank associated with sample set L29243. All samples from this set have dissolved chromium concentrations less than 10 times the filter blank concentration, have been flagged "B," and should be considered impacted by probable laboratory contamination.

Accuracy, Precision, and Bias

All spike blank, laboratory control sample, standard reference material, matrix spike, and laboratory duplicate results are within established control limits.

Sample Handling Issues

None.

Appendix A

Mercury Analysis by CVAF
Data Quality Narratives
from Frontier Geosciences, Inc.

King County

Technical Memorandum

Date: July 30, 2004

To: Doug Henderson

From: Scott Mickelson

Subj: Data Analysis of Trace Organic Compounds
Green/Duwamish Water Quality Assessment

Analysis has been completed on trace organics data associated with fresh and storm water samples collected for the Green/Duwamish Water Quality Assessment (GDWQA). This analysis was performed on data generated from samples collected between December 2002 and December 2003, representing Storm Events #8 – 13 and Organics Baseflow Events #5 – 8. The following narrative includes discussions of data quality, detected compounds by analytical category, and detected compounds by sampling location.

The attached Excel® spreadsheets summarize all GDWQA trace organics data and include the following information:

- compound name;
- method detection limit (MDL), which is the *average* MDL for all samples;
- number of samples, N(T), which is the *total* number of samples;
- number of samples, N(S), which is the number of *storm* samples;
- frequency of detection, FOD(T), for the total number of samples;
- frequency of detection, FOD(S), for the storm samples;
- minimum, maximum, mean, and median concentrations, along with standard deviation; and
- ambient (AWQC) and chronic (CWQC) water quality criteria from Chapter 173-201A WAC.

Detected chemicals are highlighted in yellow on the spreadsheets and water quality criteria that are exceeded by a detected concentration of an average MDL, are printed in red. The MDL values for four phthalate and three endocrine disrupting compounds are highlighted in green and the range of values represent blank-corrected MDLs. The following section on data quality will describe the blank correction process.

Section 1 - Data Quality

Data quality was evaluated by reviewing laboratory quality control (QC) results for method blanks, spike blanks, matrix spikes, matrix spike duplicates, and surrogates.

Section 1.1 - Method Blanks

A method blank is an aliquot of clean reference material (reagent water for this study) that is carried through the entire analytical process. This QC sample is used as an indicator of laboratory contamination imparted to the sample during processing and/or analysis. Contamination is indicated by a positive result for an analyte in the method blank. Method blank results were less than the method detection limit (MDL) with the exception of seven analytes.

Four phthalates were detected in every method blank associated with these samples; benzyl butyl phthalate, bis(2-ethylhexyl) phthalate, di-N-butyl phthalate, and diethyl phthalate. The King County Environmental Laboratory qualifies method blank-impacted sample data with a "B" flag when the detected sample concentration is less than five times the concentration detected in the method blank. The commonly-accepted practice, however, is to consider any detected sample concentration that is less than 10 times the concentration detected in the method blank as undetected (EPA, 1994). The sample-specific MDL is then raised to a value that is ten times the method blank concentration.

Based on this "ten times rule" for handling method blank-impacted sample data, all sample results for benzyl butyl phthalate and di-N-butyl phthalate should be considered "undetected" and the associated MDLs should be raised to a value ten times the concentration detected in the method blanks. Sample results for bis(2-ethylhexyl) phthalate and diethyl phthalate should also be considered "undetected," and the "ten times rule" applied, with the following two exceptions:

- Bis(2-ethylhexyl) phthalate was detected at a concentration of 15.8 µg/L in the sample collected from Station 0322 on August 26, 2003 (Baseflow #7). The bis(2-ethylhexyl) phthalate concentration in the associated method blank was 1.36 µg/L, resulting in a corrected, sample-specific MDL of 13.6 µg/L. While the sample result is, technically, a legitimate positive result, it should be considered "highly impacted" by laboratory contamination.
- Diethyl phthalate was detected at a concentration of 0.137 µg/L is the sample collected from Station C317 on January 22, 2003 (Storm #10). The diethyl phthalate concentration in the associated method blank was 0.013 µg/L, resulting in a corrected, sample-specific MDL of 0.130 µg/L. While the sample result is, technically, a legitimate positive result, it should be considered "highly impacted" by laboratory contamination.

Three endocrine disrupting compounds (EDCs) were detected in several method blanks; bisphenol A, bis(2-ethylhexyl)adipate, and total 4-nonylphenol. The initial MDL for all three compounds was 0.10 µg/L, which was the MDL for samples collected during Storms #10 and 11 and Baseflows #5 and 6. The MDL for all three compounds was lowered to 0.010 µg/L for samples collected during Baseflow #7. The MDL for bisphenol A and bis(2-ethylhexyl)adipate remained at 0.010 µg/L for samples collected during Storms #12 and 13 and Baseflow #8, however, the MDL for total 4-nonylphenol was raised to 0.050 µg/L for these three sampling events.

These three EDCs were not detected in any method blank when the MDL was 0.10 µg/L, however, they were detected in every method blank when the MDLs were lowered to 0.050 and 0.010 µg/L. Since bisphenol A and bis(2-ethylhexyl)adipate are plasticizers and total 4-nonylphenol is a common ingredient of laboratory glass-washing detergent, the "ten times rule"

for MDL correction is appropriate for these three compounds. The following considerations should be made when reviewing sample data for these EDCs:

- Bisphenol A was not detected in any method blank for which the MDL was 0.10 µg/L. It was detected in every method blank when the MDL was lowered to 0.010 µg/L, at concentrations ranging from 0.012 to 0.019 µg/L. Bisphenol A was detected in every sample for which the MDL was 0.010 µg/L, however, all of these sample results have been flagged "B," indicating the sample concentrations were less than five times the method blank concentration. Bisphenol A was detected in only 1 out of 26 samples for which the MDL was 0.10 µg/L, at a concentration of 0.17 µg/L (Station C317, Storm #11). Applying the "ten times rule" to the detected method blank concentrations of bisphenol A provides an adjusted MDL range of 0.12 to 0.19 µg/L, which brackets the only detected sample concentration of 0.17 µg/L. In view of this information, all sample results for bisphenol A should be considered "undetected" and the "ten times rule" applied to the sample-specific MDLs.
- Bis(2-ethylhexyl)adipate was not detected in any method blank for which the MDL was 0.10 µg/L. It was detected in every method blank when the MDL was lowered to 0.010 µg/L, at concentrations ranging from 0.024 to 0.159 µg/L. Bis(2-ethylhexyl)adipate was detected in every sample for which the MDL was 0.010 µg/L, however, all of these sample results have been flagged "B," indicating the sample concentration was less than five times the method blank concentration. Bis(2-ethylhexyl)adipate was detected in only 3 out of 26 samples for which the MDL was 0.10 µg/L, at concentrations ranging from 0.24 to 0.838 µg/L (Stations 0322, A310, and A317, Baseflow #5). Applying the "ten times rule" to the detected method blank concentrations of bis(2-ethylhexyl)adipate provides an adjusted MDL range of 0.24 to 1.6 µg/L, which brackets the three detected sample concentrations of 0.24, 0.67 and 0.838 µg/L. In view of this information, all sample results for bis(2-ethylhexyl)adipate should be considered "undetected" and the "ten times rule" applied to the sample-specific MDLs.
- Total 4-nonylphenol was analyzed with three different MDLs; 0.10, 0.050, and 0.010 µg/L. It was not detected in any method blank for which the MDL was 0.10 µg/L but was detected in every method blank for which the MDL was 0.050 or 0.010 µg/L, at concentrations ranging from 0.012 to 0.227 µg/L. Total 4-nonylphenol was detected in 31 out of 53 samples with positive results being reported at all three MDLs. The "B" flag has been used to qualify 17 of the 31 positive sample results, indicating that the reported sample concentrations were less than five times the associated method bank concentration and, as such, should be considered "undetected." Reported total 4-nonylphenol concentrations for 3 of the remaining 14 positive sample results were greater than 10 times their associated method blank concentrations. The remaining 11 positive sample results are associated with method blanks in which total 4-nonylphenol was not detected. Applying the "ten times rule" provides adjusted MDLs ranging from 0.12 to 2.3 µg/L. Total 4-nonylphenol sample concentrations range from 0.032 to 0.836 µg/L. Given the comparison between sample concentrations and method blank concentrations, all reported total 4-nonylphenol sample results should be considered, if not "undetected," at least as "highly impacted" by laboratory contamination.

All method blank results for phthalates are included as Appendix A to this narrative and all method blank results for EDCs are included as Appendix B.

Section 1.2 – Spike Blanks

A spike blank is a known concentration of target analyte(s) introduced into clean reference matrix (reagent water) and then carried through the entire analytical process. This QC sample is used as an indicator of analytical method performance. Performance is indicated by percent recovery of the introduced target analyte(s). Spike blank (SB) results were within method control limits with the following exceptions:

Event	Compound	SB Rec. %	Limits %	Poss. Bias	Detected
Storm #8	4-Chloro-3-methylphenol	192	23 – 97	High	No
Storm #8	2,4-Dinitrotoluene	102	24 – 96	High	No
Storm #9	4-Chloro-3-methylphenol	157	23 – 97	High	No
Storm #10	Disulfoton	29	50 – 150	Low	No
Storm #10	Ethynyl Estradiol	38	50 – 150	Low	No
Storm #10	Estradiol	44	50 – 150	Low	No
Storm #11	Disulfoton	18	50 – 150	Low	No
Storm #11	Phorate	19	50 – 150	Low	No
Storm #12	Bis(2-ethylhexyl)adipate	179	50 – 150	High	Yes
Storm #12	Disulfoton	21	50 – 150	Low	No
Storm #13	Ethyl-parathion	156	50 – 150	High	No
Storm #13	Methyl-parathion	156	50 – 150	High	No
Baseflow #5	4-Chloro-3-methylphenol	123	23 – 97	High	No
Baseflow #7	1,4-Dichlorobenzene	101	36 – 97	High	No
Baseflow #8	Endrin	142	42 – 139	High	No
Baseflow #8	Total 4-Nonylphenol	46	50 – 150	Low	Yes

The only compounds detected in associated samples were bis(2-ethylhexyl)adipate and total 4-nonylphenol.

- The 179% recovery for bis(2-ethylhexyl)adipate in the spike blank associated with Storm #12 exceeded the upper control limit of 150%, indicating a possible high bias to associated sample data. This compound was detected in all samples associated with this spike blank, however, all sample results have been blank adjusted to a reported result of "undetected."
- The 46% recovery for total 4-nonylphenol in the spike blank associated with Baseflow #8 was below the lower control limit of 50%, indicating a possible low bias to associated sample data. This compound was detected in all samples associated with this spike blank, however, all sample total 4-nonylphenol results have been blank adjusted to a reported result of "undetected."

Section 1.3 – Matrix Spikes/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is a known concentration of target analyte(s) introduced into a second and third sample aliquot prior to processing. These QC samples are used as another indicator of method performance as well as an indicator of sample matrix effect on the analytical process. Performance is indicated by percent recovery of the introduced target analyte(s). MS/MSD results were within method control limits with the following exceptions:

Event	Compound	MS Rec. %	MSD Rec. %	Limits %	Poss. Bias
Storm #8	2,4-Dinitrotoluene	**108**	**102**	24 – 96	High
	4-Chloro-3-methylphenol	**221**	**209**	23 – 97	High
	Methyl-parathion	**164**	147	50 – 150	High
Storm #9	4-Chloro-3-methylphenol	**116**	**114**	23 – 97	High
	Total 4-Nonylphenol	75	**83**	10 – 80	High
	Pentachlorophenol	77	**105**	9 – 103	High
	Methyl-parathion	150	**153**	50 – 150	High
Storm #10	4-Chloro-3-methylphenol	**99**	94	23 – 97	High
	Ethynyl Estradiol	52	**43**	50 – 150	Low
Storm #11	Pentachlorophenol	**125**	**126**	9 – 103	High
Storm #12	Pentachlorophenol	**118**	**126**	9 – 103	High
	Total 4-Nonylphenol	54	**39**	50 – 150	Low
	Methyl-parathion	**161**	**164**	50 – 150	High
	Ethyl-parathion	**174**	**162**	50 – 150	High
Storm #13	Total 4-Nonylphenol	**185**	**154**	50 – 150	High
	Bis(2-ethylhexyl)adipate	**203**	124	50 – 150	High
	Pentachlorophenol	**106**	**113**	9 – 103	High
	Methyl-parathion	**195**	**200**	50 – 150	High
	Ethyl-parathion	**203**	**199**	50 – 150	High
Baseflow #5	4-Chloro-3-methylphenol	**128**	**123**	23 – 97	High
	Bis(2-ethylhexyl)adipate	**159**	106	50 – 150	High
Baseflow #6	Pentachlorophenol	**105**	**104**	9 – 103	High
Baseflow #7	1,4-Dichlorobenzene	**103**	**101**	36 – 97	High
	Pentachlorophenol	**113**	**114**	9 – 103	High
	Estrone	**161**	**153**	50 – 150	High
	Estradiol	**155**	142	50 – 150	High
Baseflow #8	Total 4-Nonylphenol	148	**11**	50 – 150	Low
	Estradiol	**154**	144	50 – 150	High
	Pentachlorophenol	98	**104**	9 – 103	High
	Endrin	**154**	**148**	42 – 139	High

The only compounds detected in associated samples were bis(2-ethylhexyl)adipate, pentachlorophenol, and total 4-nonylphenol.

- The 203 and 159% recoveries for bis(2-ethylhexyl)adipate in the matrix spikes associated with Storm #13 and Baseflow #5 exceeded the upper control limit of 150%, indicating a possible high bias to associated sample data. This compound was detected in all samples associated with these matrix spikes, however, all sample results have been blank adjusted to a reported result of "undetected.
- Consistently elevated matrix spike and matrix spike duplicate results should be taken into consideration when reviewing any positive results for pentachlorophenol.
- Inconsistent matrix spike and matrix spike duplicate results should be taken into consideration when reviewing any positive total 4-nonylphenol results.

Section 1.4 – Surrogates

Surrogates are non-target analytes added to each sample prior to processing. They are used as a sample-specific indicator of both matrix and method bias for target compounds. Performance is indicated by percent recovery of the surrogate compounds. Surrogate recoveries were within method control limits with the following exceptions:

Sample	Locator	Event	Surrogate	% Rec.	Limits	Compounds
L26465-13	A320	Storm #8	d5-Phenol	112	10 – 110	Phenols
L26465-13	A320	Storm #8	d4-2-Chlorophenol	120	33 – 110	Phenols
L26884-12	A315	Storm #10	2,4,6-Tribromophenol	116	35 – 114	Phenols
L30141-3	E319	Storm #13	d5-Phenol	111	10 – 110	Phenols
L30141-7	C317	Storm #13	d5-Phenol	111	10 – 110	Phenols
L30141-8	A315	Storm #13	d5-Phenol	111	10 – 110	Phenols
L30141-8	A315	Storm #13	2,4,5,6-Tetrachloro-m-xylene	49	50 – 150	PCBs
L30141-10	A320	Storm #13	d5-Phenol	116	10 – 110	Phenols
L27029-1	E319	Baseflow #5	2,4,5,6-Tetrachloro-m-xylene	42	50 – 150	PCBs
L27029-4	A310	Baseflow #5	2,4,5,6-Tetrachloro-m-xylene	35	50 – 150	PCBs
L27029-5	A317	Baseflow #5	2,4,5,6-Tetrachloro-m-xylene	47	50 – 150	PCBs
L27029-6	C317	Baseflow #5	2,4,5,6-Tetrachloro-m-xylene	43	50 – 150	PCBs
L27029-7	A315	Baseflow #5	2,4,5,6-Tetrachloro-m-xylene	46	50 – 150	PCBs
L27029-7	A315	Baseflow #5	d5-Phenol	112	10 – 110	Phenols
L28268-1	E319	Baseflow #6	d4-2-Chlorophenol	125	33 – 110	Phenols
L28268-2	0322	Baseflow #6	d4-2-Chlorophenol	111	33 – 110	Phenols
L28268-3	A320	Baseflow #6	d4-2-Chlorophenol	117	33 – 110	Phenols
L28268-5	A317	Baseflow #6	d5-Phenol	111	10 – 110	Phenols
L28268-5	A317	Baseflow #6	d4-2-Chlorophenol	112	33 – 110	Phenols
L28268-7	A315	Baseflow #6	d5-Phenol	131	10 – 110	Phenols
L28268-7	A315	Baseflow #6	d4-2-Chlorophenol	124	33 – 110	Phenols
L28268-8	A317	Baseflow #6	d5-Phenol	113	10 – 110	Phenols
L28268-8	A317	Baseflow #6	d4-2-Chlorophenol	116	33 – 110	Phenols
L29247-1	E319	Baseflow #7	2,4,5,6-Tetrachloro-m-xylene	49	50 – 150	PCBs
L29247-1	E319	Baseflow #7	d5-Phenol	129	10 – 110	Phenols
L29247-1	E319	Baseflow #7	d4-2-Chlorophenol	113	33 – 110	Phenols
L29247-1	E319	Baseflow #7	2,4,6-Tribromophenol	133	10 – 123	Phenols
L29247-3	A320	Baseflow #7	d5-Phenol	118	10 – 110	Phenols
L29247-3	A320	Baseflow #7	2,4,6-Tribromophenol	126	10 – 123	Phenols
L29247-5	A317	Baseflow #7	2,4,5,6-Tetrachloro-m-xylene	47	50 – 150	PCBs
L29247-5	A317	Baseflow #7	d5-Phenol	153	10 – 110	Phenols
L29247-6	C317	Baseflow #7	d5-Phenol	219	10 – 110	Phenols
L29247-6	C317	Baseflow #7	d4-2-Chlorophenol	159	33 – 110	Phenols
L29247-8	0322	Baseflow #7	d5-Phenol	186	10 – 110	Phenols
L29247-8	0322	Baseflow #7	d4-2-Chlorophenol	146	33 – 110	Phenols
L29247-8	0322	Baseflow #7	d4-1,2-Dichlorobenzene	113	16 – 110	Chlorobenzenes

Data for each of the samples in this table should be reviewed to determine if positive results were obtained for any of the compounds affected by the associated surrogate and how the surrogate recovery may have impacted the data.

Section 1.5 – Compounds with Quality Control Issues

This section summarizes the organic compounds for which QC issues have been identified. Sample data for the compounds listed in the following table should only be used after reviewing the QC data and considering the overall data quality.

Compound	Quality Control Issue	Detected
Benzyl Butyl Phthalate	Lab contamination.	Yes
Bis(2-ethylhexyl)adipate	Lab contamination, high spike blank & matrix spike recoveries.	Yes
Bis(2-ethylhexyl) Phthalate	Lab contamination.	Yes
Bisphenol A	Lab contamination	Yes
4-Chloro-3-methylphenol	High spike blank & matrix spike recoveries.	No
Di-N-butyl Phthalate	Lab contamination.	Yes
1,4-Dichlorobenzene	High spike blank & matrix spike recoveries.	No
Diethyl Phthalate	Lab contamination.	Yes
2,4-Dinitrotoluene	High spike blank & matrix spike recoveries.	No
Disulfoton	Low spike blank recoveries.	No
Endrin	High spike blank & matrix spike recoveries.	No
Estradiol	Low spike blank recoveries & high matrix spike recoveries.	No
Estrone	High matrix spike recoveries.	No
Ethyl-parathion	High spike blank & matrix spike recoveries.	No
Ethylnyl Estradiol	Low spike blank & matrix spike recoveries.	No
Methyl-parathion	High spike blank & matrix spike recoveries.	No
Pentachlorophenol	High matrix spike recoveries.	Yes
Phorate	Low spike blank recoveries.	No
Total 4-Nonylphenol	Lab contamination, inconsistent spike blanks & matrix spikes.	Yes

Sample data for compounds not appearing in the preceding table may be used as reported from the King County database.

Section 2 - Detected Chemicals by Analytical Category

The following section discusses detected trace organic chemicals and is organized into the following analytical categories: Base/neutral/acid extractable semivolatile compounds, chlorinated herbicides, chlorinated pesticides, endocrine disrupting compounds, organophosphorus pesticides, and polychlorinated biphenyls.

Section 2.1 – Base/Neutral/Acid Extractable Semivolatile Compounds

Base/neutral/acid extractable semivolatile compound (BNA) analysis was performed on a total of 64 samples, of which 33 were collected during storm events. A smaller subset of samples (25 total/17 storms) were analyzed for some compounds. Analytes included polynuclear aromatic hydrocarbons, phthalates, phenols, chlorobenzenes, and other miscellaneous organic compounds.

The following table summarizes those compounds that were detected one or more times. It provides the frequency of detection (FOD) for both total (T) and storm (S) samples, the minimum and maximum values detected, and the average MDL over all samples.

Analyte	FOD(T)	FOD(S)	Min (µg/L)	Max (µg/L)	MDL (µg/L)
Acenaphthene	5/64	0/33	0.012	0.023	0.011
Benzo(a)pyrene	6/64	5/33	0.010	0.019	0.011
Benzo(b)fluoranthene	10/64	9/33	0.010	0.0335	0.011
Benzo(k)fluoranthene	8/64	7/33	0.012	0.0301	0.011
Bis(2-ethylhexyl) Phthalate	1/64	0/33	15.8	15.8	Blank-adjust MDLs
Caffeine	37/64	28/33	0.012	0.643	0.011 & 0.024
Chrysene	6/64	6/33	0.025	0.036	0.024
Diethyl Phthalate	1/64	1/33	0.137	0.137	Blank-adjust MDLs
Dimethyl Phthalate	6/25	5/17	0.010	0.022	0.013
Di-N-octyl Phthalate	12/25	8/17	0.012	0.345	0.011

Analyte	FOD(T)	FOD(S)	Min (µg/L)	Max (µg/L)	MDL (µg/L)
Fluoranthene	18/64	16/33	0.010	0.0449	0.011
Isophorone	3/25	3/17	0.019	0.026	0.013
4-Methylphenol	2/25	2/17	0.8	1.2	0.24
Naphthalene	6/64	0.33	0.024	0.026	0.024
Pentachlorophenol	2/64	2/33	0.22	0.24	0.12, 0.49 & 0.99
Phenanthrene	18/64	14/33	0.0098	0.0393	0.011
Phenol	9/64	8/33	0.11	0.67	0.097 & 0.49
Pyrene	16/64	13/33	0.010	0.0628	0.011

Pentachlorophenol is the only BNA compound for which Washington State water quality criteria are published. Both the acute and chronic criteria are pH-dependent and, for this set of samples, the chronic criterion ranges from 3.83 to 17.3 µg/L. The two detected pentachlorophenol results and all MDLs meet this criterion.

Section 2.2 – Chlorinated Herbicides

Chlorinated herbicide analysis was performed on a total of 64 samples, of which 33 were collected during storm events. Analytes included 2,4,5-T, 2,4,5-TP (Silvex), 2,4-D, 2,4-DB, Dalapon, Dicamba, Dichloroprop, Dinoseb, MCPA, and MCPP. Average method detection limits ranged from 0.015 to 0.046 µg/L.

2,4-D was detected in one sample at a concentration of 0.316 µg/L (MDL of 0.016). This herbicide was detected in a baseflow sample collected August 26, 2003 from station C317. All other chlorinated herbicide results were less than the method detection limit. There are no Washington State water quality criteria for chlorinated herbicides.

Section 2.3 – Chlorinated Pesticides

Chlorinated pesticide analysis was performed on a total of 65 samples, of which 34 were collected during storm events. Analytes included 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, aldrin, BHC (alpha-, beta-, delta-, and gamma-), chlordane (including alpha- and gamma-), dieldrin, endosulfan (I, II, and sulfate), endrin, endrin aldehyde, heptachlor, heptachlor epoxide, methoxychlor, and toxaphene. Average method detection limits ranged from 0.0049 to 0.049 µg/L. All chlorinated pesticide results were less than the method detection limit.

The following table summarizes the average chlorinated pesticide method detection limits (MDL) that exceed Washington State chronic water quality criteria (CWQC)

Analyte(s)	Avg. MDL (µg/L)	CWQC (µg/L)	Criterion Name
4,4'-DDD, 4,4'-DDE, 4,4'-DDT	0.0049	0.001	DDT (and metabolites)
Aldrin	0.0049	0.0019	Aldrin/Dieldrin
Chlordane	0.0049	0.0043	Chlordane
Dieldrin	0.0049	0.0019	Dieldrin/Aldrin
Endrin, Endrin Aldehyde	0.0049	0.0023	Endrin
Heptachlor, Heptachlor Epoxide	0.0049	0.0038	Heptachlor
Toxaphene	0.049	0.0002	Toxaphene

Section 2.4 – Endocrine Disrupting Compounds

Endocrine disrupting compound (EDC) analysis was performed on 53 samples, of which 22 were collected during storm events. Analytes included atrazine (only analyzed for 39 samples total/16 storms), bis(2-ethylhexyl)adipate, bisphenol A, estradiol, estrone, ethynyl estradiol, methyl testosterone, progesterone, testosterone, total 4-nonylphenol, and vinclozolin. Average method detection limits ranged from 0.0098 to 2.3 µg/L (blank-adjusted).

Atrazine was detected in one sample, at a concentration of 0.062 µg/L (MDL of 0.048 µg/L). Total 4-nonylphenol was detected in 14 out of 53 samples at concentrations ranging from 0.135 to 0.836 µg/L. These detected values should be considered "highly impacted due to probable laboratory contamination," due to repeated positive results for total 4-nonylphenol in laboratory method blanks. All other EDC sample results were less than the MDL, several of which have been "blank-adjusted." There are no Washington State water quality criteria for these EDC compounds.

Section 2.5 – Organophosphorus Pesticides

Organophosphorus pesticide analysis was performed on a total of 64 samples, of which 33 were collected during storm events. Analytes included chlorpyrifos, diazinon, disulfoton, malathion, ethyl-parathion, methyl-parathion, and phorate. Average method detection limits ranged from 0.029 to 0.052 µg/L. All organophosphorus pesticide results were less than the method detection limit.

The average MDL of 0.037 µg/L for chlorpyrifos meets the Washington State chronic water quality criterion of 0.041 µg/L . The average method detection limits of 0.049 and 0.039 µg/L for, respectively, ethyl-parathion and methyl-parathion exceed the Washington State chronic water quality criterion of 0.013 µg/L for "parathion."

Section 2.6 – Polychlorinated Biphenyls

Polychlorinated biphenyl (PCB) analysis was performed on a total of 65 samples, of which 34 were collected during storm events. Analytes included Aroclors® 1016, 1221, 1232, 1242, 1248, 1254, and 1260. The average method detection limit for all analytes was 0.049 µg/L. All PCB results were less than the method detection limit.

The average Aroclor® detection limit of 0.049 µg/L exceeds the Washington State Chronic water quality criterion of 0.014 µg/L for "polychlorinated biphenyls (PCBs)."

Section 3 – Detected Chemicals by Sampling Station

The following section discusses detected chemicals, organized by sampling station.

Section 3.1 – Station 0322 Newaukum Creek

- Atrazine was detected once, at a concentration of 0.062 µg/L, in a storm sample collected October 17, 2003.
- Bis(2-ethylhexyl)phthalate was detected twice, at concentrations of 2.60 and 15.8 µg/L, in baseflow samples collected, respectively, February 12 and August 26, 2003. Due to consistent laboratory contamination problems, however, these reported results should be considered "undetected" or, at the very least, "highly impacted by probable laboratory contamination."

- Caffeine was detected four times, at concentrations ranging from 0.017 to 0.0566 µg/L, in storm samples collected January 4, January 22, October 17, and November 18, 2003.
- Di-N-octyl Phthalate was detected twice, at concentrations of 0.0286 and 0.020 µg/L, respectively, in a storm sample collected January 22, 2003 and a baseflow sample collected February 12, 2003.
- Phenol was detected once, at a concentration of 0.52 µg/L, in a storm sample collected October 17, 2003.

Section 3.2 – Station A310 Green River (Fort Dent Park)

- Caffeine was detected three times, at concentrations of 0.198, 0.023, and 0.017 µg/L, in a storm sample collected December 12, 2002 and duplicate storm samples collected January 4, 2003.
- Di-N-octyl phthalate was detected once, at a concentration of 0.0323 µg/L, in a storm sample collected December 12, 2002.
- Fluoranthene was detected three times, at concentrations of 0.018, 0.013, and 0.012 µg/L, in a storm sample collected December 12, 2002 and duplicate storm samples collected January 4, 2003.
- Isophorone was detected once, at a concentration of 0.026 µg/L, in a storm sample collected December 12, 2002.
- Naphthalene was detected once, at a concentration of 0.026 µg/L, in a baseflow sample collected December 19, 2003.
- Phenanthrene was detected three times, at concentrations of 0.016, 0.012, and 0.011 µg/L, in a storm sample collected December 12, 2002 and duplicate storm samples collected January 4, 2003.
- Pyrene was detected twice, at concentrations of 0.016 and 0.010 µg/L, in storm samples collected December 12, 2002 and January 4, 2003.
- Total 4-Nonylphenol was detected once, at a concentration of 0.27 µg/L, in a baseflow sample collected February 12, 2003. Due to consistent laboratory contamination problems, this result should be considered "highly impacted by probable laboratory contamination."

Section 3.3 – Station A315 Mill Creek

- 4-Methylphenol was detected twice, at concentrations of 1.2 and 0.80 µg/L, in duplicate storm samples collected January 22, 2003.
- Benzo(a)pyrene was detected once, at a concentration of 0.018 µg/L, in a storm sample collected January 22, 2003.
- Benzo(b)fluoranthene was detected three times, at concentrations of 0.018, 0.012, and 0.010 µg/L, respectively, in duplicate storm samples collected January 22, 2003 and a storm sample collected March 9, 2003.
- Benzo(k)fluoranthene was detected twice, both at concentrations of 0.013 µg/L, in duplicate storm samples collected January 22, 2003.
- Caffeine was detected nine times, at concentrations ranging from 0.017 to 0.253 µg/L, in storm samples collected January 2 and November 18, 2003, duplicate storm samples collected January 22, March 9, and October 17, 2003, and a baseflow sample collected February 12, 2003.
- Dimethyl Phthalate was detected twice, at concentrations of 0.022 and 0.019 µg/L, in duplicate storm samples collected January 22, 2003.

- Di-N-octyl Phthalate was detected three times, at concentrations of 0.155, 0.110, and 0.021 µg/L, respectively, in duplicate storm samples collected January 22, 2003 and a baseflow sample collected February 12, 2003.
- Fluoranthene was detected six times, at concentrations ranging from 0.010 to 0.021 µg/L, in duplicate storm samples collected January 22, March 9, and October 17, 2003.
- Phenanthrene was detected five times, at concentrations ranging from 0.010 to 0.018 µg/L, in a storm sample collected January 4, 2003 and duplicate storm samples collected January 22 and March 9, 2003.
- Phenol was detected three times, at concentrations of 0.258, 0.15, and 0.50 µg/L, respectively, in duplicate storm samples collected January 22, 2003 and a storm sample collected October 17, 2003.
- Pyrene was detected four times, at concentrations ranging from 0.017 to 0.0264 µg/L, in duplicate storm samples and collected January 22 and March 9, 2003.
- Total 4-Nonylphenol was detected twice, at concentrations of 0.18 and 0.21 µg/L, in duplicate storm samples collected March 9, 2003. Due to consistent laboratory contamination problems, this result should be considered "highly impacted by probable laboratory contamination."

Section 3.4 – Station A317 Springbrook Creek

- Acenaphthene was detected four times at concentrations ranging from 0.013 to 0.023 µg/L, in duplicate baseflow samples collected May 12, 2003 and baseflow samples collected August 26 and December 19, 2003.
- Benzo(a)pyrene was detected once, at a concentration of 0.010 µg/L, in a storm sample collected December 12, 2002.
- Benzo(b)fluoranthene was detected twice, at concentrations of 0.0273 and 0.016 µg/L, respectively, in storm samples collected December 12, 2002 and January 4, 2003.
- Benzo(k)fluoranthene was detected once, at a concentration of 0.012 µg/L, in a storm sample collected December 12, 2002.
- Caffeine was detected seven times, at concentrations ranging from 0.0277 to 0.643 µg/L, in storm samples collected December 12, 2002, January 4 and October 18, 2003 and baseflow samples collected February 12 and December 19, 2003, and duplicate baseflow samples collected May 12, 2003.
- Chrysene was detected twice, at a concentrations of 0.030 and 0.028 µg/L, respectively, in storm samples collected December 12, 2002 and January 4, 2003.
- Dimethyl phthalate was detected once, at a concentration of 0.017 µg/L, in a storm sample collected December 12, 2002.
- Di-N-octyl Phthalate was detected twice, at concentrations of 0.0698 and 0.052 µg/L, respectively, in a storm sample collected December 12, 2002 and a baseflow sample collected February 12, 2003.
- Fluoranthene was detected three times, at concentrations of 0.0422, 0.0266, and 0.012 µg/L, respectively, in storm samples collected December 12, 2002 and January 4 and October 18, 2003.
- Isophorone was detected once, at a concentration of 0.019 µg/L, in a storm sample collected December 12, 2002.
- Naphthalene was detected twice, both at concentrations of 0.025 µg/L, in baseflow samples collected May 12 and December 19, 2003.

- Pentachlorophenol was detected once, at a concentration of 0.24 µg/L, in a storm sample collected December 12, 2002.
- Phenanthrene was detected three times, at concentrations of 0.021, 0.020, and 0.011 µg/L, respectively, in storm samples collected December 12, 2002 and January 4, 2003 and a baseflow sample collected December 19, 2003.
- Phenol was detected once, at a concentration of 0.67 µg/L, in a storm sample collected October 18, 2003.
- Pyrene was detected three times, at concentrations of 0.0344, 0.0266, and 0.015 µg/L, respectively, in storm samples collected December 12, 2002 and January 4 and October 18, 2003.
- Total 4-Nonylphenol was detected five times, at concentrations ranging from 0.14 to 0.46 µg/L, in a storm sample collected January 22, 2003, duplicate baseflow samples collected May 12, 2003, and baseflow samples collected February 12 and August 26, 2003. Due to consistent laboratory contamination problems, this result should be considered "highly impacted by probable laboratory contamination."

Section 3.5 – Station A320 Soos Creek

- Caffeine was detected six times, at concentrations ranging from 0.012 to 0.037 µg/L, in storm samples collected January 4 and March 9, 2003 and duplicate storm samples collected December 12, 2002 and November 18, 2003.
- Di-N-octyl phthalate was detected once, at a concentration of 0.012 µg/L, in a storm sample collected December 12, 2002.
- Naphthalene was detected once, at a concentration of 0.026 µg/L, in a baseflow sample collected December 19, 2003.
- Phenol was detected once, at a concentration of 0.16 µg/L, in a baseflow sample collected February 12, 2003.

Section 3.6 – Station C317 Black River Pump Station

- 2,4-D was detected once, at a concentration of 0.316 µg/L, in a baseflow sample collected August 26, 2003.
- Acenaphthene was detected once, at a concentration of 0.012 µg/L, in a baseflow sample collected May 12, 2003.
- Benzo(a)pyrene was detected four times, at concentrations ranging from 0.010 to 0.019 µg/L, in storm samples collected January 22, March 9, and November 18, 2003 and a baseflow sample collected December 19, 2003.
- Benzo(b)fluoranthene was detected five times, at concentrations ranging from 0.019 to 0.0335 µg/L, in storm samples collected December 12, 2002, January 22, March 9, and November 18, 2003, and a baseflow sample collected December 19, 2003.
- Benzo(k)fluoranthene was detected five times, at concentrations ranging from 0.013 to 0.0301 µg/L, in storm samples collected December 12, 2002, January 22, March 9, and November 18, 2003, and a baseflow sample collected December 19, 2003.
- Caffeine was detected eight times, at concentrations ranging from 0.0271 to 0.641 µg/L, in storm samples collected December 12, 2002, January 22, March 9, and November 18, 2003, baseflow samples collected February 12 and May 12, 2003, and duplicate baseflow samples collected December 19, 2003.

- Chrysene was detected four times, at concentrations ranging from 0.025 to 0.036 µg/L, in storm samples collected December 12, 2002 and January 22, March 9, and November 18, 2003.
- Diethyl Phthalate was detected once, at a concentration of 0.137 µg/L, in a storm sample collected January 22, 2003. Due to consistent laboratory contamination problems, this result should be considered "highly impacted by probable laboratory contamination."
- Dimethyl Phthalate was detected three times, at concentrations of 0.015, 0.010, and 0.020 µg/L, respectively, in storm samples collected December 12, 2002 and January 22, 2003 and a baseflow sample collected February 12, 2003.
- Di-N-octyl Phthalate was detected three times, at concentrations of 0.0982, 0.345, and 0.0288 µg/L, respectively, in storm samples collected December 12, 2002 and January 22, 2003 and a baseflow sample collected February 12, 2003.
- Fluoranthene was detected six times, at concentrations ranging from 0.018 to 0.0449 µg/L, in storm samples collected December 12, 2002, January 22, March 9, and November 18, 2003 and duplicate baseflow samples collected December 19, 2003.
- Isophorone was detected once, at a concentration of 0.019 µg/L, in a storm sample collected December 12, 2002.
- Naphthalene was detected twice, at concentrations of 0.025 and 0.024 µg/L, in duplicate baseflow samples collected December 19, 2003.
- Pentachlorophenol was detected once, at a concentration of 0.22 µg/L, in a storm sample collected December 12, 2002.
- Phenanthrene was detected seven times, at concentrations ranging from 0.0098 to 0.0393 µg/L, in storm samples collected December 12, 2002, January 22, March 9, and November 18, 2003, a baseflow sample collected August 26, 2003, and duplicate baseflow samples collected December 19, 2003.
- Phenol was detected twice, at concentrations of 0.11 and 0.54 µg/L, respectively, in storm samples collected January 22 and November 18, 2003.
- Pyrene was detected seven times, at concentrations ranging from 0.013 to 0.0628 µg/L, in storm samples collected December 12, 2002, January 22, March 9, and November 18, 2003, a baseflow sample collected February 12, 2003, and duplicate baseflow samples collected December 19, 2003.
- Total 4-Nonylphenol was detected six times, at concentrations ranging from 0.135 to 0.836 µg/L, in storm samples collected January 22, March 9, and November 18, 2003 and baseflow samples collected February 12, May 12, and August 26, 2003. Due to consistent laboratory contamination problems, this result should be considered "highly impacted by probable laboratory contamination."

Section 3.7 – Station E319 Green River (Howard Hansen Dam)

- Phenol was detected once, at a concentration of 0.67 µg/L, in a storm sample collected October 17, 2003.

Section 4 – References

Ecology, 2003. *Water Quality Standards for Surface Waters of the State of Washington, Chapter 173-201A WAC.* Washington State Department of Ecology. Olympia, Washington.

EPA, 1994. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review – Publication 9240.1-05.* United Stated Environmental Protection Agency. Washington, D.C.

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Should you have any questions regarding this data analysis, please let me know. All sample data are also available electronically, QC data are available in hard copy only.

Attachment (Excel® Spreadsheets)

Appendix A
Quality Control Data for Method Blanks
Phthalate Compounds

Appendix B
Quality Control Data for Method Blanks
Endocrine Disrupting Compounds

Green/Duwamish Water Quality Assessment
Data Analysis for Organic Compounds (all values in µg/L)

BNA Compounds	MDL	N(T)	N(S)	FOD(T)	FOD(S)	MIN	MAX	MEAN	MED	STDEV	AWQC	CWQC
1,2,4-Trichlorobenzene	0.013	25	17	0	0							
1,2-Dichlorobenzene	0.055	64	33	0	0							
1,3-Dichlorobenzene	0.055	64	33	0	0							
1,4-Dichlorobenzene	0.055	64	33	0	0							
2,4,5-Trichlorophenol	0.12	25	17	0	0							
2,4,6-Trichlorophenol	0.32	64	33	0	0							
2,4-Dichlorophenol	0.33	64	33	0	0							
2,4-Dimethylphenol	1.5	25	17	0	0							
2,4-Dinitrophenol	0.97	25	17	0	0							
2,4-Dinitrotoluene	0.065	25	17	0	0							
2,6-Dinitrotoluene	0.065	25	17	0	0							
2-Chloronaphthalene	0.011	64	33	0	0							
2-Chlorophenol	0.097	25	17	0	0							
2-Methylnaphthalene	0.11	64	33	0	0							
2-Methylphenol	0.25	25	17	0	0							
2-Nitroaniline	0.13	25	17	0	0							
2-Nitrophenol	0.049	25	17	0	0							
3,3'-Dichlorobenzidine	0.97	25	17	0	0							
3-Nitroaniline	0.65	25	17	0	0							
4,6-Dinitro-O-Cresol	0.97	25	17	0	0							
4-Bromophenyl Phenyl Ether	0.033	25	17	0	0							
4-Chloro-3-Methylphenol	0.25	25	17	0	0							
4-Chloroaniline	0.33	25	17	0	0							
4-Chlorophenyl Phenyl Ether	0.033	25	17	0	0							
4-Methylphenol	0.25	25	17	2/25	2/17	0.8	1.2	1.0	1.0	0.28		
4-Nitroaniline	0.65	25	17	0	0							
4-Nitrophenol	0.49	25	17	0	0							
Acenaphthene	0.011	64	33	5/64	0/33	0.012	0.023	0.017	0.016	0.0047		
Acenaphthylene	0.011	64	33	0	0							
Anthracene	0.011	64	33	0	0							
Benzo(a)anthracene	0.028	64	33	0	0							
Benzo(a)pyrene	0.011	64	33	6/64	5/33	0.010	0.019	0.013	0.011	0.0042		
Benzo(b)fluoranthene	0.011	64	33	10/64	9/33	0.010	0.0335	0.021	0.021	0.0078		
Benzo(g,h,i)perylene	0.084	64	33	0	0							
Benzo(k)fluoranthene	0.011	64	33	8/64	7/33	0.012	0.0301	0.017	0.013	0.0069		
Benzyl Butyl Phthalate	0.16 - 1.5	64	33	0	0							
Bis(2-Chloroethoxy)Methane	0.013	25	17	0	0							
Bis(2-Chloroethyl)Ether	0.013	25	17	0	0							
Bis(2-Chloroisopropyl)Ether	0.013	25	17	0	0							
Bis(2-Ethylhexyl)Phthalate	2.4 - 18	64	33	1/64	0/33	15.8	15.8	15.8	15.8	0		
Caffeine	0.017	64	33	37/64	28/33	0.012	0.643	0.140	0.0566	0.18		
Carbazole	0.028	64	33	0	0							
Chrysene	0.028	64	33	6/64	6/33	0.025	0.036	0.029	0.029	0.0041		
Dibenzo(a,h)anthracene	0.084	64	33	0	0							
Dibenzofuran	0.011	64	33	0	0							
Diethyl Phthalate	0.13 - 0.90	64	33	1/64	1/33	0.137	0.137	0.137	0.137	0		
Dimethyl Phthalate	0.013	25	17	6/25	5/17	0.010	0.022	0.017	0.018	0.0043		
Di-N-Butyl Phthalate	0.42 - 1.4	64	33	0	0							
Di-N-Octyl Phthalate	0.013	25	17	13/25	9/17	0.012	0.345	0.0763	0.0323	0.092		
Fluoranthene	0.011	64	33	16/64	16/33	0.010	0.0449	0.0235	0.0185	0.012		
Fluorene	0.011	64	33	0	0							
Hexachlorobenzene	0.028	64	33	0	0							
Hexachlorobutadiene	0.065	25	17	0	0							
Hexachloroethane	0.033	25	17	0	0							
Indeno(1,2,3-Cd)Pyrene	0.084	64	33	0	0							
Isophorone	0.013	25	17	3/25	3/17	0.019	0.026	0.021	0.019	0.0040		
Naphthalene	0.028	64	33	6/64	0	0.024	0.026	0.025	0.025	0.00075		
Nitrobenzene	0.013	25	17	0	0							
N-Nitrosodimethylamine	0.033	25	17	0	0							
N-Nitrosodi-N-Propylamine	0.013	25	17	0	0							
N-Nitrosodiphenylamine	0.033	25	17	0	0							
Pentachlorophenol	0.61	64	33	2/64	2/33	0.22	0.24	0.23	0.23	0.014	6.07 - 27.4	3.83 - 17.3
Phenanthrene	0.011	64	33	18/64	14/33	0.0098	0.0393	0.018	0.017	0.0082		
Phenol	0.33	64	33	9/64	8/33	0.11	0.67	0.40	0.50	0.23		
Pyrene	0.011	64	33	16/64	13/33	0.010	0.0628	0.0267	0.0262	0.014		

Green/Duwamish Water Quality Assessment
Data Analysis for Organic Compounds (all values in µg/L)

Chlorinated Herbicides	MDL	N(T)	N(S)	FOD(T)	FOD(S)	MIN	MAX	MEAN	MED	STDEV	AWQC	CWQC
2,4,5-T	0.036	64	33	0	0							
2,4,5-TP (Silvex)	0.043	64	33	0	0							
2,4-D	0.018	64	33	1/64	0	0.316	0.316	0.316	0.316	0		
2,4-DB	0.026	64	33	0	0							
Dalapon	0.040	64	33	0	0							
Dicamba	0.038	64	33	0	0							
Dichloroprop	0.024	64	33	0	0							
Dinoseb	0.037	64	33	0	0							
MCPA	0.035	64	33	0	0							
MCPP	0.017	64	33	0	0							

Chlorinated Pesticides	MDL	N(T)	N(S)	FOD(T)	FOD(S)	MIN	MAX	MEAN	MED	STDEV	AWQC	CWQC
4,4'-DDD	0.0049	65	34	0	0						1.1	0.001
4,4'-DDE	0.0049	65	34	0	0						1.1	0.001
4,4'-DDT	0.0049	65	34	0	0						1.1	0.001
Aldrin	0.0049	65	34	0	0						2.5	0.0019
Alpha-BHC	0.0049	65	34	0	0							
Alpha-Chlordane	0.0049	39	16	0	0						2.4	0.0043
Beta-BHC	0.0049	65	34	0	0							
Chlordane	0.024	26	18	0	0						2.4	0.0043
Delta-BHC	0.0049	65	34	0	0							
Dieldrin	0.0049	65	34	0	0						2.5	0.0019
Endosulfan I	0.0049	65	34	0	0						0.22	0.056
Endosulfan II	0.0049	65	34	0	0						0.22	0.056
Endosulfan Sulfate	0.0049	65	34	0	0						0.22	0.056
Endrin	0.0049	65	34	0	0						0.18	0.0023
Endrin Aldehyde	0.0049	65	34	0	0						0.18	0.0023
Gamma-BHC (Lindane)	0.0049	65	34	0	0						2.0	0.08
Gamma-Chlordane	0.0049	39	16	0	0						2.4	0.0043
Heptachlor	0.0049	65	34	0	0						0.52	0.0038
Heptachlor Epoxide	0.0049	65	34	0	0						0.52	0.0038
Methoxychlor	0.025	65	34	0	0							
Toxaphene	0.049	65	34	0	0						0.21	0.0002

EDCs	MDL	N(T)	N(S)	FOD(T)	FOD(S)	MIN	MAX	MEAN	MED	STDEV	AWQC	CWQC
Atrazine	0.056	39	16	1/39	1/16	0.062	0.062	0.062	0.062	0		
Bis(2-ethylhexyl)adipate	0.24 - 1.6	53	22	0	0							
Bisphenol A	0.12 - 0.19	53	22	0	0							
Estradiol	0.0098	53	22	0	0							
Estrone	0.0098	53	22	0	0							
Ethynyl Estradiol	0.0098	53	22	0	0							
Methyltestosterone	0.0098	53	22	0	0							
Progesterone	0.0098	53	22	0	0							
Testosterone	0.0098	53	22	0	0							
Total 4-Nonylphenol	0.12 - 2.3	53	22	14/53	6/22	0.135	0.836	0.253	0.185	0.187		
Vinclozolin	0.010	53	22	0	0							

Organophosphorus Pest.	MDL	N(T)	N(S)	FOD(T)	FOD(S)	MIN	MAX	MEAN	MED	STDEV	AWQC	CWQC
Chlorpyrifos	0.037	64	33	0	0						0.083	0.041
Diazinon	0.046	64	33	0	0							
Disulfoton	0.029	64	33	0	0							
Malathion	0.052	64	33	0	0							
Parathion-Ethyl	0.049	64	33	0	0						0.065	0.013
Parathion-Methyl	0.039	64	33	0	0						0.065	0.013
Phorate	0.036	64	33	0	0							

PCBs	MDL	N(T)	N(S)	FOD(T)	FOD(S)	MIN	MAX	MEAN	MED	STDEV	AWQC	CWQC
Aroclor 1016	0.049	65	34	0	0						2.0	0.014
Aroclor 1221	0.049	65	34	0	0						2.0	0.014
Aroclor 1232	0.049	65	34	0	0						2.0	0.014
Aroclor 1242	0.049	65	34	0	0						2.0	0.014
Aroclor 1248	0.049	65	34	0	0						2.0	0.014
Aroclor 1254	0.049	65	34	0	0						2.0	0.014
Aroclor 1260	0.049	65	34	0	0						2.0	0.014

APPENDIX B

Summary Statistics for in-Stream Field Measurements Measured at Sites in the Green-Duwamish Watershed in 2003

Table B1. Summary statistics for temperature levels (°C) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	6	8.8	7.9	4.4	17.3	4.8	8.6	12.1	8.0	4.5	5.3	10.2	14.1	5.0	100.0	16.7
A310	4	10.4	9.0	5.4	18.5	6.2	10.0	15.5	8.8	5.4	5.5	13.6	16.6	8.2	100.0	25.0
0322	6	9.3	8.7	5.1	14.1	3.5	9.1	11.6	9.7	5.4	6.4	11.2	12.7	4.8	100.0	0.0
A320	7	10.3	9.7	4.9	13.6	3.3	10.1	12.3	11.0	6.0	8.5	12.8	13.5	4.3	100.0	0.0
A315	6	10.5	9.4	4.8	15.4	4.5	10.2	13.5	12.3	4.8	6.5	13.1	14.3	6.6	100.0	0.0
A317	4	10.9	10.1	6.7	16.2	4.9	10.6	14.9	10.4	6.8	6.9	14.5	15.5	7.6	100.0	0.0
C317	5	12.6	11.7	7.2	17.7	5.0	12.3	16.2	14.3	7.2	7.3	16.3	17.1	9.0	100.0	20.0
S322	2	6.9	6.5	4.7	9.0	3.0	6.6	10.4	6.9	5.1	5.8	7.9	8.6	2.2	100.0	0.0
F321	4	9.1	9.0	7.3	9.9	1.2	9.0	10.1	9.6	8.0	9.0	9.7	9.8	0.7	100.0	0.0
B322	3	9.9	8.8	4.1	13.6	5.1	9.6	14.8	12.1	5.7	8.1	12.9	13.3	4.8	100.0	0.0
D322	3	13.0	13.0	12.6	13.2	0.3	12.9	13.3	13.1	12.7	12.9	13.2	13.2	0.3	100.0	0.0
Y320	1	2.6	2.6	2.6	2.6	n.a.	n.a.	n.a.	2.6	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	4	10.0	9.5	5.5	12.2	3.1	9.8	12.5	11.1	7.0	9.3	11.8	12.0	2.4	100.0	0.0
A326	4	11.2	10.2	4.8	15.6	4.7	10.9	15.0	12.2	6.6	9.3	14.0	15.0	4.7	100.0	0.0
A307	4	12.7	12.7	11.9	13.7	0.8	12.7	13.4	12.7	12.0	12.2	13.2	13.5	1.0	100.0	0.0
I322B	1	14.6	14.6	14.6	14.6	n.a.	n.a.	n.a.	14.6	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	64	10.4	9.5	2.6	18.5	4.0	10.3	11.2	10.9	4.8	6.9	13.3	15.2	6.4	100.0	4.7
Storm Flow																
E319	3	7.6	7.0	4.3	11.5	3.6	7.3	11.0	6.9	4.8	5.6	9.2	10.6	3.6	100.0	0.0
A310	2	6.7	6.7	6.3	7.1	0.6	6.6	7.4	6.7	6.4	6.5	6.9	7.0	0.4	100.0	0.0
0322	3	9.5	9.1	6.5	12.5	3.0	9.2	12.3	9.4	7.1	8.0	11.0	11.9	3.0	100.0	0.0
A320	4	9.2	9.1	7.1	12.0	2.1	9.1	10.9	8.9	7.5	8.0	10.1	11.3	2.1	100.0	0.0
A315	5	8.8	8.5	6.6	13.0	2.6	8.7	10.7	7.7	6.8	7.2	9.5	11.6	2.3	100.0	0.0
A317	3	10.0	9.6	7.3	13.8	3.4	9.8	13.2	8.9	7.6	8.1	11.4	12.8	3.3	100.0	0.0
C317	4	8.4	8.4	7.4	9.7	1.0	8.3	9.2	8.3	7.6	7.9	8.8	9.3	1.0	100.0	0.0
S322	3	6.9	6.9	6.2	8.0	0.9	6.9	7.8	6.6	6.3	6.4	7.3	7.7	0.9	100.0	0.0
F321	4	8.9	8.9	8.1	9.7	0.8	8.8	9.5	8.9	8.2	8.3	9.4	9.6	1.1	100.0	0.0
B322	4	7.6	7.4	5.9	9.4	1.6	7.4	8.9	7.5	6.1	6.4	8.6	9.1	2.2	100.0	0.0
D322	3	8.2	8.1	6.8	9.5	1.4	8.1	9.4	8.2	7.1	7.5	8.9	9.2	1.4	100.0	0.0
Y320	1	12.5	12.5	12.5	12.5	n.a.	n.a.	n.a.	n.a.	2.6	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	4	8.9	8.6	6.9	12.1	2.3	8.7	10.7	8.2	7.1	7.5	9.6	11.1	2.1	100.0	0.0
A326	4	8.2	8.2	7.3	8.8	0.6	8.1	8.7	8.3	7.5	7.9	8.6	8.7	0.7	100.0	0.0
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	1	9.4	9.4	9.4	9.4	n.a.	n.a.	n.a.	n.a.	9.4	n.a.	n.a.	n.a.	n.a.	100.0	0.0
B317	1	7.6	7.6	7.6	7.6	n.a.	n.a.	n.a.	n.a.	7.6	n.a.	n.a.	n.a.	n.a.	100.0	0.0
All	49	8.5	8.3	4.3	13.8	2.0	8.5	9.0	8.2	6.6	7.1	9.4	12.0	2.3	100.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

C: Celsius

Table B2. Summary statistics for dissolved oxygen concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	6	11.5	11.5	9.4	13.4	1.4	11.5	12.4	11.6	10.2	11.0	12.2	12.9	1.2	100.0	16.7
A310	4	10.5	10.3	8.0	11.7	1.7	10.3	11.8	11.1	8.8	10.1	11.4	11.6	1.3	100.0	25.0
0322	6	11.6	11.6	10.5	13.1	0.9	11.5	12.2	11.5	10.8	11.2	11.8	12.5	0.6	100.0	0.0
A320	7	11.2	11.2	10.0	12.9	0.9	11.2	11.8	11.2	10.4	10.9	11.4	12.1	0.6	100.0	0.0
A315	6	8.2	8.2	7.2	8.9	0.7	8.1	8.6	8.3	7.5	7.8	8.7	8.9	0.9	100.0	33.3
A317	4	4.9	4.8	3.4	6.5	1.4	4.8	6.0	4.9	3.7	4.1	5.8	6.2	1.7	100.0	100.0
C317	5	5.9	5.7	3.2	8.1	1.8	5.8	7.2	6.3	4.2	5.7	6.3	7.4	0.6	100.0	80.0
S322	2	12.3	12.3	11.7	12.9	0.8	12.2	13.3	12.3	11.8	12.0	12.6	12.8	0.6	100.0	0.0
F321	4	11.6	11.5	9.5	12.6	1.4	11.5	12.7	12.1	10.2	11.2	12.4	12.5	1.2	100.0	0.0
B322	3	6.3	6.2	5.1	7.4	1.2	6.2	7.4	6.4	5.4	5.8	6.9	7.2	1.2	100.0	100.0
D322	3	9.2	9.1	8.0	10.1	1.1	9.1	10.2	9.4	8.3	8.7	9.8	10.0	1.1	100.0	33.3
Y320	1	11.4	11.4	11.4	11.4	n.a.	n.a.	n.a.	11.4	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	4	11.2	11.2	9.7	12.6	1.2	11.2	12.2	11.3	10.2	10.8	11.7	12.2	0.9	100.0	0.0
A326	4	10.7	10.6	9.0	12.8	1.7	10.6	12.1	10.5	9.2	9.5	11.7	12.4	2.2	100.0	0.0
A307	4	10.2	10.2	9.1	11.3	1.1	10.2	11.1	10.3	9.2	9.4	11.1	11.2	1.7	100.0	0.0
I322B	1	6.6	6.6	6.6	6.6	n.a.	n.a.	n.a.	6.6	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	100.0
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	64	9.7	9.3	3.2	13.4	2.5	9.7	10.2	10.6	6.3	8.1	11.4	12.5	3.4	100.0	26.6
Storm Flow																
E319	3	9.9	9.7	7.4	12.5	2.6	9.7	12.3	9.8	7.9	8.6	11.2	12.0	2.6	100.0	33.3
A310	2	11.9	11.8	11.7	12.0	0.2	11.8	12.1	11.9	11.7	11.8	11.9	12.0	0.2	100.0	0.0
0322	3	9.9	9.7	7.7	11.8	2.1	9.7	11.8	10.1	8.2	8.9	11.0	11.5	2.1	100.0	33.3
A320	3	11.8	11.8	10.7	12.6	1.0	11.7	12.7	12.1	11.0	11.4	12.4	12.5	1.0	100.0	0.0
A315	5	7.8	7.8	6.0	9.4	1.3	7.8	8.8	7.8	6.6	7.4	8.6	9.1	1.2	100.0	60.0
A317	3	8.0	7.6	4.8	9.8	2.8	7.8	10.7	9.5	5.7	7.2	9.7	9.7	2.5	100.0	33.3
C317	4	9.3	9.2	8.3	10.7	1.2	9.2	10.3	9.1	8.3	8.4	10.0	10.4	1.7	100.0	0.0
S322	3	12.4	12.3	11.5	13.9	1.3	12.3	13.6	11.7	11.5	11.6	12.8	13.5	1.2	100.0	0.0
F321	4	11.8	11.7	10.9	12.6	0.7	11.7	12.3	11.8	11.1	11.4	12.2	12.4	0.8	100.0	0.0
B322	4	5.8	5.6	3.8	8.3	1.9	5.7	7.4	5.6	4.3	5.2	6.3	7.5	1.1	100.0	75.0
D322	3	9.8	9.6	7.3	12.1	2.4	9.7	12.1	10.1	7.9	8.7	11.1	11.7	2.4	100.0	33.3
Y320	1	6.2	6.2	6.2	6.2	n.a.	n.a.	n.a.	6.2	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	100.0
A330	3	11.8	11.8	11.4	12.6	0.7	11.8	12.5	11.5	11.4	11.5	12.1	12.4	0.6	100.0	0.0
A326	4	11.9	11.8	11.5	12.1	0.3	11.8	12.1	11.9	11.6	11.7	12.0	12.1	0.3	100.0	0.0
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	1	11.3	11.3	11.3	11.3	n.a.	n.a.	n.a.	11.3	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
B317	1	10.4	10.4	10.4	10.4	n.a.	n.a.	n.a.	10.4	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
All	47	9.9	9.6	3.8	13.9	2.4	9.9	10.5	10.7	6.1	8.3	11.8	12.3	3.5	100.0	23.4

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table B3. Summary statistics for levels of pH at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	6	7.4	7.4	7.1	7.6	0.2	7.4	7.5	7.4	7.2	7.2	7.6	7.6	0.4	100.0	0.0
A310	4	7.3	7.3	7.1	7.6	0.3	7.3	7.5	7.3	7.1	7.1	7.5	7.6	0.4	100.0	0.0
0322	6	7.7	7.7	7.5	8.1	0.2	7.7	7.9	7.7	7.6	7.7	7.7	7.9	0.0	100.0	0.0
A320	5	7.7	7.7	7.4	8.0	0.2	7.7	7.8	7.6	7.5	7.6	7.8	7.9	0.2	100.0	0.0
A315	6	7.1	7.1	6.8	7.5	0.3	7.1	7.3	7.1	6.9	6.9	7.3	7.4	0.4	100.0	0.0
A317	4	7.0	7.0	6.8	7.1	0.1	7.0	7.1	7.0	6.9	7.0	7.0	7.1	0.1	100.0	0.0
C317	5	7.0	7.0	6.8	7.3	0.2	7.0	7.2	6.9	6.8	6.8	7.2	7.3	0.4	100.0	0.0
S322	2	7.6	7.5	7.5	7.6	0.1	7.5	7.6	7.6	7.5	7.5	7.6	7.6	0.0	100.0	0.0
F321	3	7.7	7.7	7.6	7.9	0.2	7.7	7.9	7.6	7.6	7.6	7.8	7.8	0.2	100.0	0.0
B322	3	6.6	6.6	6.5	6.7	0.1	6.6	6.7	6.6	6.5	6.6	6.7	6.7	0.1	100.0	0.0
D322	3	7.1	7.1	6.9	7.2	0.2	7.1	7.3	7.2	7.0	7.1	7.2	7.2	0.1	100.0	0.0
Y320	1	7.4	7.4	7.4	7.4	n.a.	n.a.	n.a.	7.4	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	4	7.9	7.9	7.3	8.3	0.5	7.8	8.3	8.0	7.4	7.6	8.2	8.3	0.6	100.0	0.0
A326	4	7.8	7.8	7.6	8.1	0.2	7.8	8.0	7.8	7.6	7.7	7.9	8.0	0.2	100.0	0.0
A307	4	7.7	7.7	7.5	7.9	0.2	7.7	7.8	7.7	7.6	7.7	7.8	7.8	0.1	100.0	0.0
I322B	1	7.0	7.0	7.0	7.0	n.a.	n.a.	n.a.	7.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	61	7.4	7.4	6.5	8.3	0.4	7.4	7.5	7.5	6.8	7.1	7.7	7.9	0.6	100.0	0.0
Storm Flow																
E319	3	7.6	7.6	7.5	7.8	0.2	7.6	7.8	7.5	7.5	7.5	7.7	7.7	0.2	100.0	0.0
A310	2	7.2	7.1	7.1	7.2	0.1	7.1	7.2	7.2	7.1	7.1	7.2	7.2	0.0	100.0	0.0
0322	3	7.5	7.5	7.4	7.6	0.1	7.5	7.6	7.5	7.4	7.5	7.6	7.6	0.1	100.0	0.0
A320	4	7.5	7.5	7.4	7.7	0.2	7.5	7.6	7.4	7.4	7.4	7.5	7.6	0.1	100.0	0.0
A315	5	7.0	7.0	6.7	7.4	0.3	7.0	7.2	6.9	6.7	6.8	7.3	7.4	0.5	100.0	0.0
A317	3	7.0	7.0	6.9	7.1	0.1	7.0	7.1	7.1	6.9	7.0	7.1	7.1	0.1	100.0	0.0
C317	4	7.1	7.1	6.8	7.3	0.2	7.1	7.3	7.2	6.9	7.0	7.3	7.3	0.4	100.0	0.0
S322	3	7.7	7.7	7.4	8.0	0.3	7.7	8.0	7.7	7.5	7.6	7.9	7.9	0.3	100.0	0.0
F321	4	7.8	7.8	7.7	7.9	0.1	7.8	7.9	7.8	7.7	7.7	7.9	7.9	0.2	100.0	0.0
B322	4	6.8	6.7	6.6	6.9	0.1	6.7	6.9	6.8	6.6	6.7	6.8	6.9	0.2	100.0	0.0
D322	3	7.2	7.2	7.0	7.4	0.2	7.2	7.4	7.2	7.0	7.1	7.3	7.4	0.2	100.0	0.0
Y320	1	6.5	6.5	6.5	6.5	n.a.	n.a.	n.a.	6.5	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	4	7.4	7.4	7.3	7.6	0.2	7.4	7.5	7.4	7.3	7.3	7.5	7.6	0.2	100.0	0.0
A326	4	7.3	7.2	7.0	7.4	0.2	7.2	7.4	7.3	7.1	7.2	7.3	7.4	0.1	100.0	0.0
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	1	7.4	7.4	7.4	7.4	n.a.	n.a.	n.a.	7.4	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
B317	1	6.9	6.9	6.9	6.9	n.a.	n.a.	n.a.	6.9	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
All	49	7.3	7.3	6.5	8.0	0.4	7.3	7.4	7.3	6.8	7.0	7.5	7.7	0.5	100.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

Table B4. Summary statistics for specific conductance (µmhos/cm) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	6	50.8	48.0	38.0	93.0	21.4	49.7	65.2	41.0	38.5	39.5	50.0	73.0	10.5	100.0	n.a.
A310	4	108.0	104.7	83.0	157.0	33.3	105.9	135.4	96.0	86.3	91.3	112.8	139.3	21.5	100.0	n.a.
0322	6	152.5	152.1	139.0	174.0	12.6	151.9	160.9	149.5	142.0	145.0	157.0	166.0	12.0	100.0	n.a.
A320	7	130.7	130.6	123.0	143.0	6.7	130.4	134.8	130.0	124.8	126.5	133.0	138.2	6.5	100.0	n.a.
A315	6	229.7	225.4	168.0	295.0	48.0	227.2	261.9	225.0	182.5	198.8	262.5	281.5	63.8	100.0	n.a.
A317	4	344.3	340.6	274.0	394.0	57.0	340.7	391.1	354.5	288.4	310.0	388.8	391.9	78.8	100.0	n.a.
C317	5	348.4	346.3	290.0	381.0	41.4	346.1	378.9	375.0	301.6	319.0	377.0	379.4	58.0	100.0	n.a.
S322	2	77.0	76.8	72.0	82.0	7.1	76.4	85.2	77.0	73.0	74.5	79.5	81.0	5.0	100.0	n.a.
F321	4	109.5	109.3	101.0	119.0	7.4	109.0	115.6	109.0	103.1	106.3	112.3	116.3	6.0	100.0	n.a.
B322	3	185.3	182.3	142.0	221.0	40.1	182.4	223.4	193.0	152.2	167.5	207.0	215.4	39.5	100.0	n.a.
D322	3	190.7	186.2	142.0	242.0	50.1	187.0	238.2	188.0	151.2	165.0	215.0	231.2	50.0	100.0	n.a.
Y320	1	155.0	155.0	155.0	155.0	n.a.	n.a.	n.a.	155.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
A330	3	176.3	176.2	168.0	181.0	7.2	175.8	183.2	180.0	170.4	174.0	180.5	180.8	6.5	100.0	n.a.
A326	4	212.0	196.0	115.0	305.0	92.2	206.2	287.8	214.0	126.4	143.5	282.5	296.0	139.0	100.0	n.a.
A307	4	260.8	260.7	258.0	263.0	2.2	260.6	262.6	261.0	258.6	259.5	262.3	262.7	2.8	100.0	n.a.
I322B	1	133.0	133.0	133.0	133.0	n.a.	n.a.	n.a.	133.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	63	182.4	157.5	38.0	394.0	94.2	180.9	201.9	155.0	82.2	121.0	259.0	316.2	138.0	100.0	n.a.
Storm Flow																
E319	3	41.0	40.6	33.0	47.0	7.2	40.5	47.8	43.0	35.0	38.0	45.0	46.2	7.0	100.0	n.a.
A310	2	82.5	82.4	78.0	87.0	6.4	81.9	89.9	82.5	78.9	80.3	84.8	86.1	4.5	100.0	n.a.
0322	3	142.0	141.5	130.0	158.0	14.4	141.0	155.7	138.0	131.6	134.0	148.0	154.0	14.0	100.0	n.a.
A320	4	119.0	118.3	104.0	140.0	15.6	118.0	131.9	116.0	106.1	109.3	125.8	134.3	16.5	100.0	n.a.
A315	5	125.0	123.8	107.0	159.0	20.2	123.9	139.9	122.0	109.4	113.0	124.0	145.0	11.0	100.0	n.a.
A317	3	109.7	105.1	85.0	157.0	41.0	106.7	148.6	87.0	85.4	86.0	122.0	143.0	36.0	100.0	n.a.
C317	4	96.0	91.1	56.0	133.0	34.2	93.8	124.2	97.5	63.5	74.8	118.8	127.3	44.0	100.0	n.a.
S322	3	69.0	68.8	62.0	73.0	6.1	68.6	74.8	72.0	64.0	67.0	72.5	72.8	5.5	100.0	n.a.
F321	4	106.3	106.1	101.0	115.0	6.4	105.8	111.5	104.5	101.3	101.8	109.0	112.6	7.3	100.0	n.a.
B322	4	318.3	306.1	196.0	414.0	96.5	312.2	397.6	331.5	224.2	266.5	383.3	401.7	116.8	100.0	n.a.
D322	3	217.7	208.0	140.0	295.0	77.5	212.0	291.3	218.0	155.6	179.0	256.5	279.6	77.5	100.0	n.a.
Y320	1	99.3	99.3	99.3	99.3	n.a.	n.a.	n.a.	99.3	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
A330	4	102.3	100.0	72.0	130.0	24.1	100.7	122.1	103.5	79.8	91.5	114.3	123.7	22.8	100.0	n.a.
A326	4	80.0	77.8	56.0	105.0	21.5	78.7	97.7	79.5	60.2	66.5	93.0	100.2	26.5	100.0	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	1	70.0	70.0	70.0	70.0	n.a.	n.a.	n.a.	70.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
B317	1	56.0	56.0	56.0	56.0	n.a.	n.a.	n.a.	56.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
All	49	123.3	107.0	33.0	414.0	77.4	121.9	141.5	107.0	56.0	78.0	133.0	200.4	55.0	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µmhos/cm: micromhos/centimeter

APPENDIX C

Summary Statistics for Conventional Parameters Measured at Sites in the Green-Duwamish Watershed in 2003

Table C1. Summary statistics for alkalinity concentrations (mg/L as $CaCO_3$) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	17.3	17.2	15.3	22.4	2.2	17.2	18.6	16.8	15.9	16.5	17.1	19.2	0.6	100	n.a.
A310	4	37.5	36.7	30.0	49.8	9.1	36.9	44.9	35.1	30.4	31.0	41.6	46.5	10.6	100	n.a.
0322	7	47.4	46.4	32.4	62.0	10.2	46.9	53.7	47.9	35.8	40.9	53.8	58.2	12.9	100	n.a.
A320	5	49.0	48.8	42.4	56.6	5.4	48.7	53.0	47.9	43.9	46.2	51.9	54.7	5.7	100	n.a.
A315	4	103.1	100.4	75.0	136.0	27.3	101.4	125.6	100.8	78.8	84.4	119.5	129.4	35.1	100	n.a.
A317	6	107.3	93.3	35.4	157.0	52.5	104.6	142.6	121.5	43.5	67.0	150.3	157.0	83.3	100	n.a.
C317	2	134.0	132.6	115.0	153.0	26.9	131.6	165.3	134.0	118.8	124.5	143.5	149.2	19.0	100	n.a.
S322	4	46.3	44.0	30.8	68.6	17.3	45.2	60.5	42.9	32.0	33.7	55.4	63.3	21.7	100	n.a.
F321	4	44.9	44.7	41.8	50.3	4.0	44.6	48.1	43.7	41.9	42.0	46.6	48.8	4.6	100	n.a.
B322	3	49.1	46.1	29.3	71.4	21.1	47.6	69.2	46.7	32.8	38.0	59.1	66.5	21.0	100	n.a.
D322	3	53.5	52.6	42.0	66.9	12.6	52.6	65.5	51.7	43.9	46.9	59.3	63.9	12.5	100	n.a.
Y320	4	44.7	42.2	25.8	66.3	17.0	43.6	58.6	43.3	29.7	35.6	52.3	60.7	16.7	100	n.a.
A330	4	67.2	67.0	62.7	71.1	4.5	66.9	70.9	67.4	63.0	63.5	71.0	71.1	7.5	100	n.a.
A326	5	74.2	66.9	38.2	117.7	37.3	72.1	101.6	58.3	41.4	46.3	110.7	114.9	64.5	100	n.a.
A307	4	79.4	78.8	63.5	85.7	10.6	78.7	88.1	84.1	69.4	78.4	85.1	85.5	6.8	100	n.a.
I322B	6	31.0	27.6	14.3	50.8	15.5	30.2	41.4	31.0	15.8	18.0	41.8	46.3	23.8	100	n.a.
B317	6	66.2	55.3	18.4	99.5	34.6	64.4	89.4	83.3	22.3	39.9	86.2	93.0	46.3	100	n.a.
All	79	58.0	48.6	14.3	157.0	34.9	57.5	64.4	49.8	17.7	35.1	71.3	113.2	36.2	100	n.a.
Storm Flow																
E319	6	16.7	16.4	12.3	21.2	3.1	16.5	18.8	16.2	13.7	15.3	18.4	20.2	3.1	100	n.a.
A310	7	27.2	26.6	16.4	33.2	5.8	27.0	30.8	27.1	21.4	25.2	31.8	32.5	6.5	100	n.a.
0322	8	38.4	38.0	32.4	49.2	6.1	38.1	41.9	36.9	32.8	33.2	42.2	45.0	9.0	100	n.a.
A320	4	38.7	38.4	31.2	44.3	5.8	38.3	43.5	39.7	33.0	35.8	42.6	43.6	6.8	100	n.a.
A315	5	41.4	40.0	28.3	62.9	12.9	40.7	50.9	37.8	31.9	37.3	40.7	54.0	3.4	100	n.a.
A317	6	28.0	27.7	23.3	35.1	4.2	27.7	30.8	28.0	23.8	25.1	28.9	32.2	3.8	100	n.a.
C317	3	27.8	26.2	17.0	40.2	11.7	27.0	38.9	26.3	18.9	21.7	33.3	37.4	11.6	100	n.a.
S322	5	28.2	27.6	21.2	40.6	7.4	27.8	33.7	26.3	22.5	24.4	28.8	35.9	4.5	100	n.a.
F321	4	42.2	42.1	38.9	46.6	3.2	41.9	44.8	41.6	39.6	40.6	43.2	45.2	2.6	100	n.a.
B322	4	64.0	63.7	53.5	69.0	7.3	63.6	70.0	66.8	56.9	62.1	68.7	68.9	6.6	100	n.a.
D322	1	35.3	35.3	35.3	35.3	n.a.	n.a.	n.a.	35.3	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
Y320	9	25.8	25.5	19.1	34.3	4.2	25.6	28.1	24.8	22.2	24.3	28.1	29.7	3.8	100	n.a.
A330	4	40.4	39.6	32.6	49.1	8.7	39.8	47.5	39.9	32.8	33.0	47.2	48.4	14.3	100	n.a.
A326	4	23.3	22.8	17.0	30.6	5.7	23.0	28.0	22.9	18.3	20.3	25.9	28.7	5.6	100	n.a.
A307	2	52.3	52.3	52.1	52.5	0.3	52.3	52.6	52.3	52.1	52.2	52.4	52.5	0.2	100	n.a.
I322B	5	18.4	18.1	15.1	21.8	3.1	18.2	20.6	18.9	15.1	15.2	20.8	21.4	5.6	100	n.a.
B317	8	19.1	18.7	13.0	23.6	3.8	18.9	21.3	19.7	14.8	16.3	22.1	23.0	5.8	100	n.a.
All	85	31.1	28.8	12.3	69.0	12.8	31.0	33.4	28.3	16.4	21.8	38.9	48.1	17.1	100	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table C2. Summary statistics for turbidity levels (NTU) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	4.0	2.1	0.8	21.0	6.9	3.7	8.0	1.8	1.1	1.4	2.1	7.8	0.7	100	n.a.
A310	4	3.4	3.3	2.7	4.9	1.0	3.3	4.3	3.0	2.8	2.9	3.5	4.4	0.7	100	n.a.
0322	7	5.5	3.6	1.3	14.9	5.7	5.2	9.0	2.1	1.7	2.0	8.0	13.4	6.0	100	n.a.
A320	5	1.5	1.5	1.2	1.7	0.2	1.5	1.6	1.5	1.3	1.4	1.6	1.7	0.2	100	n.a.
A315	4	13.4	13.2	10.8	15.9	2.3	13.2	15.3	13.4	11.2	11.9	14.9	15.5	3.1	100	n.a.
A317	6	21.4	20.4	12.7	34.8	7.5	21.0	26.4	19.7	15.2	17.9	23.0	29.3	5.2	100	n.a.
C317	2	18.7	18.6	17.9	19.4	1.1	18.6	19.9	18.7	18.1	18.3	19.0	19.3	0.8	100	n.a.
S322	4	3.3	2.9	1.0	5.4	1.8	3.2	4.8	3.5	1.8	2.8	4.0	4.8	1.1	100	n.a.
F321	4	0.5	0.5	0.5	0.6	0.1	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.0	25	n.a.
B322	3	3.4	3.0	1.5	5.2	1.8	3.2	5.1	3.4	1.9	2.5	4.3	4.8	1.8	100	n.a.
D322	3	2.9	2.7	1.7	3.9	1.1	2.8	4.0	3.1	2.0	2.4	3.5	3.7	1.1	100	n.a.
Y320	4	3.7	3.2	1.6	6.3	2.2	3.5	5.4	3.3	1.8	2.1	4.9	5.8	2.9	100	n.a.
A330	4	2.9	2.8	2.2	3.6	0.6	2.9	3.4	2.9	2.3	2.5	3.2	3.5	0.7	100	n.a.
A326	5	3.5	2.2	1.2	11.5	4.5	3.2	6.8	1.5	1.2	1.3	2.1	7.7	0.8	100	n.a.
A307	4	6.1	4.4	2.0	14.3	5.8	5.7	10.8	4.0	2.1	2.1	8.0	11.8	5.8	100	n.a.
I322B	6	5.5	3.3	0.9	11.0	4.9	5.3	8.8	5.1	0.9	1.1	9.8	10.6	8.8	100	n.a.
B317	6	16.8	14.4	4.1	31.1	8.7	16.3	22.6	16.7	8.9	14.0	18.4	24.8	4.4	100	n.a.
All	79	6.9	3.8	0.5	34.8	7.7	6.8	8.3	3.1	1.1	1.6	11.8	18.1	10.2	96	n.a.
Storm Flow																
E319	6	10.4	6.0	2.7	39.2	14.3	9.6	20.0	4.7	2.7	2.9	7.7	23.7	4.8	100	n.a.
A310	7	13.1	10.0	4.8	40.1	12.4	12.5	20.8	9.6	4.9	5.8	13.0	24.6	7.2	100	n.a.
0322	8	10.9	8.5	2.8	28.2	8.7	10.6	16.0	7.0	4.2	5.6	14.0	22.2	8.3	100	n.a.
A320	4	7.0	6.0	3.9	14.2	4.9	6.7	11.0	4.9	4.0	4.1	7.8	11.7	3.8	100	n.a.
A315	5	14.3	14.0	9.9	17.5	3.3	14.1	16.7	13.5	11.1	12.9	17.5	17.5	4.6	100	n.a.
A317	6	16.8	15.6	9.2	25.3	6.6	16.5	21.3	17.2	9.4	11.1	21.5	23.9	10.4	100	n.a.
C317	3	18.2	16.8	11.9	29.2	9.5	17.5	27.3	13.6	12.2	12.8	21.4	26.1	8.7	100	n.a.
S322	5	31.0	23.3	14.8	86.8	31.4	29.2	54.1	15.3	15.0	15.1	23.0	61.3	7.8	100	n.a.
F321	4	2.4	1.9	0.6	5.1	1.9	2.3	4.0	2.0	1.0	1.6	2.9	4.2	1.3	100	n.a.
B322	4	9.7	9.2	6.8	13.9	3.5	9.5	12.6	9.1	6.8	6.9	11.9	13.1	5.0	100	n.a.
D322	1	6.6	6.6	6.6	6.6	n.a.	n.a.	n.a.	6.6	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
Y320	9	6.6	6.1	3.5	13.1	2.9	6.4	8.1	5.3	4.4	5.0	6.7	9.7	1.7	100	n.a.
A330	4	27.1	24.4	11.3	41.0	12.5	26.3	37.4	28.0	15.2	21.1	34.0	38.2	12.8	100	n.a.
A326	4	106.0	31.1	9.7	380.0	182.8	94.5	256.3	17.1	10.0	10.5	112.6	273.0	102.1	100	n.a.
A307	2	13.2	12.3	8.4	18.0	6.8	12.6	21.1	13.2	9.4	10.8	15.6	17.1	4.8	100	n.a.
I322B	5	10.6	9.3	5.1	22.3	6.8	10.2	15.5	8.0	6.1	7.6	9.8	17.3	2.2	100	n.a.
B317	8	13.2	12.2	5.4	23.2	5.3	13.0	16.3	13.3	8.2	10.1	15.2	18.0	5.0	100	n.a.
All	85	17.4	10.2	0.6	380.0	41.5	16.9	24.9	9.9	4.0	5.9	15.7	24.9	9.8	100	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

NTU: nephelometric turbidity unit

Table C3. Summary statistics for total suspended solids concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	5.5	2.9	1.0	28.2	9.2	5.1	10.9	2.3	1.3	2.0	2.9	11.4	0.9	100	n.a.
A310	4	9.5	9.3	6.4	10.8	2.1	9.3	11.2	10.4	7.5	9.2	10.7	10.7	1.5	100	n.a.
0322	7	7.7	5.5	2.4	22.2	7.4	7.3	12.2	4.4	2.5	2.9	9.5	16.6	6.6	100	n.a.
A320	5	3.6	3.5	2.2	5.5	1.2	3.6	4.5	3.4	2.6	3.2	3.9	4.9	0.7	100	n.a.
A315	4	8.2	7.1	3.9	15.3	5.1	7.9	12.4	6.8	4.3	4.8	10.1	13.2	5.3	100	n.a.
A317	6	16.7	12.6	6.4	42.4	14.8	16.0	26.7	8.6	6.8	7.5	22.6	34.8	15.1	100	n.a.
C317	2	10.1	9.9	8.0	12.2	3.0	9.8	13.6	10.1	8.4	9.1	11.2	11.8	2.1	100	n.a.
S322	4	8.0	7.5	4.8	12.6	3.4	7.8	10.8	7.3	5.2	5.9	9.4	11.3	3.5	100	n.a.
F321	4	1.0	1.0	0.8	1.5	0.3	1.0	1.3	0.9	0.8	0.8	1.1	1.3	0.3	100	n.a.
B322	3	4.3	3.3	1.0	7.2	3.1	4.1	7.2	4.8	1.8	2.9	6.0	6.7	3.1	100	n.a.
D322	3	3.2	2.6	0.9	4.4	2.0	3.1	5.2	4.4	1.6	2.7	4.4	4.4	1.8	100	n.a.
Y320	4	4.3	3.3	1.4	8.0	3.3	4.1	7.0	3.9	1.5	1.6	6.7	7.5	5.1	100	n.a.
A330	4	6.0	5.8	3.4	7.7	1.9	5.9	7.6	6.5	4.1	5.2	7.4	7.6	2.2	100	n.a.
A326	5	6.4	3.3	1.6	23.7	9.7	5.9	13.5	1.8	1.7	1.8	3.1	15.5	1.3	100	n.a.
A307	4	7.3	4.5	1.7	17.8	7.6	6.8	13.5	4.8	1.7	1.8	10.2	14.8	8.5	100	n.a.
I322B	6	8.1	3.3	0.6	24.4	9.4	7.6	14.4	5.5	0.6	0.7	11.5	18.2	10.7	83	n.a.
B317	6	22.0	9.0	0.9	71.6	27.1	20.6	40.1	12.4	1.4	3.2	28.9	52.1	25.7	100	n.a.
All	79	8.2	4.7	0.6	71.6	10.8	8.1	10.2	4.8	1.0	2.1	8.6	18.7	6.6	99	n.a.
Storm Flow																
E319	6	15.4	8.7	3.1	58.8	21.5	14.3	29.9	8.5	3.2	4.2	10.5	34.7	6.3	100	n.a.
A310	7	22.6	17.4	8.3	67.0	20.7	21.6	35.5	15.8	8.5	10.8	22.9	43.7	12.1	100	n.a.
0322	8	15.9	10.8	2.7	50.3	15.9	15.2	25.2	11.7	4.1	5.9	16.1	34.6	10.2	100	n.a.
A320	4	16.7	11.7	6.6	43.8	18.1	15.5	31.6	8.2	6.7	6.9	17.9	33.5	11.0	100	n.a.
A315	5	16.3	14.9	7.0	22.8	6.9	15.9	21.4	17.6	8.9	11.8	22.4	22.6	10.6	100	n.a.
A317	6	22.3	18.8	8.2	35.2	13.0	21.7	31.0	23.0	8.9	10.8	34.3	35.2	23.5	100	n.a.
C317	3	16.3	14.3	8.0	27.6	10.2	15.5	25.9	13.2	9.0	10.6	20.4	24.7	9.8	100	n.a.
S322	5	30.6	28.2	18.5	53.0	14.5	29.8	41.3	26.3	18.6	18.8	36.6	46.4	17.8	100	n.a.
F321	4	4.0	3.3	1.9	8.2	2.9	3.8	6.4	3.0	2.0	2.1	4.9	6.9	2.8	100	n.a.
B322	4	8.8	7.3	3.4	16.9	6.1	8.4	13.9	7.5	3.8	4.4	11.9	14.9	7.5	100	n.a.
D322	1	7.4	7.4	7.4	7.4	n.a.	n.a.	n.a.	7.4	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
Y320	8	4.0	3.6	1.5	7.2	2.0	3.9	5.2	4.2	1.9	2.5	4.8	6.4	2.3	100	n.a.
A330	4	52.4	44.9	20.1	99.6	33.6	50.3	80.0	45.0	27.4	38.4	59.0	83.4	20.6	100	n.a.
A326	4	193.1	52.6	13.7	698.0	336.8	171.9	470.1	30.3	15.4	18.0	205.4	501.0	187.4	100	n.a.
A307	2	19.8	18.1	11.7	27.9	11.4	18.8	33.1	19.8	13.4	15.8	23.9	26.3	8.1	100	n.a.
I322B	5	18.9	13.4	4.3	52.2	19.1	17.8	32.9	12.4	6.5	9.7	15.9	37.7	6.2	100	n.a.
B317	7	18.4	17.4	11.2	33.2	7.0	18.0	22.7	17.6	12.6	15.3	18.0	24.1	2.7	100	n.a.
All	83	26.5	12.9	1.5	698.0	76.6	25.4	40.3	12.4	3.4	7.0	24.5	44.4	17.5	100	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table C4. Summary statistics for dissolved organic carbon concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	12	2.0	2.0	1.4	2.9	0.4	2.0	2.2	2.0	1.5	1.8	2.3	2.3	0.5	100	n.a.
A310	4	2.4	2.4	2.0	2.8	0.4	2.4	2.7	2.4	2.1	2.2	2.7	2.7	0.5	100	n.a.
0322	7	6.7	5.9	3.1	11.7	3.5	6.5	8.9	6.0	3.3	3.6	9.3	11.0	5.8	100	n.a.
A320	5	3.3	3.2	2.1	4.4	0.9	3.2	4.0	3.2	2.4	2.8	4.0	4.2	1.2	100	n.a.
A315	4	10.6	10.6	9.9	12.1	1.0	10.6	11.5	10.3	10.0	10.1	10.8	11.6	0.8	100	n.a.
A317	6	7.1	6.9	5.0	10.2	1.9	7.0	8.3	6.9	5.3	5.7	7.8	9.0	2.0	100	n.a.
C317	2	7.2	7.2	7.1	7.3	0.1	7.2	7.3	7.2	7.2	7.2	7.2	7.3	0.1	100	n.a.
S322	4	2.6	2.6	2.1	3.2	0.6	2.6	3.1	2.6	2.1	2.1	3.2	3.2	1.0	100	n.a.
F321	3	2.3	2.2	1.6	2.7	0.6	2.2	2.8	2.6	1.8	2.1	2.6	2.6	0.5	100	n.a.
B322	3	13.6	11.0	4.1	21.8	8.9	13.0	22.1	15.1	6.3	9.6	18.4	20.5	8.9	100	n.a.
D322	3	7.0	6.7	4.4	9.4	2.5	6.9	9.4	7.3	5.0	5.8	8.3	9.0	2.5	100	n.a.
Y320	4	7.1	7.0	6.4	7.9	0.7	7.0	7.7	7.0	6.4	6.4	7.6	7.8	1.2	100	n.a.
A330	4	2.6	2.5	1.7	3.2	0.7	2.5	3.1	2.6	1.9	2.2	3.0	3.1	0.9	100	n.a.
A326	5	6.9	6.3	3.9	10.4	3.2	6.7	9.3	5.7	4.0	4.2	10.4	10.4	6.1	100	n.a.
A307	4	4.0	3.3	1.8	8.7	3.2	3.8	6.6	2.8	1.9	2.2	4.6	7.0	2.4	100	n.a.
I322B	7	7.9	5.7	3.8	29.5	9.5	7.5	13.8	4.3	3.9	4.1	4.8	14.8	0.8	100	n.a.
B317	6	5.9	5.8	3.7	7.5	1.5	5.9	6.9	6.1	4.3	5.0	7.1	7.4	2.1	100	n.a.
All	83	5.5	4.3	1.4	29.5	4.5	5.4	6.3	4.1	1.9	2.4	7.3	10.3	4.9	100	n.a.
Storm Flow																
E319	7	2.8	2.7	1.8	3.9	0.7	2.8	3.2	2.8	1.9	2.4	3.1	3.5	0.8	100	n.a.
A310	8	3.5	3.4	2.8	4.7	0.8	3.4	3.9	3.1	2.8	2.9	4.0	4.7	1.1	100	n.a.
0322	9	10.3	9.8	6.1	14.9	3.1	10.1	11.9	10.4	6.5	7.7	12.4	13.9	4.7	100	n.a.
A320	4	7.3	7.1	5.3	8.9	1.6	7.2	8.6	7.5	5.7	6.3	8.5	8.7	2.2	100	n.a.
A315	5	8.5	8.4	6.3	9.5	1.3	8.4	9.5	8.9	7.0	8.2	9.5	9.5	1.3	100	n.a.
A317	7	6.3	6.3	5.2	7.2	0.8	6.3	6.8	6.2	5.4	5.8	7.0	7.1	1.2	100	n.a.
C317	4	6.5	6.4	4.7	7.5	1.3	6.4	7.6	6.9	5.2	6.0	7.4	7.5	1.5	100	n.a.
S322	6	6.0	6.0	5.4	6.4	0.4	6.0	6.3	6.2	5.5	5.7	6.4	6.4	0.6	100	n.a.
F321	4	3.8	3.8	3.1	4.3	0.6	3.8	4.3	3.9	3.3	3.5	4.3	4.3	0.8	100	n.a.
B322	5	22.5	22.2	15.7	24.9	3.9	22.3	25.3	24.0	18.6	23.1	24.8	24.9	1.7	100	n.a.
D322	3	15.3	15.3	14.6	15.6	n.a.	n.a.	n.a.	15.6	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
Y320	10	8.0	7.9	7.0	9.9	1.0	7.9	8.5	7.8	7.1	7.2	8.5	9.1	1.3	100	n.a.
A330	4	6.3	6.3	5.3	7.0	0.8	6.3	7.0	6.5	5.6	6.0	6.9	6.9	0.9	100	n.a.
A326	5	7.2	7.1	5.7	8.3	1.1	7.1	7.9	7.6	6.0	6.4	7.8	8.1	1.4	100	n.a.
A307	2	6.9	6.9	6.9	7.0	0.0	6.9	7.0	6.9	6.9	6.9	7.0	7.0	0.0	100	n.a.
I322B	6	4.9	4.8	3.7	6.3	0.9	4.8	5.5	4.8	4.0	4.3	5.3	5.8	1.0	100	n.a.
B317	9	5.5	5.5	4.9	6.1	0.4	5.5	5.7	5.5	5.0	5.2	5.9	6.0	0.7	100	n.a.
All	98	7.4	6.4	1.8	24.9	4.6	7.3	8.1	6.3	3.2	5.1	8.1	12.8	3.0	100	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table C5. Summary statistics for total organic carbon (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	12	2.3	2.3	1.6	4.1	0.7	2.3	2.7	2.2	1.7	1.7	2.7	2.9	1.0	100	n.a.
A310	4	2.9	2.9	2.7	3.2	0.2	2.9	3.1	2.9	2.7	2.8	3.1	3.2	0.3	100	n.a.
0322	7	8.1	7.1	3.2	14.7	4.5	7.9	11.0	5.8	4.1	5.1	11.6	14.0	6.5	100	n.a.
A320	5	3.5	3.4	2.2	4.7	1.0	3.4	4.2	3.4	2.5	3.0	4.2	4.5	1.2	100	n.a.
A315	4	11.0	11.0	9.5	12.0	1.1	11.0	11.9	11.3	10.0	10.6	11.7	11.9	1.1	100	n.a.
A317	6	10.9	10.3	7.1	19.6	4.4	10.6	13.9	9.6	7.9	8.9	10.4	15.1	1.5	100	n.a.
C317	2	8.6	8.6	8.4	8.9	0.3	8.6	9.0	8.6	8.4	8.5	8.7	8.8	0.2	100	n.a.
S322	4	3.5	3.4	2.6	4.4	0.7	3.4	4.1	3.4	2.8	3.1	3.7	4.1	0.6	100	n.a.
F321	3	2.5	2.4	1.6	3.2	0.8	2.5	3.3	2.7	1.8	2.2	3.0	3.1	0.8	100	n.a.
B322	3	14.5	12.2	5.2	23.2	9.0	13.9	23.0	15.1	7.2	10.2	19.1	21.6	9.0	100	n.a.
D322	3	8.2	7.7	4.8	10.7	3.1	7.9	11.1	9.0	5.6	6.9	9.9	10.4	3.0	100	n.a.
Y320	4	7.5	7.4	6.2	8.7	1.1	7.4	8.4	7.6	6.4	6.9	8.2	8.5	1.3	100	n.a.
A330	4	2.8	2.7	2.1	3.5	0.6	2.7	3.3	2.7	2.2	2.4	3.1	3.3	0.8	100	n.a.
A326	5	7.6	7.1	3.7	10.7	3.0	7.4	9.7	7.1	4.6	6.1	10.4	10.5	4.3	100	n.a.
A307	4	5.4	4.3	2.2	12.2	4.6	5.1	9.2	3.6	2.6	3.2	5.8	9.6	2.6	100	n.a.
I322B	7	10.0	7.5	4.0	33.8	10.6	9.5	16.6	6.7	4.3	4.8	8.1	18.6	3.3	100	n.a.
B317	6	8.2	8.0	4.9	10.5	1.9	8.1	9.5	8.7	6.4	8.1	8.8	9.6	0.7	100	n.a.
All	83	6.6	5.2	1.6	33.8	5.2	6.6	7.6	4.9	2.2	3.0	8.8	11.5	5.8	100	n.a.
Storm Flow																
E319	7	3.4	3.2	2.1	6.2	1.3	3.3	4.2	3.1	2.3	2.8	3.3	4.5	0.5	100	n.a.
A310	8	4.9	4.8	3.9	7.8	1.3	4.9	5.7	4.6	3.9	4.2	5.1	6.2	0.9	100	n.a.
0322	9	13.0	12.2	6.5	21.6	4.9	12.8	15.7	12.1	8.1	9.6	16.6	19.0	7.0	100	n.a.
A320	4	8.2	8.0	5.5	10.5	2.2	8.1	10.0	8.5	6.1	7.1	9.6	10.2	2.6	100	n.a.
A315	5	9.8	9.7	8.2	10.9	1.0	9.7	10.5	9.8	8.8	9.7	10.4	10.7	0.8	100	n.a.
A317	7	8.0	8.0	7.1	9.1	0.8	8.0	8.5	7.9	7.2	7.4	8.6	9.1	1.2	100	n.a.
C317	4	7.5	7.4	6.0	9.2	1.3	7.4	8.6	7.4	6.4	6.9	8.1	8.8	1.2	100	n.a.
S322	6	10.8	10.3	7.4	17.8	3.9	10.6	13.4	9.5	7.5	8.0	12.1	15.3	4.0	100	n.a.
F321	4	4.1	4.0	2.9	5.7	1.2	4.1	5.2	3.9	3.1	3.3	4.8	5.3	1.5	100	n.a.
B322	5	25.5	25.2	19.3	30.1	4.4	25.2	28.7	24.6	21.3	24.2	29.2	29.7	5.0	100	n.a.
D322	3	16.3	16.3	15.6	17.2	n.a.	n.a.	n.a.	16.1	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
Y320	10	9.0	8.9	7.1	10.9	1.2	9.0	9.6	9.4	7.7	8.1	9.6	10.0	1.5	100	n.a.
A330	4	8.3	8.3	7.2	10.2	1.3	8.2	9.4	8.0	7.3	7.6	8.7	9.6	1.1	100	n.a.
A326	5	11.0	10.3	7.5	18.6	4.6	10.7	14.4	8.8	7.6	7.8	12.1	16.0	4.3	100	n.a.
A307	2	10.2	10.1	8.9	11.5	1.8	10.0	12.3	10.2	9.1	9.5	10.8	11.2	1.3	100	n.a.
I322B	6	6.5	6.3	4.4	9.5	1.8	6.4	7.7	6.4	4.8	5.4	6.8	8.2	1.4	100	n.a.
B317	9	7.6	7.6	6.7	8.9	0.8	7.6	8.0	7.4	6.8	6.9	8.2	8.6	1.3	100	n.a.
All	98	9.3	8.1	2.1	30.1	5.3	9.2	10.2	8.1	4.1	6.6	9.9	16.8	3.3	100	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table C6. Summary statistics for biochemical oxygen demand (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
I322B	1	12	12	12	12	n.a.	n.a.	n.a.	12	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	6	4	3	2	12	4	3	6	2	2	2	2	7	0	33	n.a.
Storm Flow																
E319	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
A310	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
0322	1	3	2	3	3	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
A320	2	3	2	2	3	1	2	3	3	2	2	3	3	1	50	n.a.
A315	2	3	2	2	3	1	2	3	3	2	2	3	3	1	50	n.a.
A317	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
C317	3	3	3	2	4	1	3	4	2	2	2	3	4	1	33	n.a.
S322	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
F321	2	2	2	2	2	0	2	2	2	2	2	2	2	0	0	n.a.
B322	1	7	7	7	7	n.a.	n.a.	n.a.	7	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
D322	3	2	2	2	3	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	67	n.a.
Y320	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
A330	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
A326	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
B317	1	2	2	2	2	n.a.	n.a.	n.a.	2	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
All	23	2	2	2	7	1	2	3	2	2	2	2	3	0	43	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table C7. Summary statistics for hardness concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	15.3	15.2	13.6	18.8	1.6	15.2	16.2	14.9	14.2	14.6	15.4	16.8	0.8	100	n.a.
A310	4	35.1	34.5	28.2	45.5	7.8	34.6	41.5	33.3	28.9	29.8	38.7	42.8	8.9	100	n.a.
0322	6	56.5	56.3	50.1	64.8	5.4	56.2	60.1	54.8	51.9	53.6	59.6	62.8	5.9	100	n.a.
A320	4	52.5	52.4	48.5	57.8	4.6	52.2	56.2	51.9	48.6	48.8	55.6	56.9	6.8	100	n.a.
A315	3	94.5	92.8	77.8	121.0	23.2	92.9	116.6	84.8	79.2	81.3	102.9	113.8	21.6	100	n.a.
A317	6	91.6	83.7	40.1	127.0	37.4	89.7	116.7	104.0	45.3	62.9	120.0	125.5	57.1	100	n.a.
C317	2	111.5	110.9	100.0	123.0	16.3	110.1	130.4	111.5	102.3	105.8	117.3	120.7	11.5	100	n.a.
S322	6	31.2	30.1	23.1	47.9	9.6	30.7	37.6	27.9	23.2	24.5	34.7	42.4	10.2	100	n.a.
F321	3	46.6	46.5	43.0	50.5	3.8	46.3	50.1	46.2	43.6	44.6	48.4	49.6	3.8	100	n.a.
B322	6	57.1	56.5	46.0	64.8	8.5	56.7	62.8	60.8	46.3	50.1	62.9	64.2	12.8	100	n.a.
D322	3	71.1	69.0	49.6	91.5	21.0	69.6	91.1	72.3	54.1	61.0	81.9	87.7	21.0	100	n.a.
Y320	5	51.5	50.0	33.2	65.2	13.1	50.7	61.1	57.1	37.0	42.7	59.2	62.8	16.5	100	n.a.
A330	4	75.9	75.8	71.5	80.3	4.5	75.6	79.6	76.0	71.8	72.3	79.6	80.0	7.2	100	n.a.
A326	9	87.7	80.3	45.5	132.0	37.8	86.1	108.4	64.1	45.5	63.7	122.0	131.2	58.3	100	n.a.
A307	4	110.0	110.0	105.0	113.0	3.6	109.8	112.9	111.0	106.5	108.8	112.3	112.7	3.5	100	n.a.
I322B	7	39.2	36.6	21.7	62.9	15.5	38.5	48.9	37.9	23.4	26.2	49.9	55.4	23.7	100	n.a.
B317	6	67.4	58.9	23.8	96.9	32.1	65.8	89.0	81.0	26.9	42.7	89.3	94.5	46.5	100	n.a.
All	86	60.7	51.6	13.6	132.0	32.6	60.3	66.5	54.3	22.4	37.2	80.1	112.5	42.9	100	n.a.
Storm Flow																
E319	6	16.0	15.9	14.7	18.7	1.6	15.9	17.1	15.2	14.9	15.0	16.7	18.0	1.7	100	n.a.
A310	7	28.5	28.1	20.0	34.2	4.9	28.3	31.6	30.0	22.5	26.1	31.6	32.8	5.5	100	n.a.
0322	8	52.1	51.6	37.4	58.5	7.3	51.8	56.3	54.3	43.4	50.1	57.2	58.2	7.1	100	n.a.
A320	4	47.4	47.2	40.7	53.9	5.4	47.1	51.8	47.5	42.6	45.5	49.4	52.1	3.9	100	n.a.
A315	5	45.1	44.2	34.4	61.5	10.2	44.5	52.6	45.1	36.3	39.1	45.3	55.0	6.2	100	n.a.
A317	6	32.8	32.4	27.2	42.3	5.5	32.5	36.4	31.8	27.7	29.0	34.5	38.8	5.4	100	n.a.
C317	3	30.2	29.0	19.6	40.6	10.5	29.5	40.2	30.5	21.8	25.1	35.6	38.6	10.5	100	n.a.
S322	8	25.7	25.0	15.3	38.2	6.3	25.4	29.3	25.5	21.2	23.9	26.5	30.4	2.6	100	n.a.
F321	4	46.0	45.9	44.1	49.5	2.4	45.8	48.0	45.2	44.3	44.5	46.7	48.4	2.2	100	n.a.
B322	8	85.9	83.0	49.9	109.2	22.4	84.9	99.0	92.1	54.1	75.3	102.0	106.9	26.7	100	n.a.
D322	1	94.8	94.8	94.8	94.8	n.a.	n.a.	n.a.	94.8	n.a.	n.a.	n.a.	n.a.	n.a.	100	n.a.
Y320	9	35.1	34.7	25.1	42.7	5.3	34.9	38.0	35.5	30.0	31.4	38.0	40.9	6.6	100	n.a.
A330	4	52.2	51.9	46.5	58.2	6.6	51.8	57.6	52.1	46.5	46.6	57.8	58.0	11.2	100	n.a.
A326	6	44.5	41.9	29.7	73.8	17.7	43.6	56.3	36.5	30.9	32.9	53.2	66.2	20.4	100	n.a.
A307	2	81.3	81.3	78.4	84.2	4.1	80.9	86.1	81.3	79.0	79.9	82.8	83.6	2.9	100	n.a.
I322B	5	29.7	29.3	24.7	39.2	5.8	29.4	33.9	27.7	25.3	26.2	30.6	35.8	4.4	100	n.a.
B317	9	23.0	22.6	15.9	28.3	4.3	22.8	25.3	24.1	17.9	19.3	26.0	27.3	6.7	100	n.a.
All	95	41.0	36.5	14.7	109.2	21.4	40.7	44.6	35.5	19.4	26.2	48.7	68.9	22.5	100	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

APPENDIX D

Summary Statistics for Microbiological Parameters Measured at Sites in the Green-Duwamish Watershed in 2003

Table D1. Summary statistics for fecal coliform bacteria concentrations (CFU/100 mL) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Exceeding Standard (Yes/No)
Base Flow																
E319	6	3	2	0	11	4	3	6	3	1	1	3	7	2	100.0	No
A310	3	63	41	12	135	65	58	124	40	18	26	88	116	62	100.0	Yes
0322	7	622	162	28	2300	912	579	1189	75	30	32	945	1820	913	100.0	Yes
A320	5	65	41	11	190	72	61	118	37	17	25	60	138	35	100.0	No
A315	4	158	111	40	290	130	150	265	152	44	50	260	278	210	100.0	Yes
A317	5	200	129	41	590	224	187	365	130	52	68	170	422	102	100.0	Yes
C317	2	325	308	220	430	148	312	498	325	241	273	378	409	105	100.0	Yes
S322	3	95	35	3	207	104	87	193	74	17	38	141	181	102	100.0	Yes
F321	4	9	6	3	25	11	8	18	4	3	3	10	19	7	100.0	No
B322	2	310	301	237	383	104	301	431	310	251	273	347	369	73	100.0	Yes
D322	3	154	112	31	240	109	146	257	190	63	111	215	230	105	100.0	Yes
Y320	3	846	82	7	2500	1432	742	2206	32	12	20	1266	2006	1247	100.0	Yes
A330	4	41	14	2	120	55	37	86	20	3	4	56	95	52	100.0	Yes
A326	4	504	384	163	1139	441	476	866	356	191	233	627	934	394	100.0	Yes
A307	4	495	236	48	1500	676	452	1051	215	82	132	578	1131	446	100.0	Yes
I322B	6	844	382	33	3200	1179	783	1636	455	147	263	655	1930	393	100.0	Yes
B317	5	498	467	280	750	193	487	640	550	300	330	580	682	250	100.0	Yes
All	70	326	77	0	3200	593	317	443	125	3	29	288	669	259	100.0	Yes
Storm Flow																
E319	6	14	11	4	29	9	13	20	12	6	8	17	23	9	100.0	No
A310	6	184	173	100	260	69	181	231	191	107	126	243	255	116	100.0	Yes
0322	6	1088	634	100	2200	873	1044	1675	1100	115	348	1725	2050	1378	100.0	Yes
A320	3	203	175	100	360	138	193	334	150	110	125	255	318	130	100.0	Yes
A315	4	1398	1218	490	2200	730	1352	1998	1450	703	1023	1825	2050	803	100.0	Yes
A317	5	1580	1514	1176	2500	554	1549	1988	1300	1196	1225	1700	2180	475	100.0	Yes
C317	2	690	685	610	770	113	680	822	690	626	650	730	754	80	100.0	Yes
S322	4	81	74	44	138	42	79	116	72	47	52	101	123	49	100.0	Yes
F321	3	26	22	9	38	15	25	40	30	13	20	34	36	15	100.0	No
B322	3	4509	3308	1037	8272	3626	4246	7953	4219	1673	2628	6246	7461	3618	100.0	Yes
D322	1	6100	6100	6100	6100	n.a.	n.a.	n.a.	6100	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	Yes
Y320	7	816	395	70	3200	1109	763	1505	450	94	165	830	1940	665	100.0	Yes
A330	3	180	137	70	370	165	168	337	99	76	85	235	316	150	100.0	Yes
A326	3	1263	850	190	1900	935	1196	2151	1700	492	945	1800	1860	855	100.0	Yes
A307	2	369	313	174	563	275	344	689	369	213	272	466	524	194	100.0	Yes
I322B	3	293	265	180	490	171	281	456	210	186	195	350	434	155	100.0	Yes
B317	7	927	675	170	2500	791	890	1419	730	290	395	1150	1720	755	100.0	Yes
All	68	903	300	4	8272	1413	881	1184	365	30	100	1200	2200	1100	100.0	Yes

[a] Percentage of collected samples with detectable samples of associated analyte.
n.a. not applicable
n.d. no data
CFU: colony forming units/100 milliliters

Table D2. Summary statistics for enterococci bacteria concentrations (CFU/100 mL) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Exceeding Standard (Yes/No)
Base Flow																
E319	2	2	1	1	2	1	1	2	2	1	1	2	2	1	100.0	No
A310	1	5	5	5	5	n.a.	n.a.	n.a.	5	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	No
0322	3	320	117	9	690	344	295	647	260	59	135	475	604	341	100.0	Yes
A320	1	20	20	20	20	n.a.	n.a.	n.a.	20	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	No
A315	1	42	42	42	42	n.a.	n.a.	n.a.	42	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	Yes
A317	2	335	257	120	550	304	308	689	335	163	228	443	507	215	100.0	Yes
C317	1	100	100	100	100	n.a.	n.a.	n.a.	100	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	Yes
S322	1	11	11	11	11	n.a.	n.a.	n.a.	11	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	No
F321	1	1	1	1	1	n.a.	n.a.	n.a.	1	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	No
B322	1	50	50	50	50	n.a.	n.a.	n.a.	50	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	Yes
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	2	508	122	15	1000	697	446	1318	508	114	261	754	902	493	100.0	Yes
A330	1	14	14	14	14	n.a.	n.a.	n.a.	14	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	No
A326	1	9	9	9	9	n.a.	n.a.	n.a.	9	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	No
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	3	2836	522	8	4800	2510	2654	5220	3700	746	1854	4250	4580	2396	100.0	Yes
B317	2	535	417	200	870	474	493	1086	535	267	368	703	803	335	100.0	Yes
All	23	542	51	1	4800	1218	511	960	42	3	9	405	974	396	100.0	Yes
Storm Flow																
E319	3	8	8	5	11	3	8	11	9	6	7	10	11	3	100.0	No
A310	2	136	128	92	180	62	130	208	136	100	114	158	171	44	100.0	Yes
0322	2	395	325	170	620	318	367	765	395	215	283	508	575	225	100.0	Yes
A320	1	370	370	370	370	n.a.	n.a.	n.a.	370	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	Yes
A315	2	825	675	350	1300	672	765	1606	825	445	588	1063	1205	475	100.0	Yes
A317	3	2633	2433	1500	4000	1266	2541	3836	2400	1680	1950	3200	3680	1250	100.0	Yes
C317	1	1800	1800	1800	1800	n.a.	n.a.	n.a.	1800	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	Yes
S322	2	12	11	7	17	7	11	21	12	8	9	15	16	5	100.0	No
F321	2	80	69	40	120	57	75	146	80	48	60	100	112	40	100.0	Yes
B322	2	3087	1578	434	5740	3752	2754	7451	3087	965	1761	4414	5209	2653	100.0	Yes
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	3	190	132	51	410	193	176	373	110	63	81	260	350	180	100.0	Yes
A330	2	430	416	320	540	156	416	611	430	342	375	485	518	110	100.0	Yes
A326	2	1380	1233	760	2000	877	1302	2400	1380	884	1070	1690	1876	620	100.0	Yes
A307	2	959	685	288	1630	949	875	2063	959	422	624	1295	1496	671	100.0	Yes
I322B	2	3050	3030	2700	3400	495	3006	3626	3050	2770	2875	3225	3330	350	100.0	Yes
B317	3	707	696	570	870	152	696	851	680	592	625	775	832	150	100.0	Yes
All	34	985	309	5	5740	1327	957	1359	422	13	113	1450	2610	1338	100.0	Yes

[a] Percentage of collected samples with detectable samples of associated analyte.
n.a. not applicable
n.d. no data
CFU: colony forming units/100 milliliters

Table D3. Summary statistics for *E. coli* concentrations (CFU/100 mL) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Exceeding Standard (Yes/No)
Base Flow																
E319	10	3	2	0	16	5	2	5	2	0	0	2	3	2	100.0	No
A310	8	54	28	5	180	63	51	91	28	8	11	68	138	56	100.0	No
0322	12	449	117	23	2300	750	422	805	62	24	30	398	1521	368	100.0	No
A320	5	78	47	15	240	94	73	147	29	20	28	80	176	52	100.0	No
A315	4	151	109	32	260	116	143	246	155	43	61	245	254	185	100.0	No
A317	8	97	87	45	170	48	95	125	77	51	63	143	156	80	100.0	No
C317	2	275	262	190	360	120	264	415	275	207	233	318	343	85	100.0	Yes
S322	4	71	21	3	169	82	66	139	57	3	3	124	151	121	100.0	No
F321	4	11	5	0	38	18	10	26	4	1	2	13	28	10	100.0	No
B322	3	486	188	17	1087	547	446	1005	353	85	185	720	940	535	100.0	Yes
D322	3	210	156	51	390	170	198	372	190	79	121	290	350	170	100.0	Yes
Y320	3	353	82	12	1000	561	312	885	46	19	29	523	809	494	100.0	No
A330	4	56	17	2	160	74	51	116	30	3	4	81	129	77	100.0	No
A326	5	562	367	79	1547	574	530	985	428	150	257	500	1129	243	100.0	Yes
A307	5	279	129	23	920	371	258	552	150	31	43	260	656	217	100.0	Yes
I322B	6	876	347	33	3700	1398	804	1814	360	122	218	563	2145	345	100.0	Yes
B317	4	545	510	340	900	245	530	747	470	373	423	593	777	170	100.0	Yes
All	90	261	56	0	3700	531	254	353	68	2	16	253	612	236	100.0	Yes
Storm Flow																
E319	8	22	16	5	43	16	21	31	17	6	8	36	42	28	87.5	No
A310	8	191	170	70	360	100	187	249	170	106	128	223	332	95	100.0	Yes
0322	7	1411	948	150	2400	950	1366	2002	1800	198	615	2150	2340	1535	100.0	Yes
A320	3	223	202	110	340	115	215	333	220	132	165	280	316	115	100.0	Yes
A315	4	1808	1584	630	2800	907	1751	2554	1900	951	1433	2275	2590	843	100.0	Yes
A317	6	1313	1042	180	2200	705	1277	1786	1270	618	1103	1750	2050	647	100.0	Yes
C317	2	1050	1049	1000	1100	71	1044	1132	1050	1010	1025	1075	1090	50	100.0	Yes
S322	4	83	70	40	172	61	79	133	60	43	46	97	142	51	100.0	No
F321	3	21	18	9	36	14	20	34	19	11	14	28	33	14	100.0	No
B322	3	4049	2912	840	7257	3208	3816	7096	4050	1482	2445	5653	6615	3208	100.0	Yes
D322	1	6600	6600	6600	6600	n.a.	n.a.	n.a.	6600	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	Yes
Y320	7	714	415	40	1600	630	684	1106	660	136	205	1145	1540	940	100.0	Yes
A330	3	247	201	130	480	202	232	439	130	130	130	305	410	175	100.0	Yes
A326	3	1047	835	340	1900	790	989	1797	900	452	620	1400	1700	780	100.0	Yes
A307	3	890	230	37	2500	1395	789	2215	133	56	85	1316	2027	1232	100.0	Yes
I322B	3	277	275	240	300	32	274	307	290	250	265	295	298	30	100.0	Yes
B317	7	1060	681	200	3900	1285	999	1859	580	272	420	950	2160	530	100.0	Yes
All	75	912	300	5	7257	1358	892	1170	320	35	126	1170	2260	1044	98.7	Yes

[a] Percentage of collected samples with detectable samples of associated analyte.
n.a. not applicable
n.d. no data
CFU: colony forming units/100 milliliters

APPENDIX E

Summary Statistics for Nutrients Measured at Sites in the Green-Duwamish Watershed in 2003

Table E1. Summary statistics for ammonia nitrogen concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.014	0.012	0.010	0.033	0.008	0.013	0.018	0.010	0.010	0.010	0.011	0.020	0.001	37.5	0.0
A310	4	0.028	0.024	0.010	0.040	0.015	0.027	0.040	0.030	0.013	0.018	0.040	0.040	0.023	100.0	0.0
0322	7	0.034	0.019	0.010	0.130	0.046	0.032	0.063	0.010	0.010	0.010	0.036	0.088	0.026	57.1	0.0
A320	5	0.011	0.011	0.010	0.013	0.001	0.011	0.012	0.010	0.010	0.010	0.010	0.012	0.000	60.0	0.0
A315	4	0.087	0.078	0.033	0.120	0.037	0.084	0.117	0.097	0.051	0.079	0.105	0.114	0.026	100.0	0.0
A317	6	0.228	0.188	0.083	0.422	0.146	0.221	0.326	0.203	0.097	0.110	0.336	0.386	0.226	100.0	0.0
C317	2	0.331	0.331	0.320	0.342	0.016	0.330	0.349	0.331	0.322	0.326	0.337	0.340	0.011	100.0	0.0
S322	4	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	25.0	0.0
F321	4	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	0.0	0.0
B322	3	0.397	0.210	0.060	0.970	0.499	0.360	0.871	0.160	0.080	0.110	0.565	0.808	0.455	100.0	0.0
D322	3	0.014	0.014	0.010	0.018	0.004	0.014	0.018	0.015	0.011	0.013	0.017	0.017	0.004	66.7	0.0
Y320	4	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	75.0	0.0
A330	4	0.011	0.011	0.010	0.015	0.003	0.011	0.013	0.010	0.010	0.010	0.011	0.014	0.001	50.0	0.0
A326	5	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	80.0	0.0
A307	4	0.020	0.020	0.012	0.025	0.006	0.020	0.025	0.022	0.014	0.018	0.025	0.025	0.007	100.0	0.0
I322B	6	0.016	0.015	0.010	0.030	0.008	0.016	0.022	0.015	0.010	0.010	0.019	0.025	0.009	83.3	0.0
B317	6	0.218	0.141	0.012	0.370	0.150	0.210	0.319	0.229	0.066	0.123	0.344	0.360	0.221	100.0	0.0
All	79	0.074	0.026	0.010	0.970	0.145	0.072	0.101	0.011	0.010	0.010	0.060	0.300	0.050	70.9	0.0
Storm Flow																
E319	6	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	16.7	0.0
A310	7	0.024	0.020	0.010	0.047	0.015	0.023	0.033	0.020	0.010	0.010	0.035	0.042	0.025	71.4	0.0
0322	8	0.038	0.022	0.010	0.140	0.046	0.036	0.064	0.016	0.010	0.010	0.040	0.091	0.030	62.5	0.0
A320	4	0.017	0.015	0.010	0.028	0.008	0.016	0.024	0.015	0.010	0.010	0.021	0.025	0.011	75.0	0.0
A315	5	0.058	0.046	0.010	0.100	0.035	0.056	0.084	0.060	0.023	0.042	0.080	0.092	0.039	80.0	0.0
A317	6	0.033	0.027	0.010	0.050	0.020	0.032	0.047	0.040	0.010	0.015	0.050	0.050	0.035	66.7	0.0
C317	3	0.050	0.036	0.010	0.080	0.036	0.047	0.084	0.060	0.020	0.035	0.070	0.076	0.035	66.7	0.0
S322	5	0.009	0.009	0.006	0.010	0.002	0.009	0.010	0.010	0.008	0.010	0.010	0.010	0.000	20.0	0.0
F321	4	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	0.0	0.0
B322	4	0.558	0.489	0.230	0.900	0.303	0.538	0.807	0.550	0.278	0.350	0.758	0.843	0.408	100.0	0.0
D322	1	0.014	0.014	0.014	0.014	n.a.	n.a.	n.a.	0.014	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	9	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	11.1	0.0
A330	4	0.010	0.010	0.010	0.010	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.000	50.0	0.0
A326	4	0.031	0.030	0.020	0.040	0.008	0.030	0.038	0.031	0.023	0.028	0.035	0.038	0.007	100.0	0.0
A307	2	0.020	0.020	0.020	0.020	0.000	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.000	100.0	0.0
I322B	5	0.018	0.016	0.010	0.028	0.008	0.017	0.023	0.020	0.010	0.010	0.020	0.025	0.010	100.0	0.0
B317	8	0.031	0.023	0.010	0.070	0.025	0.030	0.046	0.021	0.010	0.010	0.053	0.063	0.043	75.0	0.0
All	85	0.049	0.020	0.006	0.900	0.129	0.048	0.072	0.010	0.010	0.010	0.033	0.070	0.023	58.8	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table E2. Summary statistics for nitrate+nitrite nitrogen concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.112	0.088	0.020	0.190	0.066	0.110	0.151	0.134	0.031	0.052	0.163	0.176	0.110	87.5	0.0
A310	4	0.355	0.334	0.250	0.590	0.158	0.345	0.485	0.290	0.259	0.273	0.373	0.503	0.100	100.0	75.0
0322	7	2.433	2.249	1.330	4.300	1.074	2.382	3.100	1.800	1.552	1.750	3.050	3.694	1.300	100.0	100.0
A320	5	1.032	1.019	0.853	1.350	0.194	1.021	1.175	0.968	0.880	0.921	1.070	1.238	0.149	100.0	100.0
A315	4	0.538	0.466	0.289	1.080	0.366	0.515	0.840	0.392	0.306	0.331	0.599	0.888	0.268	100.0	100.0
A317	6	0.395	0.389	0.303	0.510	0.076	0.391	0.446	0.382	0.322	0.348	0.437	0.482	0.089	100.0	100.0
C317	2	0.346	0.332	0.251	0.440	0.134	0.334	0.501	0.346	0.270	0.298	0.393	0.421	0.095	100.0	50.0
S322	4	0.575	0.538	0.320	0.850	0.233	0.560	0.767	0.565	0.362	0.425	0.715	0.796	0.290	100.0	100.0
F321	4	0.542	0.534	0.443	0.650	0.103	0.535	0.626	0.537	0.449	0.459	0.619	0.638	0.161	100.0	100.0
B322	3	4.050	3.621	1.800	5.810	2.049	3.901	5.996	4.540	2.348	3.170	5.175	5.556	2.005	100.0	100.0
D322	3	2.690	2.601	1.790	3.300	0.796	2.632	3.446	2.980	2.028	2.385	3.140	3.236	0.755	100.0	100.0
Y320	4	0.809	0.747	0.407	1.280	0.361	0.787	1.106	0.775	0.501	0.642	0.943	1.145	0.301	100.0	100.0
A330	4	0.758	0.754	0.625	0.822	0.090	0.752	0.832	0.793	0.675	0.749	0.802	0.814	0.053	100.0	100.0
A326	5	0.386	0.373	0.300	0.580	0.119	0.379	0.473	0.320	0.304	0.310	0.420	0.516	0.110	100.0	100.0
A307	4	1.468	1.394	1.050	2.340	0.590	1.430	1.953	1.240	1.092	1.155	1.553	2.025	0.398	100.0	100.0
I322B	6	2.560	2.484	1.640	3.330	0.656	2.526	3.000	2.705	1.790	2.090	2.998	3.185	0.908	100.0	100.0
B317	6	0.563	0.526	0.290	0.810	0.209	0.553	0.704	0.632	0.310	0.395	0.684	0.749	0.289	100.0	100.0
All	79	1.104	0.671	0.020	5.810	1.153	1.088	1.317	0.670	0.238	0.335	1.340	2.892	1.005	98.7	87.3
Storm Flow																
E319	6	0.240	0.215	0.093	>0.26	0.117	0.234	0.318	0.204	0.136	0.181	0.341	0.380	0.161	100.0	33.3
A310	7	0.473	0.431	0.241	0.880	0.226	0.462	0.614	0.359	0.276	0.326	0.590	0.730	0.264	100.0	85.7
0322	8	2.448	2.265	1.510	4.550	1.095	2.399	3.084	1.940	1.573	1.660	3.035	3.794	1.375	100.0	100.0
A320	4	0.935	0.919	0.748	1.190	0.202	0.922	1.101	0.901	0.764	0.788	1.048	1.133	0.260	100.0	100.0
A315	5	0.653	0.625	0.460	0.980	0.221	0.641	0.816	0.606	0.460	0.460	0.760	0.892	0.300	100.0	100.0
A317	6	0.457	0.426	0.270	0.750	0.193	0.447	0.586	0.385	0.290	0.325	0.580	0.695	0.255	100.0	100.0
C317	3	0.308	0.303	0.235	0.370	0.068	0.303	0.373	0.320	0.252	0.278	0.345	0.360	0.068	100.0	66.7
S322	5	1.524	1.388	0.640	2.490	0.683	1.486	2.027	1.640	0.856	1.180	1.670	2.162	0.490	100.0	100.0
F321	4	0.636	0.634	0.570	0.700	0.059	0.633	0.685	0.638	0.581	0.596	0.678	0.691	0.081	100.0	100.0
B322	4	8.705	6.702	2.320	16.310	6.423	8.301	13.988	8.095	3.004	4.030	12.770	14.894	8.740	100.0	100.0
D322	1	9.980	9.980	9.980	9.980	n.a.	n.a.	n.a.	9.980	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	100.0
Y320	9	1.003	0.724	0.193	2.100	0.758	0.971	1.419	0.810	0.224	0.396	1.840	1.916	1.444	100.0	77.8
A330	4	0.638	0.621	0.490	0.900	0.181	0.627	0.787	0.581	0.509	0.537	0.683	0.813	0.146	100.0	100.0
A326	4	0.712	0.676	0.390	0.950	0.239	0.696	0.908	0.753	0.480	0.615	0.850	0.910	0.235	100.0	100.0
A307	2	2.210	2.135	1.640	2.780	0.806	2.138	3.148	2.210	1.754	1.925	2.495	2.666	0.570	100.0	100.0
I322B	5	2.098	2.015	1.420	3.000	0.658	2.061	2.582	2.270	1.444	1.480	2.320	2.728	0.840	100.0	100.0
B317	8	0.403	0.377	0.186	0.640	0.156	0.396	0.494	0.379	0.264	0.314	0.458	0.626	0.144	100.0	87.5
All	85	1.442	0.796	0.093	16.310	2.402	1.409	1.870	0.670	0.253	0.380	1.640	2.664	1.260	100.0	89.4

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table E3. Summary statistics for total nitrogen concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.177	0.167	0.084	0.227	0.055	0.174	0.209	0.195	0.095	0.160	0.216	0.222	0.057	100.0	0.0
A310	4	0.513	0.500	0.430	0.720	0.139	0.504	0.627	0.450	0.433	0.438	0.525	0.642	0.088	100.0	100.0
0322	7	2.957	2.741	1.690	5.150	1.294	2.896	3.762	2.360	1.876	2.075	3.675	4.616	1.600	100.0	100.0
A320	5	1.238	1.224	1.020	1.580	0.216	1.226	1.397	1.190	1.056	1.110	1.290	1.464	0.180	100.0	100.0
A315	4	1.233	1.189	1.000	1.850	0.413	1.207	1.572	1.040	1.003	1.008	1.265	1.616	0.258	100.0	100.0
A317	6	1.035	1.026	0.838	1.240	0.150	1.027	1.135	1.045	0.879	0.933	1.120	1.180	0.188	100.0	100.0
C317	2	1.054	1.051	0.987	1.120	0.094	1.045	1.163	1.054	1.000	1.020	1.087	1.107	0.067	100.0	100.0
S322	4	0.713	0.672	0.400	0.980	0.266	0.696	0.931	0.735	0.457	0.543	0.905	0.950	0.363	100.0	100.0
F321	4	0.609	0.603	0.514	0.750	0.106	0.603	0.696	0.587	0.523	0.536	0.660	0.714	0.124	100.0	100.0
B322	3	5.563	5.487	4.540	6.790	1.139	5.481	6.645	5.360	4.704	4.950	6.075	6.504	1.125	100.0	100.0
D322	3	3.157	3.117	2.510	3.700	0.602	3.113	3.728	3.260	2.660	2.885	3.480	3.612	0.595	100.0	100.0
Y320	4	1.216	1.184	0.843	1.620	0.320	1.196	1.479	1.200	0.935	1.073	1.343	1.509	0.269	100.0	100.0
A330	4	0.855	0.853	0.761	0.910	0.066	0.851	0.910	0.875	0.790	0.835	0.896	0.904	0.061	100.0	100.0
A326	5	0.726	0.703	0.410	0.830	0.179	0.716	0.857	0.810	0.550	0.760	0.820	0.826	0.060	100.0	100.0
A307	4	1.795	1.632	1.100	3.270	0.995	1.732	2.613	1.405	1.175	1.288	1.913	2.727	0.625	100.0	100.0
I322B	6	2.872	2.810	2.040	3.700	0.643	2.839	3.304	2.885	2.165	2.403	3.330	3.565	0.928	100.0	100.0
B317	6	1.224	1.186	0.850	1.750	0.344	1.207	1.455	1.155	0.903	0.976	1.428	1.615	0.451	100.0	100.0
All	79	1.503	1.056	0.084	6.790	1.321	1.484	1.747	1.040	0.365	0.761	1.800	3.302	1.040	100.0	89.9
Storm Flow																
E319	6	0.355	0.333	0.186	0.480	0.130	0.348	0.443	0.378	0.213	0.254	0.467	0.475	0.213	100.0	83.3
A310	7	0.747	0.716	0.429	1.180	0.235	0.736	0.893	0.721	0.531	0.634	0.815	0.988	0.182	100.0	100.0
0322	8	3.318	3.141	2.170	5.280	1.213	3.264	4.023	2.925	2.184	2.363	4.008	5.035	1.645	100.0	100.0
A320	4	1.395	1.383	1.160	1.640	0.209	1.382	1.567	1.390	1.202	1.265	1.520	1.592	0.255	100.0	100.0
A315	5	1.355	1.325	0.953	1.720	0.311	1.337	1.584	1.420	1.024	1.130	1.550	1.652	0.420	100.0	100.0
A317	6	0.907	0.896	0.790	1.190	0.161	0.898	1.015	0.830	0.790	0.800	0.965	1.100	0.165	100.0	100.0
C317	3	0.700	0.697	0.629	0.770	0.071	0.695	0.767	0.700	0.643	0.665	0.735	0.756	0.071	100.0	100.0
S322	5	1.894	1.778	0.970	2.920	0.720	1.854	2.423	1.920	1.202	1.550	2.110	2.596	0.560	100.0	100.0
F321	4	0.792	0.789	0.700	0.890	0.085	0.787	0.862	0.789	0.714	0.736	0.845	0.872	0.109	100.0	100.0
B322	4	11.460	9.823	4.530	18.570	6.727	11.037	16.992	11.370	5.289	6.428	16.403	17.703	9.975	100.0	100.0
D322	1	11.400	11.400	11.400	11.400	n.a.	n.a.	n.a.	11.400	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100.0
Y320	9	1.521	1.385	0.730	2.520	0.680	1.493	1.894	1.240	0.762	1.050	2.190	2.336	1.140	100.0	100.0
A330	4	1.016	0.999	0.780	1.280	0.212	1.002	1.190	1.002	0.826	0.895	1.123	1.217	0.228	100.0	100.0
A326	4	1.298	1.257	0.930	1.830	0.389	1.273	1.618	1.215	0.984	1.065	1.448	1.677	0.383	100.0	100.0
A307	2	2.725	2.680	2.230	3.220	0.700	2.663	3.539	2.725	2.329	2.478	2.973	3.121	0.495	100.0	100.0
I322B	5	2.534	2.469	1.880	3.510	0.653	2.497	3.014	2.600	1.924	1.990	2.690	3.182	0.700	100.0	100.0
B317	8	0.804	0.797	0.659	0.980	0.118	0.799	0.873	0.763	0.698	0.741	0.865	0.980	0.124	100.0	100.0
All	85	2.014	1.314	0.186	18.570	2.859	1.975	2.524	1.130	0.641	0.770	2.170	3.394	1.400	100.0	98.8

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table E4. Summary statistics for orthophosphate phosphorus concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.006	0.006	0.003	0.010	0.002	0.006	0.008	0.006	0.004	0.004	0.009	0.009	0.004	100.0	n.a.
A310	4	0.013	0.012	0.010	0.020	0.005	0.012	0.017	0.010	0.010	0.010	0.013	0.017	0.003	100.0	n.a.
0322	7	0.066	0.049	0.020	0.160	0.058	0.064	0.102	0.040	0.024	0.030	0.093	0.148	0.063	100.0	n.a.
A320	5	0.013	0.012	0.010	0.017	0.004	0.012	0.015	0.011	0.010	0.010	0.016	0.017	0.006	100.0	n.a.
A315	4	0.035	0.032	0.017	0.050	0.014	0.034	0.046	0.036	0.022	0.029	0.042	0.047	0.013	100.0	n.a.
A317	6	0.027	0.024	0.010	0.040	0.011	0.026	0.034	0.027	0.015	0.022	0.033	0.038	0.012	100.0	n.a.
C317	2	0.022	0.020	0.014	0.030	0.012	0.021	0.035	0.022	0.015	0.018	0.026	0.028	0.008	100.0	n.a.
S322	4	0.015	0.014	0.010	0.020	0.006	0.015	0.020	0.015	0.010	0.010	0.020	0.020	0.010	100.0	n.a.
F321	4	0.015	0.015	0.010	0.021	0.005	0.015	0.019	0.015	0.011	0.014	0.017	0.020	0.004	100.0	n.a.
B322	3	0.537	0.494	0.350	0.860	0.281	0.516	0.804	0.400	0.360	0.375	0.630	0.768	0.255	100.0	n.a.
D322	3	0.044	0.043	0.032	0.061	0.015	0.043	0.058	0.039	0.034	0.036	0.050	0.056	0.014	100.0	n.a.
Y320	4	0.005	0.005	0.003	0.009	0.002	0.005	0.007	0.005	0.004	0.004	0.006	0.008	0.002	100.0	n.a.
A330	4	0.029	0.028	0.020	0.036	0.008	0.028	0.036	0.030	0.021	0.023	0.036	0.036	0.013	100.0	n.a.
A326	5	0.034	0.028	0.009	0.060	0.021	0.033	0.049	0.030	0.013	0.020	0.050	0.056	0.030	100.0	n.a.
A307	4	0.032	0.032	0.027	0.041	0.006	0.032	0.038	0.031	0.027	0.028	0.036	0.039	0.008	100.0	n.a.
I322B	6	0.022	0.018	0.010	0.059	0.019	0.021	0.035	0.017	0.010	0.012	0.019	0.040	0.008	100.0	n.a.
B317	6	0.016	0.014	0.010	0.031	0.009	0.015	0.021	0.011	0.010	0.010	0.018	0.026	0.008	100.0	n.a.
All	79	0.044	0.020	0.003	0.860	0.111	0.043	0.065	0.020	0.008	0.010	0.033	0.052	0.023	100.0	n.a.
Storm Flow																
E319	6	0.006	0.005	0.003	0.007	0.002	0.006	0.007	0.006	0.003	0.004	0.007	0.007	0.003	100.0	n.a.
A310	7	0.016	0.014	0.009	0.030	0.008	0.015	0.021	0.011	0.010	0.010	0.020	0.025	0.010	100.0	n.a.
0322	8	0.108	0.080	0.032	0.250	0.085	0.104	0.157	0.082	0.034	0.038	0.150	0.222	0.112	100.0	n.a.
A320	4	0.019	0.018	0.010	0.028	0.007	0.019	0.025	0.020	0.013	0.017	0.022	0.026	0.005	100.0	n.a.
A315	5	0.074	0.067	0.030	0.110	0.032	0.072	0.097	0.070	0.042	0.060	0.100	0.106	0.041	100.0	n.a.
A317	6	0.018	0.018	0.010	0.020	0.004	0.018	0.021	0.020	0.015	0.020	0.020	0.020	0.000	100.0	n.a.
C317	3	0.012	0.012	0.010	0.016	0.004	0.012	0.016	0.010	0.010	0.010	0.013	0.015	0.003	100.0	n.a.
S322	5	0.009	0.009	0.006	0.010	0.002	0.009	0.010	0.010	0.008	0.010	0.010	0.010	0.000	100.0	n.a.
F321	4	0.011	0.011	0.010	0.015	0.003	0.011	0.013	0.010	0.010	0.010	0.011	0.014	0.001	100.0	n.a.
B322	4	1.578	1.346	0.520	2.460	0.881	1.522	2.302	1.665	0.727	1.038	2.205	2.358	1.168	100.0	n.a.
D322	1	0.098	0.098	0.098	0.098	n.a.	n.a.	n.a.	0.098	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Y320	9	0.011	0.010	0.004	0.026	0.006	0.011	0.014	0.009	0.006	0.007	0.012	0.017	0.005	100.0	n.a.
A330	4	0.019	0.016	0.010	0.035	0.012	0.018	0.029	0.015	0.010	0.010	0.024	0.031	0.014	100.0	n.a.
A326	4	0.014	0.013	0.010	0.026	0.008	0.013	0.021	0.010	0.010	0.010	0.014	0.021	0.004	100.0	n.a.
A307	2	0.015	0.014	0.010	0.020	0.007	0.014	0.023	0.015	0.011	0.013	0.018	0.019	0.005	100.0	n.a.
I322B	5	0.016	0.015	0.010	0.022	0.006	0.016	0.021	0.020	0.010	0.010	0.020	0.021	0.010	100.0	n.a.
B317	8	0.014	0.012	0.006	0.028	0.008	0.013	0.018	0.010	0.009	0.010	0.016	0.024	0.006	100.0	n.a.
All	85	0.101	0.020	0.003	2.460	0.372	0.095	0.167	0.014	0.007	0.010	0.028	0.106	0.018	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table E5. Summary statistics for total phosphorus concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.013	0.013	0.010	0.022	0.004	0.013	0.016	0.011	0.010	0.010	0.014	0.018	0.004	100.0	12.2
A310	4	0.030	0.029	0.020	0.040	0.008	0.029	0.037	0.030	0.023	0.028	0.033	0.037	0.005	100.0	100.0
0322	7	0.101	0.079	0.041	0.240	0.081	0.097	0.151	0.060	0.042	0.046	0.138	0.210	0.092	100.0	100.0
A320	5	0.023	0.023	0.020	0.027	0.003	0.023	0.026	0.023	0.021	0.021	0.026	0.027	0.005	100.0	100.0
A315	4	0.108	0.102	0.072	0.170	0.044	0.105	0.144	0.095	0.075	0.079	0.124	0.152	0.045	100.0	100.0
A317	6	0.134	0.131	0.100	0.184	0.032	0.132	0.155	0.135	0.100	0.108	0.147	0.167	0.040	100.0	100.0
C317	2	0.153	0.152	0.145	0.160	0.011	0.152	0.165	0.153	0.147	0.149	0.156	0.159	0.008	100.0	100.0
S322	4	0.028	0.027	0.020	0.030	0.005	0.027	0.032	0.030	0.023	0.028	0.030	0.030	0.003	100.0	100.0
F321	4	0.019	0.018	0.010	0.026	0.007	0.019	0.025	0.021	0.013	0.018	0.022	0.024	0.004	100.0	75.0
B322	3	0.573	0.537	0.420	0.880	0.266	0.554	0.826	0.420	0.420	0.420	0.650	0.788	0.230	100.0	100.0
D322	3	0.076	0.075	0.058	0.091	0.017	0.075	0.092	0.080	0.062	0.069	0.085	0.088	0.016	100.0	100.0
Y320	4	0.017	0.016	0.010	0.020	0.005	0.016	0.020	0.018	0.012	0.015	0.020	0.020	0.005	100.0	50.0
A330	4	0.039	0.039	0.030	0.046	0.008	0.039	0.045	0.040	0.032	0.034	0.045	0.046	0.011	100.0	100.0
A326	5	0.046	0.042	0.020	0.060	0.019	0.045	0.060	0.060	0.024	0.030	0.060	0.060	0.030	100.0	100.0
A307	4	0.062	0.057	0.042	0.104	0.029	0.060	0.086	0.051	0.042	0.043	0.070	0.090	0.027	100.0	100.0
I322B	6	0.045	0.041	0.020	0.074	0.020	0.044	0.058	0.044	0.024	0.031	0.057	0.067	0.026	100.0	100.0
B317	6	0.088	0.082	0.054	0.140	0.037	0.086	0.113	0.070	0.059	0.066	0.115	0.135	0.049	100.0	100.0
All	79	0.079	0.047	0.010	0.880	0.118	0.077	0.101	0.043	0.016	0.022	0.084	0.152	0.062	100.0	92.4
Storm Flow																
E319	6	0.023	0.017	0.010	0.067	0.022	0.021	0.037	0.014	0.010	0.010	0.019	0.043	0.009	100.0	33.3
A310	7	0.062	0.056	0.030	0.107	0.030	0.061	0.080	0.060	0.030	0.039	0.080	0.098	0.041	100.0	100.0
0322	8	0.169	0.139	0.058	0.350	0.116	0.164	0.236	0.128	0.074	0.085	0.220	0.343	0.135	100.0	100.0
A320	4	0.052	0.048	0.030	0.083	0.023	0.050	0.070	0.047	0.033	0.038	0.061	0.074	0.023	100.0	100.0
A315	5	0.164	0.158	0.111	0.230	0.047	0.161	0.198	0.160	0.119	0.130	0.187	0.213	0.057	100.0	100.0
A317	6	0.093	0.085	0.050	0.150	0.042	0.091	0.121	0.090	0.055	0.060	0.120	0.135	0.060	100.0	100.0
C317	3	0.078	0.076	0.060	0.104	0.023	0.076	0.100	0.070	0.062	0.065	0.087	0.097	0.022	100.0	100.0
S322	5	0.038	0.037	0.030	0.050	0.008	0.038	0.044	0.040	0.030	0.030	0.040	0.046	0.010	100.0	100.0
F321	4	0.022	0.021	0.020	0.026	0.003	0.021	0.024	0.020	0.020	0.020	0.022	0.024	0.002	100.0	100.0
B322	4	1.683	1.493	0.680	2.410	0.843	1.630	2.376	1.820	0.863	1.138	2.365	2.392	1.228	100.0	100.0
D322	1	0.202	0.202	0.202	0.202	n.a.	n.a.	n.a.	0.202	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	100.0
Y320	9	0.036	0.032	0.010	0.059	0.017	0.035	0.045	0.041	0.018	0.020	0.048	0.054	0.028	100.0	88.9
A330	4	0.060	0.060	0.050	0.071	0.008	0.060	0.067	0.060	0.053	0.058	0.063	0.067	0.005	100.0	100.0
A326	4	0.132	0.073	0.030	0.398	0.178	0.121	0.278	0.050	0.033	0.038	0.145	0.297	0.107	100.0	100.0
A307	2	0.050	0.049	0.040	0.060	0.014	0.049	0.066	0.050	0.042	0.045	0.055	0.058	0.010	100.0	100.0
I322B	5	0.052	0.046	0.030	0.110	0.033	0.050	0.077	0.040	0.030	0.030	0.052	0.087	0.022	100.0	100.0
B317	8	0.064	0.060	0.040	0.102	0.022	0.063	0.077	0.068	0.040	0.040	0.075	0.086	0.035	100.0	100.0
All	85	0.152	0.065	0.010	2.410	0.384	0.147	0.220	0.060	0.020	0.040	0.104	0.196	0.064	100.0	94.1

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

APPENDIX F

Summary Statistics for Metals Measured at Sites in the Green-Duwamish Watershed in 2003

Table F1. Summary statistics for dissolved aluminum concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	9	6	2	21	8	8	15	5	3	4	10	17	6	100.0	n.a.
A310	3	3	3	2	5	2	3	5	3	2	3	4	5	2	66.7	n.a.
0322	4	24	13	3	60	26	22	45	16	4	5	34	50	29	100.0	n.a.
A320	4	8	7	3	12	4	7	11	8	4	5	10	11	6	100.0	n.a.
A315	3	9	7	2	14	6	8	14	10	4	6	12	13	6	100.0	n.a.
A317	3	3	2	2	4	1	2	3	2	2	2	3	3	1	33.3	n.a.
C317	2	5	4	2	7	4	4	9	5	3	3	6	7	3	50.0	n.a.
S322	5	38	22	3	88	34	36	63	39	6	10	50	73	40	100.0	n.a.
F321	3	15	10	2	22	11	14	25	20	6	11	21	22	10	66.7	n.a.
B322	5	39	28	9	62	27	37	59	53	9	9	60	61	51	100.0	n.a.
D322	3	23	18	10	45	19	22	41	14	11	12	30	39	18	100.0	n.a.
Y320	2	24	23	18	30	9	23	34	24	19	21	27	29	6	100.0	n.a.
A330	4	6	6	4	10	3	6	9	6	4	4	9	9	5	100.0	n.a.
A326	8	23	16	6	50	18	22	33	15	7	8	37	46	29	100.0	n.a.
A307	4	9	6	2	25	11	8	18	4	3	3	10	19	7	100.0	n.a.
I322B	5	18	16	8	30	9	18	25	18	9	12	23	27	11	100.0	n.a.
B317	3	4	4	2	7	2	4	7	4	3	3	6	6	2	100.0	n.a.
All	65	17	10	2	88	19	17	21	9	2	4	22	48	18	92.3	n.a.
Storm Flow																
E319	5	19	15	5	46	16	18	31	15	7	10	20	36	10	100.0	n.a.
A310	5	12	9	4	27	10	11	19	11	4	4	12	21	8	100.0	n.a.
0322	5	26	21	9	50	19	25	40	20	9	10	42	47	33	100.0	n.a.
A320	3	33	29	13	50	18	32	51	36	18	25	43	47	18	100.0	n.a.
A315	4	19	19	18	20	1	19	20	20	18	19	20	20	1	100.0	n.a.
A317	4	18	17	9	24	7	18	24	20	12	17	21	23	4	100.0	n.a.
C317	2	27	26	20	34	10	26	39	27	21	24	31	33	7	100.0	n.a.
S322	5	101	91	43	160	48	99	137	92	54	71	140	152	69	100.0	n.a.
F321	3	23	20	10	40	15	22	38	20	12	15	30	36	15	100.0	n.a.
B322	5	50	46	26	80	22	49	66	52	28	32	60	72	28	100.0	n.a.
D322	1	45	45	45	45	n.a.	n.a.	n.a.	45	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	8	54	52	34	83	16	53	63	51	38	43	62	71	18	100.0	n.a.
A330	3	80	70	31	110	43	77	121	100	45	65	105	108	40	100.0	n.a.
A326	4	78	71	30	104	34	76	106	90	45	67	101	103	34	100.0	n.a.
A307	1	20	20	20	20	n.a.	n.a.	n.a.	20	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
I322B	2	17	15	10	24	10	16	28	17	11	13	20	22	7	100.0	n.a.
B317	6	18	17	11	25	5	18	21	18	13	16	20	22	4	100.0	n.a.
All	66	39	28	4	160	33	39	46	26	10	18	50	88	32	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F2. Summary statistics for total aluminum concentrations (µg/L)at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	7	209	104	23	915	316	194	406	130	30	49	150	462	101	100.0	57
A310	3	114	107	73	171	51	110	163	98	78	86	135	157	49	100.0	67
0322	5	406	196	31	950	432	382	723	194	44	64	790	886	726	100.0	60
A320	3	60	57	37	75	21	59	80	69	43	53	72	74	19	100.0	0
A315	2	243	163	63	422	254	220	538	243	99	153	332	386	179	100.0	50
A317	5	430	156	36	1110	531	400	820	56	40	46	900	1026	854	100.0	40
C317	1	64	64	64	64	n.a.	n.a.	n.a.	64	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0
S322	4	236	182	45	354	147	227	358	273	90	158	351	353	193	100.0	75
F321	2	34	31	19	48	20	32	57	34	22	27	41	45	14	100.0	0
B322	4	107	85	26	165	67	103	162	119	42	66	160	163	93	100.0	50
D322	3	114	98	51	197	75	109	186	95	60	73	146	177	73	100.0	67
Y320	3	272	209	65	410	182	259	445	340	120	203	375	396	172	100.0	67
A330	3	153	149	111	204	47	150	198	145	118	128	175	192	47	100.0	100
A326	7	140	89	39	549	183	132	254	69	43	49	113	294	64	100.0	43
A307	4	190	89	32	613	282	172	422	57	36	43	205	450	162	100.0	25
I322B	6	348	185	26	880	320	332	563	330	30	95	463	685	367	100.0	67
B317	5	658	192	33	1980	881	609	1307	70	39	49	1160	1652	1111	100.0	40
All	67	252	122	19	1980	359	247	324	95	33	49	310	826	261	100.0	51
Storm Flow																
E319	6	648	388	140	2250	809	607	1191	365	155	178	583	1425	405	100.0	50
A310	7	630	505	289	1750	528	604	958	360	302	317	687	1179	370	100.0	29
0322	8	696	483	96	2090	651	667	1075	460	218	308	821	1446	513	100.0	25
A320	4	530	399	190	1240	487	499	930	345	205	228	648	1003	420	100.0	25
A315	5	761	738	450	960	193	750	903	830	560	725	840	912	115	100.0	60
A317	6	757	703	420	1130	312	741	967	710	435	510	1027	1128	517	100.0	33
C317	3	763	602	260	1450	616	719	1348	580	324	420	1015	1276	595	100.0	33
S322	8	1766	1651	1175	3290	748	1732	2201	1431	1212	1240	2051	2657	811	100.0	100
F321	4	168	130	43	350	132	160	277	140	63	93	215	296	122	100.0	0
B322	8	542	452	190	1010	323	528	730	489	205	271	814	903	544	100.0	38
D322	1	310	310	310	310	n.a.	n.a.	n.a.	310	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0
Y320	9	386	353	260	946	217	377	505	300	260	270	390	509	120	100.0	11
A330	4	2327	1959	757	3630	1363	2241	3448	2460	1019	1412	3375	3528	1963	100.0	100
A326	6	5082	2225	720	22000	8369	4653	10702	1426	845	1038	3365	12975	2327	100.0	83
A307	2	732	697	508	955	316	704	1099	732	553	620	844	911	223	100.0	50
I322B	5	790	576	300	2230	817	744	1391	410	320	350	660	1602	310	100.0	20
B317	9	603	558	190	824	207	594	716	590	342	590	761	805	171	100.0	33
All	95	1055	607	43	22000	2306	1025	1444	590	205	315	1068	1864	753	100.0	42

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F3. Summary statistics for dissolved arsenic concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.6	0.6	0.5	0.9	0.2	0.6	0.7	0.5	0.5	0.5	0.6	0.7	0.1	25.0	0.0
A310	3	0.7	0.6	0.5	0.8	0.2	0.6	0.8	0.7	0.5	0.6	0.7	0.8	0.2	66.7	0.0
0322	4	0.6	0.6	0.5	0.7	0.1	0.6	0.7	0.6	0.5	0.5	0.6	0.7	0.1	75.0	0.0
A320	3	0.9	0.9	0.7	1.2	0.2	0.9	1.2	0.9	0.8	0.8	1.0	1.1	0.2	100.0	0.0
A315	2	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.0	100.0	0.0
A317	3	0.8	0.8	0.7	1.0	0.1	0.8	1.0	0.8	0.7	0.8	0.9	0.9	0.1	100.0	0.0
C317	1	0.8	0.8	0.8	0.8	n.a.	n.a.	n.a.	0.8	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.4	0.4	0.2	0.5	0.1	0.4	0.5	0.5	0.3	0.4	0.5	0.5	0.1	25.0	0.0
F321	2	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	100.0	0.0
B322	4	0.7	0.6	0.4	0.9	0.3	0.7	0.9	0.7	0.4	0.5	0.9	0.9	0.4	75.0	0.0
D322	3	0.6	0.6	0.5	0.6	0.1	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.1	100.0	0.0
Y320	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A330	3	1.0	1.0	0.8	1.1	0.1	0.9	1.1	1.0	0.9	0.9	1.0	1.0	0.1	100.0	0.0
A326	7	1.1	1.1	0.8	1.2	0.1	1.1	1.2	1.1	0.9	1.0	1.2	1.2	0.1	100.0	0.0
A307	4	1.1	1.1	1.1	1.2	0.1	1.1	1.2	1.1	1.1	1.1	1.1	1.2	0.1	100.0	0.0
I322B	5	0.5	0.5	0.5	0.6	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	20.0	0.0
B317	3	1.0	1.0	0.8	1.1	0.1	1.0	1.1	1.0	0.9	0.9	1.0	1.1	0.1	100.0	0.0
All	56	0.8	0.7	0.2	1.2	0.3	0.7	0.8	0.7	0.5	0.5	1.0	1.1	0.5	76.8	0.0
Storm Flow																
E319	5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	20.0	0.0
A310	5	0.6	0.6	0.5	0.6	0.1	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.1	60.0	0.0
0322	5	0.6	0.6	0.5	0.6	0.0	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.0	100.0	0.0
A320	3	1.0	1.0	0.9	1.2	0.2	1.0	1.2	0.9	0.9	0.9	1.1	1.2	0.2	100.0	0.0
A315	3	0.6	0.6	0.5	0.6	0.1	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.1	100.0	0.0
A317	4	0.7	0.7	0.6	0.8	0.1	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.1	100.0	0.0
C317	1	0.6	0.6	0.6	0.6	n.a.	n.a.	n.a.	0.6	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.4	0.4	0.2	0.5	0.1	0.4	0.5	0.5	0.3	0.4	0.5	0.5	0.1	25.0	0.0
F321	2	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	100.0	0.0
B322	4	1.2	1.2	1.1	1.4	0.1	1.2	1.3	1.2	1.1	1.2	1.3	1.3	0.1	100.0	0.0
D322	1	1.0	1.0	1.0	1.0	n.a.	n.a.	n.a.	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	7	0.5	0.5	0.5	0.6	0.0	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.0	28.6	0.0
A330	2	0.7	0.7	0.6	0.8	0.2	0.7	0.9	0.7	0.6	0.6	0.8	0.8	0.1	100.0	0.0
A326	3	0.8	0.8	0.6	1.0	0.2	0.8	1.0	0.9	0.6	0.7	0.9	1.0	0.2	100.0	0.0
A307	1	1.0	1.0	1.0	1.0	n.a.	n.a.	n.a.	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
I322B	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
B317	6	0.6	0.6	0.5	0.7	0.1	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.1	83.3	0.0
All	58	0.7	0.6	0.2	1.4	0.2	0.6	0.7	0.6	0.5	0.5	0.6	1.0	0.1	70.7	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F4. Summary statistics for total arsenic concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.7	0.7	0.5	1.1	0.3	0.7	0.9	0.6	0.5	0.5	0.8	1.0	0.3	50.0	n.a.
A310	3	0.9	0.8	0.6	1.1	0.3	0.8	1.1	0.9	0.6	0.7	1.0	1.1	0.3	100.0	n.a.
0322	4	0.7	0.7	0.5	0.8	0.1	0.7	0.8	0.7	0.6	0.6	0.8	0.8	0.2	100.0	n.a.
A320	3	1.0	1.0	0.8	1.3	0.3	1.0	1.3	1.0	0.8	0.9	1.1	1.2	0.3	100.0	n.a.
A315	2	1.2	1.2	1.1	1.3	0.1	1.2	1.3	1.2	1.1	1.2	1.2	1.2	0.1	100.0	n.a.
A317	3	1.5	1.5	1.3	1.7	0.2	1.5	1.7	1.6	1.4	1.5	1.7	1.7	0.2	100.0	n.a.
C317	1	1.3	1.3	1.3	1.3	n.a.	n.a.	n.a.	1.3	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.4	0.4	0.3	0.5	0.1	0.4	0.5	0.5	0.3	0.4	0.5	0.5	0.1	25.0	n.a.
F321	2	0.6	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	100.0	n.a.
B322	4	0.7	0.6	0.4	1.0	0.3	0.7	1.0	0.7	0.4	0.5	1.0	1.0	0.5	75.0	n.a.
D322	3	0.7	0.7	0.6	0.7	0.1	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.1	100.0	n.a.
Y320	1	0.6	0.6	0.6	0.6	n.a.	n.a.	n.a.	0.6	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
A330	3	1.0	1.0	0.9	1.1	0.1	1.0	1.1	1.1	0.9	1.0	1.1	1.1	0.1	100.0	n.a.
A326	7	1.2	1.2	1.0	1.3	0.1	1.2	1.2	1.2	1.0	1.1	1.3	1.3	0.2	100.0	n.a.
A307	4	1.5	1.5	1.2	2.0	0.4	1.5	1.8	1.4	1.2	1.3	1.6	1.9	0.3	100.0	n.a.
I322B	5	0.6	0.6	0.5	0.7	0.1	0.6	0.7	0.6	0.5	0.6	0.6	0.7	0.1	80.0	n.a.
B317	3	1.5	1.5	1.1	1.8	0.4	1.5	1.8	1.6	1.2	1.4	1.7	1.8	0.4	100.0	n.a.
All	56	0.9	0.9	0.3	2.0	0.4	0.9	1.0	0.9	0.5	0.6	1.2	1.4	0.6	87.5	n.a.
Storm Flow																
E319	5	0.7	0.7	0.5	0.9	0.2	0.7	0.8	0.6	0.5	0.5	0.9	0.9	0.4	60.0	n.a.
A310	5	1.2	1.2	0.9	1.6	0.3	1.2	1.5	1.1	0.9	1.1	1.5	1.6	0.4	100.0	n.a.
0322	5	0.7	0.7	0.7	0.8	0.0	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.0	100.0	n.a.
A320	3	1.4	1.4	1.2	1.5	0.2	1.4	1.5	1.4	1.2	1.3	1.5	1.5	0.2	100.0	n.a.
A315	3	0.9	0.9	0.7	1.1	0.2	0.9	1.1	1.0	0.8	0.8	1.0	1.1	0.2	100.0	n.a.
A317	4	1.4	1.4	1.0	1.9	0.4	1.4	1.8	1.4	1.0	1.1	1.8	1.8	0.7	100.0	n.a.
C317	1	1.3	1.3	1.3	1.3	n.a.	n.a.	n.a.	1.3	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.5	0.5	0.3	0.6	0.1	0.5	0.6	0.5	0.4	0.5	0.5	0.6	0.1	25.0	n.a.
F321	2	0.7	0.7	0.6	0.7	0.0	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.0	100.0	n.a.
B322	4	1.3	1.3	1.2	1.4	0.1	1.3	1.4	1.3	1.2	1.2	1.4	1.4	0.2	100.0	n.a.
D322	1	1.1	1.1	1.1	1.1	n.a.	n.a.	n.a.	1.1	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	7	0.6	0.6	0.5	0.8	0.1	0.6	0.7	0.6	0.5	0.5	0.7	0.8	0.2	71.4	n.a.
A330	2	1.1	1.1	1.0	1.1	0.0	1.1	1.1	1.1	1.0	1.0	1.1	1.1	0.0	100.0	n.a.
A326	3	2.7	1.9	0.9	5.7	2.7	2.5	5.2	1.4	1.0	1.1	3.5	4.9	2.4	100.0	n.a.
A307	1	1.4	1.4	1.4	1.4	n.a.	n.a.	n.a.	1.4	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
I322B	2	0.6	0.6	0.5	0.6	0.1	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.0	100.0	n.a.
B317	6	1.0	1.0	0.9	1.5	0.2	1.0	1.2	1.0	0.9	0.9	1.1	1.3	0.2	100.0	n.a.
All	58	1.0	0.9	0.3	5.7	0.7	1.0	1.2	0.9	0.5	0.7	1.2	1.5	0.5	87.9	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F5. Summary statistics for dissolved cadmium concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
A310	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
0322	4	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
A317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	4	0.08	0.06	0.01	0.10	0.05	0.07	0.11	0.10	0.04	0.08	0.10	0.10	0.02	0.0	0.0
F321	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
B322	4	0.06	0.03	0.01	0.10	0.05	0.05	0.10	0.06	0.01	0.01	0.10	0.10	0.09	0.0	0.0
D322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
Y320	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A330	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
A326	7	0.06	0.04	0.01	0.10	0.05	0.06	0.09	0.10	0.01	0.01	0.10	0.10	0.09	28.6	0.0
A307	4	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	25.0	0.0
I322B	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
B317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
All	56	0.06	0.04	0.01	0.10	0.04	0.06	0.07	0.10	0.01	0.01	0.10	0.10	0.09	5.4	1.8
Storm Flow																
E319	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
A310	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
0322	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
A315	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	33.3	0.0
A317	4	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
C317	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	4	0.08	0.06	0.01	0.10	0.05	0.07	0.11	0.10	0.04	0.08	0.10	0.10	0.02	0.0	0.0
F321	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
B322	4	0.07	0.05	0.02	0.10	0.04	0.06	0.10	0.07	0.03	0.04	0.10	0.10	0.06	50.0	0.0
D322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
Y320	7	0.09	0.08	0.02	0.10	0.03	0.09	0.11	0.10	0.07	0.10	0.10	0.10	0.00	14.3	0.0
A330	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	0.0
A326	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	100.0	0.0
A307	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
I322B	2	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	0.0
B317	6	0.10	0.10	0.10	0.11	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.00	16.7	0.0
All	58	0.07	0.05	0.01	0.11	0.04	0.07	0.08	0.10	0.01	0.01	0.10	0.10	0.09	15.5	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F6. Summary statistics for total cadmium concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A310	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
0322	4	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	100.0	n.a.
A317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	4	0.08	0.06	0.01	0.10	0.05	0.07	0.11	0.10	0.04	0.08	0.10	0.10	0.02	0.0	n.a.
F321	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
B322	4	0.06	0.04	0.01	0.10	0.05	0.05	0.10	0.06	0.01	0.01	0.10	0.10	0.09	50.0	n.a.
D322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	66.7	n.a.
Y320	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A330	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	33.3	n.a.
A326	7	0.06	0.04	0.01	0.10	0.05	0.06	0.09	0.10	0.01	0.02	0.10	0.10	0.08	28.6	n.a.
A307	4	0.02	0.01	0.01	0.05	0.02	0.02	0.03	0.01	0.01	0.01	0.02	0.04	0.01	50.0	n.a.
I322B	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
B317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
All	56	0.06	0.04	0.01	0.10	0.04	0.06	0.07	0.10	0.01	0.01	0.10	0.10	0.09	19.6	n.a.
Storm Flow																
E319	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A310	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
0322	5	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.00	33.3	n.a.
A315	3	0.03	0.03	0.02	0.03	0.01	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.01	100.0	n.a.
A317	4	0.13	0.13	0.10	0.17	0.03	0.13	0.16	0.13	0.10	0.11	0.15	0.16	0.04	50.0	n.a.
C317	1	0.13	0.13	0.13	0.13	n.a.	n.a.	n.a.	0.13	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.08	0.06	0.01	0.10	0.05	0.07	0.11	0.10	0.04	0.08	0.10	0.10	0.02	0.0	n.a.
F321	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
B322	4	0.09	0.07	0.03	0.12	0.04	0.08	0.12	0.10	0.05	0.08	0.11	0.11	0.03	75.0	n.a.
D322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	7	0.09	0.08	0.02	0.10	0.03	0.09	0.11	0.10	0.07	0.10	0.10	0.10	0.00	14.3	n.a.
A330	2	0.02	0.02	0.01	0.02	0.00	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.00	100.0	n.a.
A326	3	0.12	0.07	0.03	0.29	0.15	0.11	0.26	0.04	0.03	0.03	0.16	0.24	0.13	100.0	n.a.
A307	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
I322B	2	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
B317	6	0.18	0.16	0.10	0.32	0.09	0.18	0.24	0.15	0.10	0.11	0.24	0.29	0.13	83.3	n.a.
All	58	0.09	0.07	0.01	0.32	0.06	0.09	0.11	0.10	0.02	0.04	0.10	0.14	0.06	37.9	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F7. Summary statistics for dissolved chromium concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	n.a.
A310	3	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	n.a.
0322	4	0.42	0.42	0.40	0.48	0.04	0.42	0.45	0.40	0.40	0.40	0.42	0.46	0.02	25.0	n.a.
A320	3	0.18	0.17	0.10	0.25	0.08	0.18	0.26	0.20	0.12	0.15	0.23	0.24	0.08	66.7	n.a.
A315	2	0.23	0.21	0.14	0.33	0.13	0.22	0.38	0.23	0.16	0.19	0.28	0.31	0.09	100.0	n.a.
A317	3	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	n.a.
C317	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.33	0.29	0.11	0.40	0.15	0.32	0.45	0.40	0.20	0.33	0.40	0.40	0.07	25.0	n.a.
F321	2	0.24	0.24	0.23	0.25	0.01	0.24	0.26	0.24	0.23	0.24	0.25	0.25	0.01	50.0	n.a.
B322	4	0.35	0.28	0.06	0.49	0.20	0.34	0.52	0.43	0.16	0.32	0.47	0.48	0.15	75.0	n.a.
D322	3	0.20	0.17	0.08	0.37	0.15	0.19	0.35	0.16	0.09	0.12	0.27	0.33	0.15	100.0	n.a.
Y320	1	0.40	0.40	0.40	0.40	n.a.	n.a.	n.a.	0.40	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A330	3	0.25	0.24	0.18	0.31	0.06	0.24	0.30	0.25	0.19	0.22	0.28	0.29	0.06	66.7	n.a.
A326	7	0.40	0.36	0.18	0.77	0.19	0.39	0.51	0.40	0.22	0.31	0.40	0.55	0.09	42.9	n.a.
A307	4	0.22	0.17	0.05	0.39	0.14	0.21	0.33	0.22	0.09	0.15	0.28	0.34	0.14	50.0	n.a.
I322B	5	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	n.a.
B317	3	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	n.a.
All	56	0.33	0.30	0.05	0.77	0.13	0.33	0.36	0.40	0.13	0.25	0.40	0.40	0.15	37.5	n.a.
Storm Flow																
E319	5	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	n.a.
A310	5	0.40	0.40	0.40	0.41	0.00	0.40	0.41	0.40	0.40	0.40	0.40	0.41	0.00	0.0	n.a.
0322	5	0.41	0.41	0.40	0.43	0.01	0.41	0.42	0.40	0.40	0.40	0.40	0.42	0.00	20.0	n.a.
A320	3	0.31	0.31	0.30	0.33	0.02	0.31	0.33	0.31	0.30	0.31	0.32	0.32	0.02	100.0	n.a.
A315	3	0.31	0.30	0.27	0.37	0.05	0.30	0.36	0.29	0.27	0.28	0.33	0.35	0.05	100.0	n.a.
A317	4	0.51	0.51	0.43	0.58	0.06	0.51	0.56	0.52	0.46	0.50	0.54	0.56	0.04	100.0	n.a.
C317	1	0.39	0.39	0.39	0.39	n.a.	n.a.	n.a.	0.39	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.33	0.30	0.13	0.40	0.14	0.32	0.44	0.40	0.21	0.33	0.40	0.40	0.07	25.0	n.a.
F321	2	0.24	0.24	0.23	0.25	0.01	0.24	0.26	0.24	0.23	0.24	0.25	0.25	0.01	100.0	n.a.
B322	4	0.43	0.40	0.24	0.66	0.17	0.42	0.57	0.41	0.29	0.36	0.48	0.59	0.12	75.0	n.a.
D322	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	7	0.39	0.39	0.33	0.40	0.03	0.39	0.41	0.40	0.37	0.40	0.40	0.40	0.00	14.3	n.a.
A330	2	0.33	0.33	0.30	0.36	0.04	0.33	0.37	0.33	0.31	0.32	0.34	0.35	0.03	100.0	n.a.
A326	3	0.99	0.83	0.54	1.85	0.75	0.93	1.70	0.57	0.55	0.56	1.21	1.59	0.66	100.0	n.a.
A307	1	0.63	0.63	0.63	0.63	n.a.	n.a.	n.a.	0.63	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
I322B	2	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	n.a.
B317	6	0.46	0.45	0.40	0.56	0.06	0.45	0.50	0.45	0.40	0.40	0.48	0.52	0.08	66.7	n.a.
All	58	0.43	0.40	0.13	1.85	0.21	0.43	0.47	0.40	0.30	0.40	0.42	0.55	0.02	51.72	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F8. Summary statistics for total chromium concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.47	0.45	0.40	0.66	0.13	0.46	0.57	0.40	0.40	0.40	0.47	0.58	0.07	25.0	0.0
A310	3	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.00	0.0	0.0
0322	4	0.54	0.51	0.40	0.91	0.25	0.52	0.74	0.43	0.40	0.40	0.57	0.77	0.17	50.0	0.0
A320	3	0.28	0.28	0.24	0.33	0.04	0.28	0.32	0.28	0.25	0.26	0.30	0.32	0.04	100.0	0.0
A315	2	0.56	0.47	0.26	0.86	0.43	0.52	1.06	0.56	0.32	0.41	0.71	0.80	0.30	100.0	0.0
A317	3	0.49	0.48	0.40	0.54	0.08	0.48	0.56	0.52	0.42	0.46	0.53	0.54	0.07	66.7	0.0
C317	1	0.34	0.34	0.34	0.34	n.a.	n.a.	n.a.	0.34	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.35	0.33	0.19	0.40	0.11	0.34	0.43	0.40	0.25	0.35	0.40	0.40	0.05	25.0	0.0
F321	2	0.28	0.28	0.26	0.30	0.03	0.28	0.32	0.28	0.26	0.27	0.29	0.30	0.02	100.0	0.0
B322	4	0.35	0.30	0.10	0.49	0.17	0.34	0.49	0.41	0.19	0.33	0.44	0.47	0.11	75.0	0.0
D322	3	0.27	0.25	0.18	0.44	0.15	0.26	0.41	0.19	0.18	0.19	0.32	0.39	0.13	100.0	0.0
Y320	1	0.40	0.40	0.40	0.40	n.a.	n.a.	n.a.	0.40	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A330	3	0.59	0.58	0.54	0.67	0.07	0.58	0.66	0.55	0.54	0.55	0.61	0.65	0.07	100.0	0.0
A326	7	0.60	0.49	0.29	1.73	0.51	0.57	0.91	0.42	0.31	0.37	0.50	1.03	0.14	71.4	0.0
A307	4	0.49	0.36	0.16	1.21	0.49	0.46	0.89	0.29	0.20	0.25	0.52	0.94	0.27	100.0	0.0
I322B	5	0.87	0.74	0.40	1.70	0.55	0.84	1.27	0.76	0.40	0.40	1.10	1.46	0.70	60.0	0.0
B317	3	0.43	0.43	0.40	0.49	0.05	0.43	0.48	0.40	0.40	0.40	0.45	0.47	0.05	33.3	0.0
All	56	0.48	0.42	0.10	1.73	0.32	0.48	0.55	0.40	0.25	0.33	0.50	0.81	0.17	64.3	0.0
Storm Flow																
E319	5	0.54	0.49	0.40	1.10	0.31	0.53	0.77	0.40	0.40	0.40	0.42	0.83	0.02	40.0	0.0
A310	5	1.00	0.90	0.63	2.01	0.57	0.96	1.42	0.76	0.67	0.73	0.85	1.55	0.12	100.0	0.0
0322	5	0.61	0.58	0.40	1.00	0.23	0.60	0.78	0.56	0.45	0.52	0.58	0.83	0.06	80.0	0.0
A320	3	1.22	1.07	0.70	2.10	0.77	1.16	1.95	0.85	0.73	0.77	1.47	1.85	0.70	100.0	0.0
A315	3	0.73	0.72	0.58	0.84	0.14	0.72	0.86	0.77	0.61	0.67	0.80	0.82	0.13	100.0	0.0
A317	4	1.54	1.48	1.10	2.30	0.54	1.51	1.99	1.39	1.13	1.18	1.75	2.08	0.58	100.0	0.0
C317	1	2.29	2.29	2.29	2.29	n.a.	n.a.	n.a.	2.29	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.49	0.48	0.37	0.63	0.11	0.48	0.58	0.47	0.39	0.42	0.53	0.59	0.11	25.0	0.0
F321	2	0.42	0.39	0.25	0.59	0.24	0.40	0.70	0.42	0.29	0.34	0.51	0.56	0.17	100.0	0.0
B322	4	0.52	0.50	0.30	0.74	0.18	0.51	0.67	0.52	0.36	0.45	0.59	0.68	0.14	100.0	0.0
D322	1	0.56	0.56	0.56	0.56	n.a.	n.a.	n.a.	0.56	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	7	0.88	0.85	0.66	1.37	0.25	0.87	1.03	0.83	0.68	0.72	0.93	1.15	0.22	100.0	0.0
A330	2	2.26	2.08	1.38	3.14	1.24	2.15	3.71	2.26	1.56	1.82	2.70	2.96	0.88	100.0	0.0
A326	3	13.23	6.94	2.14	32.80	17.00	12.00	29.37	4.76	2.66	3.45	18.78	27.19	15.33	100.0	0.0
A307	1	1.37	1.37	1.37	1.37	n.a.	n.a.	n.a.	1.37	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
I322B	2	0.99	0.99	0.98	1.00	0.01	0.99	1.01	0.99	0.98	0.99	1.00	1.00	0.01	100.0	0.0
B317	6	1.50	1.42	0.77	2.34	0.52	1.48	1.85	1.45	1.04	1.33	1.65	2.02	0.33	100.0	0.0
All	58	1.61	0.92	0.25	32.80	4.24	1.54	2.52	0.80	0.40	0.56	1.37	2.19	0.81	87.9	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F9. Summary statistics for dissolved copper concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.5	0.4	0.4	0.6	0.1	0.4	0.5	0.4	0.4	0.4	0.5	0.6	0.1	25.0	0.0
A310	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	100.0	0.0
0322	4	1.6	1.2	0.6	3.5	1.3	1.5	2.7	1.1	0.6	0.7	2.0	2.9	1.3	100.0	0.0
A320	3	0.7	0.6	0.3	1.1	0.4	0.7	1.1	0.6	0.4	0.5	0.9	1.0	0.4	100.0	0.0
A315	2	1.1	1.0	0.7	1.5	0.5	1.1	1.7	1.1	0.8	0.9	1.3	1.4	0.4	100.0	0.0
A317	3	0.9	0.9	0.6	1.1	0.3	0.9	1.2	1.1	0.7	0.9	1.1	1.1	0.3	100.0	0.0
C317	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.5	0.5	0.4	0.6	0.1	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.1	100.0	0.0
F321	2	0.5	0.4	0.3	0.7	0.3	0.5	0.9	0.5	0.3	0.4	0.6	0.7	0.2	100.0	0.0
B322	4	4.8	4.6	3.1	6.3	1.4	4.7	6.0	4.9	3.4	3.9	5.8	6.1	1.9	100.0	0.0
D322	3	1.9	1.7	0.9	2.8	1.0	1.8	2.8	1.9	1.1	1.4	2.3	2.6	1.0	100.0	0.0
Y320	1	1.0	1.0	1.0	1.0	n.a.	n.a.	n.a.	1.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	3	0.4	0.4	0.2	0.7	0.3	0.4	0.7	0.3	0.2	0.3	0.5	0.6	0.2	100.0	0.0
A326	7	1.4	1.4	1.0	2.1	0.4	1.4	1.7	1.2	1.0	1.1	1.7	1.9	0.6	100.0	0.0
A307	4	1.2	0.7	0.3	3.4	1.5	1.1	2.4	0.5	0.3	0.3	1.3	2.6	1.0	100.0	0.0
I322B	5	2.7	2.5	1.8	5.1	1.4	2.6	3.7	2.2	1.9	2.0	2.3	4.0	0.3	100.0	0.0
B317	3	1.1	1.1	0.9	1.3	0.2	1.1	1.3	1.1	1.0	1.0	1.2	1.3	0.2	100.0	0.0
All	56	1.4	1.0	0.2	6.3	1.4	1.4	1.7	1.0	0.4	0.5	1.7	3.3	1.2	94.6	0.0
Storm Flow																
E319	5	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0
A310	5	0.7	0.7	0.5	1.1	0.2	0.7	0.9	0.6	0.5	0.6	0.7	1.0	0.1	100.0	0.0
0322	5	1.9	1.7	0.9	3.0	0.9	1.9	2.6	2.2	1.0	1.1	2.4	2.8	1.3	100.0	0.0
A320	3	1.2	1.2	1.0	1.3	0.1	1.2	1.3	1.2	1.1	1.1	1.2	1.2	0.1	100.0	0.0
A315	3	3.1	3.0	2.8	3.3	0.3	3.0	3.3	3.1	2.8	2.9	3.2	3.3	0.3	100.0	0.0
A317	4	2.9	2.9	2.7	3.1	0.2	2.9	3.1	2.9	2.7	2.8	3.0	3.1	0.3	100.0	0.0
C317	1	2.8	2.8	2.8	2.8	n.a.	n.a.	n.a.	2.8	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0	100.0	0.0
F321	2	0.3	0.3	0.2	0.4	0.1	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.1	100.0	0.0
B322	4	6.3	6.2	4.8	8.2	1.5	6.2	7.6	6.1	5.0	5.3	7.1	7.8	1.9	100.0	0.0
D322	1	5.2	5.2	5.2	5.2	n.a.	n.a.	n.a.	5.2	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	7	1.8	1.8	1.5	2.0	0.2	1.8	1.9	1.7	1.6	1.7	1.9	2.0	0.3	100.0	0.0
A330	2	1.5	1.5	1.5	1.6	0.0	1.5	1.6	1.5	1.5	1.5	1.5	1.5	0.0	100.0	0.0
A326	3	2.5	2.5	1.9	2.9	0.5	2.5	3.0	2.8	2.1	2.3	2.8	2.9	0.5	100.0	0.0
A307	1	2.7	2.7	2.7	2.7	n.a.	n.a.	n.a.	2.7	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
I322B	2	1.8	1.8	1.7	1.9	0.1	1.8	2.0	1.8	1.7	1.8	1.9	1.9	0.1	100.0	0.0
B317	6	2.8	2.8	2.5	3.0	0.2	2.7	2.9	2.8	2.6	2.6	2.8	2.9	0.2	100.0	0.0
All	58	2.1	1.6	0.2	8.2	1.6	2.1	2.5	1.9	0.4	0.9	2.8	3.2	1.9	91.4	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F10. Summary statistics for total copper concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.8	0.7	0.4	1.9	0.7	0.8	1.4	0.5	0.4	0.4	0.9	1.5	0.5	50.0	n.a.
A310	3	0.8	0.8	0.7	1.0	0.2	0.8	1.0	0.8	0.7	0.7	0.9	1.0	0.2	100.0	n.a.
0322	4	2.1	1.6	0.7	4.8	1.9	2.0	3.7	1.5	0.8	0.8	2.8	4.0	2.0	100.0	n.a.
A320	3	0.6	0.6	0.5	0.7	0.1	0.6	0.7	0.6	0.5	0.5	0.6	0.7	0.1	100.0	n.a.
A315	2	1.6	1.5	1.0	2.2	0.8	1.5	2.6	1.6	1.1	1.3	1.9	2.1	0.6	100.0	n.a.
A317	3	1.4	1.4	0.9	1.9	0.5	1.4	1.9	1.5	1.1	1.2	1.7	1.8	0.5	100.0	n.a.
C317	1	1.1	1.1	1.1	1.1	n.a.	n.a.	n.a.	1.1	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.7	0.7	0.6	0.9	0.1	0.7	0.8	0.7	0.6	0.6	0.8	0.8	0.2	100.0	n.a.
F321	2	0.6	0.5	0.3	1.0	0.5	0.6	1.2	0.6	0.4	0.5	0.8	0.9	0.3	100.0	n.a.
B322	4	7.7	7.1	4.0	11.3	3.4	7.5	10.5	7.8	4.5	5.3	10.2	10.8	4.9	100.0	n.a.
D322	3	2.1	1.9	1.3	3.2	1.0	2.0	3.1	1.8	1.4	1.5	2.5	2.9	1.0	100.0	n.a.
Y320	1	1.2	1.2	1.2	1.2	n.a.	n.a.	n.a.	1.2	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
A330	3	0.7	0.7	0.6	0.9	0.2	0.7	0.9	0.6	0.6	0.6	0.8	0.9	0.2	100.0	n.a.
A326	7	1.8	1.7	1.2	3.3	0.8	1.7	2.2	1.4	1.2	1.3	1.9	2.6	0.6	100.0	n.a.
A307	4	1.6	1.1	0.5	4.4	1.9	1.5	3.2	0.7	0.5	0.6	1.7	3.4	1.1	100.0	n.a.
I322B	5	3.9	3.7	2.2	5.4	1.4	3.8	4.9	3.4	2.6	3.2	5.1	5.3	2.0	100.0	n.a.
B317	3	1.6	1.6	1.6	1.7	0.1	1.6	1.7	1.6	1.6	1.6	1.7	1.7	0.0	100.0	n.a.
All	56	2.0	1.4	0.3	11.3	2.2	2.0	2.5	1.2	0.6	0.7	2.2	4.6	1.4	96.4	n.a.
Storm Flow																
E319	5	1.2	0.9	0.5	3.5	1.3	1.1	2.1	0.8	0.5	0.5	0.9	2.4	0.3	100.0	n.a.
A310	5	2.3	2.1	1.4	4.3	1.1	2.2	3.1	1.9	1.6	1.8	2.0	3.4	0.2	100.0	n.a.
0322	5	2.8	2.6	1.2	3.8	1.2	2.7	3.7	3.6	1.5	1.9	3.6	3.7	1.7	100.0	n.a.
A320	3	1.9	1.8	1.3	2.7	0.7	1.9	2.6	1.8	1.4	1.5	2.2	2.5	0.7	100.0	n.a.
A315	3	4.1	4.0	3.2	4.7	0.8	4.0	4.8	4.3	3.4	3.8	4.5	4.6	0.8	100.0	n.a.
A317	4	5.0	5.0	4.0	6.4	1.0	5.0	5.9	4.9	4.2	4.5	5.4	6.0	0.9	100.0	n.a.
C317	1	6.0	6.0	6.0	6.0	n.a.	n.a.	n.a.	6.0	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	1.9	1.8	1.5	2.2	0.3	1.8	2.1	1.9	1.6	1.7	2.0	2.1	0.3	100.0	n.a.
F321	2	0.5	0.5	0.3	0.7	0.3	0.5	0.8	0.5	0.3	0.4	0.6	0.7	0.2	100.0	n.a.
B322	4	7.6	7.6	6.7	8.6	0.9	7.5	8.3	7.6	6.8	7.0	8.1	8.4	1.1	100.0	n.a.
D322	1	6.3	6.3	6.3	6.3	n.a.	n.a.	n.a.	6.3	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	7	2.3	2.3	1.8	2.7	0.4	2.3	2.5	2.4	1.9	2.1	2.6	2.7	0.6	100.0	n.a.
A330	2	2.8	2.7	2.2	3.5	0.9	2.7	3.9	2.8	2.3	2.5	3.1	3.3	0.6	100.0	n.a.
A326	3	14.4	9.1	3.8	33.2	16.4	13.2	29.9	6.1	4.2	4.9	19.6	27.8	14.7	100.0	n.a.
A307	1	3.6	3.6	3.6	3.6	n.a.	n.a.	n.a.	3.6	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
I322B	2	3.5	3.5	3.2	3.8	0.4	3.5	3.9	3.5	3.3	3.3	3.6	3.7	0.3	100.0	n.a.
B317	6	5.3	5.2	4.1	7.2	1.1	5.3	6.1	5.0	4.4	4.8	5.8	6.6	1.0	100.0	n.a.
All	58	3.9	2.9	0.3	33.2	4.4	3.9	4.9	3.3	1.1	1.9	4.7	6.5	2.8	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F11. Summary statistics for dissolved lead concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
A310	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
0322	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
A320	3	0.026	0.026	0.025	0.028	0.002	0.026	0.028	0.025	0.025	0.025	0.027	0.027	0.002	33.3	0.0
A315	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	50.0	0.0
A317	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
C317	1	0.025	0.025	0.025	0.025	n.a.	n.a.	n.a.	0.025	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	4	0.156	0.119	0.025	0.200	0.088	0.151	0.228	0.200	0.078	0.156	0.200	0.200	0.044	0.0	0.0
F321	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
B322	4	0.138	0.116	0.041	0.200	0.077	0.133	0.201	0.155	0.062	0.093	0.200	0.200	0.107	50.0	0.0
D322	3	0.030	0.029	0.025	0.039	0.008	0.029	0.037	0.025	0.025	0.025	0.032	0.036	0.007	33.3	0.0
Y320	1	0.200	0.200	0.200	0.200	n.a.	n.a.	n.a.	0.200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A330	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
A326	7	0.192	0.139	0.025	0.362	0.124	0.186	0.269	0.200	0.036	0.122	0.255	0.331	0.133	42.9	0.0
A307	4	0.059	0.040	0.025	0.159	0.067	0.054	0.114	0.025	0.025	0.025	0.059	0.119	0.034	25.0	0.0
I322B	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
B317	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
All	56	0.138	0.095	0.025	0.362	0.091	0.136	0.158	0.200	0.025	0.025	0.200	0.200	0.175	16.1	0.0
Storm Flow																
E319	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
A310	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
0322	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
A320	3	0.068	0.065	0.043	0.086	0.022	0.066	0.089	0.075	0.049	0.059	0.081	0.084	0.022	100.0	0.0
A315	3	0.104	0.103	0.093	0.126	0.019	0.103	0.122	0.093	0.093	0.093	0.110	0.119	0.017	100.0	0.0
A317	4	0.225	0.222	0.200	0.290	0.044	0.222	0.261	0.205	0.200	0.200	0.230	0.266	0.030	75.0	0.0
C317	1	0.256	0.256	0.256	0.256	n.a.	n.a.	n.a.	0.256	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.159	0.131	0.037	0.200	0.082	0.154	0.226	0.200	0.086	0.159	0.200	0.200	0.041	25.0	0.0
F321	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
B322	4	0.145	0.135	0.089	0.200	0.063	0.141	0.197	0.146	0.090	0.091	0.200	0.200	0.109	50.0	0.0
D322	1	0.032	0.032	0.032	0.032	n.a.	n.a.	n.a.	0.032	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	7	0.182	0.174	0.076	0.200	0.047	0.180	0.211	0.200	0.150	0.200	0.200	0.200	0.000	14.3	0.0
A330	2	0.067	0.066	0.061	0.072	0.008	0.066	0.076	0.067	0.062	0.064	0.069	0.071	0.005	100.0	0.0
A326	3	0.233	0.184	0.064	0.385	0.161	0.222	0.386	0.251	0.101	0.158	0.318	0.358	0.161	100.0	0.0
A307	1	0.200	0.200	0.200	0.200	n.a.	n.a.	n.a.	0.200	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
I322B	2	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
B317	6	0.238	0.236	0.200	0.300	0.035	0.237	0.262	0.235	0.205	0.215	0.248	0.275	0.033	83.3	0.0
All	58	0.174	0.151	0.025	0.385	0.074	0.173	0.190	0.200	0.063	0.101	0.200	0.243	0.099	43.1	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F12. Summary statistics for total lead concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.223	0.219	0.200	0.290	0.045	0.220	0.260	0.200	0.200	0.200	0.223	0.263	0.023	25.0	n.a.
A310	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
0322	4	0.263	0.245	0.200	0.450	0.125	0.255	0.365	0.200	0.200	0.200	0.263	0.375	0.063	25.0	n.a.
A320	3	0.079	0.074	0.043	0.110	0.034	0.077	0.111	0.085	0.051	0.064	0.098	0.105	0.034	100.0	n.a.
A315	2	0.282	0.265	0.185	0.379	0.137	0.270	0.442	0.282	0.204	0.234	0.331	0.360	0.097	100.0	n.a.
A317	3	0.253	0.250	0.200	0.290	0.047	0.250	0.298	0.270	0.214	0.235	0.280	0.286	0.045	66.7	n.a.
C317	1	0.371	0.371	0.371	0.371	n.a.	n.a.	n.a.	0.371	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.169	0.157	0.075	0.200	0.063	0.165	0.220	0.200	0.113	0.169	0.200	0.200	0.031	25.0	n.a.
F321	2	0.032	0.031	0.028	0.035	0.005	0.031	0.037	0.032	0.029	0.030	0.033	0.034	0.004	100.0	n.a.
B322	4	0.207	0.193	0.100	0.280	0.076	0.202	0.269	0.224	0.135	0.188	0.243	0.265	0.055	100.0	n.a.
D322	3	0.098	0.090	0.049	0.126	0.043	0.095	0.139	0.120	0.063	0.085	0.123	0.125	0.039	100.0	n.a.
Y320	1	0.200	0.200	0.200	0.200	n.a.	n.a.	n.a.	0.200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A330	3	0.098	0.096	0.079	0.120	0.021	0.096	0.117	0.094	0.082	0.087	0.107	0.115	0.021	100.0	n.a.
A326	7	0.714	0.435	0.120	2.430	0.819	0.675	1.223	0.263	0.168	0.230	0.863	1.518	0.633	85.7	n.a.
A307	4	0.711	0.406	0.170	2.100	0.930	0.652	1.476	0.287	0.181	0.198	0.800	1.580	0.602	100.0	n.a.
I322B	5	1.916	0.902	0.200	5.500	2.241	1.790	3.565	1.020	0.200	0.200	2.660	4.364	2.460	60.0	n.a.
B317	3	0.593	0.593	0.560	0.610	0.029	0.591	0.621	0.610	0.570	0.585	0.610	0.610	0.025	100.0	n.a.
All	56	0.465	0.238	0.028	5.500	0.866	0.450	0.655	0.200	0.082	0.159	0.309	0.863	0.150	69.6	n.a.
Storm Flow																
E319	5	0.276	0.247	0.200	0.580	0.170	0.266	0.401	0.200	0.200	0.200	0.200	0.428	0.000	20.0	n.a.
A310	5	0.716	0.676	0.490	1.150	0.284	0.700	0.925	0.560	0.502	0.520	0.860	1.034	0.340	100.0	n.a.
0322	5	0.284	0.272	0.200	0.430	0.094	0.279	0.354	0.290	0.200	0.200	0.300	0.378	0.100	60.0	n.a.
A320	3	0.396	0.346	0.187	0.674	0.251	0.378	0.634	0.328	0.215	0.258	0.501	0.605	0.244	100.0	n.a.
A315	3	0.891	0.870	0.634	1.030	0.223	0.875	1.103	1.010	0.709	0.822	1.020	1.026	0.198	100.0	n.a.
A317	4	1.905	1.780	1.130	2.960	0.812	1.854	2.573	1.765	1.220	1.355	2.315	2.702	0.960	100.0	n.a.
C317	1	3.130	3.130	3.130	3.130	n.a.	n.a.	n.a.	3.130	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.290	0.282	0.221	0.410	0.083	0.285	0.359	0.265	0.230	0.243	0.313	0.371	0.070	25.0	n.a.
F321	2	0.090	0.068	0.031	0.148	0.083	0.082	0.186	0.090	0.043	0.060	0.119	0.136	0.059	100.0	n.a.
B322	4	0.278	0.276	0.231	0.340	0.046	0.275	0.316	0.271	0.240	0.254	0.295	0.322	0.041	100.0	n.a.
D322	1	0.143	0.143	0.143	0.143	n.a.	n.a.	n.a.	0.143	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	7	0.289	0.285	0.230	0.370	0.055	0.287	0.324	0.270	0.236	0.245	0.333	0.355	0.088	100.0	n.a.
A330	2	0.632	0.587	0.399	0.864	0.329	0.602	1.014	0.632	0.446	0.515	0.748	0.818	0.233	100.0	n.a.
A326	3	14.220	5.317	1.270	38.300	20.874	12.706	34.043	3.090	1.634	2.180	20.695	31.258	18.515	100.0	n.a.
A307	1	1.520	1.520	1.520	1.520	n.a.	n.a.	n.a.	1.520	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
I322B	2	2.530	2.530	2.500	2.560	0.042	2.526	2.579	2.530	2.506	2.515	2.545	2.554	0.030	100.0	n.a.
B317	6	3.012	2.704	1.150	5.390	1.465	2.936	3.996	2.760	1.675	2.263	3.625	4.600	1.363	100.0	n.a.
All	58	1.624	0.599	0.031	38.300	5.028	1.541	2.710	0.420	0.200	0.250	1.240	2.993	0.990	84.5	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F13. Summary statistics for dissolved mercury concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.0051	0.0051	0.0050	0.0058	0.0003	0.0051	0.0053	0.0050	0.0050	0.0050	0.0050	0.0052	0.0000	12.5	n.a.
A310	4	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	n.a.
0322	6	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	n.a.
A320	4	0.0009	0.0009	0.0006	0.0013	0.0003	0.0009	0.0011	0.0009	0.0007	0.0008	0.0010	0.0012	0.0002	100.0	n.a.
A315	3	0.0013	0.0013	0.0011	0.0016	0.0002	0.0013	0.0016	0.0013	0.0011	0.0012	0.0014	0.0015	0.0002	100.0	n.a.
A317	6	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	n.a.
C317	2	0.0006	0.0005	0.0003	0.0008	0.0003	0.0005	0.0010	0.0006	0.0004	0.0005	0.0007	0.0008	0.0002	100.0	n.a.
S322	6	0.0036	0.0028	0.0007	0.0050	0.0021	0.0035	0.0051	0.0050	0.0009	0.0021	0.0050	0.0050	0.0029	33.3	n.a.
F321	3	0.0008	0.0006	0.0002	0.0012	0.0005	0.0007	0.0012	0.0008	0.0003	0.0005	0.0010	0.0012	0.0005	100.0	n.a.
B322	6	0.0044	0.0040	0.0013	0.0054	0.0015	0.0043	0.0055	0.0050	0.0031	0.0049	0.0050	0.0052	0.0001	50.0	n.a.
D322	3	0.0021	0.0018	0.0009	0.0034	0.0013	0.0020	0.0033	0.0020	0.0011	0.0014	0.0027	0.0031	0.0013	100.0	n.a.
Y320	5	0.0043	0.0040	0.0017	0.0050	0.0015	0.0043	0.0054	0.0050	0.0030	0.0050	0.0050	0.0050	0.0000	20.0	n.a.
A330	4	0.0008	0.0007	0.0004	0.0012	0.0004	0.0007	0.0011	0.0007	0.0004	0.0005	0.0010	0.0011	0.0004	100.0	n.a.
A326	9	0.0038	0.0031	0.0008	0.0050	0.0018	0.0037	0.0047	0.0050	0.0009	0.0033	0.0050	0.0050	0.0017	44.4	n.a.
A307	4	0.0024	0.0012	0.0005	0.0074	0.0034	0.0022	0.0052	0.0008	0.0005	0.0006	0.0027	0.0055	0.0021	100.0	n.a.
I322B	7	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	n.a.
B317	6	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	n.a.
All	86	0.0037	0.0029	0.0002	0.0074	0.0019	0.0037	0.0041	0.0050	0.0008	0.0013	0.0050	0.0050	0.0037	39.5	n.a.
Storm Flow																
E319	6	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	0
A310	7	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	0
0322	8	0.0052	0.0052	0.0050	0.0059	0.0004	0.0052	0.0055	0.0050	0.0050	0.0050	0.0052	0.0059	0.0002	25.0	0
A320	3	0.0027	0.0027	0.0020	0.0032	0.0006	0.0027	0.0033	0.0029	0.0022	0.0025	0.0031	0.0032	0.0006	100.0	0
A315	4	0.0032	0.0032	0.0025	0.0041	0.0007	0.0032	0.0038	0.0032	0.0026	0.0028	0.0036	0.0039	0.0008	100.0	0
A317	6	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	0
C317	2	0.0030	0.0030	0.0030	0.0030	0.0000	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0030	0.0000	100.0	0
S322	7	0.0040	0.0039	0.0021	0.0050	0.0012	0.0040	0.0048	0.0050	0.0027	0.0031	0.0050	0.0050	0.0019	28.6	0
F321	3	0.0015	0.0015	0.0011	0.0022	0.0006	0.0015	0.0021	0.0013	0.0011	0.0012	0.0018	0.0020	0.0006	100.0	0
B322	7	0.0058	0.0057	0.0040	0.0074	0.0011	0.0058	0.0065	0.0059	0.0046	0.0053	0.0065	0.0071	0.0012	85.7	0
D322	1	0.0040	0.0040	0.0040	0.0040	n.a.	n.a.	n.a.	0.0040	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0
Y320	9	0.0050	0.0050	0.0039	0.0057	0.0005	0.0050	0.0053	0.0050	0.0048	0.0050	0.0052	0.0053	0.0002	44.4	0
A330	3	0.0034	0.0034	0.0032	0.0038	0.0003	0.0034	0.0037	0.0033	0.0032	0.0033	0.0036	0.0037	0.0003	100.0	0
A326	5	0.0041	0.0041	0.0033	0.0046	0.0005	0.0041	0.0045	0.0043	0.0036	0.0042	0.0044	0.0045	0.0002	80.0	0
A307	2	0.0067	0.0066	0.0059	0.0075	0.0012	0.0066	0.0080	0.0067	0.0060	0.0063	0.0071	0.0073	0.0008	100.0	0
I322B	5	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	0
B317	8	0.0050	0.0050	0.0050	0.0053	0.0001	0.0050	0.0051	0.0050	0.0050	0.0050	0.0050	0.0051	0.0000	12.5	0
All	86	0.0046	0.0044	0.0011	0.0075	0.0012	0.0046	0.0048	0.0050	0.0030	0.0041	0.0050	0.0056	0.0009	43.0	0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F14. Summary statistics for total mercury concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	0.0
A310	4	0.0050	0.0050	0.0050	0.0050	0.0000	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0	0.0
0322	6	0.0063	0.0060	0.0050	0.0092	0.0020	0.0062	0.0076	0.0050	0.0050	0.0050	0.0076	0.0089	0.0026	33.3	0.0
A320	4	0.0014	0.0014	0.0008	0.0019	0.0005	0.0014	0.0018	0.0015	0.0010	0.0012	0.0017	0.0018	0.0005	100.0	0.0
A315	3	0.0031	0.0029	0.0020	0.0049	0.0016	0.0030	0.0046	0.0026	0.0021	0.0023	0.0037	0.0044	0.0015	100.0	0.0
A317	6	0.0058	0.0056	0.0050	0.0083	0.0013	0.0057	0.0066	0.0050	0.0050	0.0050	0.0059	0.0073	0.0009	33.3	0.0
C317	2	0.0017	0.0016	0.0011	0.0023	0.0009	0.0016	0.0027	0.0017	0.0012	0.0014	0.0020	0.0022	0.0006	100.0	0.0
S322	6	0.0039	0.0034	0.0013	0.0050	0.0018	0.0038	0.0051	0.0050	0.0016	0.0028	0.0050	0.0050	0.0023	33.3	0.0
F321	3	0.0010	0.0008	0.0004	0.0013	0.0005	0.0009	0.0015	0.0012	0.0005	0.0008	0.0013	0.0013	0.0005	100.0	0.0
B322	6	0.0056	0.0051	0.0018	0.0076	0.0021	0.0055	0.0071	0.0060	0.0034	0.0052	0.0072	0.0075	0.0020	83.3	0.0
D322	3	0.0029	0.0026	0.0017	0.0048	0.0017	0.0028	0.0045	0.0022	0.0018	0.0019	0.0035	0.0043	0.0016	100.0	0.0
Y320	5	0.0050	0.0049	0.0032	0.0065	0.0012	0.0049	0.0059	0.0050	0.0039	0.0050	0.0054	0.0061	0.0004	60.0	0.0
A330	4	0.0015	0.0015	0.0013	0.0017	0.0002	0.0015	0.0017	0.0015	0.0013	0.0013	0.0017	0.0017	0.0004	100.0	0.0
A326	9	0.0048	0.0040	0.0013	0.0097	0.0026	0.0047	0.0062	0.0050	0.0013	0.0040	0.0054	0.0072	0.0014	44.4	0.0
A307	4	0.0065	0.0038	0.0014	0.0189	0.0083	0.0060	0.0133	0.0029	0.0017	0.0020	0.0074	0.0143	0.0053	100.0	25.0
I322B	7	0.0064	0.0061	0.0050	0.0110	0.0023	0.0063	0.0079	0.0051	0.0050	0.0050	0.0069	0.0093	0.0019	57.1	0.0
B317	6	0.0133	0.0080	0.0050	0.0512	0.0186	0.0123	0.0258	0.0051	0.0050	0.0050	0.0075	0.0298	0.0025	50.0	16.7
All	86	0.0052	0.0039	0.0004	0.0512	0.0057	0.0051	0.0062	0.0050	0.0013	0.0023	0.0050	0.0079	0.0027	55.8	11.6
Storm Flow																
E319	6	0.0118	0.0079	0.0050	0.0420	0.0149	0.0111	0.0218	0.0050	0.0050	0.0050	0.0080	0.0255	0.0030	33.3	n.a.
A310	7	0.0063	0.0058	0.0050	0.0140	0.0034	0.0061	0.0084	0.0050	0.0050	0.0050	0.0050	0.0086	0.0000	14.3	n.a.
0322	8	0.0066	0.0063	0.0050	0.0110	0.0025	0.0065	0.0081	0.0052	0.0050	0.0050	0.0075	0.0103	0.0025	50.0	n.a.
A320	3	0.0056	0.0053	0.0036	0.0078	0.0021	0.0054	0.0076	0.0053	0.0039	0.0044	0.0065	0.0073	0.0021	100.0	n.a.
A315	4	0.0072	0.0070	0.0049	0.0086	0.0016	0.0071	0.0085	0.0077	0.0056	0.0067	0.0081	0.0084	0.0014	100.0	n.a.
A317	6	0.0071	0.0069	0.0050	0.0096	0.0019	0.0070	0.0084	0.0065	0.0053	0.0058	0.0086	0.0094	0.0028	66.7	n.a.
C317	2	0.0075	0.0075	0.0065	0.0086	0.0015	0.0074	0.0093	0.0075	0.0067	0.0070	0.0081	0.0084	0.0011	100.0	n.a.
S322	7	0.0068	0.0067	0.0044	0.0081	0.0014	0.0067	0.0077	0.0071	0.0052	0.0059	0.0081	0.0081	0.0022	42.9	n.a.
F321	3	0.0022	0.0021	0.0014	0.0029	0.0008	0.0022	0.0030	0.0025	0.0016	0.0019	0.0027	0.0028	0.0007	100.0	n.a.
B322	7	0.0092	0.0089	0.0065	0.0146	0.0027	0.0091	0.0109	0.0086	0.0072	0.0077	0.0097	0.0123	n.a.	100.0	n.a.
D322	1	0.0068	0.0068	0.0068	0.0068	n.a.	n.a.	n.a.	0.0068	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	9	0.0071	0.0068	0.0050	0.0110	0.0022	0.0070	0.0083	0.0067	0.0050	0.0051	0.0080	0.0100	0.0029	88.9	n.a.
A330	3	0.0093	0.0090	0.0063	0.0118	0.0028	0.0091	0.0119	0.0098	0.0070	0.0081	0.0108	0.0114	0.0027	100.0	n.a.
A326	5	0.0210	0.0129	0.0068	0.0710	0.0280	0.0194	0.0416	0.0086	0.0072	0.0078	0.0108	0.0469	0.0030	100.0	n.a.
A307	2	0.0243	0.0238	0.0193	0.0293	0.0070	0.0237	0.0325	0.0243	0.0203	0.0218	0.0268	0.0283	0.0050	100.0	n.a.
I322B	5	0.0083	0.0073	0.0050	0.0177	0.0054	0.0080	0.0122	0.0063	0.0050	0.0050	0.0073	0.0135	0.0023	60.0	n.a.
B317	8	0.0326	0.0120	0.0067	0.2040	0.0693	0.0295	0.0729	0.0081	0.0070	0.0072	0.0096	0.0682	0.0025	100.0	n.a.
All	86	0.0110	0.0075	0.0014	0.2040	0.0227	0.0107	0.0150	0.0070	0.0050	0.0050	0.0086	0.0114	0.0036	73.3	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F15. Summary statistics for dissolved nickel concentrations (µg/L)at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.30	0.30	0.30	0.30	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.0	0.0
A310	3	0.35	0.35	0.33	0.36	0.02	0.35	0.36	0.35	0.33	0.34	0.36	0.36	0.02	100.0	0.0
322	4	0.74	0.70	0.42	0.98	0.25	0.72	0.94	0.78	0.50	0.61	0.91	0.95	0.30	100.0	0.0
A320	3	0.42	0.42	0.37	0.50	0.06	0.42	0.48	0.40	0.38	0.39	0.45	0.48	0.06	100.0	0.0
A315	2	1.31	1.29	1.13	1.48	0.25	1.28	1.59	1.31	1.17	1.22	1.39	1.45	0.18	100.0	0.0
A317	3	1.47	1.45	1.20	1.71	0.26	1.45	1.71	1.50	1.26	1.35	1.61	1.67	0.26	100.0	0.0
C317	1	1.08	1.08	1.08	1.08	n.a.	n.a.	n.a.	1.08	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.27	0.26	0.17	0.30	0.07	0.26	0.32	0.30	0.21	0.27	0.30	0.30	0.03	25.0	0.0
F321	2	0.28	0.28	0.24	0.33	0.06	0.28	0.36	0.28	0.25	0.26	0.31	0.32	0.04	100.0	0.0
B322	4	0.78	0.65	0.31	1.23	0.51	0.75	1.20	0.80	0.33	0.36	1.22	1.22	0.85	100.0	0.0
D322	3	0.95	0.92	0.62	1.18	0.30	0.93	1.23	1.06	0.71	0.84	1.12	1.16	0.28	100.0	0.0
Y320	1	3.08	3.08	3.08	3.08	n.a.	n.a.	n.a.	3.08	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	3	0.74	0.71	0.57	1.05	0.27	0.72	0.99	0.59	0.57	0.58	0.82	0.96	0.24	100.0	0.0
A326	7	1.44	1.43	1.12	1.67	0.17	1.43	1.54	1.46	1.26	1.40	1.52	1.58	0.12	100.0	0.0
A307	4	1.16	0.95	0.56	2.51	0.92	1.10	1.91	0.78	0.58	0.60	1.33	2.04	0.73	100.0	0.0
I322B	5	0.58	0.57	0.39	0.78	0.15	0.58	0.70	0.63	0.43	0.48	0.64	0.72	0.16	100.0	0.0
B317	3	0.88	0.87	0.69	1.10	0.21	0.87	1.08	0.86	0.72	0.78	0.98	1.05	0.21	100.0	0.0
All	56	0.85	0.69	0.17	3.08	0.58	0.84	0.98	0.66	0.30	0.37	1.19	1.51	0.82	87.5	0.0
Storm Flow																
E319	5	0.30	0.30	0.30	0.30	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.0	0.0
A310	5	0.65	0.54	0.30	1.50	0.49	0.63	1.02	0.54	0.30	0.30	0.63	1.15	0.33	60.0	0.0
322	5	0.90	0.79	0.44	1.78	0.53	0.87	1.28	0.79	0.49	0.56	0.91	1.43	0.35	100.0	0.0
A320	3	0.67	0.67	0.63	0.71	0.04	0.66	0.71	0.66	0.64	0.65	0.69	0.70	0.04	100.0	0.0
A315	3	0.90	0.89	0.72	1.03	0.16	0.89	1.05	0.95	0.76	0.83	0.99	1.01	0.16	100.0	0.0
A317	4	1.04	1.03	0.78	1.20	0.18	1.03	1.19	1.09	0.87	1.01	1.13	1.17	0.12	100.0	0.0
C317	1	0.85	0.85	0.85	0.85	n.a.	n.a.	n.a.	0.85	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.27	0.27	0.18	0.31	0.06	0.27	0.32	0.30	0.22	0.27	0.30	0.31	0.03	50.0	0.0
F321	2	0.27	0.27	0.25	0.28	0.02	0.26	0.29	0.27	0.25	0.26	0.27	0.28	0.02	100.0	0.0
B322	4	1.29	1.27	1.00	1.59	0.24	1.27	1.49	1.29	1.08	1.20	1.38	1.51	0.19	100.0	0.0
D322	1	1.45	1.45	1.45	1.45	n.a.	n.a.	n.a.	1.45	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	7	0.73	0.73	0.63	0.82	0.06	0.73	0.77	0.71	0.67	0.70	0.78	0.81	0.08	100.0	0.0
A330	2	1.08	1.08	0.98	1.18	0.14	1.07	1.24	1.08	1.00	1.03	1.13	1.16	0.10	100.0	0.0
A326	3	1.15	1.12	0.87	1.44	0.29	1.13	1.42	1.13	0.92	1.00	1.29	1.38	0.29	100.0	0.0
A307	1	1.94	1.94	1.94	1.94	n.a.	n.a.	n.a.	1.94	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
I322B	2	0.46	0.46	0.45	0.47	0.01	0.46	0.48	0.46	0.45	0.46	0.47	0.47	0.01	100.0	0.0
B317	6	0.74	0.73	0.61	0.87	0.11	0.73	0.81	0.76	0.62	0.65	0.82	0.85	0.17	100.0	0.0
All	58	0.78	0.67	0.18	1.94	0.41	0.77	0.87	0.72	0.30	0.46	1.00	1.35	0.54	84.5	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F16. Summary statistics for total nickel concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.36	0.35	0.30	0.55	0.13	0.35	0.47	0.30	0.30	0.30	0.36	0.48	0.06	25.0	0.0
A310	3	0.45	0.45	0.43	0.47	0.02	0.45	0.47	0.44	0.43	0.44	0.46	0.46	0.02	100.0	0.0
0322	4	0.86	0.80	0.48	1.30	0.34	0.83	1.13	0.82	0.57	0.71	0.97	1.17	0.27	100.0	0.0
A320	3	0.58	0.58	0.49	0.64	0.08	0.57	0.66	0.61	0.51	0.55	0.63	0.64	0.08	100.0	0.0
A315	2	1.69	1.68	1.57	1.80	0.16	1.67	1.87	1.69	1.59	1.63	1.74	1.78	0.12	100.0	0.0
A317	3	1.60	1.59	1.30	1.83	0.27	1.58	1.86	1.68	1.38	1.49	1.76	1.80	0.27	100.0	0.0
C317	1	1.52	1.52	1.52	1.52	n.a.	n.a.	n.a.	1.52	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.28	0.28	0.23	0.30	0.03	0.28	0.31	0.30	0.25	0.28	0.30	0.30	0.02	25.0	0.0
F321	2	0.31	0.31	0.26	0.37	0.07	0.31	0.40	0.31	0.27	0.29	0.34	0.35	0.05	100.0	0.0
B322	4	0.83	0.72	0.38	1.29	0.48	0.80	1.23	0.83	0.41	0.44	1.22	1.26	0.78	100.0	0.0
D322	3	1.10	1.09	0.91	1.24	0.17	1.09	1.26	1.15	0.96	1.03	1.20	1.22	0.16	100.0	0.0
Y320	1	3.27	3.27	3.27	3.27	n.a.	n.a.	n.a.	3.27	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	3	1.28	1.28	1.18	1.40	0.11	1.28	1.39	1.27	1.20	1.23	1.34	1.37	0.11	100.0	0.0
A326	7	1.71	1.70	1.50	1.99	0.18	1.70	1.82	1.73	1.51	1.57	1.80	1.91	0.23	100.0	0.0
A307	4	1.55	1.26	0.65	3.37	1.23	1.47	2.56	1.09	0.78	0.97	1.66	2.69	0.69	100.0	0.0
I322B	5	0.79	0.77	0.56	1.20	0.25	0.78	0.98	0.68	0.60	0.67	0.86	1.06	0.19	100.0	0.0
B317	3	1.26	1.18	0.79	1.88	0.56	1.22	1.79	1.10	0.85	0.95	1.49	1.72	0.55	100.0	0.0
All	56	1.05	0.85	0.23	3.37	0.69	1.04	1.21	1.00	0.30	0.48	1.50	1.82	1.03	89.3	0.0
Storm Flow																
E319	5	0.41	0.37	0.30	0.85	0.25	0.40	0.59	0.30	0.30	0.30	0.30	0.63	0.00	20.0	0.0
A310	5	1.36	1.25	0.82	2.09	0.60	1.32	1.80	1.10	0.84	0.86	1.92	2.02	1.06	100.0	0.0
0322	5	1.20	1.05	0.51	2.20	0.67	1.16	1.69	1.00	0.61	0.77	1.50	1.92	0.73	100.0	0.0
A320	3	1.71	1.53	1.02	2.88	1.02	1.64	2.68	1.23	1.06	1.13	2.06	2.55	0.93	100.0	0.0
A315	3	1.23	1.21	0.95	1.40	0.24	1.21	1.46	1.33	1.03	1.14	1.37	1.39	0.23	100.0	0.0
A317	4	1.77	1.73	1.48	2.43	0.45	1.74	2.13	1.58	1.49	1.50	1.85	2.20	0.35	100.0	0.0
C317	1	2.59	2.59	2.59	2.59	n.a.	n.a.	n.a.	2.59	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.38	0.38	0.33	0.47	0.06	0.38	0.43	0.36	0.33	0.34	0.40	0.44	0.05	50.0	0.0
F321	2	0.44	0.41	0.29	0.59	0.21	0.42	0.68	0.44	0.32	0.36	0.51	0.56	0.15	100.0	0.0
B322	4	1.34	1.32	1.08	1.63	0.23	1.32	1.52	1.32	1.14	1.24	1.41	1.54	0.18	100.0	0.0
D322	1	1.55	1.55	1.55	1.55	n.a.	n.a.	n.a.	1.55	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	7	1.23	1.19	0.88	2.02	0.39	1.22	1.48	1.10	0.93	0.97	1.35	1.65	0.38	100.0	0.0
A330	2	3.33	3.24	2.60	4.05	1.03	3.23	4.52	3.33	2.75	2.96	3.69	3.91	0.73	100.0	0.0
A326	3	17.15	7.49	2.31	45.10	24.22	15.39	40.15	4.03	2.65	3.17	24.57	36.89	21.40	100.0	0.0
A307	1	2.58	2.58	2.58	2.58	n.a.	n.a.	n.a.	2.58	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
I322B	2	0.75	0.75	0.74	0.76	0.01	0.75	0.77	0.75	0.74	0.75	0.76	0.76	0.01	100.0	0.0
B317	6	1.36	1.34	0.94	1.81	0.29	1.35	1.56	1.30	1.12	1.30	1.47	1.67	0.17	100.0	0.0
All	58	2.10	1.17	0.29	45.10	5.81	2.00	3.35	1.30	0.34	0.83	1.65	2.58	0.82	89.7	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F17. Summary statistics for dissolved selenium concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
A310	3	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
0322	4	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
A320	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
A315	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
A317	3	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
C317	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	4	1.3	1.1	0.5	1.5	0.5	1.2	1.7	1.5	0.8	1.3	1.5	1.5	0.3	0.0	n.a.
F321	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
B322	4	1.0	0.9	0.5	1.5	0.6	1.0	1.5	1.0	0.5	0.5	1.5	1.5	1.0	0.0	n.a.
D322	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
Y320	1	1.5	1.5	1.5	1.5	n.a.	n.a.	n.a.	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A330	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
A326	7	1.1	0.9	0.5	1.5	0.5	1.0	1.4	1.5	0.5	0.5	1.5	1.5	1.0	0.0	n.a.
A307	4	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
I322B	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
B317	3	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
All	56	1.1	0.9	0.5	1.5	0.5	1.1	1.2	1.5	0.5	0.5	1.5	1.5	1.0	0.0	n.a.
Storm Flow																
E319	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
A310	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
0322	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
A320	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
A315	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
A317	4	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
C317	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	4	1.3	1.1	0.5	1.5	0.5	1.2	1.7	1.5	0.8	1.3	1.5	1.5	0.3	0.0	n.a.
F321	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
B322	4	1.0	0.9	0.5	1.5	0.6	1.0	1.5	1.0	0.5	0.5	1.5	1.5	1.0	0.0	n.a.
D322	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Y320	7	1.4	1.3	0.5	1.5	0.4	1.3	1.6	1.5	1.1	1.5	1.5	1.5	0.0	0.0	n.a.
A330	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	n.a.
A326	3	0.6	0.6	0.5	0.9	0.2	0.6	0.8	0.5	0.5	0.5	0.7	0.8	0.2	33.3	n.a.
A307	1	1.5	1.5	1.5	1.5	n.a.	n.a.	n.a.	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
I322B	2	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
B317	6	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	n.a.
All	58	1.2	1.1	0.5	1.5	0.5	1.2	1.3	1.5	0.5	0.5	1.5	1.5	1.0	1.7	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F18. Summary statistics for total selenium concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
A310	3	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
0322	4	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
A320	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
A315	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
A317	3	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
C317	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	4	1.3	1.1	0.5	1.5	0.5	1.2	1.7	1.5	0.8	1.3	1.5	1.5	0.3	0.0	0.0
F321	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
B322	4	1.0	0.9	0.5	1.5	0.6	1.0	1.5	1.0	0.5	0.5	1.5	1.5	1.0	0.0	0.0
D322	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
Y320	1	1.5	1.5	1.5	1.5	n.a.	n.a.	n.a.	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A330	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
A326	7	1.1	0.9	0.5	1.5	0.5	1.0	1.4	1.5	0.5	0.5	1.5	1.5	1.0	0.0	0.0
A307	4	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
I322B	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
B317	3	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
All	56	1.1	0.9	0.5	1.5	0.5	1.1	1.2	1.5	0.5	0.5	1.5	1.5	1.0	0.0	0.0
Storm Flow																
E319	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
A310	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
0322	5	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
A320	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
A315	3	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
A317	4	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
C317	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	4	1.3	1.1	0.5	1.5	0.5	1.2	1.7	1.5	0.8	1.3	1.5	1.5	0.3	0.0	0.0
F321	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
B322	4	1.0	0.9	0.5	1.5	0.6	1.0	1.5	1.0	0.5	0.5	1.5	1.5	1.0	0.0	0.0
D322	1	0.5	0.5	0.5	0.5	n.a.	n.a.	n.a.	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
Y320	7	1.4	1.3	0.5	1.5	0.4	1.3	1.6	1.5	1.1	1.5	1.5	1.5	0.0	0.0	0.0
A330	2	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
A326	3	0.6	0.6	0.5	0.8	0.2	0.6	0.8	0.5	0.5	0.5	0.7	0.8	0.2	33.3	0.0
A307	1	1.5	1.5	1.5	1.5	n.a.	n.a.	n.a.	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
I322B	2	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
B317	6	1.5	1.5	1.5	1.5	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0
All	58	1.2	1.1	0.5	1.5	0.5	1.2	1.3	1.5	0.5	0.5	1.5	1.5	1.0	1.7	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F19. Summary statistics for dissolved silver concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
A310	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
0322	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
A320	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A315	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A317	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
C317	1	0.025	0.025	0.025	0.025	n.a.	n.a.	n.a.	0.025	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	4	0.156	0.119	0.025	0.200	0.088	0.151	0.228	0.200	0.078	0.156	0.200	0.200	0.044	0.0	n.a.
F321	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
B322	4	0.113	0.071	0.025	0.200	0.101	0.106	0.196	0.113	0.025	0.025	0.200	0.200	0.175	0.0	n.a.
D322	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
Y320	1	0.200	0.200	0.200	0.200	n.a.	n.a.	n.a.	0.200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A330	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A326	7	0.125	0.082	0.025	0.200	0.094	0.121	0.183	0.200	0.025	0.025	0.200	0.200	0.175	0.0	n.a.
A307	4	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
I322B	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
B317	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
All	56	0.125	0.082	0.025	0.200	0.087	0.124	0.144	0.200	0.025	0.025	0.200	0.200	0.175	0.0	n.a.
Storm Flow																
E319	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
A310	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
0322	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
A320	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
A315	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
A317	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
C317	1	0.025	0.025	0.025	0.025	n.a.	n.a.	n.a.	0.025	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	4	0.156	0.119	0.025	0.200	0.088	0.151	0.228	0.200	0.078	0.156	0.200	0.200	0.044	0.0	0.0
F321	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
B322	4	0.113	0.071	0.025	0.200	0.101	0.106	0.196	0.113	0.025	0.025	0.200	0.200	0.175	0.0	0.0
D322	1	0.025	0.025	0.025	0.025	n.a.	n.a.	n.a.	0.025	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
Y320	7	0.175	0.149	0.025	0.200	0.066	0.172	0.216	0.200	0.130	0.200	0.200	0.200	0.000	0.0	0.0
A330	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
A326	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	0.0
A307	1	0.200	0.200	0.200	0.200	n.a.	n.a.	n.a.	0.200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
I322B	2	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
B317	6	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	0.0
All	58	0.143	0.101	0.025	0.200	0.083	0.141	0.161	0.200	0.025	0.025	0.200	0.200	0.175	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard (see Tables 11 and 12).

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F20. Summary statistics for total silver concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
A310	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
0322	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
A320	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A315	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A317	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
C317	1	0.025	0.025	0.025	0.025	n.a.	n.a.	n.a.	0.025	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	4	0.156	0.119	0.025	0.200	0.088	0.151	0.228	0.200	0.078	0.156	0.200	0.200	0.044	0.0	n.a.
F321	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
B322	4	0.113	0.071	0.025	0.200	0.101	0.106	0.196	0.113	0.025	0.025	0.200	0.200	0.175	0.0	n.a.
D322	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
Y320	1	0.200	0.200	0.200	0.200	n.a.	n.a.	n.a.	0.200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A330	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A326	7	0.125	0.082	0.025	0.200	0.094	0.121	0.183	0.200	0.025	0.025	0.200	0.200	0.175	0.0	n.a.
A307	4	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
I322B	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
B317	3	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
All	56	0.125	0.082	0.025	0.200	0.087	0.124	0.144	0.200	0.025	0.025	0.200	0.200	0.175	0.0	n.a.
Storm Flow																
E319	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
A310	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
0322	5	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
A320	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A315	3	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A317	4	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
C317	1	0.025	0.025	0.025	0.025	n.a.	n.a.	n.a.	0.025	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	4	0.156	0.119	0.025	0.200	0.088	0.151	0.228	0.200	0.078	0.156	0.200	0.200	0.044	0.0	n.a.
F321	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
B322	4	0.113	0.071	0.025	0.200	0.101	0.106	0.196	0.113	0.025	0.025	0.200	0.200	0.175	0.0	n.a.
D322	1	0.025	0.025	0.025	0.025	n.a.	n.a.	n.a.	0.025	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Y320	7	0.175	0.149	0.025	0.200	0.066	0.172	0.216	0.200	0.130	0.200	0.200	0.200	0.000	0.0	n.a.
A330	2	0.025	0.025	0.025	0.025	0.000	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.000	0.0	n.a.
A326	3	0.053	0.041	0.025	0.110	0.049	0.050	0.100	0.025	0.025	0.025	0.068	0.093	0.043	33.3	n.a.
A307	1	0.200	0.200	0.200	0.200	n.a.	n.a.	n.a.	0.200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
I322B	2	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
B317	6	0.200	0.200	0.200	0.200	0.000	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.0	n.a.
All	58	0.144	0.104	0.025	0.200	0.081	0.143	0.162	0.200	0.025	0.025	0.200	0.200	0.175	1.7	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F21. Summary statistics for dissolved zinc concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.64	0.61	0.50	1.00	0.24	0.62	0.84	0.53	0.50	0.50	0.66	0.87	0.16	50.0	0.0
A310	3	0.61	0.60	0.50	0.76	0.13	0.60	0.74	0.58	0.52	0.54	0.67	0.72	0.13	0.0	0.0
322	4	1.22	0.94	0.50	2.78	1.08	1.15	2.11	0.80	0.50	0.50	1.52	2.28	1.02	50.0	0.0
A320	3	0.47	0.43	0.25	0.68	0.22	0.45	0.67	0.47	0.29	0.36	0.58	0.64	0.22	100.0	0.0
A315	2	1.57	1.51	1.14	2.00	0.61	1.52	2.28	1.57	1.23	1.36	1.79	1.91	0.43	100.0	0.0
A317	3	2.21	1.85	0.93	4.00	1.60	2.09	3.73	1.70	1.08	1.32	2.85	3.54	1.54	100.0	0.0
C317	1	2.13	2.13	2.13	2.13	n.a.	n.a.	n.a.	2.13	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.94	0.67	0.34	2.40	0.98	0.87	1.74	0.50	0.39	0.46	0.98	1.83	0.52	25.0	0.0
F321	2	0.42	0.41	0.34	0.49	0.11	0.41	0.54	0.42	0.36	0.38	0.45	0.48	0.08	100.0	0.0
B322	4	4.93	4.88	4.15	5.72	0.78	4.88	5.58	4.93	4.22	4.32	5.54	5.65	1.23	100.0	0.0
D322	3	1.54	1.50	1.12	1.87	0.38	1.51	1.90	1.62	1.22	1.37	1.75	1.82	0.38	100.0	0.0
Y320	1	2.20	2.20	2.20	2.20	n.a.	n.a.	n.a.	2.20	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
A330	3	0.37	0.34	0.21	0.60	0.20	0.36	0.56	0.30	0.23	0.26	0.45	0.54	0.20	100.0	0.0
A326	7	3.33	3.22	2.09	4.98	0.96	3.29	3.93	3.07	2.39	2.78	3.82	4.32	1.04	100.0	0.0
A307	4	1.43	0.99	0.52	3.76	1.56	1.33	2.72	0.72	0.52	0.53	1.63	2.91	1.10	100.0	0.0
I322B	5	24.58	23.94	19.90	34.50	6.57	24.21	29.41	20.30	19.94	20.00	28.20	31.98	8.20	100.0	0.0
B317	3	4.37	3.85	2.20	7.39	2.70	4.17	6.93	3.52	2.46	2.86	5.46	6.62	2.60	100.0	0.0
All	56	3.93	1.62	0.21	34.50	6.96	3.81	5.46	1.66	0.48	0.52	3.75	6.56	3.24	82.1	0.0
Storm Flow																
E319	5	0.55	0.55	0.50	0.66	0.08	0.55	0.61	0.50	0.50	0.50	0.61	0.64	0.11	40.0	0.0
A310	5	0.93	0.87	0.50	1.20	0.36	0.91	1.19	1.16	0.53	0.58	1.20	1.20	0.62	80.0	0.0
322	5	1.41	1.30	0.74	2.40	0.63	1.37	1.87	1.20	0.88	1.10	1.60	2.08	0.50	100.0	0.0
A320	3	1.34	1.33	1.21	1.51	0.16	1.33	1.48	1.29	1.23	1.25	1.40	1.47	0.15	100.0	0.0
A315	3	5.11	4.88	3.57	7.29	1.94	4.97	6.95	4.46	3.75	4.02	5.88	6.72	1.86	100.0	0.0
A317	4	11.31	10.94	8.60	16.65	3.62	11.09	14.29	10.00	9.02	9.65	11.66	14.66	2.01	100.0	0.0
C317	1	15.70	15.70	15.70	15.70	n.a.	n.a.	n.a.	15.70	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
S322	4	0.67	0.66	0.59	0.72	0.06	0.66	0.71	0.68	0.61	0.64	0.71	0.71	0.07	100.0	0.0
F321	2	0.36	0.35	0.29	0.43	0.10	0.35	0.48	0.36	0.30	0.33	0.40	0.42	0.07	100.0	0.0
B322	4	20.71	18.80	10.00	31.00	9.85	20.09	28.81	20.93	11.50	13.75	27.89	29.76	14.14	100.0	0.0
D322	1	4.69	4.69	4.69	4.69	n.a.	n.a.	n.a.	4.69	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
Y320	7	5.10	5.04	4.40	6.93	0.86	5.05	5.63	4.83	4.53	4.66	5.10	5.97	0.44	100.0	0.0
A330	2	1.06	1.05	0.88	1.25	0.26	1.04	1.37	1.06	0.91	0.97	1.16	1.21	0.19	100.0	0.0
A326	3	4.09	3.60	2.06	6.97	2.56	3.91	6.53	3.25	2.30	2.66	5.11	6.23	2.46	100.0	0.0
A307	1	3.54	3.54	3.54	3.54	n.a.	n.a.	n.a.	3.54	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	0.0
I322B	2	14.95	14.11	10.00	19.90	7.00	14.33	23.09	14.95	10.99	12.48	17.43	18.91	4.95	100.0	0.0
B317	6	21.45	21.09	17.60	29.60	4.56	21.22	24.51	20.00	17.70	18.35	22.78	26.65	4.43	100.0	16.7
All	58	6.86	3.08	0.29	31.00	8.20	6.72	8.63	3.56	0.56	0.93	10.00	19.93	9.07	93.1	1.7

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table F22. Summary statistics for total zinc concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	1.30	1.01	0.50	2.82	1.08	1.23	2.18	0.94	0.52	0.55	1.68	2.36	1.13	75.0	n.a.
A310	3	0.84	0.82	0.60	1.01	0.21	0.82	1.04	0.91	0.66	0.76	0.96	0.99	0.21	100.0	n.a.
0322	4	3.06	2.36	1.10	6.75	2.60	2.90	5.20	2.20	1.19	1.33	3.94	5.63	2.61	100.0	n.a.
A320	3	0.74	0.68	0.41	1.17	0.39	0.72	1.11	0.65	0.46	0.53	0.91	1.07	0.38	100.0	n.a.
A315	2	3.22	3.02	2.11	4.33	1.57	3.08	5.05	3.22	2.33	2.67	3.78	4.11	1.11	100.0	n.a.
A317	3	6.69	6.13	3.92	10.60	3.48	6.44	10.00	5.55	4.25	4.74	8.08	9.59	3.34	100.0	n.a.
C317	1	5.34	5.34	5.34	5.34	n.a.	n.a.	n.a.	5.34	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.92	0.88	0.53	1.09	0.26	0.90	1.13	1.02	0.67	0.88	1.05	1.08	0.17	75.0	n.a.
F321	2	0.34	0.34	0.34	0.34	0.00	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.00	100.0	n.a.
B322	4	6.57	6.37	4.47	8.56	1.80	6.45	8.05	6.62	4.86	5.45	7.73	8.23	2.28	100.0	n.a.
D322	3	2.35	2.31	1.81	2.81	0.50	2.31	2.83	2.43	1.93	2.12	2.62	2.73	0.50	100.0	n.a.
Y320	1	3.32	3.32	3.32	3.32	n.a.	n.a.	n.a.	3.32	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
A330	3	0.97	0.96	0.88	1.08	0.10	0.96	1.06	0.94	0.89	0.91	1.01	1.05	0.10	100.0	n.a.
A326	7	5.15	4.55	2.65	11.89	3.16	5.00	7.11	4.50	2.69	3.32	5.19	8.07	1.88	100.0	n.a.
A307	4	3.56	2.23	1.02	10.10	4.37	3.28	7.15	1.55	1.18	1.41	3.70	7.54	2.29	100.0	n.a.
I322B	5	32.00	31.58	23.50	37.40	5.58	31.69	36.10	32.80	26.10	30.00	36.30	36.96	6.30	100.0	n.a.
B317	3	9.69	9.07	5.55	13.70	4.08	9.39	13.56	9.81	6.40	7.68	11.76	12.92	4.08	100.0	n.a.
All	56	6.02	2.77	0.34	37.40	8.92	5.87	7.98	2.77	0.59	1.04	5.61	12.80	4.57	96.4	n.a.
Storm Flow																
E319	5	1.96	1.55	0.92	5.19	1.81	1.86	3.29	1.30	0.99	1.10	1.30	3.63	0.20	100.0	n.a.
A310	5	4.58	4.29	3.03	7.71	1.93	4.47	6.00	3.85	3.09	3.18	5.11	6.67	1.93	100.0	n.a.
0322	5	3.63	3.45	1.80	5.11	1.18	3.57	4.51	3.75	2.53	3.63	3.88	4.62	0.25	100.0	n.a.
A320	3	3.13	2.76	1.56	5.30	1.94	2.99	4.98	2.54	1.76	2.05	3.92	4.75	1.87	100.0	n.a.
A315	3	8.37	8.16	5.91	10.00	2.17	8.22	10.43	9.21	6.57	7.56	9.61	9.84	2.05	100.0	n.a.
A317	4	26.19	25.35	20.00	36.48	7.89	25.70	32.68	24.15	20.00	20.00	30.34	34.02	10.34	100.0	n.a.
C317	1	30.90	30.90	30.90	30.90	n.a.	n.a.	n.a.	30.90	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	2.62	2.58	2.07	3.43	0.58	2.59	3.10	2.50	2.18	2.35	2.77	3.17	0.42	100.0	n.a.
F321	2	0.77	0.60	0.29	1.24	0.67	0.71	1.55	0.77	0.39	0.53	1.00	1.15	0.48	100.0	n.a.
B322	4	28.64	27.31	20.00	37.57	9.98	28.02	36.85	28.50	20.00	20.00	37.14	37.40	17.14	100.0	n.a.
D322	1	6.56	6.56	6.56	6.56	n.a.	n.a.	n.a.	6.56	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	7	7.21	7.12	5.62	8.58	1.22	7.15	7.97	7.29	5.66	6.29	8.20	8.50	1.92	100.0	n.a.
A330	2	4.50	4.23	2.97	6.03	2.16	4.31	7.02	4.50	3.28	3.74	5.27	5.72	1.53	100.0	n.a.
A326	3	43.17	23.16	10.00	108.00	56.15	39.09	96.49	11.50	10.30	10.75	59.75	88.70	49.00	100.0	n.a.
A307	1	7.05	7.05	7.05	7.05	n.a.	n.a.	n.a.	7.05	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
I322B	2	25.00	24.49	20.00	30.00	7.07	24.37	33.22	25.00	21.00	22.50	27.50	29.00	5.00	100.0	n.a.
B317	6	41.48	39.19	28.60	73.30	16.82	40.62	52.78	36.00	29.30	30.50	43.75	59.15	13.25	100.0	n.a.
All	58	14.64	7.34	0.29	108.00	19.19	14.32	18.78	6.73	1.48	3.24	20.00	36.64	16.76	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX G

Summary Statistics for Minerals Measured at Sites in the Green-Duwamish Watershed in 2003

Table G1. Summary statistics for dissolved calcium concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	7	4.54	4.52	3.88	5.40	0.48	4.52	4.84	4.47	4.13	4.30	4.71	5.06	0.41	100.0	n.a.
A310	4	9.00	8.93	7.77	10.83	1.32	8.92	10.08	8.70	7.96	8.25	9.45	10.28	1.20	100.0	n.a.
0322	6	14.33	14.30	12.90	15.60	1.08	14.28	15.06	14.45	13.10	13.53	15.15	15.45	1.63	100.0	n.a.
A320	4	12.95	12.94	12.30	13.70	0.60	12.91	13.44	12.90	12.42	12.60	13.25	13.52	0.65	100.0	n.a.
A315	3	22.90	22.63	19.70	28.00	4.46	22.58	27.14	21.00	19.96	20.35	24.50	26.60	4.15	100.0	n.a.
A317	6	19.23	17.63	7.89	24.80	7.50	18.85	24.27	23.35	9.70	14.43	24.25	24.65	9.83	100.0	n.a.
C317	2	23.95	23.93	23.10	24.80	1.20	23.84	25.35	23.95	23.27	23.53	24.38	24.63	0.85	100.0	n.a.
S322	6	8.97	8.72	6.82	13.20	2.47	8.85	10.63	8.19	6.86	7.21	9.96	11.87	2.75	100.0	n.a.
F321	3	13.17	13.16	12.70	13.80	0.57	13.13	13.71	13.00	12.76	12.85	13.40	13.64	0.55	100.0	n.a.
B322	6	14.15	14.03	11.63	15.90	1.96	14.05	15.46	15.00	11.67	12.50	15.52	15.78	3.02	100.0	n.a.
D322	3	17.20	16.85	13.10	21.50	4.20	16.90	21.19	17.00	13.88	15.05	19.25	20.60	4.20	100.0	n.a.
Y320	5	13.38	12.89	7.88	17.30	3.76	13.16	16.14	15.00	9.25	11.30	15.40	16.54	4.10	100.0	n.a.
A330	4	15.90	15.90	15.60	16.40	0.38	15.88	16.21	15.80	15.60	15.60	16.10	16.28	0.50	100.0	n.a.
A326	9	19.23	18.00	11.00	28.00	7.22	18.92	23.18	15.30	11.02	14.22	25.40	27.89	11.18	100.0	n.a.
A307	4	18.95	18.94	18.20	19.80	0.77	18.90	19.59	18.90	18.26	18.35	19.50	19.68	1.15	100.0	n.a.
I322B	7	11.51	10.68	6.24	18.30	4.67	11.29	14.42	11.30	6.92	7.43	14.95	16.38	7.53	100.0	n.a.
B317	6	15.19	13.19	4.93	20.70	7.22	14.82	20.04	19.45	5.93	10.02	19.68	20.20	9.65	100.0	n.a.
All	85	14.33	12.87	3.88	28.00	6.18	14.25	15.44	14.22	6.47	10.53	18.30	23.38	7.77	100.0	n.a.
Storm Flow																
E319	6	4.59	4.52	3.24	5.76	0.83	4.55	5.15	4.52	3.83	4.44	4.95	5.43	0.51	100.0	n.a.
A310	7	7.26	7.09	4.38	8.93	1.61	7.19	8.27	7.69	5.44	6.47	8.46	8.70	1.99	100.0	n.a.
0322	7	13.80	13.76	11.80	15.40	1.15	13.75	14.51	14.00	12.64	13.35	14.35	14.98	1.00	100.0	n.a.
A320	4	11.26	11.20	9.94	13.10	1.39	11.17	12.40	11.00	10.11	10.36	11.90	12.62	1.54	100.0	n.a.
A315	5	10.89	10.64	8.06	15.10	2.71	10.74	12.89	11.10	8.44	9.01	11.20	13.54	2.19	100.0	n.a.
A317	5	8.10	7.98	6.31	10.40	1.61	8.01	9.29	7.89	6.59	7.01	8.91	9.80	1.90	100.0	n.a.
C317	3	7.19	6.84	4.44	9.70	2.64	7.00	9.70	7.43	5.04	5.94	8.57	9.25	2.63	100.0	n.a.
S322	8	6.54	6.11	2.23	10.24	2.19	6.44	7.81	6.75	4.68	6.36	7.01	8.03	0.65	100.0	n.a.
F321	4	12.58	12.57	12.20	13.30	0.52	12.54	13.00	12.40	12.20	12.20	12.78	13.09	0.58	100.0	n.a.
B322	8	19.64	19.08	12.58	24.73	4.69	19.43	22.37	21.05	12.59	17.78	22.06	24.43	4.28	100.0	n.a.
D322	1	21.10	21.10	21.10	21.10	n.a.	n.a.	n.a.	21.10	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	8	8.68	8.55	6.26	10.60	1.54	8.61	9.57	8.89	7.12	7.49	9.56	10.60	2.07	100.0	n.a.
A330	4	10.92	10.86	9.29	12.10	1.37	10.84	12.05	11.15	9.59	10.05	12.03	12.07	1.98	100.0	n.a.
A326	6	8.43	7.96	5.48	15.10	3.47	8.25	10.76	7.59	5.80	6.43	8.49	11.91	2.07	100.0	n.a.
A307	2	15.50	15.46	14.34	16.66	1.64	15.35	17.41	15.50	14.57	14.92	16.08	16.43	1.16	100.0	n.a.
I322B	4	8.97	8.84	7.38	11.50	1.82	8.86	10.46	8.50	7.56	7.84	9.63	10.75	1.80	100.0	n.a.
B317	8	5.60	5.48	3.69	7.20	1.24	5.55	6.32	5.93	4.24	4.58	6.26	7.03	1.68	100.0	n.a.
All	90	9.92	8.92	2.23	24.73	4.74	9.86	10.74	8.92	4.61	6.66	12.20	15.13	5.55	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G2. Summary statistics for total calcium concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	4.76	4.74	4.30	5.84	0.48	4.74	5.04	4.63	4.42	4.51	4.79	5.24	0.29	100.0	n.a.
A310	4	9.09	8.99	7.65	11.20	1.55	8.99	10.36	8.75	7.84	8.12	9.71	10.60	1.59	100.0	n.a.
0322	6	14.80	14.75	13.40	16.80	1.28	14.73	15.66	14.30	13.75	14.10	15.55	16.35	1.45	100.0	n.a.
A320	4	12.85	12.82	12.00	13.80	0.93	12.79	13.62	12.80	12.03	12.08	13.58	13.71	1.50	100.0	n.a.
A315	3	22.90	22.55	19.00	28.60	5.05	22.53	27.69	21.10	19.42	20.05	24.85	27.10	4.80	100.0	n.a.
A317	6	20.12	18.76	9.81	26.70	7.32	19.74	25.03	23.20	10.91	14.60	25.35	26.25	10.75	100.0	n.a.
C317	2	24.35	24.28	22.50	26.20	2.62	24.12	27.39	24.35	22.87	23.43	25.28	25.83	1.85	100.0	n.a.
S322	6	8.99	8.69	6.72	13.75	2.71	8.85	10.81	8.07	6.75	7.10	9.92	12.14	2.82	100.0	n.a.
F321	3	12.80	12.78	12.00	13.70	0.85	12.74	13.61	12.70	12.14	12.35	13.20	13.50	0.85	100.0	n.a.
B322	6	13.96	13.86	11.70	15.50	1.70	13.87	15.10	14.70	11.80	12.60	15.10	15.37	2.50	100.0	n.a.
D322	3	17.23	16.84	12.70	21.50	4.41	16.91	21.42	17.50	13.66	15.10	19.50	20.70	4.40	100.0	n.a.
Y320	5	13.09	12.73	8.54	16.70	3.27	12.90	15.49	14.40	9.52	11.00	14.80	15.94	3.80	100.0	n.a.
A330	4	16.00	16.00	15.40	16.20	0.40	15.97	16.33	16.20	15.64	16.00	16.20	16.20	0.20	100.0	n.a.
A326	9	19.37	18.03	10.80	28.79	7.56	19.05	23.51	14.90	10.80	14.70	25.50	28.72	10.80	100.0	n.a.
A307	4	19.00	19.00	18.50	19.50	0.42	18.97	19.34	19.00	18.62	18.80	19.20	19.38	0.40	100.0	n.a.
I322B	7	11.61	10.95	6.82	18.30	4.24	11.41	14.25	11.30	7.37	8.08	14.35	16.08	6.27	100.0	n.a.
B317	6	15.66	14.02	6.26	21.60	6.84	15.31	20.25	19.05	6.93	10.45	20.08	21.00	9.63	100.0	n.a.
All	86	14.37	12.91	4.30	28.79	6.28	14.28	15.48	14.10	6.49	9.99	18.45	23.25	8.46	100.0	n.a.
Storm Flow																
E319	6	4.89	4.86	4.29	5.76	0.55	4.86	5.25	4.68	4.44	4.60	5.17	5.54	0.58	100.0	n.a.
A310	7	7.65	7.56	5.48	9.06	1.20	7.59	8.40	8.01	6.28	7.13	8.38	8.66	1.25	100.0	n.a.
0322	8	13.68	13.53	9.64	15.50	2.02	13.59	14.86	14.05	11.43	12.95	15.40	15.43	2.45	100.0	n.a.
A320	4	11.58	11.53	10.10	13.10	1.23	11.50	12.58	11.55	10.52	11.15	11.98	12.65	0.82	100.0	n.a.
A315	5	11.11	10.90	8.35	15.00	2.51	10.97	12.95	11.30	8.85	9.60	11.30	13.52	1.70	100.0	n.a.
A317	6	8.16	8.06	6.86	10.60	1.42	8.08	9.11	7.84	6.88	7.07	8.69	9.75	1.62	100.0	n.a.
C317	3	7.43	7.13	4.83	9.84	2.51	7.25	9.81	7.62	5.39	6.23	8.73	9.40	2.51	100.0	n.a.
S322	8	7.31	7.11	4.26	10.84	1.79	7.23	8.35	7.16	6.05	6.87	7.63	8.68	0.75	100.0	n.a.
F321	4	12.58	12.56	12.10	13.50	0.64	12.53	13.10	12.35	12.13	12.18	12.75	13.20	0.58	100.0	n.a.
B322	8	19.96	19.31	11.62	24.63	4.96	19.74	22.84	21.70	12.52	18.52	22.96	24.33	4.44	100.0	n.a.
D322	1	22.60	22.60	22.60	22.60	n.a.	n.a.	n.a.	22.60	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	9	9.07	8.96	6.33	11.10	1.43	9.01	9.86	9.19	7.71	8.28	9.94	10.70	1.66	100.0	n.a.
A330	4	11.53	11.49	10.40	12.50	1.08	11.46	12.41	11.60	10.52	10.70	12.43	12.47	1.73	100.0	n.a.
A326	6	10.19	9.78	6.96	15.40	3.33	10.02	12.43	8.85	7.43	8.13	12.12	14.30	4.00	100.0	n.a.
A307	2	15.93	15.91	15.16	16.69	1.08	15.83	17.18	15.93	15.31	15.54	16.31	16.54	0.77	100.0	n.a.
I322B	5	8.95	8.82	7.27	11.80	1.74	8.85	10.23	8.24	7.63	8.17	9.25	10.78	1.08	100.0	n.a.
B317	9	6.07	5.97	4.33	7.51	1.11	6.02	6.68	6.44	4.66	5.11	6.81	7.23	1.70	100.0	n.a.
All	95	10.28	9.41	4.26	24.63	4.62	10.22	11.06	9.06	5.38	7.13	12.30	15.40	5.17	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G3. Summary statistics for dissolved iron concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	7	0.05	0.05	0.05	0.08	0.01	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.00	14.3	0.0
A310	4	0.20	0.16	0.09	0.37	0.13	0.19	0.30	0.16	0.09	0.10	0.26	0.33	0.16	100.0	0.0
0322	6	0.07	0.07	0.05	0.10	0.02	0.07	0.09	0.07	0.05	0.05	0.10	0.10	0.05	50.0	0.0
A320	4	0.06	0.06	0.05	0.07	0.01	0.06	0.07	0.05	0.05	0.05	0.06	0.07	0.01	75.0	0.0
A315	3	0.56	0.54	0.43	0.80	0.21	0.55	0.76	0.46	0.43	0.44	0.63	0.73	0.19	100.0	0.0
A317	6	0.35	0.24	0.05	0.60	0.26	0.34	0.52	0.39	0.07	0.12	0.58	0.60	0.46	100.0	0.0
C317	2	0.40	0.28	0.11	0.69	0.41	0.36	0.88	0.40	0.17	0.26	0.55	0.63	0.29	100.0	0.0
S322	6	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
F321	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
B322	6	0.16	0.12	0.06	0.35	0.14	0.16	0.25	0.09	0.06	0.07	0.27	0.34	0.20	100.0	0.0
D322	3	0.19	0.17	0.11	0.32	0.11	0.19	0.30	0.15	0.12	0.13	0.24	0.29	0.11	100.0	0.0
Y320	5	0.08	0.08	0.06	0.15	0.04	0.08	0.11	0.07	0.06	0.07	0.07	0.12	0.00	100.0	0.0
A330	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A326	9	0.09	0.08	0.05	0.19	0.05	0.09	0.12	0.05	0.05	0.05	0.12	0.17	0.07	44.4	0.0
A307	4	0.11	0.11	0.09	0.13	0.02	0.11	0.12	0.11	0.10	0.11	0.12	0.12	0.01	100.0	0.0
I322B	7	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
B317	6	0.55	0.41	0.16	1.30	0.43	0.52	0.84	0.48	0.16	0.21	0.67	1.00	0.46	100.0	16.7
All	85	0.16	0.10	0.05	1.30	0.22	0.16	0.20	0.07	0.05	0.05	0.15	0.45	0.10	58.8	98.8
Storm Flow																
E319	6	0.05	0.05	0.05	0.06	0.01	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.00	16.7	n.a.
A310	7	0.11	0.11	0.06	0.15	0.03	0.11	0.13	0.11	0.08	0.11	0.12	0.13	0.01	100.0	n.a.
0322	7	0.09	0.08	0.05	0.12	0.02	0.08	0.10	0.08	0.06	0.07	0.10	0.11	0.03	85.7	n.a.
A320	4	0.10	0.10	0.07	0.12	0.02	0.10	0.12	0.11	0.08	0.09	0.12	0.12	0.03	100.0	n.a.
A315	5	0.32	0.30	0.18	0.43	0.09	0.31	0.39	0.33	0.22	0.28	0.37	0.40	0.09	100.0	n.a.
A317	5	0.28	0.27	0.21	0.37	0.07	0.27	0.33	0.25	0.22	0.23	0.32	0.35	0.09	100.0	n.a.
C317	3	0.29	0.28	0.22	0.42	0.11	0.29	0.40	0.24	0.22	0.23	0.33	0.38	0.10	100.0	n.a.
S322	8	0.09	0.08	0.03	0.13	0.03	0.09	0.11	0.09	0.07	0.08	0.11	0.12	0.03	100.0	n.a.
F321	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
B322	8	0.15	0.14	0.10	0.21	0.04	0.14	0.17	0.14	0.11	0.12	0.17	0.19	0.05	100.0	n.a.
D322	1	0.11	0.11	0.11	0.11	n.a.	n.a.	n.a.	0.11	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	8	0.07	0.07	0.05	0.09	0.01	0.07	0.08	0.06	0.06	0.06	0.07	0.09	0.01	100.0	n.a.
A330	4	0.07	0.07	0.05	0.09	0.02	0.07	0.09	0.07	0.05	0.06	0.08	0.09	0.02	75.0	n.a.
A326	6	0.06	0.06	0.05	0.08	0.01	0.06	0.07	0.07	0.05	0.05	0.07	0.08	0.02	83.3	n.a.
A307	2	0.12	0.12	0.12	0.12	0.00	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.00	100.0	n.a.
I322B	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
B317	8	0.16	0.15	0.10	0.25	0.05	0.16	0.19	0.17	0.10	0.11	0.19	0.22	0.08	100.0	n.a.
All	90	0.12	0.10	0.03	0.43	0.09	0.12	0.14	0.10	0.05	0.06	0.15	0.24	0.08	82.2	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G4. Summary statistics for total iron concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.23	0.14	0.05	1.01	0.32	0.22	0.42	0.14	0.05	0.10	0.16	0.45	0.05	87.5	12.5
A310	4	0.58	0.55	0.37	0.88	0.21	0.57	0.76	0.54	0.42	0.49	0.63	0.78	0.14	100.0	0.0
0322	6	0.43	0.29	0.08	1.06	0.39	0.41	0.70	0.27	0.12	0.17	0.66	0.91	0.49	100.0	16.6
A320	4	0.17	0.16	0.13	0.19	0.03	0.16	0.19	0.17	0.14	0.15	0.18	0.19	0.03	100.0	0.0
A315	3	2.81	2.75	2.17	3.60	0.73	2.76	3.50	2.67	2.27	2.42	3.14	3.41	0.72	100.0	100.0
A317	6	3.96	3.82	2.62	6.23	1.23	3.90	4.79	3.74	2.95	3.36	4.08	5.20	0.73	100.0	100.0
C317	2	3.43	3.39	2.94	3.92	0.69	3.37	4.24	3.43	3.04	3.19	3.68	3.82	0.49	100.0	100.0
S322	6	0.24	0.22	0.08	0.36	0.10	0.24	0.31	0.24	0.15	0.22	0.31	0.34	0.09	100.0	0.0
F321	3	0.05	0.05	0.05	0.06	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	33.3	0.0
B322	6	0.30	0.25	0.13	0.56	0.20	0.29	0.43	0.22	0.14	0.16	0.47	0.55	0.32	100.0	0.0
D322	3	0.49	0.47	0.34	0.68	0.17	0.48	0.65	0.46	0.36	0.40	0.57	0.63	0.17	100.0	0.0
Y320	5	0.29	0.28	0.16	0.39	0.09	0.29	0.36	0.29	0.20	0.26	0.35	0.37	0.09	100.0	0.0
A330	4	0.27	0.26	0.21	0.33	0.06	0.27	0.32	0.27	0.22	0.23	0.31	0.32	0.09	100.0	0.0
A326	9	0.26	0.21	0.11	0.75	0.20	0.25	0.37	0.19	0.11	0.14	0.31	0.40	0.17	100.0	0.0
A307	4	0.70	0.58	0.30	1.32	0.48	0.67	1.09	0.58	0.32	0.33	0.95	1.17	0.62	100.0	0.0
I322B	7	0.28	0.18	0.05	0.75	0.26	0.27	0.45	0.25	0.05	0.06	0.41	0.56	0.35	71.4	25.0
B317	6	3.06	2.61	0.70	5.22	1.52	2.98	4.08	3.08	1.52	2.50	3.76	4.58	1.25	100.0	83.3
All	86	0.92	0.39	0.05	6.23	1.36	0.90	1.16	0.31	0.08	0.16	0.76	3.24	0.60	94.2	17.4
Storm Flow																
E319	6	0.61	0.42	0.19	1.96	0.68	0.57	1.06	0.39	0.19	0.22	0.52	1.25	0.30	100.0	n.a.
A310	7	1.15	1.00	0.49	2.38	0.67	1.12	1.56	0.98	0.57	0.70	1.39	1.98	0.68	100.0	n.a.
0322	8	0.71	0.54	0.15	1.94	0.59	0.69	1.06	0.46	0.28	0.38	0.90	1.40	0.51	100.0	n.a.
A320	4	0.68	0.55	0.29	1.49	0.55	0.64	1.13	0.47	0.33	0.38	0.76	1.20	0.38	100.0	n.a.
A315	5	1.78	1.68	0.89	2.60	0.64	1.74	2.25	1.84	1.14	1.51	2.06	2.38	0.55	100.0	n.a.
A317	6	2.51	2.20	1.10	4.59	1.38	2.44	3.44	2.23	1.21	1.42	3.38	4.09	1.96	100.0	n.a.
C317	3	1.85	1.82	1.55	2.27	0.38	1.82	2.20	1.72	1.58	1.64	2.00	2.16	0.36	100.0	n.a.
S322	8	1.55	1.43	0.96	3.03	0.73	1.52	1.98	1.25	0.99	1.02	1.87	2.39	0.86	100.0	n.a.
F321	4	0.17	0.13	0.05	0.36	0.14	0.16	0.28	0.13	0.06	0.08	0.21	0.30	0.13	100.0	n.a.
B322	8	0.52	0.49	0.28	0.86	0.19	0.51	0.63	0.50	0.32	0.37	0.62	0.73	0.25	100.0	n.a.
D322	1	0.36	n.a.	0.36	0.36	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Y320	9	0.35	0.32	0.23	0.74	0.16	0.34	0.44	0.34	0.23	0.25	0.37	0.45	0.12	100.0	n.a.
A330	4	2.30	2.02	0.88	3.82	1.24	2.23	3.32	2.26	1.18	1.64	2.92	3.46	1.28	100.0	n.a.
A326	6	5.76	2.50	0.72	24.80	9.42	5.28	12.09	1.83	0.84	1.08	3.88	14.62	2.80	100.0	n.a.
A307	2	1.21	1.11	0.74	1.67	0.66	1.15	1.97	1.21	0.83	0.97	1.44	1.58	0.47	100.0	n.a.
I322B	5	0.66	0.50	0.26	1.79	0.64	0.63	1.13	0.35	0.29	0.33	0.58	1.31	0.25	100.0	n.a.
B317	9	1.32	1.21	0.47	2.36	0.54	1.30	1.62	1.32	0.74	1.04	1.59	1.81	0.55	100.0	n.a.
All	95	1.39	0.82	0.05	24.80	2.61	1.35	1.83	0.88	0.25	0.38	1.69	2.37	1.31	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G5. Summary statistics for dissolved magnesium concentrations (mg/L)at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	7	0.79	0.78	0.68	1.01	0.11	0.78	0.85	0.75	0.70	0.73	0.81	0.90	0.08	100.0	n.a.
A310	4	2.96	2.87	2.26	4.13	0.87	2.91	3.67	2.73	2.28	2.32	3.37	3.82	1.05	100.0	n.a.
0322	6	4.66	4.64	4.16	5.46	0.49	4.63	4.99	4.58	4.19	4.28	4.89	5.22	0.61	100.0	n.a.
A320	4	4.94	4.92	4.51	5.61	0.50	4.91	5.35	4.82	4.54	4.58	5.18	5.44	0.60	100.0	n.a.
A315	3	9.08	8.86	7.48	12.00	2.54	8.89	11.48	7.75	7.53	7.62	9.88	11.15	2.26	100.0	n.a.
A317	6	9.89	8.52	3.01	14.50	4.86	9.64	13.15	11.55	3.86	6.33	13.48	14.25	7.14	100.0	n.a.
C317	2	12.25	12.18	10.90	13.60	1.91	12.08	14.47	12.25	11.17	11.58	12.93	13.33	1.35	100.0	n.a.
S322	6	2.11	2.05	1.58	3.19	0.62	2.08	2.53	1.90	1.60	1.68	2.35	2.85	0.67	100.0	n.a.
F321	3	3.62	3.61	3.33	3.95	0.31	3.60	3.92	3.58	3.38	3.46	3.77	3.88	0.31	100.0	n.a.
B322	6	5.49	5.37	3.95	6.52	1.21	5.43	6.30	6.02	3.96	4.48	6.36	6.50	1.88	100.0	n.a.
D322	3	6.83	6.54	4.49	9.32	2.42	6.66	9.13	6.69	4.93	5.59	8.01	8.79	2.42	100.0	n.a.
Y320	5	4.70	4.51	2.69	6.07	1.39	4.62	5.72	5.40	3.15	3.85	5.49	5.84	1.64	100.0	n.a.
A330	4	8.58	8.57	7.98	9.30	0.63	8.54	9.10	8.53	8.03	8.09	9.02	9.19	0.92	100.0	n.a.
A326	9	9.53	8.57	4.60	14.50	4.48	9.35	11.99	6.77	4.64	6.35	13.90	14.47	7.55	100.0	n.a.
A307	4	15.23	15.20	13.70	16.10	1.05	15.16	16.09	15.55	14.24	15.05	15.73	15.95	0.67	100.0	n.a.
I322B	7	2.48	2.17	1.09	4.16	1.31	2.42	3.29	2.25	1.14	1.31	3.63	3.85	2.32	100.0	n.a.
B317	6	6.79	5.40	1.51	10.10	3.86	6.59	9.38	8.43	1.91	3.81	9.60	10.03	5.79	100.0	n.a.
All	85	6.07	4.52	0.68	16.10	4.29	6.01	6.83	4.65	1.28	3.01	8.35	13.78	5.34	100.0	n.a.
Storm Flow																
E319	6	0.81	0.79	0.57	1.00	0.15	0.80	0.90	0.80	0.66	0.77	0.89	0.95	0.12	100.0	n.a.
A310	7	2.15	2.07	1.14	2.74	0.58	2.12	2.50	2.26	1.45	1.87	2.57	2.69	0.70	100.0	n.a.
0322	7	4.55	4.54	3.74	4.96	0.40	4.53	4.80	4.59	4.16	4.48	4.81	4.90	0.33	100.0	n.a.
A320	4	4.30	4.27	3.69	5.10	0.59	4.26	4.79	4.21	3.81	3.99	4.52	4.87	0.53	100.0	n.a.
A315	5	4.11	4.02	3.17	5.78	1.01	4.05	4.85	4.00	3.30	3.49	4.09	5.10	0.60	100.0	n.a.
A317	5	3.00	2.97	2.45	3.81	0.51	2.97	3.38	2.85	2.58	2.77	3.13	3.54	0.36	100.0	n.a.
C317	3	2.65	2.48	1.53	3.78	1.13	2.57	3.72	2.64	1.75	2.09	3.21	3.55	1.13	100.0	n.a.
S322	8	1.56	1.45	0.52	2.54	0.55	1.53	1.87	1.57	1.13	1.49	1.66	1.95	0.17	100.0	n.a.
F321	4	3.51	3.50	3.35	3.79	0.21	3.49	3.68	3.45	3.35	3.36	3.60	3.71	0.24	100.0	n.a.
B322	8	8.70	8.38	5.56	11.68	2.44	8.59	10.11	9.03	5.56	6.93	10.47	11.27	3.55	100.0	n.a.
D322	1	8.65	8.65	8.65	8.65	n.a.	n.a.	n.a.	8.65	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	8	2.99	2.96	2.21	3.55	0.44	2.97	3.25	3.07	2.49	2.72	3.30	3.43	0.58	100.0	n.a.
A330	4	5.00	4.88	3.81	6.33	1.25	4.92	6.02	4.93	3.89	4.01	5.92	6.17	1.91	100.0	n.a.
A326	6	2.96	2.87	2.03	4.45	0.84	2.92	3.52	2.90	2.20	2.48	3.09	3.79	0.61	100.0	n.a.
A307	2	9.74	9.73	9.34	10.13	0.56	9.69	10.38	9.74	9.42	9.54	9.93	10.05	0.40	100.0	n.a.
I322B	4	1.78	1.74	1.37	2.38	0.43	1.75	2.13	1.69	1.44	1.55	1.92	2.19	0.37	100.0	n.a.
B317	8	1.75	1.71	1.08	2.21	0.39	1.73	1.98	1.75	1.36	1.48	2.12	2.15	0.64	100.0	n.a.
All	90	3.55	2.87	0.52	11.68	2.46	3.52	3.98	2.99	1.35	1.77	4.26	6.44	2.49	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G6. Summary statistics for total magnesium concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	0.83	0.82	0.69	1.03	0.10	0.82	0.88	0.81	0.74	0.78	0.86	0.92	0.08	100.0	n.a.
A310	4	3.01	2.90	2.21	4.27	0.96	2.95	3.80	2.79	2.24	2.29	3.51	3.96	1.21	100.0	n.a.
0322	6	4.74	4.71	4.04	5.55	0.53	4.71	5.09	4.64	4.25	4.48	5.02	5.33	0.54	100.0	n.a.
A320	4	4.95	4.93	4.49	5.67	0.56	4.91	5.41	4.82	4.50	4.51	5.27	5.51	0.76	100.0	n.a.
A315	3	9.06	8.84	7.38	12.00	2.55	8.88	11.49	7.81	7.47	7.60	9.91	11.16	2.31	100.0	n.a.
A317	6	10.05	8.91	3.79	14.70	4.66	9.81	13.17	11.20	4.39	6.44	13.70	14.55	7.27	100.0	n.a.
C317	2	12.40	12.28	10.70	14.10	2.40	12.19	15.20	12.40	11.04	11.55	13.25	13.76	1.70	100.0	n.a.
S322	6	2.11	2.03	1.54	3.26	0.68	2.08	2.57	1.88	1.55	1.63	2.40	2.92	0.78	100.0	n.a.
F321	3	3.54	3.52	3.18	3.94	0.38	3.51	3.90	3.49	3.24	3.34	3.72	3.85	0.38	100.0	n.a.
B322	6	5.40	5.31	4.07	6.35	1.04	5.35	6.10	5.84	4.09	4.54	6.11	6.28	1.57	100.0	n.a.
D322	3	6.82	6.52	4.37	9.19	2.41	6.65	9.11	6.91	4.88	5.64	8.05	8.73	2.41	100.0	n.a.
Y320	5	4.57	4.42	2.89	5.71	1.20	4.50	5.45	5.13	3.23	3.73	5.37	5.57	1.64	100.0	n.a.
A330	4	8.73	8.69	7.80	9.69	0.97	8.67	9.53	8.71	7.86	7.94	9.50	9.61	1.55	100.0	n.a.
A326	9	9.56	8.54	4.52	14.62	4.62	9.37	12.10	6.56	4.52	6.49	14.20	14.52	7.71	100.0	n.a.
A307	4	15.20	15.17	13.80	16.10	1.05	15.13	16.06	15.45	14.16	14.70	15.95	16.04	1.25	100.0	n.a.
I322B	7	2.50	2.24	1.14	4.18	1.20	2.44	3.25	2.35	1.22	1.47	3.44	3.75	1.97	100.0	n.a.
B317	6	6.87	5.75	1.99	10.40	3.66	6.69	9.33	8.10	2.33	4.02	9.53	10.20	5.51	100.0	n.a.
All	86	6.03	4.49	0.69	16.10	4.31	5.97	6.80	4.64	1.21	2.96	8.06	14.11	5.10	100.0	n.a.
Storm Flow																
E319	6	0.92	0.91	0.83	1.04	0.08	0.91	0.97	0.91	0.84	0.85	0.96	1.00	0.11	100.0	n.a.
A310	7	2.28	2.23	1.53	2.80	0.48	2.26	2.58	2.42	1.64	2.01	2.59	2.71	0.58	100.0	n.a.
0322	8	4.36	4.33	3.23	4.91	0.57	4.34	4.69	4.50	3.64	4.30	4.70	4.85	0.41	100.0	n.a.
A320	4	4.50	4.47	3.77	5.17	0.59	4.46	4.98	4.53	3.95	4.23	4.80	5.02	0.58	100.0	n.a.
A315	5	4.21	4.13	3.29	5.82	0.97	4.16	4.92	4.12	3.45	3.68	4.16	5.16	0.48	100.0	n.a.
A317	6	3.01	2.98	2.46	3.85	0.48	2.99	3.34	2.96	2.57	2.74	3.13	3.51	0.39	100.0	n.a.
C317	3	2.84	2.71	1.84	3.89	1.03	2.77	3.81	2.79	2.03	2.32	3.34	3.67	1.03	100.0	n.a.
S322	8	1.80	1.76	1.12	2.70	0.44	1.78	2.06	1.81	1.48	1.63	1.87	2.13	0.24	100.0	n.a.
F321	4	3.54	3.53	3.38	3.84	0.21	3.52	3.71	3.46	3.39	3.40	3.60	3.74	0.21	100.0	n.a.
B322	8	8.78	8.41	5.07	11.60	2.57	8.66	10.27	9.25	5.53	7.04	10.84	11.25	3.80	100.0	n.a.
D322	1	9.30	9.30	9.30	9.30	n.a.	n.a.	n.a.	9.30	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	9	3.04	3.01	2.26	3.65	0.44	3.02	3.28	3.12	2.55	2.68	3.35	3.47	0.67	100.0	n.a.
A330	4	5.68	5.62	4.73	6.61	0.96	5.62	6.47	5.69	4.81	4.92	6.45	6.54	1.53	100.0	n.a.
A326	6	4.63	4.17	2.98	9.95	2.70	4.49	6.44	3.49	2.99	3.07	4.56	7.40	1.49	100.0	n.a.
A307	2	10.08	10.08	9.84	10.32	0.34	10.05	10.47	10.08	9.89	9.96	10.20	10.27	0.24	100.0	n.a.
I322B	5	1.78	1.75	1.41	2.37	0.36	1.76	2.05	1.72	1.48	1.58	1.82	2.15	0.24	100.0	n.a.
B317	9	1.90	1.87	1.23	2.31	0.38	1.89	2.11	1.94	1.52	1.60	2.22	2.27	0.62	100.0	n.a.
All	95	3.73	3.07	0.83	11.60	2.52	3.69	4.15	3.12	1.55	1.91	4.50	7.13	2.59	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G7. Summary statistics for dissolved manganese concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.051	0.044	0.020	0.087	0.028	0.049	0.073	0.048	0.027	0.038	0.061	0.076	0.023	100.0	n.a.
A310	3	0.042	0.035	0.014	0.058	0.024	0.040	0.064	0.053	0.022	0.034	0.055	0.057	0.022	100.0	n.a.
0322	4	0.003	0.003	0.002	0.004	0.001	0.003	0.004	0.003	0.002	0.002	0.003	0.004	0.001	100.0	n.a.
A320	4	0.008	0.008	0.006	0.010	0.002	0.008	0.009	0.008	0.006	0.007	0.009	0.009	0.002	100.0	n.a.
A315	3	0.364	0.359	0.280	0.410	0.073	0.359	0.434	0.403	0.305	0.342	0.407	0.409	0.065	100.0	n.a.
A317	3	0.370	0.335	0.173	0.518	0.178	0.357	0.538	0.418	0.222	0.296	0.468	0.498	0.173	100.0	n.a.
C317	2	0.472	0.472	0.470	0.474	0.003	0.472	0.475	0.472	0.470	0.471	0.473	0.474	0.002	100.0	n.a.
S322	5	0.002	0.002	0.002	0.002	0.0004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	100.0	n.a.
F321	3	0.001	0.001	0.0005	0.001	0.0001	0.001	0.001	0.0005	0.0005	0.0005	0.001	0.001	0.0000	100.0	n.a.
B322	5	0.056	0.045	0.010	0.094	0.034	0.055	0.081	0.048	0.024	0.046	0.085	0.090	0.039	100.0	n.a.
D322	3	0.043	0.037	0.017	0.066	0.025	0.041	0.066	0.046	0.023	0.031	0.056	0.062	0.024	100.0	n.a.
Y320	2	0.033	0.031	0.020	0.047	0.019	0.032	0.055	0.033	0.023	0.027	0.040	0.044	0.013	100.0	n.a.
A330	4	0.009	0.007	0.002	0.018	0.007	0.009	0.015	0.008	0.003	0.006	0.012	0.015	0.006	100.0	n.a.
A326	8	0.011	0.010	0.006	0.014	0.002	0.011	0.012	0.011	0.009	0.010	0.012	0.013	0.002	100.0	n.a.
A307	4	0.061	0.059	0.043	0.076	0.014	0.060	0.072	0.062	0.047	0.054	0.069	0.073	0.015	100.0	n.a.
I322B	5	0.003	0.003	0.002	0.005	0.001	0.003	0.004	0.004	0.002	0.002	0.004	0.005	0.002	100.0	n.a.
B317	3	0.160	0.109	0.026	0.276	0.126	0.151	0.280	0.179	0.057	0.103	0.228	0.257	0.125	100.0	n.a.
All	65	0.075	0.018	0.0005	0.518	0.133	0.073	0.102	0.014	0.002	0.004	0.058	0.278	0.053	100.0	n.a.
Storm Flow																
E319	5	0.017	0.015	0.010	0.034	0.010	0.016	0.024	0.015	0.010	0.010	0.015	0.026	0.005	100.0	n.a.
A310	5	0.010	0.010	0.008	0.015	0.003	0.010	0.012	0.010	0.008	0.009	0.010	0.013	0.001	100.0	n.a.
0322	5	0.002	0.002	0.001	0.003	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	100.0	n.a.
A320	3	0.007	0.006	0.002	0.011	0.004	0.007	0.011	0.008	0.003	0.005	0.009	0.010	0.004	100.0	n.a.
A315	4	0.032	0.027	0.009	0.050	0.018	0.031	0.047	0.035	0.015	0.025	0.043	0.047	0.018	100.0	n.a.
A317	4	0.031	0.030	0.020	0.040	0.009	0.031	0.038	0.032	0.023	0.027	0.036	0.039	0.009	100.0	n.a.
C317	2	0.044	0.044	0.040	0.048	0.005	0.043	0.050	0.044	0.041	0.042	0.046	0.047	0.004	100.0	n.a.
S322	5	0.003	0.003	0.002	0.004	0.001	0.003	0.003	0.003	0.002	0.002	0.003	0.004	0.001	100.0	n.a.
F321	3	0.001	0.001	0.001	0.001	0.0003	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	100.0	n.a.
B322	5	0.023	0.019	0.010	0.054	0.018	0.022	0.036	0.020	0.010	0.011	0.020	0.040	0.009	100.0	n.a.
D322	1	0.006	0.006	0.006	0.006	n.a.	n.a.	n.a.	0.006	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	8	0.005	0.005	0.003	0.012	0.003	0.005	0.007	0.005	0.003	0.004	0.005	0.008	0.002	100.0	n.a.
A330	3	0.007	0.007	0.005	0.009	0.002	0.007	0.009	0.007	0.005	0.006	0.008	0.008	0.002	100.0	n.a.
A326	4	0.012	0.010	0.007	0.022	0.007	0.011	0.017	0.008	0.008	0.008	0.012	0.018	0.004	100.0	n.a.
A307	1	0.041	0.041	0.041	0.041	n.a.	n.a.	n.a.	0.041	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
I322B	2	0.003	0.003	0.003	0.004	0.0005	0.003	0.004	0.003	0.003	0.003	0.004	0.004	0.0003	100.0	n.a.
B317	6	0.011	0.008	0.002	0.020	0.008	0.011	0.017	0.012	0.002	0.005	0.018	0.020	0.013	100.0	n.a.
All	66	0.013	0.008	0.001	0.054	0.014	0.013	0.016	0.009	0.002	0.003	0.018	0.038	0.015	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G8. Summary statistics for total manganese concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	7	0.056	0.040	0.020	0.133	0.049	0.053	0.086	0.025	0.020	0.020	0.086	0.123	0.066	100.0	n.a.
A310	3	0.062	0.056	0.029	0.092	0.032	0.060	0.092	0.067	0.037	0.048	0.079	0.087	0.031	100.0	n.a.
0322	5	0.033	0.027	0.011	0.070	0.023	0.032	0.050	0.025	0.014	0.019	0.040	0.058	0.021	100.0	n.a.
A320	3	0.017	0.017	0.016	0.018	0.001	0.017	0.019	0.018	0.016	0.017	0.018	0.018	0.001	100.0	n.a.
A315	2	0.376	0.374	0.340	0.411	0.050	0.371	0.434	0.376	0.347	0.358	0.393	0.404	0.036	100.0	n.a.
A317	5	0.341	0.312	0.160	0.512	0.152	0.332	0.453	0.300	0.195	0.247	0.484	0.501	0.237	100.0	n.a.
C317	1	0.534	0.534	0.534	0.534	n.a.	n.a.	n.a.	0.534	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
S322	4	0.010	0.010	0.007	0.012	0.002	0.010	0.012	0.011	0.008	0.010	0.011	0.012	0.001	100.0	n.a.
F321	2	0.002	0.002	0.002	0.002	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	100.0	n.a.
B322	4	0.083	0.078	0.056	0.129	0.034	0.080	0.110	0.073	0.057	0.060	0.096	0.116	0.036	100.0	n.a.
D322	3	0.074	0.071	0.048	0.091	0.023	0.072	0.096	0.084	0.055	0.066	0.087	0.089	0.022	100.0	n.a.
Y320	3	0.042	0.038	0.020	0.067	0.024	0.041	0.065	0.040	0.024	0.030	0.054	0.062	0.024	100.0	n.a.
A330	3	0.021	0.020	0.017	0.025	0.004	0.020	0.025	0.020	0.017	0.018	0.022	0.024	0.004	100.0	n.a.
A326	7	0.024	0.022	0.016	0.050	0.012	0.023	0.031	0.022	0.017	0.017	0.023	0.034	0.006	100.0	n.a.
A307	4	0.100	0.096	0.070	0.155	0.037	0.098	0.131	0.088	0.075	0.082	0.106	0.135	0.024	100.0	n.a.
I322B	6	0.012	0.010	0.005	0.021	0.007	0.011	0.016	0.009	0.006	0.006	0.018	0.020	0.011	100.0	n.a.
B317	5	0.153	0.125	0.047	0.253	0.096	0.147	0.223	0.150	0.056	0.070	0.244	0.249	0.174	100.0	n.a.
All	67	0.089	0.041	0.002	0.534	0.125	0.087	0.114	0.040	0.011	0.018	0.090	0.249	0.072	100.0	n.a.
Storm Flow																
E319	6	0.059	0.050	0.030	0.124	0.040	0.057	0.086	0.038	0.030	0.030	0.082	0.109	0.052	100.0	n.a.
A310	7	0.077	0.066	0.030	0.159	0.049	0.075	0.108	0.059	0.035	0.045	0.101	0.144	0.056	100.0	n.a.
0322	8	0.040	0.029	0.010	0.090	0.030	0.039	0.057	0.040	0.010	0.011	0.055	0.076	0.045	100.0	n.a.
A320	4	0.039	0.035	0.020	0.076	0.025	0.038	0.060	0.031	0.023	0.028	0.043	0.063	0.015	100.0	n.a.
A315	5	0.134	0.113	0.060	0.280	0.089	0.129	0.200	0.127	0.061	0.063	0.140	0.224	0.078	100.0	n.a.
A317	6	0.107	0.093	0.040	0.170	0.057	0.104	0.145	0.107	0.050	0.063	0.156	0.165	0.093	100.0	n.a.
C317	3	0.092	0.087	0.060	0.130	0.036	0.089	0.125	0.085	0.065	0.072	0.107	0.121	0.035	100.0	n.a.
S322	8	0.052	0.044	0.020	0.120	0.032	0.050	0.071	0.044	0.025	0.029	0.062	0.083	0.033	100.0	n.a.
F321	4	0.006	0.005	0.003	0.010	0.003	0.005	0.008	0.005	0.003	0.003	0.007	0.009	0.004	100.0	n.a.
B322	8	0.035	0.029	0.010	0.070	0.024	0.034	0.049	0.023	0.015	0.019	0.056	0.069	0.037	100.0	n.a.
D322	1	0.022	0.022	0.022	0.022	n.a.	n.a.	n.a.	0.022	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	na
Y320	9	0.021	0.017	0.009	0.070	0.019	0.021	0.032	0.015	0.009	0.010	0.022	0.034	0.012	100.0	n.a.
A330	4	0.081	0.073	0.042	0.140	0.042	0.078	0.116	0.070	0.048	0.056	0.095	0.122	0.039	100.0	n.a.
A326	6	0.179	0.087	0.020	0.640	0.241	0.166	0.341	0.061	0.030	0.040	0.208	0.445	0.168	100.0	n.a.
A307	2	0.132	0.126	0.092	0.173	0.057	0.127	0.199	0.132	0.100	0.112	0.152	0.164	0.040	100.0	n.a.
I322B	5	0.018	0.014	0.010	0.050	0.018	0.017	0.031	0.010	0.010	0.010	0.012	0.035	0.002	100.0	n.a.
B317	9	0.050	0.044	0.016	0.091	0.025	0.049	0.063	0.050	0.025	0.030	0.060	0.082	0.030	100.0	n.a.
All	95	0.064	0.040	0.003	0.640	0.079	0.063	0.078	0.044	0.010	0.021	0.073	0.138	0.052	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G9. Summary statistics for dissolved potassium concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	7	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A310	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
0322	6	3	3	2	6	2	3	4	3	2	2	4	5	2	66.7	n.a.
A320	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A315	3	3	3	2	3	1	3	3	3	2	3	3	3	1	66.7	n.a.
A317	6	4	3	2	5	1	4	5	4	2	3	5	5	2	66.7	n.a.
C317	2	4	4	4	5	1	4	5	4	4	4	5	5	0	100.0	n.a.
S322	6	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
F321	3	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
B322	6	10	9	3	14	6	10	14	14	3	6	14	14	8	100.0	n.a.
D322	3	6	5	4	7	2	5	7	5	4	5	6	7	2	100.0	n.a.
Y320	5	2	2	2	2	0	2	2	2	2	2	2	2	0	40.0	n.a.
A330	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A326	9	2	2	2	3	0	2	2	2	2	2	3	3	1	55.6	n.a.
A307	4	4	4	3	4	1	4	4	4	3	3	4	4	0	100.0	n.a.
I322B	7	2	2	2	2	0	2	2	2	2	2	2	2	0	14.3	n.a.
B317	6	2	2	2	3	0	2	2	2	2	2	2	3	0	50.0	n.a.
All	85	3	3	2	14	3	3	4	2	2	2	3	5	1	42.4	n.a.
Storm Flow																
E319	6	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A310	7	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
0322	7	5	4	2	8	2	4	6	4	3	4	5	6	2	100.0	n.a.
A320	4	2	2	2	3	0	2	2	2	2	2	2	2	0	25.0	n.a.
A315	5	3	3	3	4	1	3	4	3	3	3	3	4	0	100.0	n.a.
A317	5	2	2	2	2	0	2	2	2	2	2	2	2	0	40.0	n.a.
C317	3	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
S322	8	2	2	1	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
F321	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
B322	8	27	26	17	38	8	27	32	28	18	20	34	35	13	100.0	n.a.
D322	1	17	17	17	17	n.a.	n.a.	n.a.	17	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	na
Y320	8	2	2	2	3	0	2	3	2	2	2	3	3	1	87.5	n.a.
A330	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A326	6	2	2	2	2	0	2	2	2	2	2	2	2	0	16.7	n.a.
A307	2	3	3	3	3	0	3	3	3	3	3	3	3	0	100.0	n.a.
I322B	4	2	2	2	2	0	2	2	2	2	2	2	2	0	25.0	n.a.
B317	8	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
All	90	5	3	1	38	8	5	6	2	2	2	3	8	1	38.9	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G10. Summary statistics for total potassium concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A310	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
0322	6	3	3	2	6	2	3	4	3	2	2	5	6	3	66.7	n.a.
A320	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A315	3	3	3	2	4	1	3	4	3	2	3	3	4	1	100.0	n.a.
A317	6	4	3	2	6	1	4	5	4	2	3	5	5	2	83.3	n.a.
C317	2	5	5	4	5	1	5	5	5	4	5	5	5	0	100.0	n.a.
S322	6	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
F321	3	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
B322	6	10	9	3	14	5	10	14	13	3	6	14	14	8	100.0	n.a.
D322	3	6	6	5	8	2	6	7	5	5	5	6	7	2	100.0	n.a.
Y320	5	2	2	2	2	0	2	2	2	2	2	2	2	0	40.0	n.a.
A330	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A326	9	2	2	2	3	0	2	2	2	2	2	3	3	1	66.7	n.a.
A307	4	4	4	3	5	1	4	4	4	3	4	4	4	1	100.0	n.a.
I322B	7	2	2	2	3	0	2	2	2	2	2	2	2	0	14.3	n.a.
B317	6	2	2	2	3	0	2	2	2	2	2	2	3	0	66.7	n.a.
All	86	3	3	2	14	3	3	4	2	2	2	3	5	1	46.5	n.a.
Storm Flow																
E319	6	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
A310	7	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
0322	8	4	4	3	7	1	4	5	4	3	4	5	6	1	100.0	n.a.
A320	4	2	2	2	3	0	2	3	2	2	2	2	3	0	50.0	n.a.
A315	5	3	3	2	4	1	3	4	4	3	3	4	4	0	100.0	n.a.
A317	6	2	2	2	2	0	2	2	2	2	2	2	2	0	16.7	n.a.
C317	3	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
S322	8	2	2	1	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
F321	4	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
B322	8	27	26	16	37	9	26	32	28	18	19	34	36	15	100.0	n.a.
D322	1	16	16	16	16	n.a.	n.a.	n.a.	16	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	9	2	2	2	3	0	2	2	2	2	2	3	3	1	77.8	n.a.
A330	4	2	2	2	2	0	2	2	2	2	2	2	2	0	25.0	n.a.
A326	6	2	2	2	4	1	2	3	2	2	2	2	3	0	33.3	n.a.
A307	2	3	3	3	3	0	3	4	3	3	3	3	3	0	100.0	n.a.
I322B	5	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
B317	9	2	2	2	2	0	2	2	2	2	2	2	2	0	0.0	n.a.
All	95	5	3	1	37	7	5	6	2	2	2	3	6	1	38.9	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G11. Summary statistics for dissolved sodium concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	7	2.6	2.6	2.4	3.1	0.2	2.6	2.8	2.6	2.5	2.5	2.7	2.8	0.2	100.0	n.a.
A310	4	8.3	7.7	5.2	12.5	3.6	8.1	11.3	7.8	5.3	5.4	10.7	11.8	5.3	100.0	n.a.
0322	6	6.8	6.8	6.3	7.2	0.4	6.8	7.1	6.8	6.4	6.5	7.1	7.2	0.6	100.0	n.a.
A320	4	6.8	6.8	6.5	7.0	0.2	6.8	6.9	6.8	6.6	6.7	6.9	7.0	0.2	100.0	n.a.
A315	3	13.0	12.6	10.0	17.5	4.0	12.7	16.8	11.4	10.3	10.7	14.5	16.3	3.8	100.0	n.a.
A317	6	25.3	20.1	5.3	40.2	14.4	24.5	34.9	31.1	7.3	14.3	34.2	37.4	19.9	100.0	n.a.
C317	2	31.8	31.4	26.9	36.6	6.9	31.1	39.7	31.8	27.9	29.3	34.2	35.6	4.9	100.0	n.a.
S322	6	8.3	8.0	6.2	12.6	2.5	8.1	9.9	7.3	6.2	6.5	9.2	11.3	2.7	100.0	n.a.
F321	3	4.0	4.0	3.8	4.3	0.2	4.0	4.2	4.0	3.8	3.9	4.1	4.2	0.2	100.0	n.a.
B322	6	8.9	8.9	7.6	10.6	1.4	8.9	9.8	8.7	7.6	7.8	10.1	10.6	2.3	100.0	n.a.
D322	3	8.2	8.0	6.7	9.9	1.7	8.0	9.7	7.9	6.9	7.3	8.9	9.5	1.6	100.0	n.a.
Y320	5	6.4	6.2	3.9	7.8	1.7	6.3	7.7	7.6	4.5	5.3	7.6	7.7	2.3	100.0	n.a.
A330	4	6.8	6.8	6.6	7.3	0.3	6.8	7.1	6.8	6.6	6.6	7.0	7.2	0.3	100.0	n.a.
A326	9	8.9	8.4	5.5	14.3	3.4	8.8	10.8	7.0	5.5	6.2	11.0	13.6	4.8	100.0	n.a.
A307	4	8.7	8.7	7.9	9.4	0.6	8.7	9.3	8.9	8.2	8.6	9.0	9.2	0.4	100.0	n.a.
I322B	7	4.9	4.2	2.3	9.8	2.9	4.7	6.7	3.9	2.3	2.4	6.6	8.3	4.3	100.0	n.a.
B317	6	8.8	7.3	2.4	13.3	4.7	8.5	11.9	10.7	3.0	5.0	12.1	12.8	7.0	100.0	n.a.
All	85	9.1	7.3	2.3	40.2	7.5	9.0	10.5	7.2	2.7	5.5	9.9	13.4	4.5	100.0	n.a.
Storm Flow																
E319	6	2.8	2.8	2.3	3.3	0.3	2.8	3.0	2.7	2.5	2.7	3.0	3.2	0.3	100.0	n.a.
A310	7	4.6	4.5	2.7	6.1	1.2	4.6	5.4	4.3	3.3	3.9	5.6	5.9	1.7	100.0	n.a.
0322	7	6.6	6.6	6.0	7.5	0.5	6.6	6.9	6.6	6.2	6.4	6.9	7.2	0.5	100.0	n.a.
A320	4	5.6	5.6	4.9	6.3	0.7	5.6	6.2	5.6	5.0	5.1	6.2	6.3	1.1	100.0	n.a.
A315	5	6.4	6.3	5.3	8.6	1.3	6.3	7.4	6.1	5.4	5.5	6.6	7.8	1.1	100.0	n.a.
A317	5	4.9	4.8	4.0	6.4	0.9	4.8	5.6	4.5	4.2	4.4	5.2	5.9	0.8	100.0	n.a.
C317	3	4.3	4.0	2.4	6.2	1.9	4.2	6.1	4.5	2.8	3.4	5.3	5.8	1.9	100.0	n.a.
S322	8	6.1	5.7	2.0	9.4	2.0	6.0	7.3	6.3	4.3	5.9	6.6	7.4	0.7	100.0	n.a.
F321	4	3.9	3.9	3.8	4.1	0.1	3.9	4.0	3.9	3.8	3.9	4.0	4.0	0.1	100.0	n.a.
B322	8	14.0	13.2	8.5	20.1	4.8	13.8	16.8	13.8	8.7	10.1	17.5	19.9	7.4	100.0	n.a.
D322	1	10.1	10.1	10.1	10.1	n.a.	n.a.	n.a.	10.1	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	8	4.5	4.5	3.7	5.4	0.6	4.5	4.9	4.6	3.9	4.0	4.9	5.4	0.9	100.0	n.a.
A330	4	5.1	5.1	4.6	5.6	0.5	5.1	5.6	5.1	4.6	4.7	5.5	5.6	0.8	100.0	n.a.
A326	6	3.5	3.4	2.3	5.9	1.3	3.5	4.4	3.3	2.4	2.7	3.7	4.8	1.0	100.0	n.a.
A307	2	6.3	6.3	5.9	6.8	0.6	6.3	7.0	6.3	6.0	6.1	6.5	6.7	0.4	100.0	n.a.
I322B	4	3.0	3.0	2.5	3.8	0.6	3.0	3.5	2.8	2.6	2.7	3.1	3.5	0.4	100.0	n.a.
B317	8	2.6	2.6	1.6	3.4	0.6	2.6	3.0	2.7	2.0	2.4	3.0	3.2	0.6	100.0	n.a.
All	90	5.5	4.8	1.6	20.1	3.4	5.5	6.1	4.9	2.6	3.4	6.3	8.7	2.9	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

Table G12. Summary statistics for total sodium concentrations (mg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	8	2.6	2.6	2.4	3.1	0.2	2.6	2.8	2.6	2.4	2.5	2.7	2.9	0.3	100.0	n.a.
A310	4	8.5	7.8	5.1	13.2	3.9	8.2	11.7	7.8	5.2	5.2	11.0	12.3	5.7	100.0	n.a.
0322	6	6.8	6.8	6.0	7.3	0.4	6.8	7.1	6.9	6.4	6.8	7.1	7.2	0.3	100.0	n.a.
A320	4	6.7	6.7	6.5	6.9	0.1	6.6	6.8	6.6	6.5	6.6	6.7	6.8	0.1	100.0	n.a.
A315	3	12.6	12.3	10.1	16.4	3.3	12.4	15.8	11.3	10.3	10.7	13.9	15.4	3.2	100.0	n.a.
A317	6	25.4	20.6	6.2	41.4	14.3	24.6	34.9	30.0	7.9	14.3	34.2	38.3	19.9	100.0	n.a.
C317	2	30.8	30.4	26.4	35.1	6.2	30.2	37.9	30.8	27.3	28.6	32.9	34.2	4.4	100.0	n.a.
S322	6	8.2	7.8	6.0	12.9	2.7	8.0	10.0	7.2	6.0	6.3	9.1	11.3	2.8	100.0	n.a.
F321	3	3.9	3.9	3.7	4.2	0.3	3.9	4.2	4.0	3.7	3.8	4.1	4.1	0.3	100.0	n.a.
B322	6	8.7	8.6	7.0	10.4	1.4	8.6	9.6	8.4	7.3	7.8	9.7	10.3	1.9	100.0	n.a.
D322	3	7.8	7.7	6.5	9.6	1.6	7.7	9.3	7.3	6.7	6.9	8.4	9.1	1.5	100.0	n.a.
Y320	5	6.2	6.0	4.1	7.5	1.5	6.1	7.3	7.2	4.5	5.1	7.3	7.4	2.2	100.0	n.a.
A330	4	6.7	6.7	6.4	7.1	0.3	6.7	6.9	6.6	6.5	6.5	6.8	7.0	0.3	100.0	n.a.
A326	9	8.9	8.3	5.4	14.7	3.6	8.7	10.8	6.8	5.4	6.2	10.8	13.8	4.6	100.0	n.a.
A307	4	8.4	8.4	7.6	8.9	0.6	8.4	8.9	8.6	7.9	8.3	8.8	8.9	0.5	100.0	n.a.
I322B	7	4.7	4.1	2.4	9.3	2.7	4.6	6.4	3.9	2.4	2.5	6.3	7.9	3.9	100.0	n.a.
B317	6	8.7	7.5	2.8	13.0	4.4	8.5	11.7	10.4	3.2	5.2	11.8	12.5	6.6	100.0	n.a.
All	86	8.9	7.2	2.4	41.4	7.4	8.8	10.2	7.0	2.7	5.4	9.8	13.4	4.4	100.0	n.a.
Storm Flow																
E319	6	2.8	2.8	2.4	3.2	0.3	2.8	3.0	2.8	2.6	2.7	3.0	3.1	0.2	100.0	n.a.
A310	7	4.7	4.6	3.1	6.1	1.0	4.6	5.3	4.6	3.6	4.2	5.4	5.7	1.3	100.0	n.a.
0322	8	6.4	6.3	4.7	7.3	0.8	6.3	6.8	6.6	5.6	6.2	6.8	7.1	0.6	100.0	n.a.
A320	4	5.8	5.7	5.0	6.4	0.6	5.7	6.3	5.8	5.2	5.5	6.1	6.3	0.6	100.0	n.a.
A315	5	6.5	6.4	5.3	8.8	1.3	6.4	7.5	6.1	5.5	5.8	6.5	7.8	0.7	100.0	n.a.
A317	6	4.8	4.7	3.9	6.4	0.9	4.7	5.4	4.5	4.0	4.2	5.0	5.8	0.8	100.0	n.a.
C317	3	4.4	4.1	2.5	6.4	1.9	4.3	6.3	4.4	2.9	3.5	5.4	6.0	1.9	100.0	n.a.
S322	8	6.3	6.0	3.3	9.2	1.6	6.2	7.2	6.4	4.8	6.0	6.6	7.4	0.6	100.0	n.a.
F321	4	4.0	4.0	3.8	4.4	0.2	4.0	4.2	3.9	3.8	3.8	4.0	4.2	0.2	100.0	n.a.
B322	8	14.0	13.2	7.7	20.0	4.9	13.8	16.9	14.0	8.4	10.4	17.7	19.8	7.3	100.0	n.a.
D322	1	10.7	10.7	10.7	10.7	n.a.	n.a.	n.a.	10.7	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	n.a.
Y320	9	4.6	4.5	3.7	5.6	0.6	4.5	4.9	4.6	4.1	4.3	4.7	5.3	0.4	100.0	n.a.
A330	4	5.3	5.3	4.8	5.8	0.4	5.3	5.7	5.3	4.9	5.0	5.6	5.7	0.7	100.0	n.a.
A326	6	4.0	3.9	2.7	5.9	1.1	4.0	4.7	3.9	3.1	3.5	4.3	5.2	0.8	100.0	n.a.
A307	2	6.5	6.4	6.0	6.9	0.7	6.4	7.2	6.5	6.1	6.2	6.7	6.8	0.5	100.0	n.a.
I322B	5	2.9	2.8	2.3	3.7	0.5	2.8	3.2	2.8	2.4	2.6	2.9	3.4	0.3	100.0	n.a.
B317	9	2.8	2.7	1.7	3.5	0.5	2.7	3.0	2.8	2.2	2.5	3.2	3.3	0.7	100.0	n.a.
All	95	5.5	4.9	1.7	20.0	3.3	5.5	6.1	4.7	2.7	3.6	6.3	8.3	2.8	100.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

mg/L: milligram/liter

APPENDIX H

Summary Statistics for Halogenated Hydrocarbons Measured at Sites in the Green-Duwamish Watershed in 2003

Table H1. Summary statistics for 1,2,4-trichlorobenzene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H2. Summary statistics for 1,2-dichlorobenzene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A310	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
0322	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
A320	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A315	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
C317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
A320	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
A315	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
A317	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
C317	2	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H3. Summary statistics for 1,3-dichlorobenzene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A310	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
0322	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
A320	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A315	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
C317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
A320	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
A315	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
A317	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
C317	2	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H4. Summary statistics for 1,4-dichlorobenzene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A310	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
0322	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
A320	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A315	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
C317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
A320	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
A315	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
A317	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
C317	2	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H5. Summary statistics for 2-chloronaphthalene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H6. Summary statistics for 3,3'-dichlorobenzidine concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.71	0.71	0.71	0.71	n.a.	n.a.	n.a.	0.71	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.71	0.71	0.71	0.71	n.a.	n.a.	n.a.	0.71	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.71	0.71	0.71	0.71	n.a.	n.a.	n.a.	0.71	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.74	0.74	0.74	0.74	n.a.	n.a.	n.a.	0.74	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.72	0.72	0.72	0.72	n.a.	n.a.	n.a.	0.72	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.71	0.71	0.71	0.71	n.a.	n.a.	n.a.	0.71	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.74	0.73	0.72	0.75	0.02	0.73	0.76	0.74	0.72	0.73	0.74	0.75	0.01	0.0	n.a.
A317	1	0.75	n.a.	0.75	0.75	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C317	1	0.71	n.a.	0.71	0.71	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.73	0.73	0.71	0.75	0.02	0.73	0.74	0.72	0.71	0.71	0.74	0.75	0.03	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H7. Summary statistics for 4-bromophenylphenylether concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.02	n.a.	0.02	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
A310	1	0.02	n.a.	0.02	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0322	1	0.02	n.a.	0.02	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
A320	1	0.02	n.a.	0.02	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	1	0.02	n.a.	0.02	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C317	1	0.02	n.a.	0.02	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H8. Summary statistics for 4-chloroaniline concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.25	0.24	0.24	0.25	0.01	0.24	0.25	0.25	0.24	0.24	0.25	0.25	0.01	0.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.24	0.24	0.24	0.25	0.01	0.24	0.25	0.24	0.24	0.24	0.25	0.25	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H9. Summary statistics for 4-chlorophenylphenylether concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H10. Summary statistics for bis(2-chloroethoxy)methane concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H11. Summary statistics for bis(2-chloroethyl)ether concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H12. Summary statistics for bis(2-chloroisopropyl)ether concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H13. Summary statistics for hexachlorobenzene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A310	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
0322	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.03	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
C317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
Storm Flow																
E319	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A315	4	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	2	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
C317	2	0.02	0.02	0.02	0.02	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H14. Summary statistics for hexachlorobutadiene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.05	0.04	0.04	0.05	0.01	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
A317	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table H15. Summary statistics for hexachloroethane concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX I

Summary Statistics for Phenols Measured At Sites in the Green-Duwamish Watershed in 2003

Table I1. Summary statistics for 2,4,5-trichlorophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.12	0.12	0.12	0.12	0.00	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.00	0.0	n.a.
A320	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	0.13	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.12	0.12	0.12	0.13	0.00	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.00	0.0	n.a.
Storm Flow																
E319	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.13	0.12	0.12	0.12	0.01	0.12	0.13	0.13	0.12	0.12	0.13	0.13	0.01	0.0	n.a.
A317	1	0.13	0.13	0.13	0.13	n.a.	n.a.	n.a.	0.13	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.12	0.12	0.12	0.13	0.00	0.12	0.13	0.12	0.12	0.12	0.12	0.13	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I2. Summary statistics for 2,4,6-trichlorophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.37	0.26	0.04	0.49	0.22	0.36	0.55	0.48	0.17	0.37	0.48	0.49	0.11	0.0	n.a.
A310	4	0.38	0.27	0.05	0.49	0.22	0.36	0.55	0.48	0.18	0.37	0.48	0.49	0.11	0.0	n.a.
0322	5	0.30	0.18	0.04	0.48	0.24	0.29	0.48	0.48	0.04	0.04	0.48	0.48	0.44	0.0	n.a.
A320	4	0.39	0.28	0.05	0.52	0.22	0.37	0.57	0.49	0.18	0.37	0.50	0.51	0.13	0.0	n.a.
A315	3	0.33	0.21	0.04	0.49	0.25	0.31	0.57	0.47	0.13	0.26	0.48	0.49	0.23	0.0	n.a.
A317	4	0.38	0.27	0.05	0.49	0.22	0.36	0.55	0.48	0.18	0.37	0.48	0.49	0.11	0.0	n.a.
C317	4	0.37	0.26	0.04	0.49	0.22	0.36	0.55	0.48	0.17	0.36	0.48	0.49	0.12	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	28	0.36	0.24	0.04	0.52	0.20	0.35	0.42	0.48	0.04	0.05	0.48	0.49	0.43	0.0	n.a.
Storm Flow																
E319	3	0.34	0.21	0.04	0.50	0.26	0.32	0.59	0.49	0.13	0.27	0.50	0.50	0.23	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.34	0.21	0.04	0.49	0.26	0.32	0.58	0.48	0.13	0.26	0.49	0.49	0.23	0.0	n.a.
A320	3	0.34	0.21	0.04	0.49	0.26	0.32	0.58	0.48	0.13	0.26	0.49	0.49	0.23	0.0	n.a.
A315	4	0.27	0.15	0.04	0.50	0.26	0.25	0.48	0.27	0.04	0.05	0.49	0.49	0.44	0.0	n.a.
A317	2	0.29	0.16	0.05	0.53	0.34	0.26	0.68	0.29	0.10	0.17	0.41	0.48	0.24	0.0	n.a.
C317	2	0.27	0.14	0.04	0.49	0.32	0.24	0.64	0.27	0.09	0.15	0.38	0.45	0.23	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.29	0.17	0.04	0.53	0.23	0.29	0.38	0.48	0.04	0.04	0.49	0.50	0.45	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I3. Summary statistics for 2,4-dichlorophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.39	0.32	0.09	0.49	0.20	0.37	0.55	0.48	0.21	0.38	0.48	0.49	0.10	0.0	n.a.
A310	4	0.39	0.32	0.09	0.49	0.20	0.37	0.55	0.48	0.21	0.38	0.48	0.49	0.10	0.0	n.a.
0322	5	0.32	0.25	0.09	0.48	0.21	0.31	0.48	0.48	0.09	0.09	0.48	0.48	0.39	0.0	n.a.
A320	4	0.40	0.32	0.09	0.52	0.20	0.38	0.56	0.49	0.21	0.38	0.50	0.51	0.12	0.0	n.a.
A315	3	0.35	0.27	0.09	0.49	0.23	0.33	0.56	0.47	0.17	0.28	0.48	0.49	0.20	0.0	n.a.
A317	4	0.39	0.33	0.10	0.49	0.19	0.38	0.55	0.48	0.21	0.39	0.48	0.49	0.10	0.0	n.a.
C317	4	0.38	0.32	0.09	0.49	0.20	0.37	0.54	0.48	0.20	0.38	0.48	0.49	0.11	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	28	0.37	0.30	0.09	0.52	0.18	0.37	0.43	0.48	0.09	0.10	0.48	0.49	0.39	0.0	n.a.
Storm Flow																
E319	3	0.36	0.28	0.09	0.50	0.23	0.34	0.58	0.49	0.17	0.29	0.50	0.50	0.21	0.0	n.a.
A310	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.35	0.28	0.09	0.49	0.23	0.34	0.57	0.48	0.17	0.29	0.49	0.49	0.20	0.0	n.a.
A320	3	0.35	0.28	0.09	0.49	0.23	0.34	0.57	0.48	0.17	0.29	0.49	0.49	0.20	0.0	n.a.
A315	4	0.29	0.22	0.09	0.50	0.23	0.28	0.48	0.29	0.09	0.10	0.49	0.49	0.39	0.0	n.a.
A317	2	0.32	0.23	0.10	0.53	0.30	0.29	0.67	0.32	0.14	0.21	0.42	0.49	0.22	0.0	n.a.
C317	2	0.29	0.21	0.09	0.49	0.28	0.26	0.62	0.29	0.13	0.19	0.39	0.45	0.20	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.32	0.23	0.09	0.53	0.21	0.31	0.39	0.48	0.09	0.09	0.49	0.50	0.40	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I4. Summary statistics for 2,4-dimethylphenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	1.50	1.50	1.50	1.50	n.a.	n.a.	n.a.	1.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	1.50	1.50	1.50	1.50	n.a.	n.a.	n.a.	1.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	1.40	1.40	1.40	1.40	0.00	1.40	1.40	1.40	1.40	1.40	1.40	1.40	0.00	0.0	n.a.
A320	1	1.50	1.50	1.50	1.50	n.a.	n.a.	n.a.	1.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	1.40	1.40	1.40	1.40	n.a.	n.a.	n.a.	1.40	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	1.50	1.50	1.50	1.50	n.a.	n.a.	n.a.	1.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	1.40	1.40	1.40	1.40	n.a.	n.a.	n.a.	1.40	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	1.45	1.45	1.40	1.50	0.05	1.45	1.48	1.45	1.40	1.40	1.50	1.50	0.10	0.0	n.a.
Storm Flow																
E319	1	1.40	1.40	1.40	1.40	n.a.	n.a.	n.a.	1.40	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	1.50	1.50	1.50	1.50	n.a.	n.a.	n.a.	1.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	1.40	1.40	1.40	1.40	n.a.	n.a.	n.a.	1.40	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	1.40	1.40	1.40	1.40	n.a.	n.a.	n.a.	1.40	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	1.45	1.45	1.40	1.50	0.07	1.44	1.53	1.45	1.41	1.43	1.48	1.49	0.05	0.0	n.a.
A317	1	1.50	1.50	1.50	1.50	n.a.	n.a.	n.a.	1.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	1.40	1.40	1.40	1.40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	1.44	1.44	1.40	1.50	0.05	1.44	1.47	1.40	1.40	1.40	1.50	1.50	0.10	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I5. Summary statistics for 2,4-dinitrophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.97	0.97	0.97	0.97	n.a.	n.a.	n.a.	0.97	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.99	0.99	0.99	0.99	n.a.	n.a.	n.a.	0.99	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.95	0.95	0.94	0.96	0.01	0.95	0.97	0.95	0.94	0.95	0.96	0.96	0.01	0.0	n.a.
A320	1	0.99	0.99	0.99	0.99	n.a.	n.a.	n.a.	0.99	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	1.00	1.00	1.00	1.00	n.a.	n.a.	n.a.	1.00	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.97	0.97	0.94	1.00	0.02	0.97	0.98	0.97	0.95	0.95	0.99	0.99	0.04	0.0	n.a.
Storm Flow																
E319	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.99	0.99	0.99	0.99	n.a.	n.a.	n.a.	0.99	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.96	0.96	0.96	0.96	n.a.	n.a.	n.a.	0.96	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.94	0.94	0.94	0.94	n.a.	n.a.	n.a.	0.94	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.98	0.98	0.96	1.00	0.03	0.98	1.01	0.98	0.96	0.97	0.99	1.00	0.02	0.0	n.a.
A317	1	1.00	1.00	1.00	1.00	n.a.	n.a.	n.a.	1.00	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.97	0.97	0.94	1.00	0.02	0.97	0.98	0.96	0.95	0.95	0.99	1.00	0.04	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I6. Summary statistics for 2-chlorophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.09	0.09	0.09	0.09	0.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.00	0.0	n.a.
A320	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.09	0.09	0.09	0.10	0.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.00	0.0	n.a.
Storm Flow																
E319	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.09	n.a.	0.00	0.00	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.10	0.09	0.09	0.10	0.01	0.09	0.10	0.10	0.09	0.09	0.10	0.10	0.01	0.0	n.a.
A317	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.09	0.09	0.09	0.10	0.00	0.09	0.10	0.09	0.09	0.09	0.09	0.10	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I7. Summary statistics for 2-methylphenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.24	0.24	0.24	0.24	0.00	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.00	0.0	n.a.
A320	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.24	0.24	0.24	0.25	0.01	0.24	0.25	0.24	0.24	0.24	0.25	0.25	0.01	0.0	n.a.
Storm Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.25	0.24	0.24	0.25	0.01	0.24	0.25	0.25	0.24	0.24	0.25	0.25	0.01	0.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.24	0.24	0.24	0.25	0.01	0.24	0.25	0.24	0.24	0.24	0.25	0.25	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I8. Summary statistics for 2-nitrophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
A320	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
Storm Flow																
E319	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.05	0.04	0.04	0.05	0.01	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
A317	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I9. Summary statistics for 4,6-dinitro-2-methylphenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.97	0.97	0.97	0.97	n.a.	n.a.	n.a.	0.97	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.99	0.99	0.99	0.99	n.a.	n.a.	n.a.	0.99	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.95	0.95	0.94	0.96	0.01	0.95	0.97	0.95	0.94	0.95	0.96	0.96	0.01	0.0	n.a.
A320	1	0.99	0.99	0.99	0.99	n.a.	n.a.	n.a.	0.99	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	1.00	1.00	1.00	1.00	n.a.	n.a.	n.a.	1.00	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.97	0.97	0.94	1.00	0.02	0.97	0.98	0.97	0.95	0.95	0.99	0.99	0.04	0.0	n.a.
Storm Flow																
E319	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.99	0.99	0.99	0.99	n.a.	n.a.	n.a.	0.99	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.96	0.96	0.96	0.96	n.a.	n.a.	n.a.	0.96	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.94	0.94	0.94	0.94	n.a.	n.a.	n.a.	0.94	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.98	0.98	0.96	1.00	0.03	0.98	1.01	0.98	0.96	0.97	0.99	1.00	0.02	0.0	n.a.
A317	1	1.00	1.00	1.00	1.00	n.a.	n.a.	n.a.	1.00	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.95	0.95	0.95	0.95	n.a.	n.a.	n.a.	0.95	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.97	0.97	0.94	1.00	0.02	0.97	0.98	0.96	0.95	0.95	0.99	1.00	0.04	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I10. Summary statistics for 4-chloro-3-methylphenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.24	0.24	0.24	0.24	0.00	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.00	0.0	n.a.
A320	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.24	0.24	0.24	0.25	0.01	0.24	0.25	0.24	0.24	0.24	0.25	0.25	0.01	0.0	n.a.
Storm Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.25	0.24	0.24	0.25	0.01	0.24	0.25	0.25	0.24	0.24	0.25	0.25	0.01	0.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.24	0.24	0.24	0.25	0.01	0.24	0.25	0.24	0.24	0.24	0.25	0.25	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I11. Summary statistics for 4-methylphenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.24	0.24	0.24	0.24	0.00	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.00	0.0	n.a.
A320	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.24	0.24	0.24	0.25	0.01	0.24	0.25	0.24	0.24	0.24	0.25	0.25	0.01	0.0	n.a.
Storm Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.72	0.54	0.24	1.20	0.68	0.66	1.51	0.72	0.34	0.48	0.96	1.10	0.48	50.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.36	0.30	0.24	1.20	0.34	0.35	0.56	0.24	0.24	0.24	0.25	0.54	0.01	12.5	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I12. Summary statistics for 4-nitrophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.49	0.49	0.49	0.49	n.a.	n.a.	n.a.	0.49	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	2	0.48	0.47	0.47	0.48	0.01	0.47	0.48	0.48	0.47	0.47	0.48	0.48	0.01	0.0	n.a.
A320	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A317	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.49	0.49	0.47	0.50	0.01	0.49	0.49	0.49	0.48	0.48	0.50	0.50	0.02	0.0	n.a.
Storm Flow																
E319	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.47	0.47	0.47	0.47	n.a.	n.a.	n.a.	0.47	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.49	0.49	0.48	0.50	0.01	0.49	0.51	0.49	0.48	0.49	0.50	0.50	0.01	0.0	n.a.
A317	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.49	0.49	0.47	0.50	0.01	0.49	0.49	0.48	0.48	0.48	0.50	0.50	0.02	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I13. Summary statistics for pentachlorophenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.75	0.57	0.12	0.97	0.42	0.73	1.10	0.96	0.37	0.75	0.96	0.97	0.21	0.0	0.0
A310	4	0.75	0.57	0.12	0.98	0.42	0.73	1.10	0.96	0.37	0.74	0.97	0.97	0.22	0.0	0.0
0322	5	0.62	0.42	0.12	0.96	0.46	0.60	0.96	0.95	0.12	0.12	0.96	0.96	0.84	0.0	0.0
A320	4	0.76	0.58	0.12	1.00	0.43	0.74	1.12	0.97	0.37	0.74	0.99	0.99	0.24	0.0	0.0
A315	3	0.68	0.48	0.12	0.97	0.48	0.64	1.13	0.94	0.28	0.53	0.96	0.96	0.43	0.0	0.0
A317	4	0.75	0.58	0.13	0.97	0.42	0.73	1.09	0.96	0.38	0.75	0.96	0.97	0.22	0.0	0.0
C317	4	0.75	0.57	0.12	0.98	0.42	0.72	1.09	0.95	0.37	0.74	0.96	0.97	0.22	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.72	0.53	0.12	1.00	0.39	0.71	0.84	0.95	0.12	0.13	0.96	0.98	0.84	0.0	0.0
Storm Flow																
E319	3	0.70	0.49	0.12	1.00	0.50	0.66	1.18	0.98	0.29	0.55	0.99	1.00	0.44	0.0	0.0
A310	1	0.12	0.12	0.12	0.12	n.a.	n.a.	n.a.	0.12	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.69	0.48	0.12	0.98	0.49	0.65	1.15	0.96	0.29	0.54	0.97	0.98	0.43	0.0	0.0
A320	3	0.68	0.48	0.12	0.97	0.49	0.65	1.15	0.96	0.29	0.54	0.97	0.97	0.43	0.0	0.0
A315	4	0.55	0.35	0.12	0.99	0.49	0.52	0.95	0.55	0.12	0.13	0.97	0.98	0.84	0.0	0.0
A317	2	0.62	0.38	0.13	1.10	0.69	0.55	1.41	0.62	0.23	0.37	0.86	1.00	0.49	0.0	0.0
C317	2	0.55	0.34	0.12	0.97	0.60	0.49	1.24	0.55	0.21	0.33	0.76	0.89	0.43	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	18	0.60	0.39	0.12	1.10	0.44	0.59	0.77	0.96	0.12	0.12	0.98	0.99	0.86	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table I14. Summary statistics for phenol concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.39	0.32	0.09	0.49	0.20	0.37	0.55	0.48	0.21	0.38	0.48	0.49	0.10	0.0	n.a.
A310	4	0.39	0.32	0.09	0.49	0.20	0.37	0.55	0.48	0.21	0.38	0.48	0.49	0.10	0.0	n.a.
0322	5	0.32	0.25	0.09	0.48	0.21	0.31	0.48	0.48	0.09	0.09	0.48	0.48	0.39	0.0	n.a.
A320	4	0.41	0.37	0.16	0.52	0.17	0.40	0.55	0.49	0.26	0.40	0.50	0.51	0.10	25.0	n.a.
A315	3	0.35	0.27	0.09	0.49	0.23	0.33	0.56	0.47	0.17	0.28	0.48	0.49	0.20	0.0	n.a.
A317	4	0.39	0.33	0.10	0.49	0.19	0.38	0.55	0.48	0.21	0.39	0.48	0.49	0.10	0.0	n.a.
C317	4	0.38	0.32	0.09	0.49	0.20	0.37	0.54	0.48	0.20	0.38	0.48	0.49	0.11	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	28	0.37	0.31	0.09	0.52	0.18	0.37	0.43	0.48	0.09	0.15	0.48	0.49	0.34	3.6	n.a.
Storm Flow																
E319	3	0.42	0.31	0.09	0.67	0.30	0.40	0.70	0.50	0.17	0.30	0.59	0.64	0.29	33.3	n.a.
A310	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.37	0.28	0.09	0.52	0.24	0.35	0.59	0.49	0.17	0.29	0.51	0.51	0.22	33.3	n.a.
A320	3	0.35	0.28	0.09	0.49	0.23	0.34	0.57	0.48	0.17	0.29	0.49	0.49	0.20	0.0	n.a.
A315	4	0.33	0.27	0.09	0.50	0.20	0.32	0.49	0.37	0.14	0.21	0.49	0.49	0.28	50.0	n.a.
A317	2	0.39	0.26	0.10	0.67	0.40	0.35	0.85	0.39	0.16	0.24	0.53	0.61	0.29	50.0	n.a.
C317	2	0.33	0.24	0.11	0.54	0.30	0.30	0.68	0.33	0.15	0.22	0.43	0.50	0.22	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.35	0.26	0.09	0.67	0.22	0.34	0.43	0.48	0.09	0.09	0.50	0.58	0.41	38.9	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX J

Summary Statistics for Phthalates Measured at Sites in the Green-Duwamish Watershed In 2003

Table J1. Summary statistics for bis(2-ethylhexyl)phthalate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.97	0.85	0.38	1.29	0.51	0.93	1.45	1.23	0.55	0.81	1.26	1.28	0.45	0.0	n.a.
A310	3	0.65	0.60	0.33	0.84	0.28	0.63	0.91	0.78	0.42	0.56	0.81	0.83	0.25	0.0	n.a.
0322	4	5.06	1.82	0.21	15.80	7.27	4.60	11.04	2.11	0.45	0.82	6.35	12.02	5.53	25.0	n.a.
A320	3	2.60	1.99	0.85	5.16	2.26	2.44	4.75	1.80	1.04	1.33	3.48	4.49	2.15	0.0	n.a.
A315	2	0.96	0.91	0.66	1.27	0.43	0.93	1.47	0.96	0.72	0.81	1.12	1.21	0.31	0.0	n.a.
A317	3	0.74	0.71	0.49	0.86	0.21	0.72	0.94	0.86	0.56	0.67	0.86	0.86	0.19	0.0	n.a.
C317	3	1.14	0.94	0.58	2.17	0.89	1.07	1.99	0.67	0.60	0.62	1.42	1.87	0.79	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	1.93	1.05	0.21	15.80	3.37	1.83	3.14	0.86	0.38	0.66	1.29	3.20	0.63	4.8	n.a.
Storm Flow																
E319	3	1.37	1.24	0.89	2.25	0.77	1.31	2.09	0.96	0.91	0.93	1.61	1.99	0.68	0.0	n.a.
A310	1	0.80	0.80	0.80	0.80	n.a.	n.a.	n.a.	0.80	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.81	0.64	0.23	1.39	0.58	0.77	1.36	0.81	0.35	0.52	1.10	1.27	0.58	0.0	n.a.
A320	3	1.34	0.96	0.26	2.14	0.97	1.27	2.26	1.61	0.53	0.93	1.88	2.03	0.94	0.0	n.a.
A315	4	2.89	2.29	0.57	4.11	1.58	2.79	4.19	3.44	1.40	2.66	3.67	3.93	1.01	0.0	n.a.
A317	2	3.51	2.65	1.21	5.80	3.25	3.22	7.28	3.51	1.67	2.36	4.65	5.34	2.30	0.0	n.a.
C317	2	1.47	1.15	0.55	2.38	1.29	1.35	2.97	1.47	0.73	1.01	1.92	2.20	0.91	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	1.82	1.28	0.23	5.80	1.52	1.78	2.41	1.30	0.46	0.80	2.35	3.70	1.55	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table J2. Summary statistics for butylbenzylphthalate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.04	0.03	0.02	0.07	0.02	0.04	0.06	0.03	0.02	0.03	0.05	0.06	0.02	0.0	n.a.
A310	3	0.04	0.04	0.03	0.05	0.01	0.04	0.05	0.03	0.03	0.03	0.04	0.05	0.01	0.0	n.a.
0322	4	0.04	0.04	0.02	0.06	0.02	0.04	0.05	0.04	0.03	0.03	0.05	0.05	0.02	0.0	n.a.
A320	3	0.04	0.03	0.02	0.07	0.02	0.04	0.06	0.03	0.02	0.03	0.05	0.06	0.02	0.0	n.a.
A315	2	0.06	0.05	0.02	0.09	0.05	0.05	0.11	0.06	0.03	0.04	0.07	0.08	0.03	0.0	n.a.
A317	3	0.05	0.04	0.03	0.07	0.02	0.04	0.06	0.04	0.03	0.04	0.05	0.06	0.02	0.0	n.a.
C317	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.04	0.04	0.02	0.09	0.02	0.04	0.05	0.03	0.02	0.03	0.05	0.07	0.03	0.0	n.a.
Storm Flow																
E319	3	0.04	0.04	0.03	0.07	0.02	0.04	0.07	0.04	0.03	0.03	0.05	0.06	0.02	0.0	n.a.
A310	1	0.11	0.11	0.11	0.11	n.a.	n.a.	n.a.	0.11	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.04	0.03	0.01	0.08	0.04	0.04	0.08	0.05	0.02	0.03	0.06	0.07	0.04	0.0	n.a.
A320	3	0.04	0.03	0.01	0.07	0.03	0.04	0.07	0.05	0.02	0.03	0.06	0.07	0.03	0.0	n.a.
A315	4	0.10	0.07	0.03	0.20	0.08	0.09	0.16	0.08	0.04	0.05	0.13	0.17	0.07	0.0	n.a.
A317	2	0.10	0.10	0.08	0.12	0.03	0.10	0.13	0.10	0.08	0.09	0.11	0.12	0.02	0.0	n.a.
C317	2	0.22	0.19	0.10	0.34	0.17	0.21	0.42	0.22	0.13	0.16	0.28	0.32	0.12	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.08	0.06	0.01	0.34	0.08	0.08	0.12	0.07	0.02	0.04	0.10	0.14	0.06	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table J3. Summary statistics for diethylphthalate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.04	0.04	0.03	0.05	0.01	0.04	0.05	0.04	0.03	0.04	0.05	0.05	0.01	0.0	n.a.
A310	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.01	0.0	n.a.
0322	4	0.03	0.03	0.02	0.04	0.01	0.03	0.04	0.03	0.02	0.03	0.04	0.04	0.01	0.0	n.a.
A320	3	0.04	0.04	0.03	0.04	0.01	0.04	0.05	0.04	0.03	0.03	0.04	0.04	0.01	0.0	n.a.
A315	2	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.00	0.0	n.a.
A317	3	0.04	0.04	0.02	0.07	0.02	0.04	0.06	0.03	0.03	0.03	0.05	0.06	0.02	0.0	n.a.
C317	3	0.03	0.03	0.02	0.05	0.01	0.03	0.05	0.03	0.02	0.03	0.04	0.05	0.01	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.04	0.03	0.02	0.07	0.01	0.04	0.04	0.03	0.02	0.03	0.04	0.05	0.01	0.0	n.a.
Storm Flow																
E319	3	0.06	0.04	0.02	0.13	0.06	0.05	0.11	0.03	0.02	0.02	0.08	0.11	0.05	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.07	0.06	0.04	0.11	0.04	0.06	0.11	0.04	0.04	0.04	0.08	0.10	0.04	0.0	n.a.
A320	3	0.04	0.03	0.02	0.08	0.04	0.04	0.08	0.02	0.02	0.02	0.05	0.07	0.03	0.0	n.a.
A315	4	0.05	0.04	0.02	0.11	0.04	0.05	0.08	0.03	0.02	0.02	0.06	0.09	0.03	0.0	n.a.
A317	2	0.09	0.08	0.05	0.13	0.05	0.08	0.15	0.09	0.06	0.07	0.11	0.12	0.04	0.0	n.a.
C317	2	0.10	0.09	0.06	0.13	0.05	0.09	0.15	0.10	0.07	0.08	0.11	0.12	0.03	50.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.06	0.05	0.02	0.13	0.04	0.06	0.08	0.04	0.02	0.02	0.10	0.13	0.08	5.6	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table J4. Summary statistics for dimethylphthalate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.01	50.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.00	25.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table J5. Summary statistics for di-n-butylphthalate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.10	0.10	0.07	0.15	0.04	0.10	0.14	0.09	0.08	0.08	0.12	0.13	0.04	0.0	n.a.
A310	3	0.09	0.09	0.08	0.12	0.02	0.09	0.11	0.08	0.08	0.08	0.10	0.11	0.02	0.0	n.a.
0322	4	0.08	0.08	0.05	0.13	0.03	0.08	0.11	0.08	0.06	0.07	0.09	0.11	0.03	0.0	n.a.
A320	3	0.07	0.07	0.06	0.07	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.00	0.0	n.a.
A315	2	0.15	0.14	0.09	0.22	0.10	0.15	0.27	0.15	0.10	0.12	0.19	0.21	0.07	0.0	n.a.
A317	3	0.06	0.06	0.05	0.07	0.01	0.06	0.07	0.07	0.05	0.06	0.07	0.07	0.01	0.0	n.a.
C317	3	0.07	0.07	0.05	0.09	0.02	0.07	0.09	0.07	0.06	0.06	0.08	0.09	0.02	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.09	0.08	0.05	0.22	0.04	0.09	0.10	0.07	0.05	0.07	0.09	0.13	0.02	0.0	n.a.
Storm Flow																
E319	3	0.08	0.07	0.03	0.16	0.07	0.08	0.15	0.07	0.03	0.05	0.11	0.14	0.07	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.08	0.07	0.03	0.13	0.05	0.08	0.13	0.08	0.04	0.05	0.10	0.12	0.05	0.0	n.a.
A320	3	0.07	0.06	0.02	0.14	0.06	0.07	0.13	0.05	0.03	0.04	0.09	0.12	0.06	0.0	n.a.
A315	4	0.10	0.08	0.04	0.20	0.07	0.10	0.16	0.09	0.05	0.07	0.12	0.17	0.05	0.0	n.a.
A317	2	0.13	0.12	0.08	0.19	0.07	0.13	0.22	0.13	0.09	0.11	0.16	0.17	0.05	0.0	n.a.
C317	2	0.11	0.11	0.11	0.11	0.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.09	0.08	0.02	0.20	0.05	0.09	0.11	0.08	0.03	0.05	0.12	0.16	0.07	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table J6. Summary statistics for di-n-octylphthalate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.08	0.04	0.01	0.15	0.10	0.07	0.20	0.08	0.02	0.05	0.12	0.14	0.07	100.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.34	0.34	0.34	0.34	n.a.	n.a.	n.a.	0.34	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.07	0.02	0.01	0.34	0.12	0.06	0.14	0.01	0.01	0.01	0.05	0.21	0.04	50.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX K

Summary Statistics for Polycyclic Aromatic Hydrocarbons (PAHs) Measured at Sites in the Green-Duwamish Watershed in 2003

Table K1. Summary statistics for 2-methylnaphthalene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A310	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
0322	4	0.09	0.09	0.09	0.10	0.00	0.09	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A320	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A315	2	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
C317	3	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.10	0.10	0.10	0.00	0.0	n.a.
Storm Flow																
E319	3	0.10	0.10	0.09	0.10	0.01	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.01	0.0	n.a.
A310	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.09	0.09	0.09	0.10	0.00	0.09	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A320	3	0.09	0.09	0.09	0.10	0.00	0.09	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A315	4	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A317	2	0.11	0.10	0.10	0.11	0.01	0.10	0.11	0.11	0.10	0.10	0.11	0.11	0.00	0.0	n.a.
C317	2	0.09	0.09	0.09	0.10	0.00	0.09	0.10	0.09	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.10	0.10	0.09	0.11	0.01	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K2. Summary statistics for acenaphthene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.02	0.02	0.01	0.02	0.00	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.00	100.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	33.3	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	19.0	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K3. Summary statistics for acenaphthylene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K4. Summary statistics for anthracene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
Storm Flow																
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
All	18	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K5. Summary statistics for benzo(a)anthracene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A310	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
0322	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.03	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
C317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
Storm Flow																
E319	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A315	4	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	2	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
C317	2	0.02	0.02	0.02	0.02	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K6. Summary statistics for benzo(a)pyrene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	33.3	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	4.8	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	25.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	16.7	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K7. Summary statistics for benzo(b)fluoranthene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.01	33.3	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	4.8	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	25.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	50.0	n.a.
C317	2	0.02	0.02	0.02	0.03	0.01	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.01	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	22.2	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K8. Summary statistics for benzo(g,h,i)perylene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A310	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
0322	4	0.08	0.08	0.04	0.10	0.03	0.08	0.10	0.10	0.06	0.08	0.10	0.10	0.01	0.0	n.a.
A320	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A315	2	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
C317	3	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.09	0.09	0.04	0.10	0.01	0.09	0.10	0.10	0.09	0.10	0.10	0.10	0.00	0.0	n.a.
Storm Flow																
E319	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A320	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A315	4	0.07	0.07	0.04	0.10	0.03	0.07	0.10	0.07	0.04	0.05	0.10	0.10	0.05	0.0	n.a.
A317	2	0.08	0.07	0.05	0.11	0.04	0.08	0.13	0.08	0.06	0.07	0.10	0.10	0.03	0.0	n.a.
C317	2	0.07	0.06	0.04	0.10	0.04	0.06	0.12	0.07	0.05	0.05	0.08	0.09	0.03	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.07	0.07	0.04	0.11	0.03	0.07	0.09	0.10	0.04	0.04	0.10	0.10	0.06	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K9. Summary statistics for benzo(k)fluoranthene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	33.3	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	4.8	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	25.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.02	0.02	0.01	0.03	0.01	0.02	0.04	0.02	0.01	0.02	0.03	0.03	0.01	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	16.7	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K10. Summary statistics for chrysene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A310	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
0322	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.03	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
C317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
Storm Flow																
E319	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A315	4	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	2	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.00	50.0	n.a.
C317	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.01	16.7	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K11. Summary statistics for dibenzo(a,h)anthracene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A310	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
0322	4	0.08	0.08	0.04	0.10	0.03	0.08	0.10	0.10	0.06	0.08	0.10	0.10	0.01	0.0	n.a.
A320	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A315	2	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
C317	3	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.09	0.09	0.04	0.10	0.01	0.09	0.10	0.10	0.09	0.10	0.10	0.10	0.00	0.0	n.a.
Storm Flow																
E319	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A320	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A315	4	0.07	0.07	0.04	0.10	0.03	0.07	0.10	0.07	0.04	0.05	0.10	0.10	0.05	0.0	n.a.
A317	2	0.08	0.07	0.05	0.11	0.04	0.08	0.13	0.08	0.06	0.07	0.10	0.10	0.03	0.0	n.a.
C317	2	0.07	0.06	0.04	0.10	0.04	0.06	0.12	0.07	0.05	0.05	0.08	0.09	0.03	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.07	0.07	0.04	0.11	0.03	0.07	0.09	0.10	0.04	0.04	0.10	0.10	0.06	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K12. Summary statistics for fluoranthene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.02	0.01	0.01	0.03	0.01	0.02	0.03	0.01	0.01	0.01	0.02	0.03	0.01	33.3	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	4.8	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.00	50.0	n.a.
A317	2	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.00	100.0	n.a.
C317	2	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.03	0.00	38.9	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K13. Summary statistics for fluorene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K14. Summary statistics for indeno(1,2,3-cd)pyrene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A310	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
0322	4	0.08	0.08	0.04	0.10	0.03	0.08	0.10	0.10	0.06	0.08	0.10	0.10	0.01	0.0	n.a.
A320	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
A315	2	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
A317	3	0.10	0.10	0.10	0.10	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.0	n.a.
C317	3	0.10	0.10	0.09	0.10	0.00	0.10	0.10	0.10	0.09	0.09	0.10	0.10	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.09	0.09	0.04	0.10	0.01	0.09	0.10	0.10	0.09	0.10	0.10	0.10	0.00	0.0	n.a.
Storm Flow																
E319	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A320	3	0.08	0.07	0.04	0.10	0.03	0.08	0.11	0.10	0.05	0.07	0.10	0.10	0.03	0.0	n.a.
A315	4	0.07	0.07	0.04	0.10	0.03	0.07	0.10	0.07	0.04	0.05	0.10	0.10	0.05	0.0	n.a.
A317	2	0.08	0.07	0.05	0.11	0.04	0.08	0.13	0.08	0.06	0.07	0.10	0.10	0.03	0.0	n.a.
C317	2	0.07	0.06	0.04	0.10	0.04	0.06	0.12	0.07	0.05	0.05	0.08	0.09	0.03	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.07	0.07	0.04	0.11	0.03	0.07	0.09	0.10	0.04	0.04	0.10	0.10	0.06	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K15. Summary statistics for naphthalene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A310	3	0.03	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	33.3	n.a.
0322	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	33.3	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	33.3	n.a.
C317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	33.3	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.00	19.0	n.a.
Storm Flow																
E319	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A315	4	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	2	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
C317	2	0.02	0.02	0.02	0.02	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K16. Summary statistics for phenanthrene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	33.3	n.a.
C317	3	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.00	66.7	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	14.3	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	50.0	n.a.
A317	2	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	50.0	n.a.
C317	2	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.00	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.04	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.00	33.3	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table K17. Summary statistics for pyrene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.02	0.01	0.01	0.03	0.01	0.02	0.03	0.01	0.01	0.01	0.02	0.03	0.01	33.3	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	4.8	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.00	25.0	n.a.
A317	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	100.0	n.a.
C317	2	0.05	0.05	0.04	0.06	0.01	0.05	0.07	0.05	0.04	0.04	0.05	0.06	0.01	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.02	0.01	0.01	0.06	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.03	0.00	33.3	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX L

Summary Statistics for Polychlorinated Biphenyls (PCBs) Measured at Sites in the Green-Duwamish Watershed in 2003

Table L1. Summary statistics for aroclor 1016 concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table L2. Summary statistics for aroclor 1221 concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table L3. Summary statistics for aroclor 1232 concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table L4. Summary statistics for aroclor 1242 concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table L5. Summary statistics for aroclor 1248 concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table L6. Summary statistics for aroclor 1254 concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table L7. Summary statistics for aroclor 1260 concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX M

Summary Statistics for Miscellaneous Semivolatile Organics Measured at Sites In the Green-Duwamish Watershed in 2003

Table M1. Summary statistics for 2,4-dinitrotoluene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.05	0.04	0.04	0.05	0.01	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
A317	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M2. Summary statistics for 2,6-dinitrotoluene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.05	0.04	0.04	0.05	0.01	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	n.a.
A317	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.04	0.04	0.04	0.05	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M3. Summary statistics for 3,5,5-trimethyl-2-cyclohexene-1-one concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M4. Summary statistics for 2-nitroaniline concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.10	0.09	0.09	0.10	0.01	0.09	0.10	0.10	0.09	0.09	0.10	0.10	0.01	0.0	n.a.
A317	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.09	0.09	0.09	0.10	0.00	0.09	0.10	0.09	0.09	0.09	0.09	0.10	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M5. Summary statistics for 3-nitroaniline concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.47	0.47	0.47	0.47	n.a.	n.a.	n.a.	0.47	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.47	0.47	0.47	0.47	n.a.	n.a.	n.a.	0.47	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.47	0.47	0.47	0.47	n.a.	n.a.	n.a.	0.47	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.49	0.49	0.48	0.50	0.01	0.49	0.51	0.49	0.48	0.49	0.50	0.50	0.01	0.0	n.a.
A317	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.49	0.49	0.47	0.50	0.01	0.49	0.49	0.48	0.48	0.48	0.50	0.50	0.02	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M6. Summary statistics for 4-nitroaniline concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.47	0.47	0.47	0.47	n.a.	n.a.	n.a.	0.47	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.47	0.47	0.47	0.47	n.a.	n.a.	n.a.	0.47	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.47	0.47	0.47	0.47	n.a.	n.a.	n.a.	0.47	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.49	0.49	0.48	0.50	0.01	0.49	0.51	0.49	0.48	0.49	0.50	0.50	0.01	0.0	n.a.
A317	1	0.50	0.50	0.50	0.50	n.a.	n.a.	n.a.	0.50	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.48	0.48	0.48	0.48	n.a.	n.a.	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.49	0.49	0.47	0.50	0.01	0.49	0.49	0.48	0.48	0.48	0.50	0.50	0.02	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M7. Summary statistics for caffeine concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.01	0.02	0.01	0.02	0.03	0.02	0.01	0.02	0.02	0.02	0.01	0.0	n.a.
A310	3	0.02	0.02	0.01	0.03	0.01	0.02	0.03	0.02	0.01	0.02	0.02	0.02	0.01	0.0	n.a.
0322	4	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.01	25.0	n.a.
A320	3	0.02	0.02	0.01	0.03	0.01	0.02	0.03	0.02	0.01	0.02	0.02	0.02	0.01	0.0	n.a.
A315	2	0.02	0.02	0.01	0.02	0.01	0.02	0.03	0.02	0.01	0.01	0.02	0.02	0.01	0.0	n.a.
A317	3	0.05	0.04	0.02	0.11	0.05	0.05	0.10	0.03	0.02	0.03	0.07	0.09	0.04	66.7	n.a.
C317	3	0.05	0.04	0.02	0.10	0.04	0.05	0.09	0.03	0.02	0.03	0.06	0.08	0.04	66.7	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.03	0.02	0.01	0.11	0.03	0.03	0.04	0.02	0.01	0.01	0.03	0.03	0.02	23.8	n.a.
Storm Flow																
E319	3	0.02	0.02	0.01	0.03	0.01	0.02	0.03	0.03	0.01	0.02	0.03	0.03	0.01	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.04	0.03	0.02	0.06	0.02	0.04	0.06	0.04	0.02	0.03	0.05	0.05	0.02	100.0	n.a.
A320	3	0.02	0.02	0.01	0.03	0.01	0.02	0.03	0.02	0.01	0.02	0.03	0.03	0.01	66.7	n.a.
A315	4	0.13	0.11	0.05	0.25	0.09	0.12	0.20	0.11	0.06	0.08	0.16	0.21	0.08	100.0	n.a.
A317	2	0.13	0.13	0.13	0.14	0.01	0.13	0.14	0.13	0.13	0.13	0.14	0.14	0.01	100.0	n.a.
C317	2	0.58	0.58	0.52	0.64	0.09	0.57	0.68	0.58	0.53	0.55	0.61	0.63	0.06	100.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.12	0.05	0.01	0.64	0.18	0.12	0.19	0.04	0.01	0.02	0.13	0.33	0.10	77.8	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M8. Summary statistics for carbazole concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A310	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
0322	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.03	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
C317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
Storm Flow																
E319	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A315	4	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	2	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.
C317	2	0.02	0.02	0.02	0.02	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M9. Summary statistics for dibenzofuran concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
0322	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
Storm Flow																
E319	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A315	4	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
C317	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	18	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M10. Summary statistics for nitrobenzene concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Storm Flow																
E319	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.
A317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.a.	n.a.	n.a.	0.01	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M11. Summary statistics for n-nitroso-di-methylamine concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
A317	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M12. Summary statistics for n-nitroso-di-n-propylamine concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.10	0.09	0.09	0.10	0.01	0.09	0.10	0.10	0.09	0.09	0.10	0.10	0.01	0.0	n.a.
A317	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.09	0.09	0.09	0.09	n.a.	n.a.	n.a.	0.09	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.09	0.09	0.09	0.10	0.00	0.09	0.10	0.09	0.09	0.09	0.09	0.10	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M13. Summary statistics for n-nitrosodiphenylamine concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
0322	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A315	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
C317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
Storm Flow																
E319	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A310	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A320	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
A315	2	0.25	0.24	0.24	0.25	0.01	0.24	0.25	0.25	0.24	0.24	0.25	0.25	0.01	0.0	n.a.
A317	1	0.25	0.25	0.25	0.25	n.a.	n.a.	n.a.	0.25	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.24	0.24	0.24	0.24	n.a.	n.a.	n.a.	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	8	0.24	0.24	0.24	0.25	0.01	0.24	0.25	0.24	0.24	0.24	0.25	0.25	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table M14. Summary statistics for phorate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.04	0.04	0.03	0.06	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.05	0.01	0.0	n.a.
A310	4	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.06	0.01	0.0	n.a.
0322	5	0.04	0.04	0.03	0.06	0.01	0.04	0.05	0.03	0.03	0.03	0.03	0.05	0.00	0.0	n.a.
A320	4	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.06	0.01	0.0	n.a.
A315	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
A317	4	0.04	0.04	0.03	0.06	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.05	0.01	0.0	n.a.
C317	4	0.04	0.04	0.03	0.06	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.05	0.01	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	28	0.04	0.04	0.03	0.07	0.01	0.04	0.04	0.03	0.03	0.03	0.03	0.06	0.00	0.0	n.a.
Storm Flow																
E319	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
A310	1	0.03	0.03	0.03	0.03	n.a.	n.a.	n.a.	0.03	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
A320	4	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
A315	5	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
A317	2	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
C317	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.a.
All	21	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX N

Summary Statistics for Chlorinated and Organophosphorus Pesticides Measured at Sites in the Green-Duwamish Watershed in 2003

Table N1. Summary statistics for 4,4'-DDD concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N2. Summary statistics for 4,4'-DDE concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N3. Summary statistics for 4,4'-DDT concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N4. Summary statistics for aldrin concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N5. Summary statistics for alpha-BHC concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	n.a.
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	n.a.
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	n.a.
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	n.a.
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	n.a.
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	n.a.
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	n.a.
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N6. Summary statistics for beta-BHC concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	n.a.
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	n.a.
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	n.a.
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	n.a.
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	n.a.
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	n.a.
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	n.a.
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N7. Summary statistics for delta-BHC concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	n.a.
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	n.a.
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	n.a.
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	n.a.
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	n.a.
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	n.a.
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	n.a.
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N8. Summary statistics for gamma-BHC concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0	0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0	0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0	0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0	0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0	0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0	0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0	0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0	0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0	0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0	0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0	0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0	0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0	0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0	0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0	0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N9. Summary statistics for chlordane concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A310	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	2	0.0200	0.0200	0.0200	0.0200	0.0000	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0000	0.0	0.0
A320	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A315	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A317	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
C317	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	8	0.0200	0.0200	0.0200	0.0200	0.0000	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0000	0.0	0.0
Storm Flow																
E319	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A310	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A320	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
A315	2	0.0200	0.0200	0.0200	0.0200	0.0000	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0000	0.0	0.0
A317	2	0.0200	0.0200	0.0200	0.0200	0.0000	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0000	0.0	0.0
C317	1	0.0200	0.0200	0.0200	0.0200	n.a.	n.a.	n.a.	0.0200	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	9	0.0200	0.0200	0.0200	0.0200	0.0000	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0000	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N10. Summary statistics for dieldrin concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N11. Summary statistics for endosulfan I concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N12. Summary statistics for endosulfan II concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N13. Summary statistics for endosulfan sulfate concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	n.a.
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	n.a.
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	n.a.
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	n.a.
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	n.a.
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	n.a.
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	n.a.
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N14. Summary statistics for endrin concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N15. Summary statistics for endrin aldehyde concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	n.a.
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	n.a.
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	n.a.
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	n.a.
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	n.a.
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	n.a.
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	n.a.
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	n.a.
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N16. Summary statistics for Heptachlor concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N17. Summary statistics for Heptachlor Epoxide concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A310	4	0.0049	0.0049	0.0047	0.0050	0.0001	0.0049	0.0050	0.0049	0.0048	0.0049	0.0049	0.0050	0.0001	0.0	0.0
0322	5	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0047	0.0049	0.0049	0.0002	0.0	0.0
A315	3	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0049	0.0001	0.0	0.0
A317	4	0.0049	0.0048	0.0047	0.0050	0.0001	0.0048	0.0050	0.0049	0.0047	0.0048	0.0049	0.0050	0.0002	0.0	0.0
C317	4	0.0049	0.0048	0.0048	0.0050	0.0001	0.0048	0.0049	0.0048	0.0048	0.0048	0.0049	0.0049	0.0001	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.0048	0.0048	0.0047	0.0050	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0049	0.0050	0.0001	0.0	0.0
Storm Flow																
E319	3	0.0049	0.0049	0.0048	0.0049	0.0001	0.0049	0.0049	0.0049	0.0048	0.0049	0.0049	0.0049	0.0000	0.0	0.0
A310	1	0.0050	0.0050	0.0050	0.0050	n.a.	n.a.	n.a.	0.0050	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.0049	0.0049	0.0048	0.0050	0.0001	0.0049	0.0050	0.0048	0.0048	0.0048	0.0049	0.0050	0.0001	0.0	0.0
A320	4	0.0048	0.0048	0.0047	0.0049	0.0001	0.0048	0.0049	0.0048	0.0047	0.0048	0.0048	0.0049	0.0000	0.0	0.0
A315	5	0.0050	0.0050	0.0048	0.0056	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0049	0.0053	0.0000	0.0	0.0
A317	3	0.0051	0.0051	0.0049	0.0053	0.0002	0.0051	0.0053	0.0050	0.0049	0.0050	0.0052	0.0052	0.0002	0.0	0.0
C317	3	0.0050	0.0050	0.0048	0.0053	0.0003	0.0050	0.0053	0.0049	0.0048	0.0049	0.0051	0.0052	0.0003	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.0049	0.0049	0.0047	0.0056	0.0002	0.0049	0.0050	0.0049	0.0048	0.0048	0.0050	0.0053	0.0002	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N18. Summary statistics for camphechlor (toxaphene) concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
A310	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
0322	5	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
A315	3	0.05	0.05	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	0.0
C317	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0.0	0.0
Storm Flow																
E319	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A320	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A315	5	0.05	0.04	0.04	0.06	0.01	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.01	0.0	0.0
C317	3	0.05	0.05	0.04	0.05	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.05	0.05	0.04	0.06	0.01	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N19. Summary statistics for chlorpyriphos concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.06	0.01	0.0	0.0
A310	4	0.04	0.04	0.03	0.07	0.02	0.04	0.06	0.03	0.03	0.03	0.04	0.06	0.01	0.0	0.0
0322	5	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.03	0.03	0.03	0.03	0.05	0.00	0.0	0.0
A320	4	0.04	0.04	0.03	0.07	0.02	0.04	0.06	0.03	0.03	0.03	0.04	0.06	0.01	0.0	0.0
A315	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	0.0
A317	4	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.06	0.01	0.0	0.0
C317	4	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.03	0.03	0.03	0.04	0.06	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.04	0.04	0.03	0.07	0.01	0.04	0.04	0.03	0.03	0.03	0.03	0.07	0.00	0.0	0.0
Storm Flow																
E319	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	0.0
A310	1	0.03	0.03	0.03	0.03	n.a.	n.a.	n.a.	0.03	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	0.0
A320	4	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	0.0
A315	5	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	0.0
A317	2	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.00	0.0	0.0
C317	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N20. Summary statistics for diazinon concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.04	0.08	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	n.a.
A310	4	0.05	0.05	0.04	0.08	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	n.a.
0322	5	0.05	0.05	0.04	0.08	0.02	0.05	0.06	0.04	0.04	0.04	0.04	0.07	0.00	0.0	n.a.
A320	4	0.05	0.05	0.04	0.08	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	n.a.
A315	3	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
A317	4	0.05	0.05	0.04	0.08	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	n.a.
C317	4	0.05	0.05	0.04	0.08	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.08	0.02	0.05	0.06	0.04	0.04	0.04	0.04	0.08	0.00	0.0	n.a.
Storm Flow																
E319	3	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
A310	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
A320	4	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
A315	5	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
A317	2	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
C317	3	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.04	0.04	0.04	0.05	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N21. Summary statistics for disulfoton concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.03	0.03	0.02	0.05	0.01	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.01	0.0	n.a.
A310	4	0.03	0.03	0.02	0.05	0.01	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.01	0.0	n.a.
0322	5	0.03	0.03	0.02	0.05	0.01	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.01	0.0	n.a.
A320	4	0.03	0.03	0.02	0.05	0.01	0.03	0.04	0.03	0.02	0.02	0.03	0.05	0.01	0.0	n.a.
A315	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A317	4	0.03	0.03	0.02	0.05	0.01	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.01	0.0	n.a.
C317	4	0.03	0.03	0.02	0.05	0.01	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.01	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.03	0.03	0.02	0.05	0.01	0.03	0.03	0.03	0.02	0.02	0.03	0.05	0.01	0.0	n.a.
Storm Flow																
E319	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
A320	4	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.01	0.0	n.a.
A315	5	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.01	0.0	n.a.
A317	2	0.02	0.02	0.02	0.03	0.01	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.00	0.0	n.a.
C317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N22. Summary statistics for malathion concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.06	0.05	0.04	0.09	0.02	0.05	0.08	0.05	0.04	0.04	0.06	0.08	0.01	0.0	0.0
A310	4	0.06	0.05	0.04	0.09	0.03	0.05	0.08	0.05	0.04	0.04	0.06	0.08	0.01	0.0	0.0
0322	5	0.05	0.05	0.04	0.09	0.02	0.05	0.07	0.05	0.04	0.04	0.05	0.07	0.01	0.0	0.0
A320	4	0.06	0.05	0.04	0.09	0.02	0.06	0.08	0.05	0.04	0.04	0.06	0.08	0.02	0.0	0.0
A315	3	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A317	4	0.06	0.05	0.04	0.09	0.02	0.05	0.08	0.05	0.04	0.04	0.06	0.08	0.01	0.0	0.0
C317	4	0.06	0.05	0.04	0.09	0.02	0.05	0.08	0.05	0.04	0.04	0.06	0.08	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.09	0.02	0.05	0.06	0.05	0.04	0.04	0.05	0.09	0.01	0.0	0.0
Storm Flow																
E319	3	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A310	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A320	4	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0.0	0.0
A315	5	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0.0	0.0
A317	2	0.05	0.05	0.04	0.05	0.01	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0
C317	3	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.04	0.05	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N23. Summary statistics for methoxychlor concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
A310	4	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.00	0.0	0.0
0322	5	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
A320	4	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
A315	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
A317	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
C317	4	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	0.0
Storm Flow																
E319	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
A310	1	0.02	0.02	0.02	0.02	n.a.	n.a.	n.a.	0.02	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
A320	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
A315	5	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.00	0.0	0.0
A317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
C317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	22	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N24. Summary statistics for methyl parathion concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.04	0.04	0.03	0.07	0.02	0.04	0.06	0.04	0.03	0.03	0.04	0.06	0.01	0.0	n.a.
A310	4	0.04	0.04	0.03	0.07	0.02	0.04	0.06	0.03	0.03	0.03	0.04	0.06	0.01	0.0	n.a.
0322	5	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.04	0.03	0.03	0.04	0.06	0.01	0.0	n.a.
A320	4	0.04	0.04	0.03	0.07	0.02	0.04	0.06	0.04	0.03	0.03	0.05	0.06	0.01	0.0	n.a.
A315	3	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
A317	4	0.04	0.04	0.03	0.07	0.02	0.04	0.06	0.03	0.03	0.03	0.04	0.06	0.01	0.0	n.a.
C317	4	0.04	0.04	0.03	0.07	0.02	0.04	0.06	0.03	0.03	0.03	0.04	0.06	0.01	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.04	0.04	0.03	0.07	0.02	0.04	0.05	0.04	0.03	0.03	0.04	0.07	0.01	0.0	n.a.
Storm Flow																
E319	3	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.00	0.0	n.a.
A310	1	0.03	0.03	0.03	0.03	n.a.	n.a.	n.a.	0.03	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
0322	3	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.00	0.0	n.a.
A320	4	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.01	0.0	n.a.
A315	5	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.01	0.0	n.a.
A317	2	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.00	0.0	n.a.
C317	3	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.01	0.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table N25. Summary statistics for parathion concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	4	0.05	0.05	0.04	0.09	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	0.0
A310	4	0.05	0.05	0.04	0.09	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	0.0
0322	5	0.05	0.05	0.04	0.09	0.02	0.05	0.07	0.04	0.04	0.04	0.04	0.07	0.00	0.0	0.0
A320	4	0.05	0.05	0.04	0.09	0.02	0.05	0.07	0.04	0.04	0.04	0.06	0.08	0.01	0.0	0.0
A315	3	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	0.0
A317	4	0.05	0.05	0.04	0.09	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	0.0
C317	4	0.05	0.05	0.04	0.09	0.02	0.05	0.07	0.04	0.04	0.04	0.05	0.07	0.01	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	28	0.05	0.05	0.04	0.09	0.02	0.05	0.06	0.04	0.04	0.04	0.04	0.09	0.00	0.0	0.0
Storm Flow																
E319	3	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.00	0.0	0.0
A310	1	0.04	0.04	0.04	0.04	n.a.	n.a.	n.a.	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	0.0
0322	3	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	0.0
A320	4	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	0.0
A315	5	0.04	0.04	0.04	0.05	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	0.0
A317	2	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.00	0.0	0.0
C317	3	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.0	0.0
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.04	0.04	0.04	0.05	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.00	0.0	0.0

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX O

Summary Statistics for Chlorinated Herbicides Measured at Sites in the Green-Duwamish Watershed in 2003

Table O1. Summary statistics for atrazine concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A310	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
0322	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A320	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A315	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
A317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
C317	3	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	20	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.0	n.a.
Storm Flow																
E319	2	0.07	0.07	0.05	0.10	0.04	0.07	0.12	0.07	0.05	0.06	0.09	0.09	0.03	0.0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.08	0.08	0.06	0.10	0.03	0.08	0.11	0.08	0.07	0.07	0.09	0.09	0.02	50.0	n.a.
A320	2	0.07	0.07	0.05	0.10	0.03	0.07	0.11	0.07	0.05	0.06	0.08	0.09	0.02	0.0	n.a.
A315	2	0.07	0.07	0.05	0.10	0.03	0.07	0.11	0.07	0.05	0.06	0.08	0.09	0.02	0.0	n.a.
A317	1	0.05	0.05	0.05	0.05	n.a.	n.a.	n.a.	0.05	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
C317	1	0.10	0.10	0.10	0.10	n.a.	n.a.	n.a.	0.10	n.a.	n.a.	n.a.	n.a.	n.a.	0.0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	10	0.08	0.07	0.05	0.10	0.02	0.07	0.09	0.08	0.05	0.05	0.10	0.10	0.05	10.0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O2. Summary statistics for 2,2-dichloropropionic acid concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.04	0.04	0.02	0.05	0.02	0.04	0.05	0.05	0.03	0.03	0.05	0.05	0.01	0	n.a.
A310	3	0.04	0.04	0.02	0.05	0.02	0.04	0.05	0.05	0.03	0.04	0.05	0.05	0.01	0	n.a.
0322	4	0.04	0.04	0.02	0.05	0.01	0.04	0.05	0.04	0.03	0.04	0.05	0.05	0.01	0	n.a.
A320	3	0.04	0.04	0.02	0.05	0.02	0.04	0.05	0.05	0.03	0.03	0.05	0.05	0.01	0	n.a.
A315	2	0.04	0.03	0.02	0.05	0.02	0.03	0.06	0.04	0.02	0.03	0.04	0.05	0.01	0	n.a.
A317	3	0.04	0.04	0.02	0.05	0.02	0.04	0.06	0.05	0.03	0.03	0.05	0.05	0.01	0	n.a.
C317	3	0.04	0.04	0.02	0.05	0.02	0.04	0.05	0.05	0.03	0.03	0.05	0.05	0.01	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.04	0.04	0.02	0.05	0.01	0.04	0.04	0.05	0.02	0.02	0.05	0.05	0.03	0	n.a.
Storm Flow																
E319	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A320	3	0.03	0.03	0.02	0.04	0.01	0.03	0.04	0.02	0.02	0.02	0.03	0.04	0.01	0	n.a.
A315	3	0.03	0.03	0.02	0.04	0.01	0.03	0.04	0.02	0.02	0.02	0.03	0.04	0.01	0	n.a.
A317	2	0.04	0.04	0.03	0.05	0.02	0.04	0.06	0.04	0.03	0.03	0.04	0.05	0.01	0	n.a.
C317	1	0.02	0.02	0.02	0.02	n.d.	n.d.	n.d.	0.02	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.03	0.03	0.02	0.05	0.01	0.03	0.03	0.02	0.02	0.02	0.03	0.04	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O3. Summary statistics for 2,4-D concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A310	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
0322	4	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A315	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A317	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
C317	3	0.12	0.04	0.02	0.32	0.17	0.10	0.28	0.02	0.02	0.02	0.17	0.26	0.15	33	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.03	0.02	0.01	0.32	0.07	0.03	0.05	0.02	0.02	0.02	0.02	0.02	0.00	5	n.a.
Storm Flow																
E319	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A320	3	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
A315	3	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
A317	2	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.00	0	n.a.
C317	1	0.02	0.02	0.02	0.02	n.d.	n.d.	n.d.	0.02	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.02	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O4. Summary statistics for 2,4-DB concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A310	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
0322	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A315	2	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
C317	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0	n.a.
Storm Flow																
E319	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A320	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.00	0	n.a.
A315	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0	n.a.
A317	2	0.03	0.02	0.02	0.03	0.01	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.01	0	n.a.
C317	1	0.03	0.03	0.03	0.03	n.d.	n.d.	n.d.	0.03	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O5. Summary statistics for 2,4,5-T concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.03	0.03	0.02	0.04	0.02	0.03	0.05	0.04	0.02	0.03	0.04	0.04	0.01	0	n.a.
A310	3	0.04	0.03	0.02	0.04	0.02	0.03	0.05	0.04	0.02	0.03	0.04	0.04	0.01	0	n.a.
0322	4	0.04	0.03	0.02	0.04	0.01	0.04	0.05	0.04	0.02	0.03	0.04	0.04	0.01	0	n.a.
A320	3	0.03	0.03	0.02	0.04	0.02	0.03	0.05	0.04	0.02	0.03	0.04	0.04	0.01	0	n.a.
A315	2	0.03	0.03	0.02	0.04	0.02	0.03	0.05	0.03	0.02	0.02	0.04	0.04	0.01	0	n.a.
A317	3	0.04	0.03	0.02	0.05	0.02	0.03	0.05	0.04	0.02	0.03	0.05	0.05	0.02	0	n.a.
C317	3	0.03	0.03	0.02	0.04	0.02	0.03	0.05	0.04	0.02	0.03	0.04	0.04	0.01	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.03	0.03	0.02	0.05	0.01	0.03	0.04	0.04	0.02	0.02	0.04	0.04	0.03	0	n.a.
Storm Flow																
E319	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A320	3	0.02	0.02	0.02	0.04	0.01	0.02	0.04	0.02	0.02	0.02	0.03	0.04	0.01	0	n.a.
A315	3	0.03	0.02	0.02	0.04	0.01	0.02	0.04	0.02	0.02	0.02	0.03	0.04	0.01	0	n.a.
A317	2	0.03	0.03	0.02	0.04	0.01	0.03	0.05	0.03	0.02	0.03	0.04	0.04	0.01	0	n.a.
C317	1	0.02	0.02	0.02	0.02	n.d.	n.d.	n.d.	0.02	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.02	0.02	0.02	0.04	0.01	0.02	0.03	0.02	0.02	0.02	0.02	0.04	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O6. Summary statistics for dicamba concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.04	0.04	0.03	0.04	0.01	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.01	0	n.a.
A310	3	0.04	0.04	0.03	0.04	0.01	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.00	0	n.a.
0322	4	0.04	0.03	0.03	0.04	0.01	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.01	0	n.a.
A320	3	0.04	0.04	0.03	0.04	0.01	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.01	0	n.a.
A315	2	0.04	0.04	0.03	0.04	0.01	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.00	0	n.a.
A317	3	0.04	0.04	0.03	0.04	0.01	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.01	0	n.a.
C317	3	0.04	0.04	0.03	0.04	0.01	0.04	0.04	0.04	0.03	0.03	0.04	0.04	0.01	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.04	0.04	0.03	0.04	0.00	0.04	0.04	0.04	0.03	0.03	0.04	0.04	0.01	0	n.a.
Storm Flow																
E319	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A320	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
A315	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A317	2	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0	n.a.
C317	1	0.03	0.03	0.03	0.03	n.d.	n.d.	n.d.	0.03	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O7. Summary statistics for dichlorprop concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A310	3	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
0322	4	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A320	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A315	2	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
A317	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0	n.a.
C317	3	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.02	0.02	0.02	0.03	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.00	0	n.a.
Storm Flow																
E319	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A320	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.00	0	n.a.
A315	3	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0	n.a.
A317	2	0.03	0.02	0.02	0.03	0.01	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.01	0	n.a.
C317	1	0.03	0.03	0.03	0.03	n.d.	n.d.	n.d.	0.03	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.02	0.02	0.02	0.03	0.00	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O8. Summary statistics for dinoseb concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
A310	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
0322	4	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.00	0	n.a.
A320	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
A315	2	0.04	0.04	0.03	0.04	0.01	0.04	0.05	0.04	0.03	0.03	0.04	0.04	0.01	0	n.a.
A317	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
C317	3	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
Storm Flow																
E319	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.00	0	n.a.
A320	3	0.04	0.04	0.03	0.05	0.01	0.04	0.05	0.04	0.03	0.04	0.05	0.05	0.01	0	n.a.
A315	3	0.04	0.04	0.03	0.05	0.01	0.04	0.05	0.05	0.03	0.04	0.05	0.05	0.01	0	n.a.
A317	2	0.04	0.04	0.03	0.05	0.02	0.04	0.06	0.04	0.03	0.04	0.05	0.05	0.01	0	n.a.
C317	1	0.04	0.04	0.04	0.04	n.d.	n.d.	n.d.	0.04	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.04	0.04	0.03	0.05	0.01	0.04	0.05	0.05	0.03	0.04	0.05	0.05	0.01	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O9. Summary statistics for MCPA concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.04	0.03	0.03	0.04	0.01	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.00	0	n.a.
A310	3	0.04	0.04	0.03	0.04	0.00	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.00	0	n.a.
0322	4	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.01	0	n.a.
A320	3	0.04	0.04	0.03	0.04	0.01	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.01	0	n.a.
A315	2	0.03	0.03	0.03	0.04	0.01	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.00	0	n.a.
A317	3	0.04	0.04	0.03	0.04	0.01	0.04	0.04	0.04	0.03	0.03	0.04	0.04	0.01	0	n.a.
C317	3	0.04	0.03	0.03	0.04	0.01	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.00	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.03	0.03	0.03	0.04	0.00	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.01	0	n.a.
Storm Flow																
E319	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A320	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A315	3	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0	n.a.
A317	2	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0	n.a.
C317	1	0.03	0.03	0.03	0.03	n.d.	n.d.	n.d.	0.03	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.03	0.03	0.03	0.04	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O10. Summary statistics for MCPP concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.02	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
A310	3	0.02	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
0322	4	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.00	0	n.a.
A320	3	0.02	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
A315	2	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.00	0	n.a.
A317	3	0.02	0.02	0.01	0.02	0.00	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
C317	3	0.02	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.00	0	n.a.
Storm Flow																
E319	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0	n.a.
A320	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0	n.a.
A315	3	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0	n.a.
A317	2	0.01	0.01	0.01	0.02	0.00	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.00	0	n.a.
C317	1	0.01	0.01	0.01	0.01	n.d.	n.d.	n.d.	0.01	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

Table O11. Summary statistics for silvex concentrations (µg/L) at sites in the Green-Duwamish watershed in 2003.

Site Locator	Count	Arithmatic Mean	Geometric Mean	Minimum Value	Maximum Value	Standard Deviation	Lower 95% C.I.	Upper 95% C.I.	Median	10th Percentile	25th Percentile	75th Percentile	90th Percentile	Quartile Range	Percent Detected[a]	Percent Exceeding Standard[b]
Base Flow																
E319	3	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0	n.a.
A310	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.00	0	n.a.
0322	4	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.01	0	n.a.
A320	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0	n.a.
A315	2	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0	n.a.
A317	3	0.05	0.05	0.04	0.05	0.00	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0	n.a.
C317	3	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.00	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	21	0.05	0.04	0.04	0.05	0.00	0.04	0.05	0.05	0.04	0.04	0.05	0.05	0.01	0	n.a.
Storm Flow																
E319	2	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.00	0	n.a.
A310	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
0322	2	0.04	0.04	0.04	0.04	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0	n.a.
A320	3	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.04	0.05	0.00	0	n.a.
A315	3	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.00	0	n.a.
A317	2	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0	n.a.
C317	1	0.04	0.04	0.04	0.04	n.d.	n.d.	n.d.	0.04	n.d.	n.d.	n.d.	n.d.	n.d.	0	n.a.
S322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
F321	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
D322	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Y320	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A330	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A326	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
A307	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
I322B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
B317	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
All	13	0.04	0.04	0.04	0.05	0.00	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.00	0	n.a.

[a] Percentage of collected samples with detectable samples of associated analyte.

[b] Percentage of collected samples that exceed the applicable water quality standard.

n.a. not applicable

n.d. no data

µg/L: microgram/liter

APPENDIX P

Water Quality Spatial Pattern Analysis Results

Table P1. Spatial pattern analysis for in-stream field parameters measured at main stem sampling sites in the Green/Duwamish Watershed in 2003.

		Average Rank Sum			
Parameter	Event Type	Sampling Site[a] E319	Sampling Site[a] A310	U[b]	p-value[c]
Temperature	Base	5.0	6.3	9.0	0.6095
Temperature	Storm	3.0	3.0	3.0	1.0000
Dissolved Oxygen	Base	6.3	4.3	7.0	0.3524
Dissolved Oxygen	Storm	2.7	3.5	2.0	0.8000
pH	Base	5.9	4.9	9.5	0.6095
pH	Storm	4.0	1.5	0.0	0.2000
Conductivity	Base	3.7	8.3	1.0	**0.0190**
Conductivity	Storm	2.0	4.5	0.0	0.2000

[a] Sampling site A310: Green River at Fort Dent Park; sampling site E319: Green River below Howard Hanson Dam.

[b] Computed test statistic from Mann Whitney U-test.

[c] Values in **bold** in indicate signficant differences exists between sampling sites A310 and E319 at $\alpha = 0.05$

Table P2. Spatial pattern analysis for in-stream field parameters measured during base flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b]				
		Low Mean Rank				High Mean Rank
Temperature	0.5828	0322	A320	A315	A317	C317
Dissolved Oxygen	**<0.0001**	A317	C317	A315	A320	0322
pH	**0.0011**	C317	A317	A315	A320	0322
Specific Conductance	**<0.0001**	A320	0322	A315	C317	A317

[a] Values in bold indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA (a = 0.05).

[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.

Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P3. Spatial pattern analysis for in-stream field parameters measured during storm flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Temperature	0.9754	A315	C317	0322	A320	A317
Dissolved Oxygen	0.0665	A315	A317	C317	0322	A320
pH	**0.0188**	A315	A317	C317	A320	0322
Specific Conductance	0.2998	C317	A317	A320	A315	0322

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).

[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.

Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P4. Spatial pattern analysis for conventional parameters measured at main stem sampling sites in the Green/Duwamish Watershed in 2003.

Parameter	Event Type	Average Rank Sum: Sampling Site[a] E319	Average Rank Sum: Sampling Site[a] A310	U[b]	p-value[c]
Alkalinity	Base	4.5	10.5	0.00	**0.0040**
Alkalinity	Storm	6.8	7.2	19.50	0.8357
Turbidity	Base	5.0	9.5	4.0	**0.0485**
Turbidity	Storm	5.3	8.4	11.0	0.1807
Total Suspended Solids	Base	5.0	9.5	4.0	**0.0485**
Total Suspended Solids	Storm	5.2	8.6	10.0	0.1375
Dissolved Organic Carbon	Base	7.6	11.3	13.0	**0.0042**
Dissolved Organic Carbon	Storm	6.3	9.5	16.00	0.1893
Total Organic Carbon	Base	7.2	12.5	8.00	0.0582
Total Organic Carbon	Storm	5.0	10.6	7.0	**0.0140**
Hardness	Base	4.5	10.5	0.0	**0.0040**
Hardness	Storm	3.5	10.0	0.0	**0.0012**

[a] Sampling site A310: Green River at Fort Dent Park; sampling site E319: Green River below Howard Hanson Dam.

[b] Computed test statistic from Mann Whitney U-test.

[c] Values in **bold** in indicate signficant differences exists between sampling sites A310 and E319 at $\alpha = 0.05$

Table P5. Spatial pattern analysis for conventional parameters measured during base flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Alkalinity	**0.0250**	0322	A320	A317	A315	C317
Turbidity	**0.0010**	A320	0322	A315	C317	A317
Total Suspended Solids	0.0519	A320	0322	A315	C317	A317
Dissolved Organic Carbon	**0.0182**	A320	0322	C317	A317	A315
Total Organic Carbon	**0.0147**	A320	C317	0322	A317	A315
Hardness	0.0850	A320	322	A317	A315	C317

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).

[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.

Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P6. Spatial pattern analysis for conventional parameters measured during storm flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Alkalinity	0.9657	A317	C317	A315	A320	0322
Turbidity	0.1216	A320	0322	A315	A317	C317
Total Suspended Solids	0.6274	A320	0322	C317	A315	A317
Dissolved Organic Carbon	**0.0183**	A317	C317	A320	A315	0322
Total Organic Carbon	**0.0156**	C317	A317	A320	A315	0322
Hardness	**0.0043**	C317	A317	A315	A320	0322

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).
[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.
Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P7. Spatial pattern analysis for microbiological parameters measured at main stem sampling sites in the Green/Duwamish Watershed in 2003.

		Average Rank Sum			
Parameter	Event Type	Sampling Site[a] A310	Sampling Site[a] E319	U[b]	p-value[c]
Fecal Coliform Bacteria	Base	3.5	8.0	0.00	**0.0238**
Fecal Coliform Bacteria	Storm	3.5	9.5	0.00	**0.0022**
Enterococci Bacteria	Base	n.d.	n.d.	n.d.	n.d.
Enterococci Bacteria	Storm	2.0	4.5	0.00	0.2000
E. Coli Bacteria	Base	5.9	14.0	4.00	**0.0005**
E. Coli Bacteria	Storm	4.5	12.5	0.00	**0.0002**

[a] Sampling site A310: Green River at Fort Dent Park; sampling site E319: Green River below Howard Hanson Dam.

[b] Computed test statistic from Mann Whitney U-test.

[c] Values in **bold** in indicate signficant differences exists between sampling sites A310 and E319 at $\alpha = 0.05$.

n.d. insufficient data are available to perform the analysis.

Table P8. Spatial pattern analysis for microbiological parameters measured during base flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b]				
		Low Mean Rank				High Mean Rank
Fecal Coliform Bacteria	0.3064	A320	0322	A315	A317	C317
Enterococci Bacteria	0.3792	A320	0322	A317	A315	C317
E. Coli Bacteria	0.6742	A320	A315	C317	0322	A317

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).

[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.
Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P9. Spatial pattern analysis for microbiological parameters measured during storm flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b]				
		Low Mean Rank				High Mean Rank
Fecal Coliform Bacteria	0.1033	A320	C317	0322	A315	A317
Enterococci Bacteria	0.1863	0322	A320	A315	C317	A317
E. Coli Bacteria	0.1898	A320	C317	A317	0322	A315

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).

[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.

Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P10. Spatial pattern analysis for nutrients measured at main stem sampling sites in the Green/Duwamish Watershed in 2003.

		Average Rank Sum			
Parameter	Event Type	Sampling Site[a] E319	Sampling Site[a] A310	U[b]	p-value[c]
Ammonia	Base	5.3	9.0	6	0.1091
Ammonia	Storm	5.0	8.7	9	0.1014
Total Nitrogen	Base	4.5	10.5	0	**0.0040**
Total Nitrogen	Storm	4.0	9.6	3	**0.0082**
Nitrate + Nitrite Nitrogen	Base	4.5	10.5	0	**0.0040**
Nitrate + Nitrite Nitrogen	Storm	4.8	8.9	8	0.0734
Orthophosphorus	Base	4.5	10.5	0	**0.0040**
Orthophosphorus	Storm	3.5	10.0	0	**0.0012**
Total Phosphorus	Base	4.6	10.3	1	**0.0081**
Total Phosphorus	Storm	4.2	9.4	4	**0.0140**

[a] Sampling site A310: Green River at Fort Dent Park; sampling site E319: Green River below Howard Hanson Dam.

[b] Computed test statistic from Mann Whitney U-test.

[c] Values in **bold** in indicate signficant differences exists between sampling sites A310 and E319 at $\alpha = 0.05$

Table P11. Spatial pattern analysis for nutrients measured during base flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b]				
		Low Mean Rank				High Mean Rank
Ammonia	**0.0027**	A320	0322	A315	A317	C317
Total Nitrogen	**0.0041**	A317	C317	A315	A320	0322
Nitrate + Nitrite Nitrogen	**0.0012**	C317	A317	A315	A320	0322
Orthophosphorus	**0.0160**	A320	C317	A317	A315	0322
Total Phosphorus	**0.0102**	A320	0322	A315	A317	C317

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).

[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.

Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0'0322 Newakaum Creek near mouth.

Table P12. Spatial pattern analysis for nutrients measured during storm flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Ammonia	0.3788	A320	0322	A317	C317	A315
Total Nitrogen	**0.0002**	C317	A317	A315	A320	0322
Nitrate + Nitrite Nitrogen	**0.0003**	C317	A317	A315	A320	0322
Orthophosphorus	**0.0005**	C317	A320	A317	A315	0322
Total Phosphorus	**0.0180**	A320	C317	A317	0322	A315

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).

[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.

Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0'0322 Newakaum Creek near mouth.

Table P13. Spatial pattern analysis for trace metals measured at main stem sampling sites in the Green/Duwamish Watershed in 2003.

Parameter	Event Type	Average Rank Sum: Sampling Site[a] E319	Average Rank Sum: Sampling Site[a] A310	U[b]	p-value[c]
Aluminum, dissolved	Base	4.8	3.0	3	0.4000
Aluminum, dissolved	Storm	6.4	4.6	8	0.4206
Aluminum, total	Base	5.3	6.0	9	0.8333
Aluminum, total	Storm	6.2	7.7	16	0.5338
Arsenic, dissolved	Base	3.6	4.5	4.5	0.6286
Arsenic, dissolved	Storm	4.2	6.8	6	0.2222
Arsenic, total	Base	3.3	5.0	3	0.4000
Arsenic, total	Storm	3.4	7.6	2	**0.0317**
Cadmium, dissolved	Base	4.0	4.0	6	1.0000
Cadmium, dissolved	Storm	5.5	5.5	12.5	1.0000
Cadmium, total	Base	4.0	4.0	6	1.0000
Cadmium, total	Storm	5.5	5.5	12.5	1.0000
Chromium, dissolved	Base	4.0	4.0	6	1.0000
Chromium, dissolved	Storm	5.5	5.5	12.5	1.0000
Chromium, total	Base	4.4	3.5	4.5	0.6286
Chromium, total	Storm	3.8	7.2	4	0.0952
Copper, dissolved	Base	3.3	5.0	3	0.4000
Copper, dissolved	Storm	3.0	8.0	0	**0.0079**
Copper, total	Base	3.3	5.0	3	0.4000
Copper, total	Storm	3.8	7.2	4	0.0952
Lead, dissovled	Base	4.0	4.0	6	1.0000
Lead, dissovled	Storm	5.5	5.5	12.5	1.0000
Lead, total	Base	4.4	3.5	4.5	0.6286
Lead, total	Storm	3.6	7.4	3	0.0556
Mercury, dissolved	Base	6.8	6.0	14	0.8081
Mercury, dissolved	Storm	7.0	7.0	21	1.0000
Mercury, total	Base	6.5	6.5	16	1.0000
Mercury, total	Storm	7.7	6.4	17	0.6282
Nickel, dissolved	Base	2.5	6.0	0	0.0571
Nickel, dissolved	Storm	4.0	7.0	5	0.1508
Nickel, total	Base	3.3	5.0	3	0.4000
Nickel, total	Storm	3.2	7.8	1	**0.0159**
Selenium, dissolved	Base	4.0	4.0	6	1.0000
Selenium, dissolved	Storm	5.5	5.5	12.5	1.0000
Selenium, total	Base	4.0	4.0	6	1.0000
Selenium, total	Storm	5.5	5.5	12.5	1.0000
Silver, dissolved	Base	4.0	4.0	6	1.0000
Silver, dissolved	Storm	5.5	5.5	12.5	1.0000
Silver, total	Base	4.0	4.0	6	1.0000
Silver, total	Storm	5.5	5.5	12.5	1.0000
Zinc, dissolved	Base	4.8	3.0	3	0.4000
Zinc, dissolved	Storm	4.1	6.9	5.5	1.0000
Zinc, total	Base	4.0	4.0	6	1.0000
Zinc, total	Storm	3.8	7.2	4	0.0952

[a] Sampling site A310: Green River at Fort Dent Park; sampling site E319: Green River below Howard Hanson Dam.

[b] Computed test statistic from Mann Whitney U-test.

[c] Values in **bold** in indicate signficant differences exists between sampling sites A310 and E319 at $\alpha = 0.05$

Table P14. Spatial pattern analysis for trace metals measured during base flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Aluminum, dissolved	0.2343	A317	C317	A320	A315	0322
Aluminum, total	0.9272	A320	A317	A315	0322	
Arsenic, dissolved	0.1926	0322	A315	A317	A320	
Arsenic, total	**0.0272**	0322	A320	A315	A317	
Cadmium, dissolved	**0.0117**	A320	A315	A317	0322	
Cadmium, total	**0.0120**	A320	A315	A317	0322	
Chromium, dissolved	**0.0245**	A320	A315	A317	0322	
Chromium, total	0.1772	A320	A315	0322	A317	
Copper, dissolved	0.6840	A320	A317	0322	A315	
Copper, total	0.1334	A320	322	A317	A315	
Lead, dissolved	**0.0142**	A315	A320	A317	0322	
Lead, total	0.0873	A320	A315	0322	A317	
Mercury, dissolved	**0.0007**	C317	A320	A315	A317	0322
Mercury, total	**0.0024**	A320	C317	A315	A317	0322
Nickel, dissolved	**0.0238**	A320	0322	A315	A317	
Nickel, total	**0.0437**	A320	0322	A317	A315	
Selenium, dissolved		Analysis not performed because the analyte was not detected in any samples.				
Selenium, total		Analysis not performed because the analyte was not detected in any samples.				
Silver, dissolved		Analysis not performed because the analyte was not detected in any samples.				
Silver, total		Analysis not performed because the analyte was not detected in any samples.				
Zinc, dissolved	0.1199	A320	0322	A315	A317	
Zinc, total	0.0723	A320	0322	A315	A317	

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).
[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.
Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P15. Spatial pattern analysis for trace metals measured during storm flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Aluminum, dissolved	0.7053	A315	A317	0322	C317	A320
Aluminum, total	0.6437	A320	0322	C317	A317	A315
Arsenic, dissolved	**0.0283**	0322	A315	A317	A320	
Arsenic, total	**0.0215**	0322	A315	A317	A320	
Cadmium, dissolved	**0.0035**	A320	A315	A317	0322	
Cadmium, total	**0.0055**	A320	A315	0322	A317	
Chromium, dissolved	**0.0059**	A315	A320	0322	A317	
Chromium, total	**0.0299**	0322	A315	A320	A317	
Copper, dissolved	**0.0392**	A320	0322	A317	A315	
Copper, total	**0.0224**	A320	0322	A315	A317	
Lead, dissolved	0.0055	A320	A315	0322	A317	
Lead, total	0.0109	0322	A320	A315	A317	
Mercury, dissolved	**0.0009**	A320	A315	C317	A317	0322
Mercury, total	0.8023	A320	0322	A317	A315	C317
Nickel, dissolved	0.1544	A320	0322	A315	A317	
Nickel, total	0.2776	A315	0322	A320	A317	
Selenium, dissolved		Analysis not performed because the analyte was not detected in any samples.				
Selenium, total		Analysis not performed because the analyte was not detected in any samples.				
Silver, dissolved		Analysis not performed because the analyte was not detected in any samples.				
Silver, total		Analysis not performed because the analyte was not detected in any samples.				
Zinc, dissolved	**0.0088**	0322	A320	A315	A317	
Zinc, total	**0.0088**	A320	0322	A315	A317	

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA (α = 0.05).
[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.
Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 00'0322 Newakaum Creek near mouth.

Table P16. Spatial pattern analysis for minerals measured at main stem sampling sites in the Green/Duwamish Watershed in 2003.

Parameter	Event Type	Average Rank Sum: Sampling Site[a] E319	Average Rank Sum: Sampling Site[a] A310	U[b]	p-value[c]
Calcium, dissolved	Base	4.0	9.5	0	**0.0061**
Calcium, dissolved	Storm	4.3	9.3	5	**0.0221**
Calcium, total	Base	4.5	10.5	0	**0.0040**
Calcium, total	Storm	3.7	9.9	1	**0.0023**
Iron, dissolved	Base	4.0	9.5	0	**0.0061**
Iron, dissolved	Storm	3.7	9.9	1	**0.0023**
Iron, total	Base	5.0	9.5	4	**0.0485**
Iron, total	Storm	4.8	8.9	7.5	0.0513
Magnesium, dissolved	Base	4.0	9.5	0	**0.0061**
Magnesium, dissolved	Storm	3.5	10.0	0	**0.0012**
Magnesium, total	Base	4.5	10.5	0	**0.0040**
Magnesium, total	Storm	3.5	10.0	0	**0.0012**
Manganese, dissolved	Base	4.0	4.0	6	1.0000
Manganese, dissolved	Storm	7.2	3.8	4	0.0952
Manganese, total	Base	5.0	6.7	7	0.5167
Manganese, total	Storm	5.8	8.1	13.5	0.2949
Potassium, dissolved	Base	6.0	6.0	14	1.0000
Potassium, dissolved	Storm	7.0	7.0	21	1.0000
Potassium, total	Base	6.5	6.5	16	1.0000
Potassium, total	Storm	7.0	7.0	21	1.0000
Sodium, dissolved	Base	4.0	9.5	0	**0.0061**
Sodium, dissolved	Storm	4.2	9.4	4	**0.0140**
Sodium, total	Base	4.5	10.5	0	**0.0040**
Sodium, total	Storm	3.7	9.9	1	**0.0023**

[a] Sampling site A310: Green River at Fort Dent Park; sampling site E319: Green River below Howard Hanson Dam.

[b] Computed test statistic from Mann Whitney U-test.

[c] Values in **bold** in indicate signficant differences exists between sampling sites A310 and E319 at $\alpha = 0.05$

Table P17. Spatial pattern analysis for minerals measured during base flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Calcium, dissolved	0.0817	A320	0322	A317	A315	C317
Calcium, total	0.0658	A320	0322	A317	A315	C317
Iron, dissolved	**0.0104**	A320	0322	A317	C317	A315
Iron, total	**0.0031**	A320	0322	A315	C317	A317
Magnesium, dissolved	0.0599	0322	A320	A317	A315	C317
Magnesium, total	0.0647	0322	A320	A317	A315	C317
Manganese, dissolved	**0.0096**	0322	A320	A315	A317	C317
Manganese, total	**0.0113**	A320	0322	A315	A317	
Potassium, dissolved	0.1585	A320	A315	0322	A317	C317
Potassium, total	0.0944	A320	A315	0322	A317	C317
Sodium, dissolved	**0.0313**	A320	0322	A315	A317	C317
Sodium, total	**0.0234**	A320	0322	A315	A317	C317

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).
[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.
Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0322 Newakaum Creek near mouth.

Table P18. Spatial pattern analysis for minerals measured during storm flow at major stream sites in the Green/Duwamish Watershed in 2003.

Parameter	p-value[a]	Site[b] Low Mean Rank				High Mean Rank
Calcium, dissolved	**0.0025**	C317	A317	A315	A320	0322
Calcium, total	**0.0024**	C317	A317	A315	A320	0322
Iron, dissolved	**0.0014**	0322	A320	A317	C317	A315
Iron, total	**0.0091**	A320	0322	A315	C317	A317
Magnesium, dissolved	**0.0105**	C317	A317	A315	A320	0322
Magnesium, total	**0.0092**	A317	C317	A315	0322	A320
Manganese, dissolved	**0.0087**	0322	A320	A317	A315	C317
Manganese, total	**0.0289**	A320	0322	C317	A317	A315
Potassium, dissolved	**0.0012**	C317	A317	A320	A315	0322
Potassium, total	**0.0005**	C317	A317	A320	A315	0322
Sodium, dissolved	**0.0223**	C317	A317	A320	A315	0322
Sodium, total	**0.0259**	A317	C317	A320	A315	0322

[a] Values in **bold** indicate significant differences exist between monitoring sites based on a Kruskal-Wallis ANOVA ($\alpha = 0.05$).
[b] Monitoring sites connected by a single unbroken line are not significantly different based on a nonparametric multiple range test.
Sampling site C317: Black River pump station; A317: Springbrook Creek near mouth; A315: Mill Creek near mouth; A320: Soos Creek above fish hatchery; and 0'0322 Newakaum Creek near mouth.

APPENDIX Q

Water Quality Index Scores

A Water Quality Index Developed for Washington State Streams. Vers3c:06/25/04

Summary

This Water Quality Index is designed to rate general water quality relative to expected quality. Monitoring results from monthly grab samples can be converted to scores ranging from 1 to 100. In general, scores less than 40 indicate water quality did not meet expectations. These are areas of highest concern. Scores of 40 to 79 indicate moderate concern, and scores of 80 and greater indicate water quality met expectations and are of lowest concern.

Limitations

Indexes by design contain less information than the raw data that they summarize; many uses of water quality data cannot be met with an index. An index is most useful for comparative purposes (what stations have particularly poor water quality compared to expectations?) and for general questions (how is water quality in my stream?). Indexes are less suited to specific questions. Site-specific decisions should be based on an analysis of the original water quality data. This index should not be used to compare stations unless expectations are the same. In short, an index is a useful tool for "communicating water quality information to the lay public and to legislative decision makers;" it is not "a complex predictive model for technical and scientific application"

Besides being general in nature (imprecise), there are at least two reasons that any index may fail to accurately communicate water quality information. First, this index, like most indexes, is based on a pre-identified set of water quality constituents. A particular station may receive a good WQI score, and yet have water quality impaired by constituents not included in the index. Second, aggregation of data may mask short-term water quality problems. A satisfactory WQI at a particular station does not necessarily mean that water quality was always satisfactory. A good score should, however, indicate that poor water quality (for evaluated constituents, at least)

Directions

This spreadsheet is designed to convert and aggregate results from grab samples from a single station and a single year to index scores (up to 12 samples). Scores must be determined separately for additional stations or years. Twelve monthly samples are not required. Scores may be based on as little as a single sample--though this, of course, may not be sufficiently representative to accurately assess water quality.

There are five tabs. The first, this one, contains instructions and narrative information. The second "Main" tab is where you enter your data and view the index scores. The third "Interim Results" tab shows scores for each individual result. The fourth "Curves" tab contains the data used to calculate scores. The fifth "Notes" tab is for you to use as you wish. I have used it to convert some data in text format (top) to numbers (bottom) which can

Under the "Main" tab:

1. Enter the station's class (A, AA, or B), ecoregion (1-4, 6-8), and glacial status ("TRUE" if, in your judgement, sediment or turbidity is noticably impacted by glacial melt, otherwise "FALSE").
2. Enter the data for the year being evaluated. We use water years, but the index may be calculated on a calendar
3. Click the "Update Default Curve Numbers" button. This determines the curves to be used based on your station's ecoregion and class. (Note: This does not reset the "Curve to Use." If you changed those for a particular station, you will need to reset them manually.)
4. Edit the "Curve to Use" numbers if desired (see the "Curves" tab). You may want to do this if there is a station-specific criterion different than the standard class criterion (some special curves are available in the "Curves" tab; you may also add your own, though you will have to unlock the worksheet to edit this tab). You might also want to change the curve numbers if you believe the default curves do not accurately reflect expected conditions for your stream. Keep in mind, however, that if you do not use the standard curve numbers, your results will not be
5. Click the "Calc Individual WQI Scores" button. This converts individual sample results to scores (stored under the "Interim Results" tab) and aggregates monthly scores.
6. Click the "Calc Constituent & Overall Scores" button. This aggregates the constituent scores and determines the overall score.

If you have trouble

Make sure your data are entered as numbers and not as text.
If you have added your own criteria curves, you must sort the "Curves" worksheet by parameter.

Make sure you have enabled macros. You may also need to set security to "low" (Tools/Macro/Security)
Contact me (see below)

For more information

http://www.ecy.wa.gov/programs/eap/fw_riv/docs/WQIOverview.html. A detailed description is here: http://www.ecy.wa.gov/biblio/0203052.html. You may contact Dave Hallock at daha461@ecy.wa.gov or 360 407-6681. You may download the most recent version of this application here: http://www.ecy.wa.gov/programs/eap/fw_riv/docs/WQIVer3.xls

Change History

11/19/02: Fixed a "divide by zero" error when no data were entered for a particular constituent or month.
11/19/02: Changed title of "Calc Individual WQI scores" button to "Calc Interim WQI scores"
11/19/02: Added text to instructions to clarify that security must be set to "low"/macros must be enabled to run the
12/13/02: Limited monthly scores to 1. (Overall score was also being miscalculated when monthly scores were
09/10/03: Modified code to use similar ecoregions for ecoregions where there were insufficient data to develop curves. Added error handling for unrecognized stream class and ecoregion.
06/25/04: Was behaving badly if some dates were missing. Modified code to correct this (re-sorting by original date order after determining minimum scores). This correction is released in version 3c.

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

KEY
Input
Low Concern
Moderate Concern
High Concern

Station:	E319
Class:	AA
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**77**

Default Curve No.:		53	23	43	72	82	14	62	92	
Curve to Use:		53	23	43	72	82	14	62	92	
	Date	FC col/100mL	Oxygen mg/L	pH std. Units	TP mg/L	TSS mg/L	Temp C	TN mg/L	Turbidity NTU	Monthly Scores
	01/22/03	4	12.5	7.5	0.01	10	4.3	0.24	6.21	99
	02/12/03	0	13.4	7.3	0.01	2.29	4.4	0.19	2.12	99
	03/09/03				0.01	1.4		0.18	1.8	100
	04/28/03	2	12.3	7.2	0.0126	4.22	7.5	0.099	1.2	99
	05/12/03		12	7.1			8.5			97
	06/08/03	1	11.1	7.6	0.0134	0.96	10.8	0.084	0.81	98
	08/26/03	3	9.4	7.6	0.017	2.35	17.3	0.215	1.7	83
	10/17/03	29	9.8	7.8	0.0187	3.3	11.5	0.297	3.11	90
	11/18/03	17	7.4	7.5	0.0669	58.8	6.9	0.458	39.2	58
	12/19/03		11	7.5			4.5			97
										0
										0
	Constituent Scores:	92	52	94	83	86	75	89	83	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	A310
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**62**

KEY
Input
Low Concern
Moderate Concern
High Concern

	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	
Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Monthly Scores
01/21/03	162	12	7.1	0.03	8.25	6.3	0.86	4.94	86
02/12/03		11.7	7.6	0.03	10.63	5.4	0.72	4.93	95
03/08/03				0.03	8.6		0.77	4.78	90
04/28/03	12.33			0.02	10.78		0.46	2.95	95
05/12/03		11.3	7.5			12			99
06/08/03	40			0.03	10.08		0.44	2.67	78
08/26/03	135.33	8	7.1	0.04	6.37	18.5	0.43	3.07	64
10/16/03	260			0.067	12.9		0.599	6.58	45
11/17/03	100			0.0477	15.8		0.429	11.8	85
12/19/03		10.8	7.1			5.5			97
									0
									0
Constituent Scores:	73	80	94	67	81	78	59	86	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

KEY
Input
Low Concern
Moderate Concern
High Concern

Station:	0322
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**24**

Default Curve No.:		51	21	41	72	82	11	62	92	
Curve to Use:		51	21	41	72	82	11	62	92	
	Date	FC col/100mL	Oxygen mg/L	pH std. Units	TP mg/L	TSS mg/L	Temp C	TN mg/L	Turbidity NTU	Monthly Scores
	01/22/03	2200	11.8	7.4	0.34	27.8	6.5	4.93	19.6	20
	02/12/03	32	13.1	7.7	0.06	2.54	5.1	3.09	2.08	86
	03/09/03				0.35	50.3		2.86	28.2	11
	04/28/03	28			0.0859	6.18		2.36	3.57	72
	05/13/03	32	11.1	7.7	0.0423	3.2	10.8	2	2	91
	06/08/03	390			0.0411	4.44		2.15	2.07	57
	08/26/03	75	10.5	8.1	0.0487	2.4	14.1	1.69	1.3	78
	10/17/03	130	10.1	7.6	0.058	2.69	12.5	2.19	2.83	71
	11/18/03	1000	7.7	7.5	0.105	11.2	9.4	3.7	12.1	41
	12/19/03		11.8	7.5			5.6			99
										0
										0
	Constituent Scores:	48	77	91	30	82	94	1	78	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	A320
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**63**

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

Default Curve No.:		51	21	41	72	82	11	62	92	
Curve to Use:		51	21	41	72	82	11	62	92	
	Date	FC col/100mL	Oxygen mg/L	pH std. Units	TP mg/L	TSS mg/L	Temp C	TN mg/L	Turbidity NTU	Monthly Scores
	01/04/03	100	12.1	7.4	0.04	9.3	8.3	1.64	5.71	89
	02/12/03	11	12.9	7.6	0.02	5.48	4.9	1.58	1.5	98
	03/09/03		12.6	7.7	0.03	7	7.1	1.3	3.9	96
	04/28/03	37	11.5	8	0.0226	3.43	10.2	1.11	1.7	95
	05/13/03	25	10.7	7.4	0.0213	3.2	11	1.19	1.4	97
	06/09/03	60	11		0.0273	3.93	13.4	1.29	1.6	91
	08/26/03	190	10		0.0261	2.2	13.6	1.02	1.2	82
	10/17/03	150		7.4	0.0536	6.63	12	1.16	4.1	68
	11/18/03	360	10.7	7.4	0.0827	43.8	9.5	1.48	14.2	39
	12/19/03		11.2	7.6			6.7			99
										0
										0
	Constituent Scores:	71	93	93	68	85	95	1	88	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	A315
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**20**

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

		FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
	Default Curve No.:	51	21	41	72	82	11	62	92	
	Curve to Use:	51	21	41	72	82	11	62	92	
	Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
										0
	01/22/03	2200	8.6	6.9	0.23	22.4	6.6	1.55	17.5	20
	02/12/03	250	8.9	6.8	0.17	15.3	4.8	1.85	14.6	44
	03/09/03		9.4	7.3	0.13	22.8	7.2	1.13	17.5	58
	04/28/03	40	8.8	7.3	0.072	8.4	13.2	1	15.9	62
										0
	05/13/03	53	7.2	6.9	0.0811	5.1	11.7	1.01	10.8	53
	06/09/03	290	7.7	7.5	0.109	3.92	15.4	1.07	12.2	36
	10/17/03	490	6	6.7	0.111	7.01	13	0.953	9.91	19
	11/18/03	1200	7.4	7.4	0.187	17.6	9.5	1.42	13.5	21
	12/19/03		8.4	6.9			4.8			91
										0
	Constituent Scores:	46	57	86	36	85	90	1	76	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

KEY
Input
Low Concern
Moderate Concern
High Concern

Station:	A317
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	7

Default Curve No.:		51	21	41	72	82	11	62	92	
Curve to Use:		51	21	41	72	82	11	62	92	
	Date	FC col/100mL	Oxygen mg/L	pH std. Units	TP mg/L	TSS mg/L	Temp C	TN mg/L	Turbidity NTU	Monthly Scores
	01/22/03	2500	9.8	7.1	0.05	14.4	7.3	0.79	16	39
	02/12/03	41	5.5	7.1	0.1	6.4	6.7	1.24	17.6	33
	03/09/03				0.12	31.5		0.83	25.3	49
	04/28/03	68			0.1	7.2		1.12	18.6	44
	05/12/03		4.3	7			13.9			45
	06/08/03	130			0.184	8.8		1.12	20.7	19
	08/26/03	170	3.4	7	0.139	8.4	16.2	0.838	12.7	1
	10/16/03	1175.86	4.8	6.9	0.15	35.18	13.8	0.79	18.37	1
	11/17/03	1225.13			0.12	35.21		0.83	22.58	21
	12/19/03		6.5	6.8			6.9			73
										0
										0
	Constituent Scores:	40	13	88	24	73	87	9	67	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	C317
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	27

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
01/22/03	610	9.8	7	0.07	13.2	7.4	0.77	13.6	56
02/12/03	220	5.7	6.8	0.16	8	7.2	1.12	17.9	26
03/09/03		10.7	7.3	0.06	8	8	0.7	11.9	83
05/12/03		8.1	6.9			14.3			88
06/09/03	430	3.2	7.2	0.145	12.2	16.3	0.987	19.4	1
08/26/03		6.3	7.3			17.7			68
11/18/03	770	8.4	6.8	0.104	27.6	9.7	0.629	29.2	54
12/19/03		6.3	6.8			7.3			71
									0
									0
									0
									0
Constituent Scores:	56	9	88	42	83	81	32	72	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	S322
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**58**

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

Default Curve No.:		51	21	41	72	82	11	62	92	
Curve to Use:		51	21	41	72	82	11	62	92	
	Date	FC col/100mL	Oxygen mg/L	pH std. Units	TP mg/L	TSS mg/L	Temp C	TN mg/L	Turbidity NTU	Monthly Scores
	01/21/03	44.02	11.5	7.4	0.03	18.51	6.6	1.55	15.25	92
	02/12/03		12.9	7.6	0.02	4.75	4.7	0.98	3.44	98
	03/08/03		13.9	7.7	0.04	53	6.2	0.97	86.82	71
	04/28/03	2.84	11.7	7.5	0.03	8.33	9	0.88	5.36	96
	06/08/03	74			0.03	12.59		0.59	3.48	63
	08/26/03	207.21			0.03	6.25		0.4	1.04	71
	10/16/03	137.66			0.05	36.58		2.92	22.97	41
	11/17/03	89.09			0.04	26.25		2.11	15.13	79
										0
										0
										0
										0
	Constituent Scores:	76	98	98	74	70	100	1	64	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	F321
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**95**

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
									0
01/22/03	30	11.5	7.7	0.02	3.75	8.1	0.89	2.18	97
02/12/03	5	12.3	7.6	0.01	0.84	7.3	0.75	0.5	100
03/09/03		12.6	7.7	0.02	2.15	8.4	0.7	1.9	98
04/28/03	3	11.8	7.9	0.0206	1.02	9.5	0.543	0.64	97
05/13/03	3	12.6	7.6	0.0208	0.8	9.6	0.514	0.5	99
08/26/03	25	9.5		0.0257	1.46	9.9	0.63	0.5	93
11/18/03	38	10.9	7.9	0.026	1.88	9.7	0.748	0.58	95
									0
									0
									0
									0
Constituent Scores:	91	91	95	87	100	100	57	100	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	B322
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	4

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	
Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Monthly Scores
01/21/03	8272	5.6	6.7	2.35	16.88	5.9	15.68	13.91	1
02/12/03		6.4	6.6	0.42	1.04	4.1	6.79	1.53	38
03/08/03		8.3	6.8	1.29	10.26	6.6	4.53	11.24	52
04/28/03	236.66	7.4	6.7	0.88	4.76	13.6	4.54	5.15	37
06/08/03	383.33	5.1	6.5	0.42	7.15	12.1	5.36	3.43	10
11/17/03	4219	3.8	6.6	0.68	4.8	9.4	7.06	6.9	1
									0
									0
									0
									0
									0
									0
Constituent Scores:	30	21	80	1	88	95	1	86	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	D322
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**40**

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly Scores
Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	
01/04/03		10.1	7.4			8.2			98
03/09/03		12.1	7.2			6.8			99
04/28/03	31	10.1	7.2	0.0798	4.4	13.1	2.51	3.89	79
06/09/03	190	9.4	7.2	0.0581	4.4	13.2	3.26	3.14	65
10/17/03	240	8	6.9	0.0906	0.9	12.6	3.7	1.7	50
11/18/03	6100	7.3	7	0.202	7.4	9.5	11.4	6.55	6
									0
									0
									0
									0
									0
									0
Constituent Scores:	52	73	90	47	95	96	1	93	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

KEY
Input
Low Concern
Moderate Concern
High Concern

Station:	Y320
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**41**

Default Curve No.:		51	21	41	72	82	11	62	92	
Curve to Use:		51	21	41	72	82	11	62	92	
		FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
	Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
	01/21/03	2500			0.02	6.2		1.25	6.34	46
	02/12/03	7	11.4	7.4	0.01	1.41	2.6	1.62	2.21	99
	03/09/03				0.03	7.21		1.24	5.31	90
	04/28/03	32			0.0161	1.62		0.843	1.6	96
	10/17/03	450	6.2	6.5	0.0592	4.3	12.5	0.73	13.1	26
	11/17/03	1100			0.0407	6.12		1.05	6.53	51
										0
										0
										0
										0
										0
										0
	Constituent Scores:	46	59	80	75	95	98	2	85	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	A330
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**50**

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
									0
01/22/03	99	11.5	7.3	0.05	99.6	6.9	1.07	41	70
02/12/03	2	12.6	7.3	0.03	7.29	5.5	0.91	2.66	97
03/09/03		12.6	7.6	0.06	44.5	7.7	0.78	24.4	71
04/28/03	5	11.2	7.7	0.0359	3.43	10.6	0.761	2.19	96
06/09/03	120	11.4	8.3	0.0459	5.74	11.6	0.891	3.09	56
08/26/03	35	9.7	8.2	0.0446	7.67	12.2	0.859	3.63	61
10/17/03	370		7.5	0.0707	20.1	12.1	0.933	11.3	33
									0
									0
									0
									0
Constituent Scores:	74	92	86	63	69	99	24	71	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	A326
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**18**

Update default curve numbers

Calc Interim WQI scores

Calc Constituent & Overall Scores

KEY
Input
Low Concern
Moderate Concern
High Concern

	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
01/22/03	190	11.8	7.3	0.03	13.7	7.3	1.11	10.8	84
02/12/03		12.8	7.6	0.02	1.63	4.8	0.82	1.46	98
03/08/03		11.5	7.3	0.06	41.2	8.5	0.93	23.49	59
04/28/03	256.38	11.3	7.7	0.03	3.12	10.8	0.83	2.06	83
06/08/03	456.28	9.6	7.8	0.06	1.84	13.5	0.76	1.31	48
08/26/03	163.4	9	8.1	0.06	1.79	15.6	0.41	1.16	77
10/16/03	1138.97			0.06	23.7		0.81	11.49	3
11/18/03	1900	12	7	0.398	698	8.1	1.83	380	1
									0
									0
									0
									0
Constituent Scores:	48	88	91	43	54	89	20	52	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

KEY
Input
Low Concern
Moderate Concern
High Concern

Station:	A307
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**45**

Default Curve No.:		51	21	41	72	82	11	62	92	
Curve to Use:		51	21	41	72	82	11	62	92	
	Date	FC col/100mL	Oxygen mg/L	pH std. Units	TP mg/L	TSS mg/L	Temp C	TN mg/L	Turbidity NTU	Monthly Scores
	01/21/03	563.23			0.06	27.9		2.23	18.04	48
	04/28/03	48	11.3	7.9	0.043	1.7	11.9	1.46	2	90
	06/09/03	270	11	7.7	0.0581	7.73	12.3	1.35	5.84	63
	08/26/03	160	9.1	7.7	0.0415	1.8	13.7	1.1	2.19	74
	10/17/03	1500	9.5	7.5	0.104	17.8	13	3.27	14.3	24
										0
										0
										0
										0
										0
										0
										0
	Constituent Scores:	55	88	95	56	79	95	1	78	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

KEY
Input
Low Concern
Moderate Concern
High Concern

Station:	I322B
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	**27**

Default Curve No.:	51	21	41	72	82	11	62	92	
Curve to Use:	51	21	41	72	82	11	62	92	
	FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
01/04/03	660	11.3	7.4	0.06	24.4	9.4	3.7	11	62
02/12/03	260			0.02	0.6		3.03	1.5	79
03/09/03				0.11	52.2		1.99	22.3	12
04/28/03	33			0.0281	0.6		2.74	0.9	92
06/08/03	3200			0.0736	1.15		3.43	0.91	14
10/17/03		6.6	7			14.6			73
11/17/03	640			0.048	12		2.04	10.2	54
									0
									0
									0
									0
									0
Constituent Scores:	45	65	93	59	82	92	1	83	

A Water Quality Index for Washington State streams (Version 3a, 25 Jun 04).

Station:	B317
Class:	A
Ecoregion:	2
Glacial:	FALSE
Overall Score:	8

KEY
Input
Low Concern
Moderate Concern
High Concern

	Default Curve No.:	51	21	41	72	82	11	62	92	
	Curve to Use:	51	21	41	72	82	11	62	92	
		FC	Oxygen	pH	TP	TSS	Temp	TN	Turbidity	Monthly
	Date	col/100mL	mg/L	std. Units	mg/L	mg/L	C	mg/L	NTU	Scores
	01/21/03	550			0.07	32.6		0.85	18	33
	02/12/03	330			0.07	17.6		1.75	18.5	53
	03/09/03		10.4	6.9	0.07	18	7.6	0.75	13.8	77
	04/28/03	280			0.0641	0.93		1.27	13.6	24
	06/08/03	580			0.13	7.1		1.48	15.3	6
	08/26/03	750			0.0539	1.9		0.955	4.14	18
	10/16/03	2500			0.0732	11.2		0.826	9.39	1
	11/17/03	1200			0.102	33.2		0.659	23.2	35
										0
										0
										0
										0
	Constituent Scores:	43	95	90	47	79	100	1	74	