Vashon-Maury Island

2005 Water Resources Data Report

Part of the Water Resources Evaluation Project

April 2006

King County

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EXECUTIVE SUMMARY

King County Water and Land Resource Division (WLRD) has been monitoring precipitation, stream gauging, and groundwater on Vashon-Maury Island (VMI) for a number of years. This report summarizes the monitoring activities completed in 2005 for the Water Resource Evaluation (WRE) Project.

The number of precipitation sites has increased from two to five. A variation of almost seven inches was observed across the island and all sites on VMI recorded more rainfall than Sea-Tac airport, the area reference. Site 28Y, West Judd Creek (at the transfer station), recorded the most rainfall at 39.2 inches per water year (October 1 to September 30). The Maury Island site, 36U, recorded the least amount of rainfall at 31.9 inches per water year. The Sea-Tac annual total precipitation for the 2005 water year was 30.6 inches which is ~18% below the annual average of 37.2 inches (based on historic data 1971-2000).

Stream gauging activities on VMI increased in 2005 in both continuous gaging and staff/crest measurement sites. Three additional streams were added into the continuous gauging network 2004 and early 2005 for a total of five sites on VMI. A comparison of total stream flow data for previous five water years can be done for two sites; 28A – Judd Creek and 43A – Shingle Mill Creek. The totals (Q_t) from water year 2005 are the second lowest in the recorded history of each site. This reduction in the water year data is also seen in the precipitation data.

A total of 22 streams have been monitored for staff/crest measurements in 2005 allowing for an Island-wide assessment of stream flow. A typical hydrograph of these sites (based on these three points) has the maximum stream flow measurement in February with decreasing flow measurements as the year progressed. The lowest flow measurement was in September except at seven locations, which showed an increase in flow in September relative to the measurements taken in July

In 2005, groundwater water level monitoring activities were expanded the across the island by continued support of the volunteers who monitor their own well water levels, added additional volunteers, conducted an Island-wide survey, and installed dedicated monitoring wells.

The volunteers have been monitoring their wells monthly since 2001 and this allows for assessment of trends for selected areas on VMI. A baseline has been established by averaging all measurements taken between 2001 and 2002. The data for two sites, GWL_w-06 & GWL_w-09, show increasing depth to water between 2003 to 2005. Site GWL_w-01 has increased depth to water measurements when compared to the baseline, yet the trend from 2003 to 2005 is with smaller increases (closer to the baseline) each year. The other two sites show a varying difference from year to year.

A large water level survey on VMI was conducted in September/October to better define groundwater flow in the major island aquifers. Volunteers were sought via newspaper articles asking for well owners to participate in the study. A total of 20 locations were measured in the initial Island-wide survey.

Dedicated monitoring wells were drilled and installed over a three month period after the Island-wide survey was completed. Water level measurements were recorded at these locations following the completion of the installation and well development.

The groundwater water quality sampling, done in June, included the Environmental Indicators of Arsenic, Chloride, and Nitrate + Nitrite at the 20 long-term monitoring locations. These sites have been monitored by King County WLRD since 2001. The concentrations of these parameters were similar to the results in the previous seven rounds of sampling.

Additional parameters were analyzed in 2005 as part of 3-year rotation of organic sampling. The focus of this organic sampling was pesticides and herbicides. Endocrine disrupting compounds (EDC) were also analyzed. It is the first time these EDC compounds have been tested for in groundwater on VMI. Due to the high cost and the limit of the project water quality budget, only 14 of the 20 sites were sampled for organics. The results from this suite of parameters were all non-detects except for bis(2-ethylhexyl)adipate.

The precipitation, stream gauging, and groundwater monitoring activities of the WRE project will continue in 2006. The data collected will be presented in a similar report and on the King County web pages.

1.0. INTRODUCTION

The Water Resource Evaluation Project is intended to cover monitoring, modeling, and data management activities within Vashon-Maury Island (VMI) for seven years (2004-2010). As part of this work, an annual data report of monitoring activities is summarized in this report. The structure of the report is as follows: Section 1.0 – Introduction and Overview; Section 2.0 – Gauging Activities; Section 3.0 – Groundwater Monitoring; Section 4.0 – Discussion.

1.1 Overview

Vashon-Maury Island is an island that lies in the Puget Lowland encompassing about 36 square miles. All drinking water sources on the island (springs, surface water, and groundwater) are supplied by precipitation. Groundwater is the portion of precipitation that soaks into the ground and gets stored in underground geological water systems called aquifers. Every groundwater system is unique and dependent upon external factors such as the rate of precipitation, the interaction of groundwater with the streams and other surface water bodies, and the rate of evapotranspiration. These external factors all contribute to the overall water budget. Understanding the water budget for VMI and changes occur in response to human activities and climate changes is important in determining the amount of drinking water that can be used on a sustained basis.

A long-term plan that describes and evaluates the different components of the VMI water budget is being implemented to address needs and concerns identified by residents of VMI and King County staff. Much interest has been expressed over the years in the sustainability of the water supply on the island, although to date there has not been a comprehensive study to address many major water supply issues.

The work plan of the Water Resources Evaluation Project is designed to provide a scientific evaluation of the water supply issues (both water quantity and quality related) on VMI. The work plan can be found at: http://dnr.metrokc.gov/wlr/WQ/vashon-island/pdf/Vashon-Maury-Island-plan.pdf. The work plan for the VMI Water Resources Evaluation has four main objectives:

1. To monitor Vashon-Maury Island groundwater and surface water quantity and quality to record and identify changes over time;
2. To build a comprehensive groundwater flow model that evaluates groundwater and surface water quantity and quality under various climate change and land-use scenarios;
3. To satisfy the goals of the countywide data management work plan for the Vashon-Maury Island region; and
4. To coordinate activities with the Vashon-Maury Island Groundwater Protection and Land Use Committees, the WRIA 15 watershed planning unit, and the citizens of Vashon Maury Island.

To satisfy the objectives of this project, the work is being done in four major areas. The first three areas, monitoring, modeling, and data management are closely interrelated and must be

responsive to each other to satisfy the first three objectives of this work plan. The last area, project communication, addresses the fourth and final objective.

1.2 2005 Monitoring Activities

Groundwater, surface water, and precipitation are being monitored in an effort to better describe the VMI water budget and overall water quality. Monitoring efforts on VMI will serve three purposes (1) to identify changes and trends in groundwater and surface water quantity and quality, (2) to provide necessary data for model development and calibration, and (3) to have an early warning system on the impacts of pollution sources and groundwater extraction. This monitoring will be conducted by a combination of King County (KC) staff, volunteers, and consultant contracts. Data collected in previous years have been presented in several different formats. The precipitation and stream-flow gauging data have been available via request and web site: http://dnr.metrokc.gov/wlr/waterres/hydrology/GaugeSelect.aspx. The groundwater data collected in previous years was presented in a report summarizing all of King County's groundwater monitoring, (King County, 2005) and is available at the website: http://dnr.metrokc.gov/wlr/wq/ambient-groundwater-monitoring01-04.htm. The following sections give brief descriptions of the data and outline the major monitoring tasks.

Precipitation

A combination of volunteers on VMI and KC Staff recorded precipitation values. KC Staff installed continuous precipitation gages at selected gage locations, see section 2.1. Volunteers will be used to supplement this data. King County will provide the equipment for the volunteers and King County staff will train the volunteers on the proper protocol. Locations have been based on availability of volunteers and modeling requirements.

Stream-flow gaging

Two types of stream gauging is being done on the creeks of Vashon-Mary Island, continuous and staff/crest measurements. Judd Creek and Shingle Mill Creek have been monitored as part of the existing KC Department of Natural Resources and Parks stream-gauge network. Four additional streams were added into the continuous stream-gage network and additional 20 creeks are being monitored as part of the staff/crest measuring sites, see section 2.2.

Water level survey

An extensive water level survey on VMI was conducted to better define groundwater flow in the major island aquifers, see section 3.1. The water level measurements were taken at all the wells within a short period of time (around one week) so that the hydraulic heads in the aquifer are measured under the same hydrologic conditions. These measurements will be collected at all the wells twice, in the spring and fall, to evaluate seasonal changes. Groundwater contour maps for the major aquifers on VMI will be generated with the results of survey.

Water-level measurements in dedicated monitoring wells

Dedicated groundwater-monitoring wells were drilled and installed throughout VMI. The locations of these wells were determined on the need for additional data at these locations. The Phase I groundwater model helped to determine where data gaps existed.

During drilling, soil samples were collected and a boring log describing subsurface soils completed. After installation and development, these wells will be equipped with automatic water level recorders or data loggers that monitor water level fluctuations on a continuous basis, see section 3.1.4. Water-level measurements will be downloaded from the data loggers twice per year by KC staff.

Groundwater quality sample collection

This task involves collecting groundwater samples from our long-term well locations. These sites are currently 20 public supply/private wells that have been sampled since 2001, see section 3.2. The current water quality program has a set of environmental indicators, Arsenic; Chloride; and Nitrate + Nitrite, that are sampled annually at all sites. Organic compounds were added to the analyte list this year to help establish a baseline of selected pesticides, herbicides and endocrine disrupting compounds, see section 3.2.

2.0. GAUGING ACTIVITIES

The gauging activity on Vashon-Maury Island (VMI) has been expanded as part of the Water Resources Evaluation Project. This increased effort is needed to help establish a baseline of conditions as well highlight the variety of conditions across the island.

2.1 Precipitation sites

The precipitation sites have increased from the two sites to five current monitoring sites. The locations of the gauging sites are shown in Figure 1 and listed in Table 1. One of the previous sites, 28U, was moved to a more representative location, and re-named "28Y" to reflect a new site. The data from Sea-Tac airport is also include in Table 1 as an area reference.

The data presented in Table 1 is summarized as total precipitation (inches per year). The annual total can be calculated in two different ways, Water Year (WY) – October 1 to September 30 or Calendar Year (CY) – January 1 to December 31. Accumulated daily totals of precipitation for both ways of calculating annual totals are presented in Figure 2. All of the sites except for site 43U did not start collecting data until after the start of the 2005 water year, October 1, 2004. Site 36V, East Maury Island, has the shortest record of data for this report since this site was established in March 2005.

Site 28Y, West Judd Creek, had the maximum amount of rain recorded regardless of the time recorded – Water year or Calendar year, Table 1, Figure 2 and Appendix A. Site 36U, Maury Island, had the least amount of rain fall. Site 65U, South Vashon, has a lower total measured for the water year than Site 36U because the date started is 30 days later. In comparing the total precipitation from the same start date of November 5 for these two sites, Site 36U has a total of 28.1 in/yr versus 31.2 in/yr for site 65U.

2.2 Stream gauging sites

2.2.1 Continuous gauging sites

Two creeks on VMI, Judd Creek and Shingle Mill Creek, are monitored as part of the existing KC DNRP stream-gage network. Three additional streams were added into the continuous stream-gage network in 2004 and early 2005. All gauging locations are shown in Figure 1 and the continuous gauging sites are listed in Table 2.

A comparison of total stream flow, Q_t, measured in the water year (Oct-Sep) verse calendar year (Jan-Dec) shows a difference of ~10 percent. The total flow measured in the calendar year had less flow for all sites except for Green Valley Creek, Table 2. This site has a limited period of record with measurements starting in March of 2005. The gauging site was washed out in early 2005 requiring a new installation of gauging equipment and a weir.

The median, maximum and minimum flows recorded were similar independent of the 12 month time period, WY vs. CY. Table 2 contains these flow measurements that were the maximum or

the minimum. The hydrographs (total daily flow versus time) for all the continuous sites are presented in Figures 3-7.

2.2.2 Island-wide gauging sites

In 2004, King County began measuring stream flow around Vashon-Maury Island to better assess the amount of flow in stream catchments where continuous gauging is not feasible. These measurements continued at 22 locations in 2005 on three separate occasions in February, July, and September. The locations are shown in Figure 1 and the data are presented in Table 3. A typical hydrograph of these sites (based on these three points) has the maximum stream flow measurement in February with decreasing flow measurements as the year progressed, Figure 8. The lowest flow measurement was in September except at seven locations, McCormick Creek; Needle Creek; Green Valley Creek; Judd Creek at SW 204thStreet; Judd Creek at Singer Road; Tsugwalla Creek; and Raab's Creek. Each of these sites showed an increase in flow in September relative to the measurements taken in July, Table 3.

3.0. GROUNDWATER MONITORING

A major part of the Water Resources Evaluation (WRE) project focuses on the groundwater on Vashon-Maury Island (VMI). This project is expanding the water level and water quality monitoring across the island to better understand the local variations.

3.1 Water Level Monitoring

In 2005, the WRE project expanded the water level monitoring by continued support of the volunteers who monitor their own well water levels, added additional volunteers, conducted an Island-wide survey, and installed dedicated monitoring wells.

3.1.1 Volunteer sites

The volunteer sites are five individuals that have monitored water levels in their own wells since 2001. The measurements are typically taken once a month and reported to KC staff via e-mail. These locations are shown in Figure 9. The data are presented in Table 4 and shown in Figure 10. Two of the sites, GWL_w-01 and GWL_w-06, have very small fluctuations in the measurements during the year with changes in the range of tenths of a foot, Figure 10 and Table 4. The other three sites show a typical hydrograph with smaller depth to water measurements in late spring and greater measurements in late summer/early fall, Figure 10 and Table 4.

3.1.2 Water quality sites

Nine sites of the 20 sites that are sampled for water quality have availability for water levels to be taken. These locations are identified with a unique symbol in Figure 9. During the water quality sampling event in June, water level measurements were taken, Table 5. These sites were also included in the Island-wide water level survey conducted in the fall, see next section.

3.1.3 Water level survey

An extensive water level survey on VMI was conducted in the September/October to better define groundwater flow in the major island aquifers. Volunteers were sought via newspaper articles asking for well owners to participate in the study. Initial efforts got a response of nine interested volunteers. After site visits, seven locations were accessible for water level measurements. A total of 20 locations were measured in the initial Island-wide survey. The data are presented in Table 6.

3.1.4 Monitoring wells

Six monitoring wells were drilled and installed in the fall of 2005, October-December. Water level measurements were taken at numerous times for these sites. Continuous water levels (Leveloggers™) will be installed in these locations in 2006. The locations of these monitoring wells are shown in Figure 9 and the data are presented in Table 7. A well data report will be forthcoming in early to mid 2006 with specific information about these locations.

3.2 Water Quality Monitoring

The water quality sampling, done in June, included the Environmental Indicators of Arsenic, Chloride, and Nitrate + Nitrite at the 20 long-term monitoring locations, see Figure 9. These sites have been monitored by King County WLRD since 2001. The results of these parameters are presented in Table 8 and Appendix A. The concentrations of these parameters were similar to the results in the previous seven rounds of sampling, Table 8.

This year additional parameters were analyzed as part of a 3-year rotation of organic sampling. The focus of this organic sampling was pesticides and herbicides. Endocrine disrupting compounds (EDC) were also analyzed. It is the first time these EDC compounds have been tested for in groundwater on VMI. Due to the high cost (> $700 per sample) and the limit of the project water quality budget, only 14 of the 20 sites were sampled for organics. Table 9 has the full list of organics analyzed. The results from this suite of parameters were all non-detects except for bis(2-ethylhexyl)adipate, Appendix A. The method detection limit (MDL) for this compound has been recently lowered by a factor of ~2.5. Consequently, it is detected everywhere, including in the method blank. All sample results for this compound have this been qualified as “B”, see Appendix A for a full list of results. A “B” qualifier is used when a parameter is also detected in a laboratory generated "blank" sample. The concentration of that parameter may be reflective of analytical environment not of the groundwater. Table 9 can be considered a replacement for the results since all, but bis(2-ethylhexyl)adipate, are below these MDLs.

4.0. DISCUSSION

This section of the report summarizes the data and provides a brief rationale of reasons why the activities are important to this project. If additional data was available, this section includes discussion of further interpretation.

4.1 Gauging Activities

4.1.1 Precipitation sites

As mentioned in Section 2.1, there is a measurable difference in precipitation across the island with the least amount of rainfall being on Maury Island, Table 1 and Appendix A. All of the sites recorded the increased precipitation in Fall 2005. The difference in total rainfall measured between Oct 2004 - Dec 2005 is greater than five inches in the (existing) sites except for Maury Island. Maury Island, site 36U, recorded more than seven inches difference between the fall of 2004 and 2005. The Sea-Tac data also show a similar increase in rainfall amounts for this time period, Table 1.

Only one site has data prior to water year 2005 and that site, 43U – North Vashon, only has the historic data for WY2004 on-line (at the present time). Table 10 highlights the difference on the total precipitation between years and sites. The Sea-Tac data is less than all the Vashon-Maury Island sites highlighting the need to have numerous local sites to record the local variation. Site 43U shows a difference of 7.5 inches between WY 2004 and WY2005. Sites 28U and 28Y shows a greater difference of almost 13 inches, however, these sites are not in the same place. These sites are in a similar region in Judd Creek basin and show slight variations in monthly totals for the three months that these sites co-existed. NOTE: Site 28U December 2004 monthly data is based on 28 days not 31 days. Site 28Y recorded 0.4 inches of rain during that same period.

In comparing the data for the two water years justifies the need for having these sites longer term to record this and other local variations in precipitation. Having data like this precipitation variability and the related recharge to groundwater allows for more realistic representation of hydrologic conditions on the island.

Rationale: Precipitation values are needed on a microclimatic scale to estimate recharge to the aquifer. It is necessary for a more realistic model input. Precipitation data also aid in the interpretation of water level changes in the monitoring wells.

4.1.2 Stream sites

The gauging activities on VMI have been expanded as part of the WRE project. More sites are being monitored on a continuous basis. This increased monitoring is not without some difficult as shown by the data record at Green Valley Creek. This site has had the weir and gauging site altered by several large storms. The result is a limited dataset as shown in Figure 7.

A comparison of total stream flow data (Q_t) for previous water years can be done for two sites; 28A – Judd Creek and 43A – Shingle Mill Creek. The totals (Q_t) from water year 2005 are the second lowest in the recorded history of each site, Table 11. This reduction in the water year data is also seen in the precipitation data; see previous section and Table 10.

The island-wide sites that are being measured as staff/crest sites adds to the overall understanding of stream flow on the island. This data will help provide a basis for assessing the stream flow modeling as part of the Phase II modeling effort.

Rationale: Other types of hydrologic information are a necessary part of any groundwater monitoring/modeling program. The stream-gage stations help describe the interaction of surface water and groundwater on VMI. It is important to understand how the groundwater levels are related to stream flows since many endangered and threatened species rely on stream flows for survival. Stream discharge or stage levels are useful in examining the interaction between groundwater and surface water.

4.2 Groundwater Activities

4.2.1 Volunteer Sites

The volunteer sites have been monitoring their wells monthly since 2001 and this allows for assessment of trends for selected areas on Vashon-Maury Island. A baseline has been established by averaging all of measurements taken between 2001 and 2002. The number of water level measurements taken varies from 11 to 21 for this 24 month period. Establishing a baseline allows for a simple comparison of measurements to this number. Some limitations are present using this technique, such as the limited number of measurements used to establish the baseline number for a few sites. Another concern is the seasonal variation may not be accurately being measured, depending on when the baseline measurements were taken. Despite these limitations, the baseline does show trends when comparing the annual average of measurements taken, Table 12.

Table 12 shows the relative change of the annual average from the baseline in the depth to water measurements taken in 2003, 2004, and 2005. Two sites, GWL_w-06 & GWL_w-09, show a trend of increasing depth to water with time from 2003 to 2005. Site GWL_w-01 has increased depth to water measurements when compared to the baseline, yet the trend from 2003 to 2005 is with the increases becoming smaller (closer to the baseline) each year. The other two sites show a varying difference from year to year. Another way to visual the data is to show the monthly depth to water (DTW) measurements versus time, Figure 11. This figure has three separate graphs of the volunteer sites with increasing depth to water on the left and the same annual time periods across the top. The purpose of this figure is to highlight the seasonal variation recorded at some sites as well as to display the steady increase of the DTW measurements for other sites.

4.2.2 Water level survey

The Island-wide water level survey had limited success. The initial call of volunteers yielded nine people and only seven of these were able to participate. All of the sites used in assessing the island-wide water table contour map allowed for a simple comparison of historic data and

highlighted a need for a greater diversity of sites. These results and the low number of volunteers necessitated a need for another call for volunteers which occurred in December. This later solicitation yielded 12 additional sites that increased involvement and helped continue this activity into 2006. These sites were not part of the 2005 data collection.

Rationale: This survey effort is necessary to contour the water levels in the major aquifers on VMI. This data also gives a better understanding about the patterns of groundwater flow, which is crucial to the development and assessment of an accurate groundwater model.

4.2.3 Dedicated monitoring wells

The dedicated monitoring wells were installed October through December 2005. This work took longer and went deeper than expected. Locations of the monitoring wells were chosen based on existing data gaps. This information yielded insightful data on depths and thickness of the Qva, the "main" Island aquifer, and water level data. A well data report will be forthcoming in 2006.

Rationale: To accurately monitor groundwater levels, you need dedicated monitoring wells that are unaffected by pumping. The installation of continuous water-level measurements allows for characterization of the magnitude, frequency, and cause of water-level fluctuations. Long-term water-level measurements serve as the primary data required for calibration and testing of groundwater models. Fluctuations in water levels will be used to calibrate and assess the Phase II (surface-groundwater) model. They are also required to assess the effects of climate variability and to monitor the effects of regional aquifer development.

4.2.4 Water quality monitoring

The analytes that will be sampled over the course of this study have been grouped into three separate classes: environmental indicator, baseline, and selected organics. This year was the first year of the organics sampling of selected pesticides, herbicides and endocrine disrupting compounds, see section 3.2, Table 9 and Appendix A for complete results. No detections were reported except for blank contamination of bis(2-ethylhexyl)adipate at the 14 sites sampled.

The environmental indicators of Arsenic, Chloride and Nitrate + Nitrite, were sampled at all sites with similar results as previous results, Table 8.

Rationale: The three main reasons to implement routine monitoring of groundwater quality on VMI are to: (1) establish the natural baseline quality of the system to detect future changes; (2) have an early warning system on the impacts of pollution sources; and (3) identify trends in groundwater quality caused by natural events, the impact of diffuse pollution, and changes in the hydrologic regime.

5.0. REFERENCES

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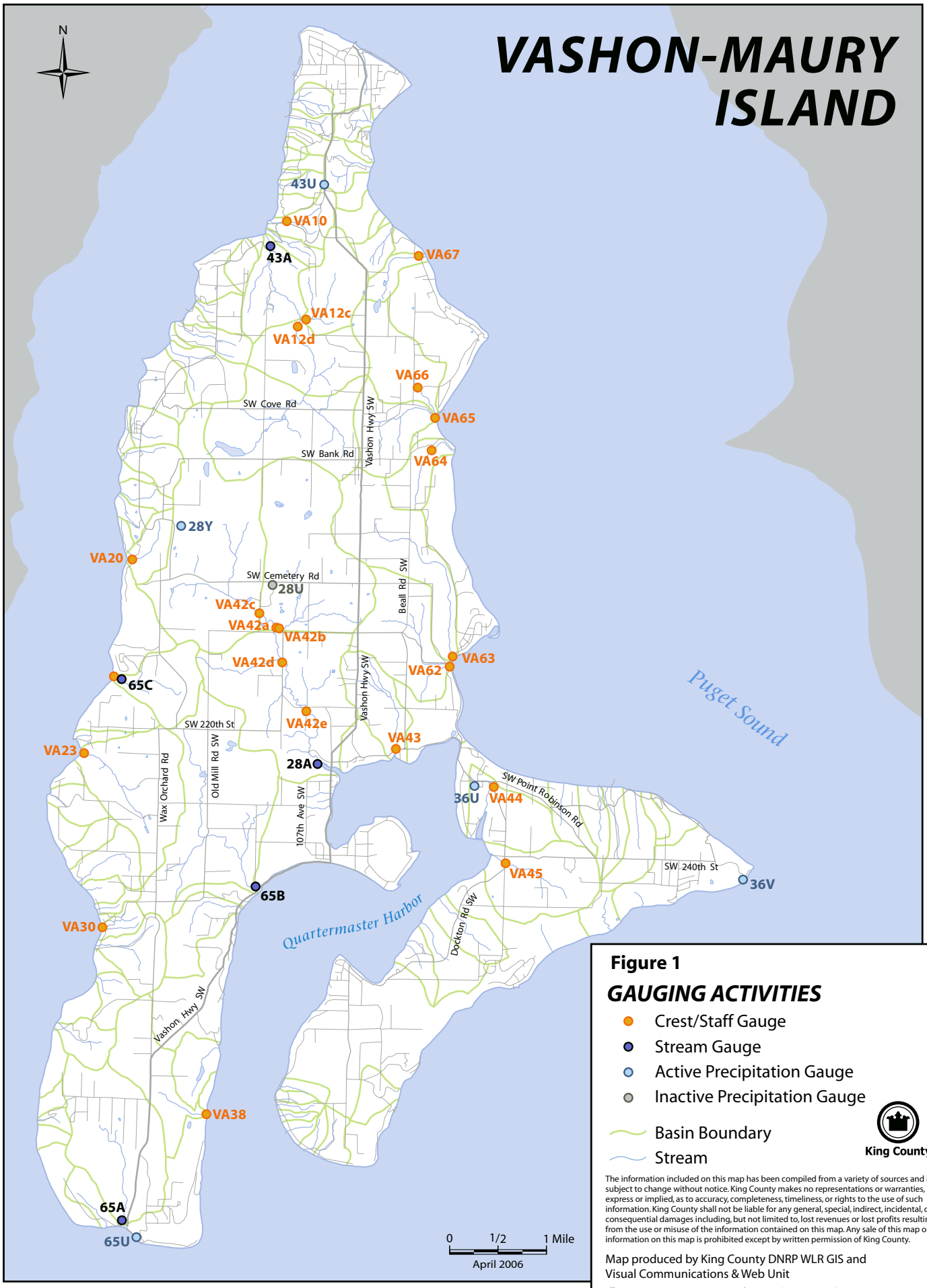

Figure 1

GAUGING ACTIVITIES

- Crest/Staff Gauge
- Stream Gauge
- Active Precipitation Gauge
- Inactive Precipitation Gauge
- Basin Boundary
- Stream

King County

The information included on this map has been compiled from a variety of sources and is subject to change without notice. King County makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. King County shall not be liable for any general, special, indirect, incidental, or consequential damages including, but not limited to, lost revenues or lost profits resulting from the use or misuse of the information contained on this map. Any sale of this map or information on this map is prohibited except by written permission of King County.

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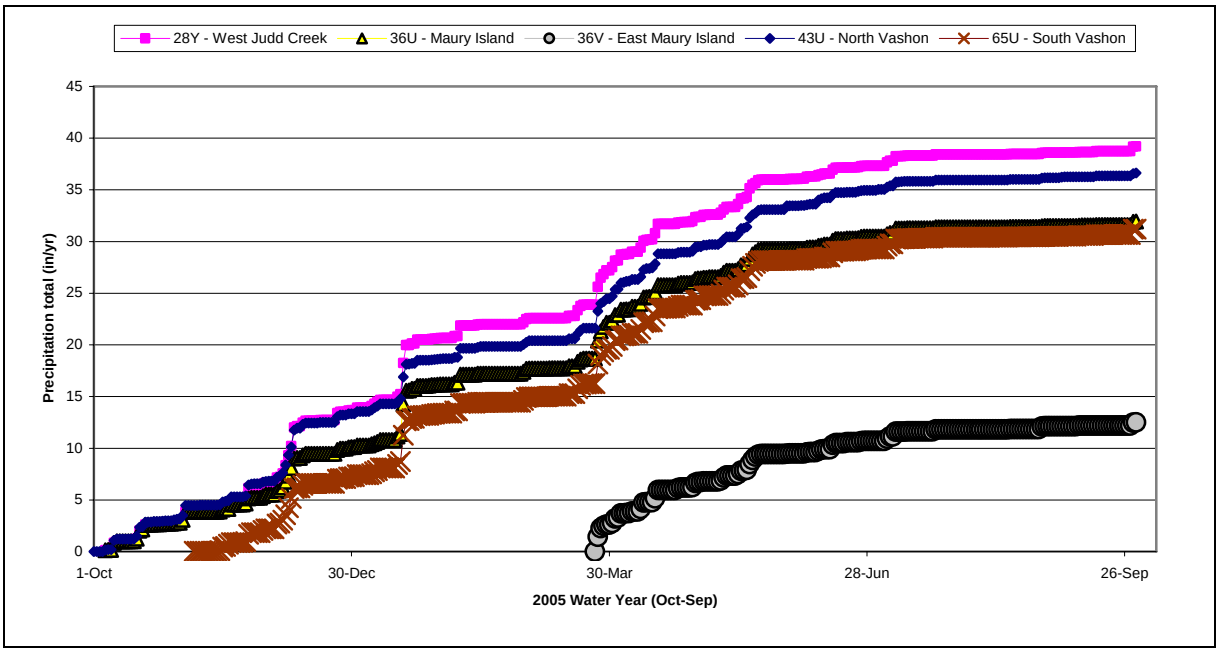
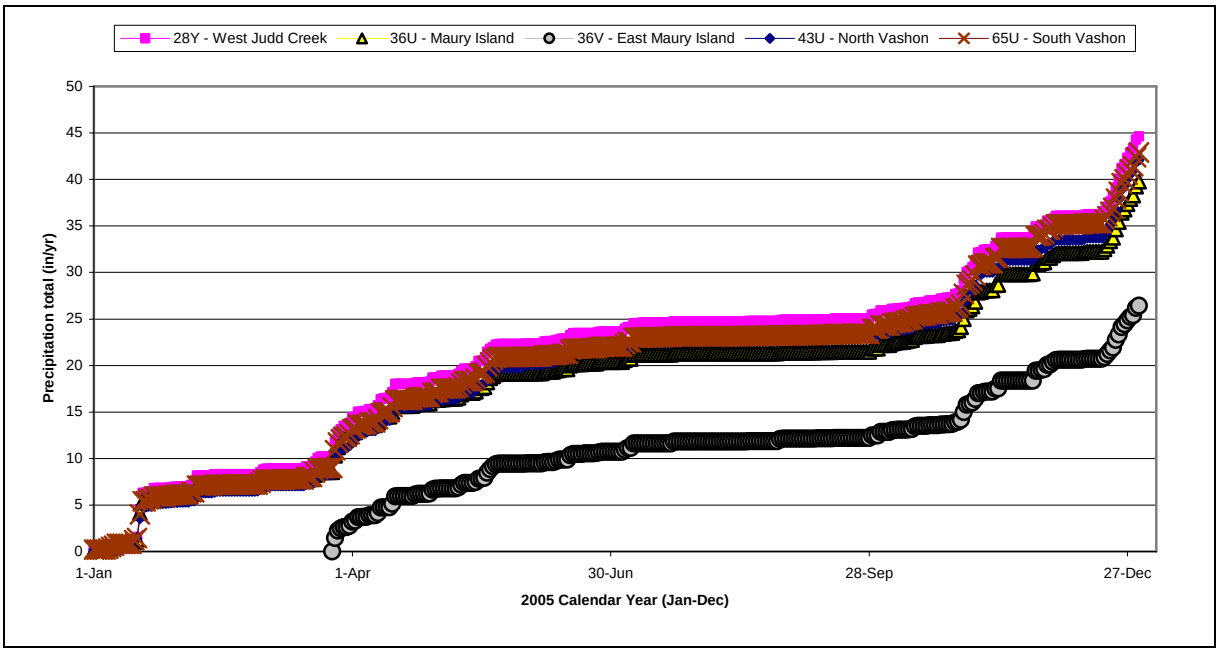


2a. Accumulated daily totals of precipitation (inches/year) for the 2005 Water Year (October to September)



2b. Accumulated daily totals of precipitation (inches/year) for the 2005 Calendar Year (January to December)

Figure 2 (a-b). Accumulated daily totals of precipitation for all sites on Vashon-Maury Island. Figure 2a displays the data on a Water Year (October to September) time scale while Figure 2b displays the data on a Calendar Year (January to December) time scale.

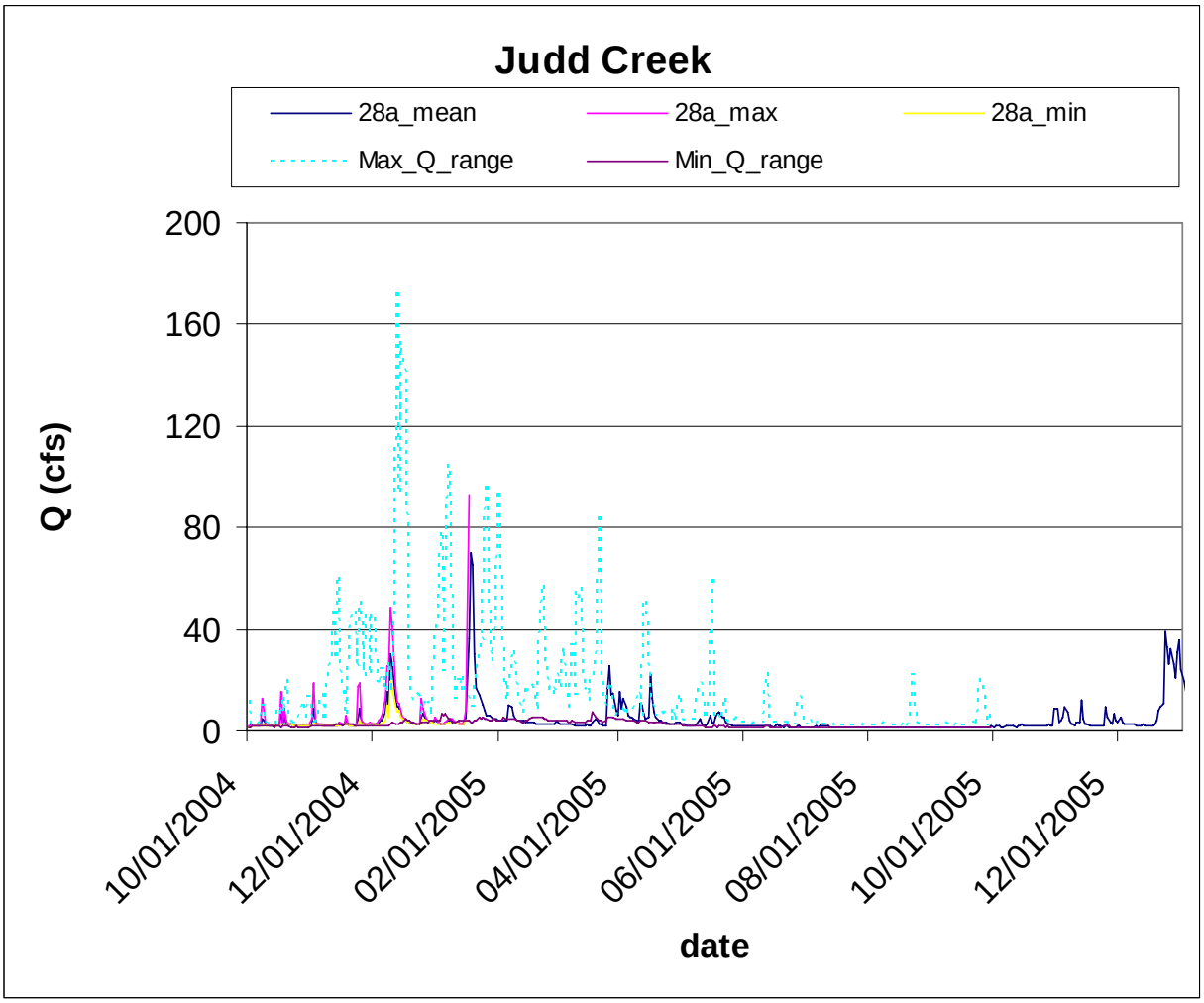


Figure 3. Hydrograph of daily total stream flows (median, maximum and minimum) for the Judd Creek site, gauge site id# 28A.

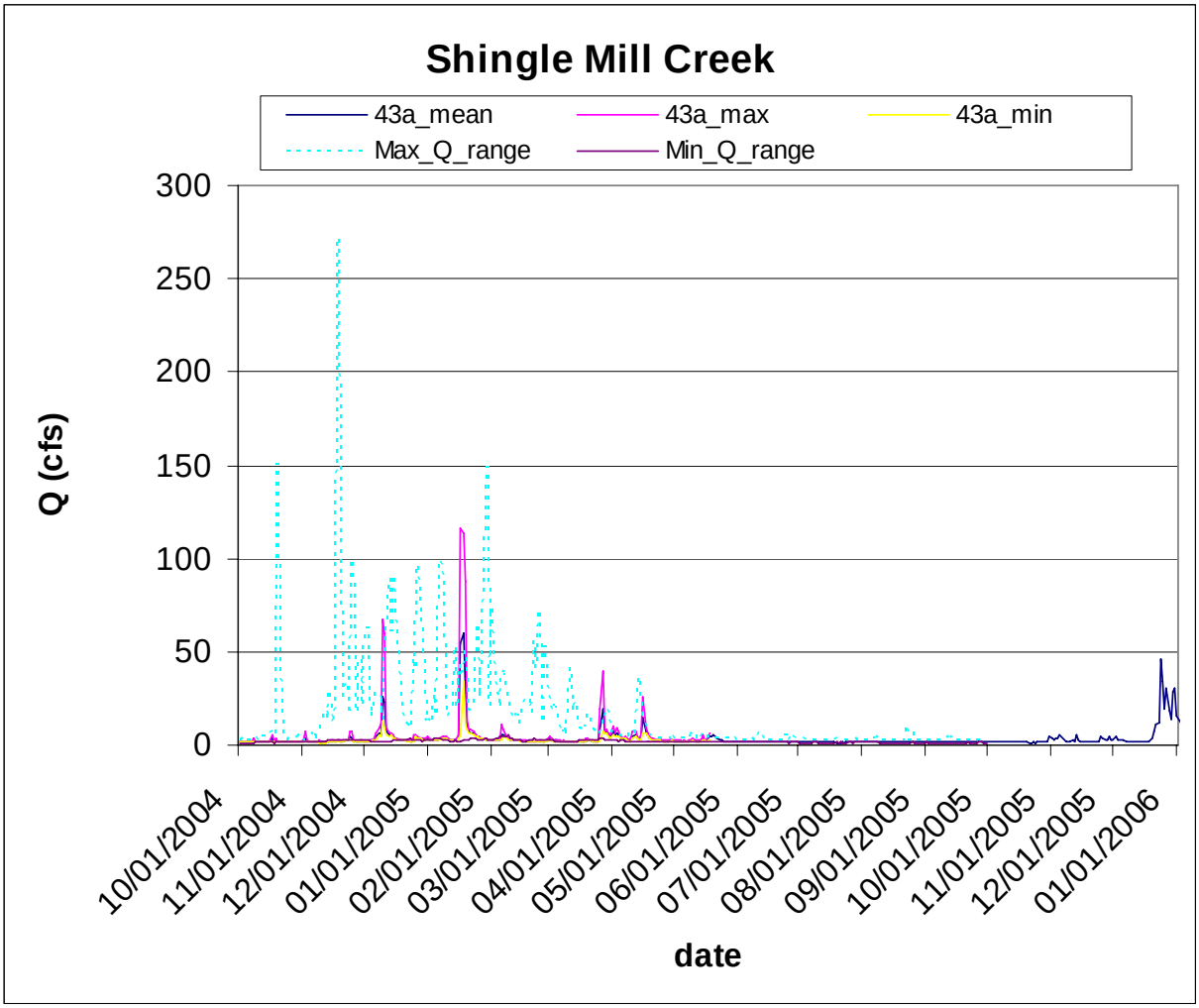


Figure 4. Hydrograph of daily total stream flows (median, maximum and minimum) for the Shingle Mill Creek site, gauge site id# 43A

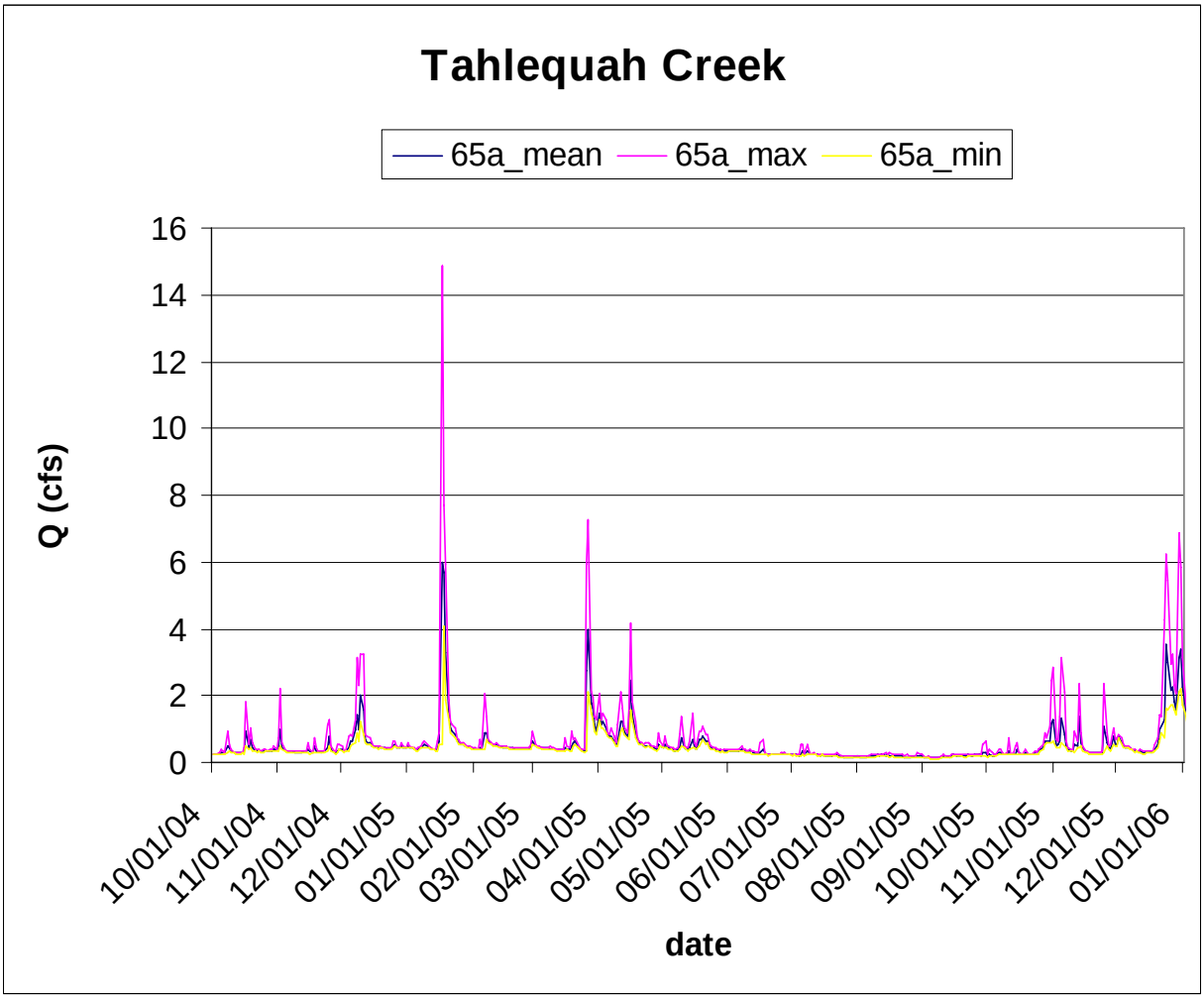


Figure 5. Hydrograph of daily total stream flows (median, maximum and minimum) for the Tahlequah Creek site, gauge site id# 65A.

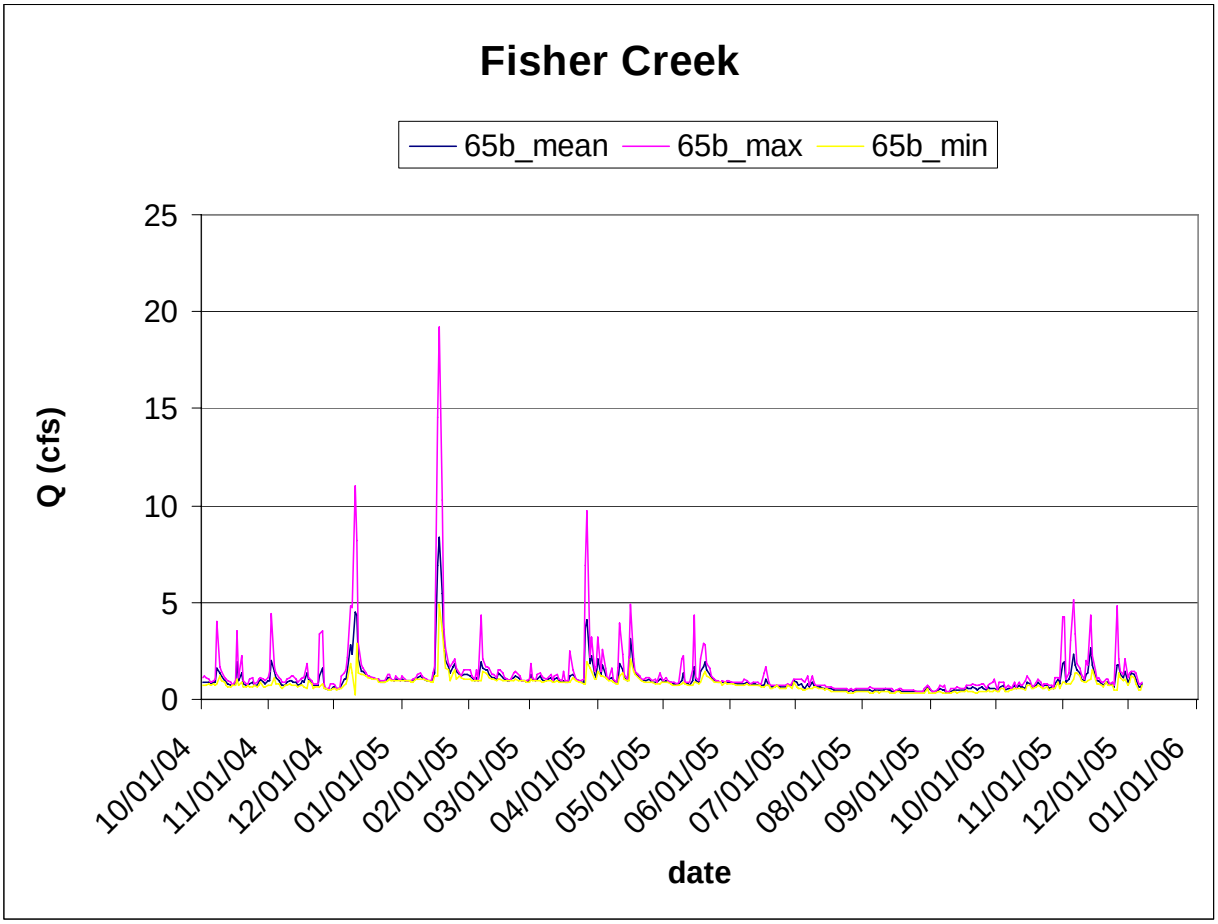


Figure 6. Hydrograph of daily total stream flows (median, maximum and minimum) for the Fisher Creek site, gauge site id# 65B.

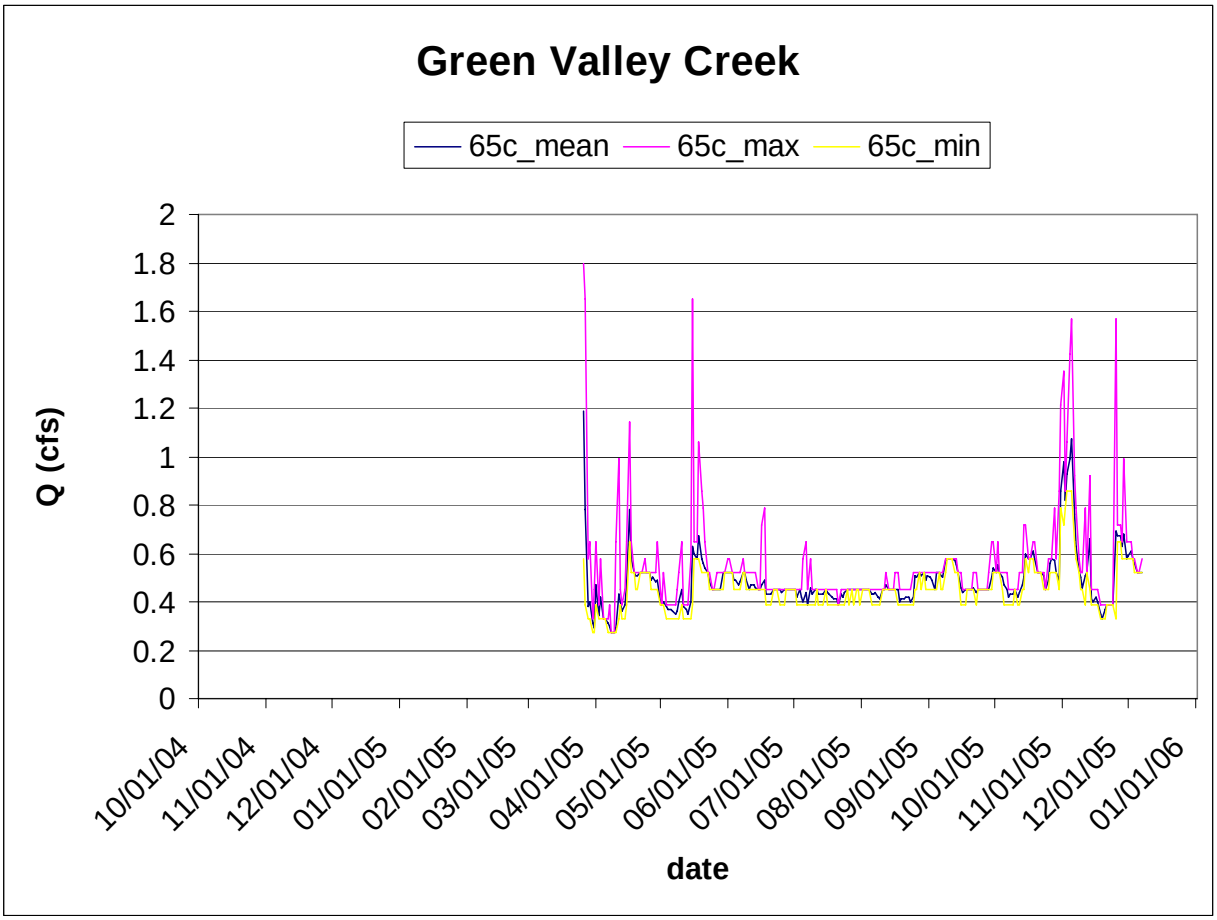


Figure 7. Hydrograph of daily total stream flows (median, maximum and minimum) for the Green Valley Creek site, gauge site id# 65C. NOTE: this site has a limited time period of data; March – December 2005.

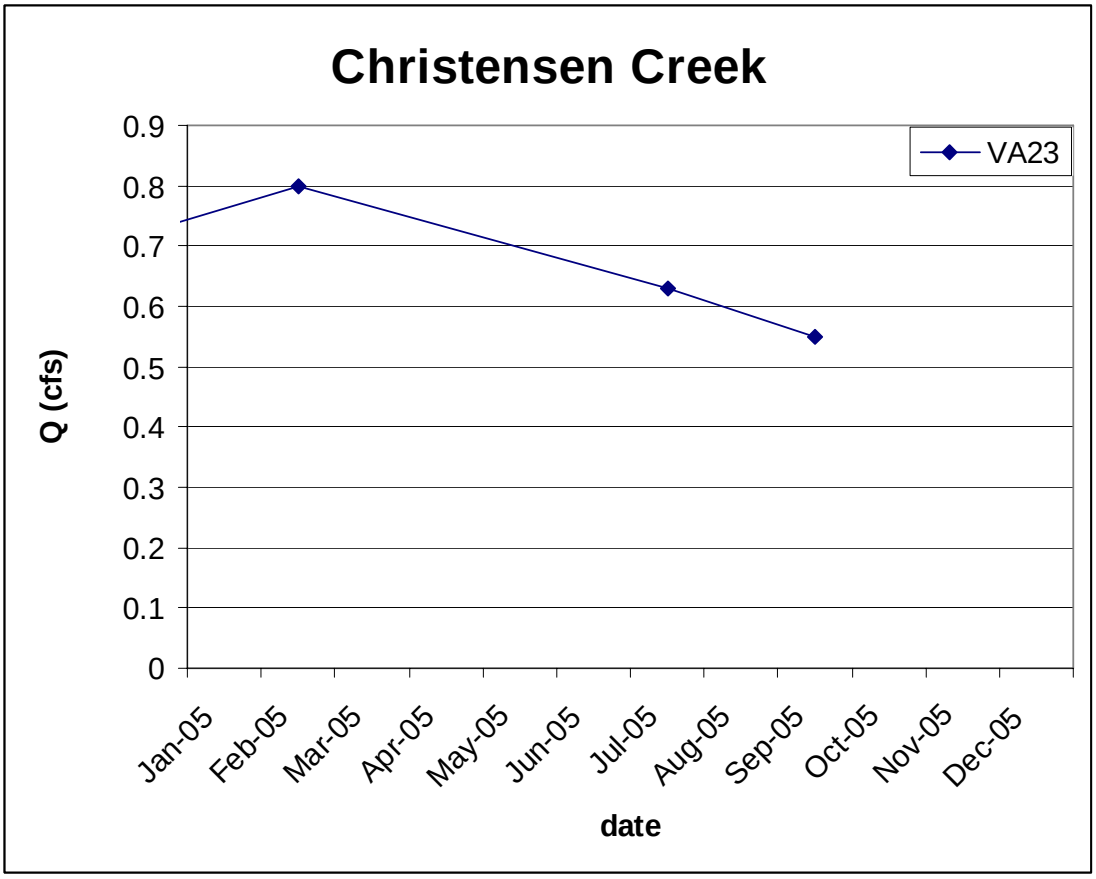


Figure 8. Typical hydrograph for the Island-wide stream gauge sites. This location is Christensen Creek, gauge site id# VA23, and has been measured since April 2004.

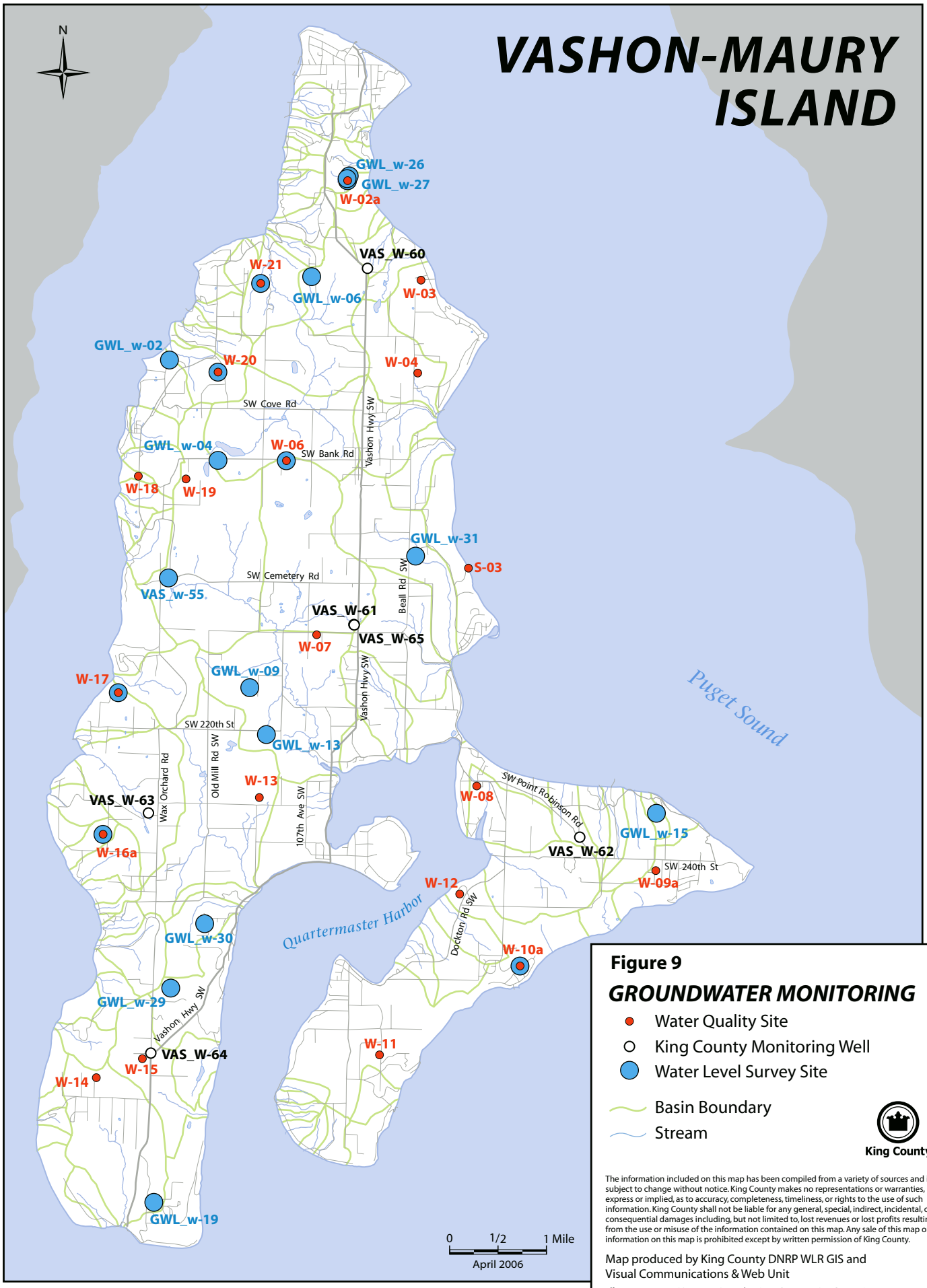


Figure 9

GROUNDWATER MONITORING

- Water Quality Site
- King County Monitoring Well
- Water Level Survey Site
- Basin Boundary
- Stream

King County

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Map produced by King County DNRP WLR GIS and Visual Communications & Web Unit

File name: 0604vmiGWmaps.ai wgab **Data Sources:** King County Datasets

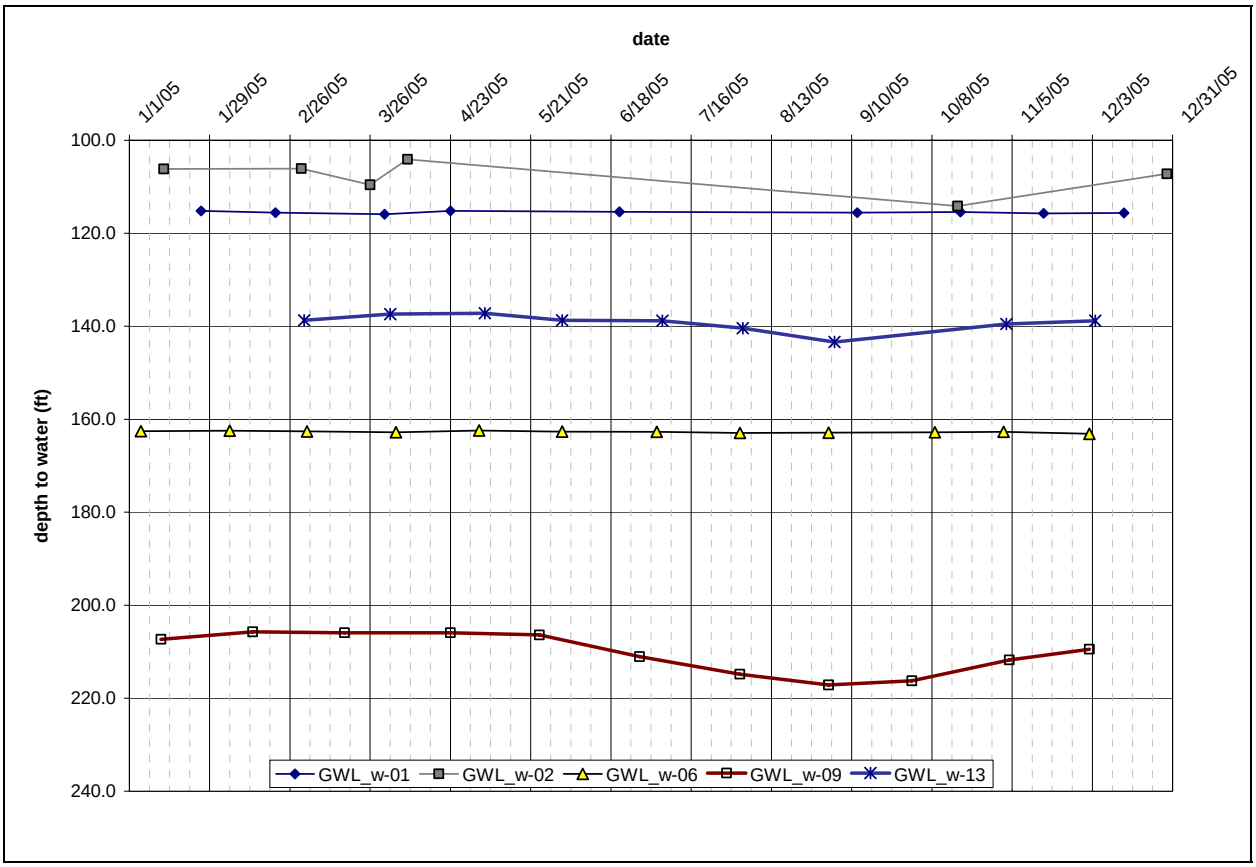

Figure 10. Hydrograph of water level (depth to water) measurements of the volunteer sites on VMI in 2005.

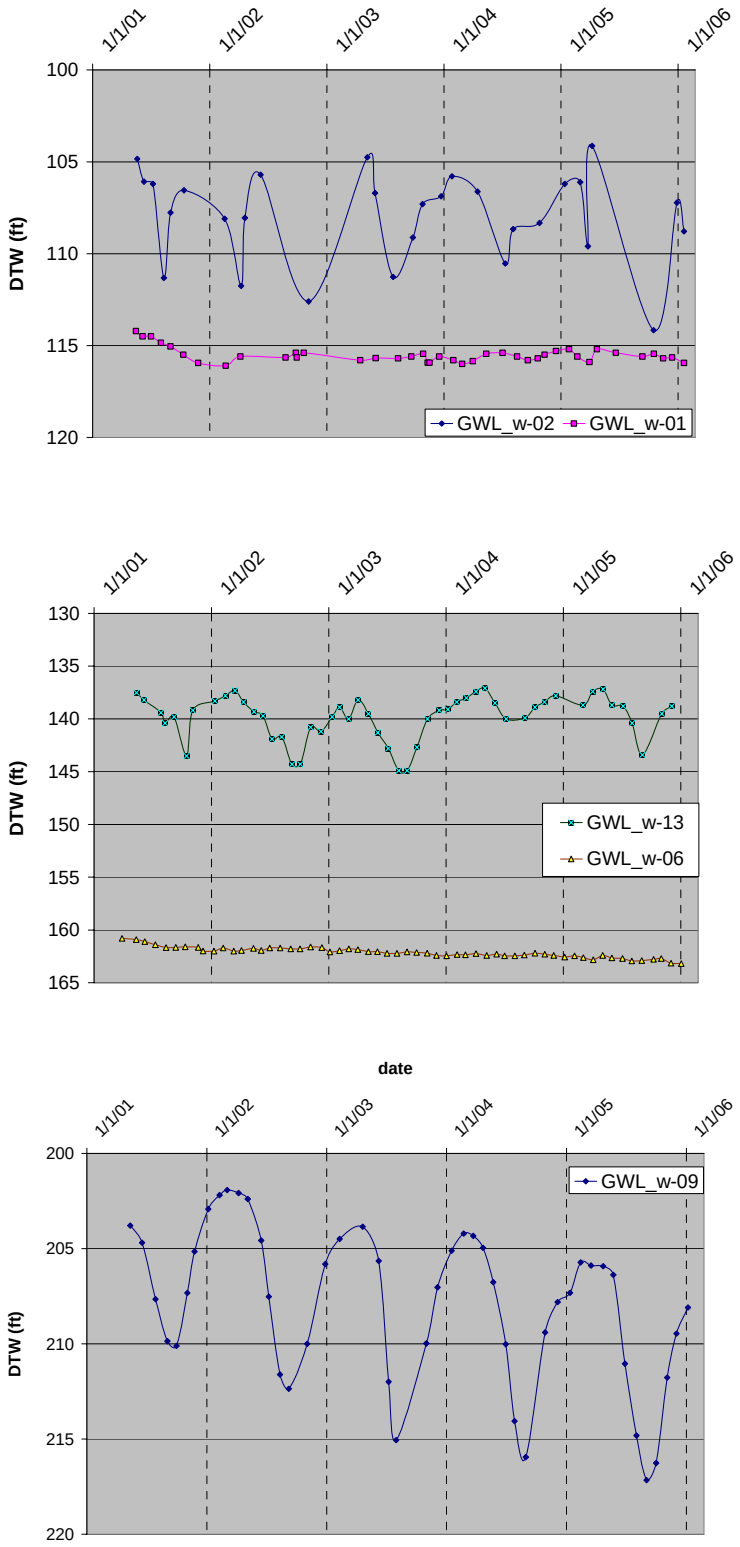

Figure 11. Depth to water (DTW) measurements in feet below land surface for the volunteer monitoring sites since 2001.

Table 1. List of Precipitation Gauge Sites on Vashon-Maury Island.

Gauge Id	Gauge Name	Date Started	Total Precipitation (inches/yr)	
			Water Year Oct04-Sep05	Calendar Year Jan-Dec05
28Y	West Judd Creek (Transfer Station)	Oct-5-04	39.2*	44.6
36U	Maury Island (KIRO)	Oct-5-04	31.9*	39.8
36V	East Maury Island (marine park)	Mar-25-05	*12.5**	*26.4**
43U	North Vashon (Heights Water District Office)	Sep-20-99	36.6	42.1
65U	South Vashon (Tallequah Ferry Landing)	Nov-5-04	31.2*	42.9
Sea-Tac	Sea-Tac airport (area reference)	1971^	30.6	35.6

"*" = refers to sites that have incomplete data record for the time period measured.

"^" = refers to the year that precipitation annual averages started – the annual average for Sea-Tac is 37.2 measured 1971-2000.

Table 2. A summary of flow data for all continuous stream gauge sites on Vashon-Maury Island.

Gauge Id	Gauge Name	Date Started	Q_t WY (cfs)	Q_t CY (cfs)	Q_{median} (cfs)	Q_{max} (cfs)	Q_{min} (cfs)
28A	Judd Creek	Jul-16-99	1456.6	1311.9	2.2	93.0	1.1
43A	Shingle Mill Creek	Jul-9-98	1102.0	1000.2	2.0	116.0	1.0
65A	Tahlequah Creek	May-1-04	176.6	167.1	0.4	14.9	0.1
65B	Fisher Creek	May-1-04	369.4	336.3	0.9	19.2	0.2
65C	Green Valley Creek	Mar-25-05	87.1*	124.6*	0.5*	1.8*	0.3*

Q_t = Total flow for measured time period of water year (WY) or calendar year (CY).

Q_{median} = Median flow recorded for a given site.

Q_{max} = Maximum flow recorded for a given site.

Q_{min} = Minimum flow recorded for a given site.

(cfs) = cubic feet per second; the unit of measurement for stream flow.

"*" = refers to sites that have incomplete data record for the time period measured.

Table 3. List of Stream Gauge Sites measured as part of the Island-wide assessment.

King County Gauge Id#	Rural Recon. Report Stream #	Stream Name	Stream Flow Measurements (cfs)		
			02/23,25/2005	07/21/2005	9/14,15,22/2005
VA10	10	McCormick Creek	0.32	0.11	0.20
43A	12	Shingle Mill Creek	2.00	1.73	1.54
	12a	Shingle Mill at Cove Rd	0.00	0.00	0.00
	12b	East Fork Shingle Mill at Cove Rd	0.00	0.00	0.00
	12c	Shingle Mill above Needle Creek	1.55	1.40	1.29
	12d	Needle Creek	0.27	0.16	0.19
VA20	20	Robinwood Creek	0.69	0.51	0.35
65C	21	Green Valley Creek	0.47	0.44	0.50
VA23	23	Christensen Creek	0.80	0.63	0.55
VA30	30	Bates Creek	0.10	0.13	0.09
65A	37	Tahlequah Creek	0.48	0.49	0.20
65B	41	Fisher Creek	1.12	0.55	0.54
VA42A	42a	Judd Creek @ SW 204th	not meas	0.41	0.43
VA42B	42b	East Fork Judd Creek @ SW 204th	0.29	0.02	0.00
28A	42	Judd Creek near Mouth	2.82	1.63	1.45
	42c	Judd Creek at Singer Rd	0.95	0.20	0.38
	42d	Judd at 111th SW	1.62	0.68	0.70
	42e	Judd at 107th SW	2.82	1.22	1.29
VA43	43	Tsugwalla Creek	0.06	0.02	0.04
VA44	44	Raab's Creek	0.05	0.01	0.02
VA45	45	Mileta Creek	0.02	0.00	0.00
VA62	62	Ellis Creek	0.49	0.50	0.27
VA63	63	Ellisport Creek	0.35	0.32	0.31
VA64	64	Beall Creek, upstream intake	0.68	0.89	0.73
VA65	65	Gorsuch Creek	0.05	0.11	0.06
VA66	66	Dilworth Creek	0.15	0.05	0.03
VA67	67	Glen Acre Creek	0.05	not meas	0.02

(cfs) = cubic feet per second

Not meas. = This location was not measured for flow during the Island-wide assessment.

Table 4. Volunteer Water Level sites and depth to water measurement data for 2005.

	GWL_w-01	GWL_w-02	GWL_w-06	GWL_w-09	GWL_w-13
Month	**depth to water (feet)**				
Jan	115.2	106.2	162.6	207.3	not meas
Feb	115.6	106.1	162.4	205.7	not meas
Mar	115.9	109.6	162.6	205.9	138.7
Apr	115.2	104.1	162.8	205.9	137.4
May	not meas	not meas	162.4	206.4	137.2
Jun	115.4	not meas	162.6	211.1	138.7
Jul	not meas	not meas	162.7	not meas	138.8
Aug	not meas	not meas	162.9	214.8	140.4
Sep	115.6	not meas	162.9	217.2	143.4
Oct	115.4	114.2	162.8	216.3	not meas
Nov	115.7	not meas	162.7	211.8	139.5
Dec	115.7	107.2	163.1	209.5	138.8

Table 5. Water level measurements for water quality sites on Vashon-Maury Island.

Site id	Measurement date	Depth to water (feet)
w-02a	06/21/2005	146.5
w-06	06/20/2005	148.25
w-14	06/21/2005	164.75
w-16a	06/20/2005	24.81
w-17	06/20/2005	170.71
w-18	06/23/2005	76.15
w-20	06/20/2005	89.58
w-21	06/21/2005	115.39

Table 6. Locations used in the 2005 Island-wide water level survey.

Map id	Measurement Date	Depth to water (feet)	Location type
GWL_w-02	10/17/05	114.2	vol
GWL_w-04	9/13/05	108.4	wl-vol
GWL_w-06	9/2/05	162.9	vol
GWL_w-09	9/2/05	217.2	vol
GWL_w-13	9/4/05	143.4	vol
GWL_w-15	9/12/05	48.4	wl-vol
GWL_w-19	9/13/05	64.2	wl-vol
GWL_w-26	9/12/05	114.3	wq
GWL_w-27	9/12/05	126.4	wl-vol
GWL_w-28	9/12/05	275.1	wl-vol
GWL_w-29	9/12/05	180.2	wl-vol
GWL_w-30	9/12/05	136.0	wl-vol
GWL_w-31	9/13/05	110.6	wl-vol
VAS_w-02a/GWL_w-25	9/12/05	148.4	wq/wl-vol
VAS_w-06	9/12/05	149.5	wq
VAS_w-10a	9/12/05	88.3	wq
VAS_w-16a	9/12/05	27.6	wq
VAS_w-17	9/12/05	172.3	wq
VAS_w-20	9/13/05	90.1	wq
VAS_w-21/GWL_w-01	9/12/05	115.6	wq/vol
VAS_w-55	10/12/05	92.1	wq

Vol = Volunteer Water Level location

Wl-vol = New location for water level measurements

Wq = Water quality sampling site where water levels are measured.

Table 7. Water level measurements at the dedicated groundwater monitoring wells on VMI.

WELL ID	Site Name	Date Measured	Depth to water (feet)
VAS_W-60	Vashon Hwy SW, near 145th Pl	10/31/2005	205.50
		11/16/2005	210.10
		12/01/2005	223.80
		12/12/2005	180.45
		12/13/2005	197.63
VAS_W-61	Valley Center Park-n-Ride 2" well	10/31/2005	81.10
		11/16/2005	84.80
		12/05/2005	85.08
		12/06/2005	84.81
		12/12/2005	85.53
		12/13/2005	85.73
VAS_W-62	Maury Island - 63rd Ave SW	11/16/2005	dry
		12/05/2005	dry
		12/12/2005	dry
VAS_W-63	SW Redding Beach Rd	12/13/2005	109.83
VAS_W-65	Valley Center Park-n-Ride 6" well	12/05/2005	85.25
		12/06/2005	85.05
		12/12/2005	87.45
		12/13/2005	85.85

NOTE: Well Id: VAS_W-64, Wax Orchard Road @ Vashon Hwy, was completed in late December 2005 and was not measured for water level until 2006. This delay was necessary for well development and recovery before recording levels.

Table 8. Environmental Indicators – Arsenic, Chloride, and Nitrate-Nitrate – sampling results at the 20 long-term monitoring sites. Sampling occurred June 20 – 23 2005.

	Arsenic		Chloride		Nitrate + Nitrite	
	June results	Avg Conc.	June results	Avg Conc.	June results	Avg Conc.
	mg/L					
VAS_s-03	0.0019	0.0019	6.14	6.16	2.18	1.85
VAS_w-02a	0.0071	0.0076	3.97	3.63	0.47	1.11
VAS_w-03	0.0011	0.0011	7.53	7.59	0.33	0.36
VAS_w-04	0.0175	0.0186	4.03	3.53	0.02	0.02
VAS_w-06	0.0010	0.0010	3.25	2.89	1.31	1.20
VAS_w-07	0.0241	0.0367	2.99	2.59	0.02	0.02
VAS_w-08	0.0022	0.0030	8.96	8.02	0.02	0.02
VAS_w-09a	0.0047	0.0060	5.11	4.78	0.02	0.02
VAS_w-10a	0.0013	0.0013	9.88	9.53	3.61	2.90
VAS_w-11	0.0015	0.0015	5.21	4.92	0.02	0.02
VAS_w-12	0.0053	0.0060	4.23	3.91	0.02	0.02
VAS_w-13	0.0011	0.0011	8.95	8.48	1.81	1.72
VAS_w-14	0.0013	0.0014	4.45	3.99	0.03	0.03
VAS_w-15	0.0013	0.0014	5.05	4.51	0.02	0.02
VAS_w-16a*	0.0005	0.0005	3.69	4.03	3.89	4.96
	0.0005		3.60		4.02	
VAS_w-17*	0.0005	0.0005	4.19	3.62	1.85	1.58
	0.0005		4.03		1.82	
VAS_w-18	0.0029	0.0037	6.02	5.74	0.02	0.02
VAS_w-19	0.0019	0.0019	2.97	2.82	0.59	0.69
VAS_w-20	0.0006	0.0006	3.59	3.38	2.78	2.84
VAS_w-21	0.0031	0.0041	3.89	3.58	0.02	0.02

Avg Conc. = Average Concentration of the previous sampling events (typically seven results per location)

mg/L = milligrams per liter.

* = these locations had a sample replicate taken during this sampling event.

Table 9. Organic Compounds sampled in June 2005 as part of the WRE WQ sampling.

Chlorinated Pesticides		
Compound	MDL	Units
4,4'-DDD	0.0024	ug/L
4,4'-DDE	0.0024	ug/L
4,4'-DDT	0.0024	ug/L
Aldrin	0.0024	ug/L
Alpha-BHC	0.0024	ug/L
Alpha-Chlordane	0.012	ug/L
Beta-BHC	0.0024	ug/L
Delta-BHC	0.0024	ug/L
Dieldrin	0.0024	ug/L
Endosulfan I	0.0024	ug/L
Endosulfan II	0.0024	ug/L
Endosulfan Sulfate	0.0024	ug/L
Endrin	0.0024	ug/L
Endrin Aldehyde	0.0024	ug/L
Gamma-BHC (Lindane)	0.0024	ug/L
Gamma-Chlordane	0.012	ug/L
Heptachlor	0.0024	ug/L
Heptachlor Epoxide	0.0024	ug/L
Methoxychlor	0.012	ug/L
Toxaphene	0.024	ug/L
Organophosphorus Pesticides		
Compound	MDL	Units
Chlorpyrifos	0.032	ug/L
Diazinon	0.041	ug/L
Disulfoton	0.026	ug/L
Malathion	0.046	ug/L
Parathion-Ethyl	0.043	ug/L
Parathion-Methyl	0.034	ug/L
Phorate	0.031	ug/L

Chlorinated Herbicides		
Compound	MDL	Units
2,4,5-T	0.032	ug/L
2,4,5-TP (Silvex)	0.019	ug/L
2,4-D	0.014	ug/L
2,4-DB	0.023	ug/L
Dalapon	0.033	ug/L
Dicamba	0.024	ug/L
Dichloroprop	0.041	ug/L
Dinoseb	0.021	ug/L
MCPA	0.015	ug/L
MCPP	0.016	ug/L
Endocrine Disrupting Compounds		
Compound	MDL	Units
Bis(2-ethylhexyl)adipate	0.048	ug/L
Bisphenol A	0.12	ug/L
Chlordecone (Kepone)	0.12	ug/L
Methyltestosterone	0.24	ug/L
Progesterone	0.12	ug/L
Testosterone	0.24	ug/L
Total 4-Nonylphenol	0.12	ug/L
Vinclozolin	0.12	ug/L
Estradiol	0.00048	ug/L
Estrone	0.00029	ug/L
Ethynyl estradiol	0.00048	ug/L

Table 10. Rainfall Summary for Water Year: 2004 and 2005

Water Year	Site	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	YTD Total
WY04	**28U**	11.5	8.9	5.0	8.3	3.5	3.2	1.1	2.8	1.1	0.5	3.5	2.7	**52.1**
	43U	8.4	7.8	5.0	7.2	3.0	2.9	0.7	2.5	0.6	0.7	3.0	2.3	**44.1**
	SeaTac	8.9	6.8	3.9	6.4	2.4	2.1	0.7	2.5	0.8	0.2	3.0	2.8	**40.5**
WY05	**28U**	3.3	3.4	4.9	--	--	--	--	--	--	--	--	--	**11.6**
	28Y	2.8	3.9	7.0	7.0	1.5	5.3	4.9	3.6	1.3	1.1	0.2	0.6	**39.2**
	36U	2.8	2.7	4.6	6.1	1.2	5.0	4.1	2.8	1.2	0.9	0.1	0.4	**31.9**
	36V	--	--	--	--	--	2.8	4.0	2.7	1.3	1.1	0.3	0.4	**12.5**
	43U	3.1	3.7	6.6	5.3	1.4	4.7	4.8	4.0	1.5	1.0	0.2	0.5	**36.6**
	65U	--	2.2	5.1	6.2	1.3	5.2	4.5	3.8	1.1	1.1	0.1	0.7	**31.2**
	SeaTac	2.8	3.2	4.4	4.4	1.2	3.7	3.7	3.3	1.6	1.0	0.3	1.0	**30.6**

YTD Total = Year to date total of the daily total precipitation.

WY = Water Year – a 12 month period starting October 1 through September 30; WY04 is from October 2003 through September 2004 and WY 2005 is from October 2004 through September 2005.

-- = No data for this site for this month.

Table 11. Comparison of Total Stream Flow by water year (WY) for 28A – Judd Creek and 43A – Shingle Mill Creek.

	28A - Judd Creek	43A - Shingle Mill Creek
	Q_t (cfs)	
WY99	--	2786.6
WY00	2418.4	2067.6
WY01	1393.5	970.9
WY02	2504.3	1844.9
WY03	1775.8	1406.5
WY04	2160.0	1616.5
WY05	1456.6	1311.9

Q_t = Total flow for measured time period of water year (WY).

WY = Water Year – a 12 month period starting October 1 through September 30.

(cfs) = cubic feet per second; the unit of measurement for stream flow.

-- = No data for this site for this water year

Table 12. The relative change of the annual average (in feet) from the baseline of the depth to water measurements done in 2003 to 2005 for the five long-term water level sites. The baseline for each site is the average of the measurements made in 2001-2002.

	2001-2002		2003		2004		2005	
	baseline	count	data	count	data	count	data	count
GWL_w-01	**115.3**	13	***-0.4***	8	***-0.3***	10	***-0.2***	9
GWL_w-02	**108.1**	11	+0.4	6	+0.1	5	+0.2	6
GWL_w-06	**161.6**	21	***-0.5***	12	***-0.8***	12	***-1.1***	12
GWL_w-09	**206.2**	18	***-2.1***	7	***-2.1***	10	***-4.0***	11
GWL_w-13	**140.2**	19	***-0.8***	12	+1.7	11	+1.0	9

Appendix A

Precipitation data

28Y West Judd Creek

2005 Water Year 05Oct to 30Sep

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.29	0.01	0.24	0.00	0.29	0.63	0.00	0.04	0.00	0.02	0.00
2	0.00	0.78	0.00	0.00	0.00	0.11	0.04	0.16	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.00	0.00
4	0.00	0.01	0.48	0.00	0.18	0.00	0.00	0.06	0.00	0.00	0.00	0.00
5	0.11	0.00	0.09	0.00	0.00	0.00	0.07	0.00	0.02	0.32	0.00	0.01
6	0.03	0.00	0.34	0.17	1.00	0.00	0.01	0.00	0.01	0.15	0.00	0.00
7	0.00	0.00	0.76	0.22	0.00	0.00	0.20	0.00	0.17	0.00	0.00	0.00
8	0.69	0.00	0.97	0.17	0.01	0.00	0.00	0.17	0.04	0.44	0.00	0.00
9	0.15	0.00	0.90	0.18	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
10	0.00	0.00	1.79	0.00	0.00	0.00	0.42	0.24	0.00	0.00	0.00	0.03
11	0.00	0.00	0.13	0.00	0.00	0.00	0.64	0.00	0.12	0.05	0.00	0.00
12	0.00	0.00	0.00	0.00	0.11	0.00	0.11	0.00	0.07	0.01	0.00	0.00
13	0.00	0.00	0.34	0.00	0.01	0.00	0.01	0.00	0.08	0.00	0.00	0.00
14	0.00	0.05	0.17	0.00	0.00	0.00	0.05	0.28	0.00	0.00	0.00	0.00
15	0.00	0.31	0.00	0.32	0.01	0.00	0.59	0.53	0.00	0.00	0.00	0.00
16	0.27	0.07	0.00	0.26	0.00	0.22	0.89	0.05	0.40	0.01	0.00	0.09
17	0.78	0.03	0.00	2.99	0.00	0.00	0.00	0.11	0.18	0.00	0.04	0.00
18	0.11	0.43	0.01	1.74	0.00	0.00	0.00	0.85	0.00	0.00	0.00	0.00
19	0.45	0.00	0.05	0.01	0.00	0.54	0.00	0.32	0.00	0.00	0.00	0.00
20	0.01	0.00	0.01	0.14	0.00	0.41	0.00	0.16	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.02	0.00	0.12	0.00	0.28	0.02	0.00	0.00	0.00
22	0.05	0.01	0.00	0.35	0.00	0.00	0.00	0.06	0.00	0.11	0.00	0.00
23	0.00	0.10	0.00	0.01	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
24	0.00	1.28	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
25	0.02	0.10	0.70	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.00	0.00
26	0.03	0.02	0.10	0.01	0.00	1.75	0.00	0.00	0.09	0.00	0.00	0.00
27	0.00	0.01	0.00	0.04	0.00	0.88	0.00	0.00	0.05	0.00	0.00	0.00
28	0.00	0.00	0.00	0.03	0.19	0.32	0.09	0.00	0.00	0.00	0.07	0.00
29	0.04	0.25	0.14	0.05		0.37	0.40	0.00	0.00	0.00	0.05	0.44
30	0.05	0.13	0.02	0.02		0.00	0.03	0.00	0.00	0.00	0.00	0.05
31	0.00		0.01	0.02		0.31		0.03		0.00	0.00	
Total	2.79 #	3.87 #	7.02 #	6.99 #	1.51 #	5.32 #	4.89 #	3.61 #	1.32 #	1.09 #	0.18 #	0.62

Year To Date Total: 39.21 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

28Y West Judd Creek

2006 Water Year 01Oct to 05Feb

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.79	0.23	0.18	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.37	0.15	0.30	0.35	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.01	0.39	0.00	0.20	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.49	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	1.06	0.00	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.17	0.06	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.23	0.00	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.04	0.04	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.02	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.04	0.00	0.00	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.38	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.07	0.04	0.11	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.06	0.87	0.05	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.35	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.01	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.01	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.17	0.00	0.38	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.46	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.56	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.20	0.00	0.90	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.01	0.11	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.09	1.07	1.12	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.41	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.04	0.06	0.70	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.34	0.08	0.56	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.08	0.47	0.46	1.48		0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.34	0.00	0.93	0.92		0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	1.17		0.37	0.65		0.00		0.00		0.00	0.00	
Total	3.72	6.30	9.09	14.27	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Year To Date Total: **35.23** **inches**

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

36U Maury Island

2005 Water Year 05Oct to 30Sep

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.29	0.00	0.16	0.00	0.28	0.52	0.00	0.02	0.00	0.00	0.00
2	0.00	0.78	0.00	0.00	0.00	0.05	0.05	0.07	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.01	0.00	0.00	0.00
4	0.00	0.01	0.33	0.00	0.14	0.00	0.00	0.04	0.00	0.00	0.00	0.00
5	0.11	0.00	0.07	0.00	0.00	0.00	0.05	0.00	0.00	0.21	0.00	0.00
6	0.03	0.00	0.29	0.10	0.78	0.00	0.00	0.00	0.00	0.14	0.00	0.00
7	0.00	0.00	0.55	0.11	0.00	0.00	0.23	0.00	0.12	0.00	0.00	0.00
8	0.69	0.00	0.60	0.11	0.00	0.00	0.00	0.13	0.03	0.41	0.00	0.00
9	0.15	0.00	0.74	0.20	0.00	0.02	0.00	0.32	0.00	0.00	0.00	0.00
10	0.00	0.00	0.89	0.00	0.00	0.00	0.29	0.17	0.00	0.00	0.00	0.04
11	0.00	0.00	0.07	0.00	0.00	0.00	0.62	0.00	0.14	0.02	0.00	0.01
12	0.00	0.00	0.01	0.00	0.11	0.00	0.04	0.00	0.05	0.02	0.00	0.00
13	0.00	0.00	0.24	0.00	0.00	0.00	0.01	0.00	0.09	0.00	0.00	0.00
14	0.00	0.03	0.14	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
15	0.00	0.17	0.00	0.33	0.00	0.00	0.44	0.35	0.00	0.00	0.00	0.00
16	0.27	0.06	0.00	0.25	0.00	0.18	0.68	0.03	0.37	0.00	0.00	0.03
17	0.78	0.00	0.00	2.88	0.00	0.00	0.02	0.09	0.16	0.00	0.03	0.00
18	0.11	0.44	0.00	1.31	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00
19	0.44	0.00	0.00	0.03	0.00	0.45	0.00	0.42	0.00	0.00	0.00	0.00
20	0.01	0.00	0.00	0.14	0.00	0.22	0.00	0.22	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.20	0.05	0.00	0.00	0.00
22	0.05	0.00	0.00	0.27	0.00	0.00	0.00	0.08	0.00	0.11	0.00	0.00
23	0.00	0.10	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00
24	0.00	0.48	0.00	0.01	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
25	0.02	0.06	0.39	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00
26	0.03	0.01	0.11	0.02	0.00	1.74	0.00	0.00	0.12	0.00	0.00	0.00
27	0.00	0.01	0.00	0.08	0.00	0.90	0.00	0.00	0.05	0.00	0.00	0.00
28	0.00	0.00	0.00	0.01	0.17	0.44	0.06	0.00	0.00	0.00	0.06	0.00
29	0.04	0.16	0.14	0.02		0.38	0.32	0.00	0.00	0.00	0.02	0.33
30	0.05	0.14	0.03	0.02		0.00	0.06	0.00	0.00	0.00	0.00	0.01
31	0.00		0.00	0.01		0.23		0.01		0.00	0.00	
Total	2.78 #	2.74 #	4.60 #	6.07 #	1.20 #	4.97 #	4.07 #	2.83 #	1.23 #	0.91 #	0.11 #	0.42

Year To Date Total: 31.93 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

36U Maury Island

2006 Water Year 01Oct to 07Feb

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.93	0.27	0.11	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.39	0.14	0.22	0.37	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.29	0.03	0.20	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.48	0.00	0.02	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	1.01	0.00	1.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.18	0.06	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.06	0.13	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.05	0.04	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.04	0.01	0.00	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.08	0.54	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.06	0.04	0.10	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.07	1.12	0.03	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.32	0.00	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.01	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.02	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.08	0.00	0.28	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.37	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.47	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.15	0.00	0.92	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.07	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.05	1.05	0.99	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.35	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.04	0.10	0.59	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.20	0.07	0.55	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.09	0.47	0.37	1.53		0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.33	0.01	0.97	0.74		0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.88		0.50	0.47		0.00		0.00		0.00	0.00	
Total	3.19	6.57	8.19	13.55	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Year To Date Total: 32.95 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

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King County Water and Land Resources Division (206) 296-6519

36V East Maury Island

2005 Water Year 25Mar to 30Sep

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.03	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.04	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.22	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.20	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.09	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.02	0.47	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.19	0.00	0.00	0.00	0.06
11	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.13	0.01	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.13	0.01	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.34	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.02	0.43	0.00	0.00	0.01
17	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.16	0.00	0.02	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.07	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.20	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.09	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.05	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.23	0.04	0.00	0.00	0.00	0.27	0.00
29	0.00	0.00	0.00	0.00		0.14	0.40	0.00	0.00	0.00	0.01	0.29
30	0.00	0.00	0.00	0.00		0.00	0.10	0.00	0.00	0.00	0.00	0.01
31	0.00		0.00	0.00		0.15		0.01		0.00	0.00	
Total	0.00 #	0.00 #	0.00 #	0.00 #	0.00 #	2.77 #	3.97 #	2.71 #	1.26 #	1.11 #	0.30 #	0.37

Year To Date Total: **12.49** **inches**

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

36V East Maury Island

2006 Water Year 01Oct to 28Feb

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.79	0.27	0.06	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.35	0.09	0.22	0.33	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.15	0.03	0.18	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.37	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.62	0.00	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.20	0.01	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.01	0.14	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.04	0.03	0.00	0.02	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.32	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.03	0.01	0.06	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.04	0.83	0.05	0.54	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.25	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.08	0.00	0.17	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.35	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.36	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.08	0.00	0.85	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.02	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.02	1.05	0.77	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.33	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.03	0.10	0.39	0.18	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.16	0.07	0.38	0.82	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.07	0.47	0.20	1.12		0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.21	0.01	0.79	0.65		0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.85		0.23	0.32		0.00		0.00		0.00	0.00	
Total	2.51	5.08	6.35	10.55	2.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Year To Date Total: 26.71 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

43U North Vashon

2005 Water Year 01Oct to 30Sep

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.39	0.01	0.20	0.00	0.23	0.64	0.00	0.00	0.00	0.00	0.00
2	0.00	0.97	0.00	0.00	0.00	0.14	0.03	0.16	0.00	0.07	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.38	0.00	0.14	0.00	0.05	0.06	0.00	0.00	0.00	0.08
5	0.14	0.00	0.13	0.00	0.00	0.00	0.10	0.00	0.03	0.24	0.00	0.01
6	0.04	0.00	0.31	0.17	0.87	0.00	0.01	0.00	0.00	0.11	0.00	0.00
7	0.00	0.01	0.75	0.21	0.00	0.00	0.17	0.00	0.08	0.00	0.00	0.00
8	0.89	0.00	0.94	0.15	0.00	0.00	0.00	0.17	0.05	0.39	0.00	0.00
9	0.14	0.00	0.78	0.23	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
10	0.00	0.01	1.65	0.00	0.00	0.00	0.25	0.24	0.01	0.01	0.00	0.01
11	0.00	0.00	0.20	0.00	0.00	0.00	0.69	0.00	0.41	0.04	0.00	0.00
12	0.00	0.00	0.00	0.00	0.07	0.00	0.12	0.00	0.13	0.00	0.00	0.00
13	0.00	0.00	0.35	0.00	0.10	0.00	0.01	0.00	0.07	0.00	0.00	0.00
14	0.00	0.04	0.13	0.00	0.00	0.00	0.04	0.28	0.00	0.00	0.00	0.00
15	0.00	0.26	0.00	0.11	0.00	0.00	0.40	0.53	0.00	0.01	0.00	0.00
16	0.28	0.08	0.00	0.36	0.00	0.18	0.97	0.05	0.34	0.00	0.00	0.09
17	0.86	0.04	0.01	2.13	0.00	0.00	0.00	0.11	0.15	0.00	0.07	0.00
18	0.07	0.37	0.00	1.20	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.00
19	0.42	0.00	0.05	0.02	0.00	0.50	0.00	0.32	0.00	0.00	0.00	0.00
20	0.00	0.00	0.01	0.08	0.00	0.34	0.00	0.16	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.01	0.00	0.20	0.00	0.28	0.06	0.00	0.00	0.00
22	0.07	0.01	0.00	0.29	0.00	0.00	0.00	0.06	0.00	0.10	0.00	0.00
23	0.00	0.09	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
24	0.00	1.05	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
25	0.04	0.09	0.56	0.00	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.00
26	0.02	0.03	0.14	0.02	0.00	1.63	0.00	0.00	0.08	0.00	0.00	0.00
27	0.00	0.00	0.00	0.02	0.01	0.76	0.00	0.00	0.03	0.00	0.00	0.00
28	0.00	0.00	0.00	0.03	0.18	0.19	0.09	0.00	0.00	0.00	0.12	0.00
29	0.10	0.17	0.13	0.04		0.28	0.40	0.00	0.00	0.00	0.03	0.23
30	0.05	0.07	0.02	0.01		0.00	0.03	0.00	0.00	0.00	0.00	0.06
31	0.00		0.00	0.03		0.25		0.36		0.00	0.00	
Total	3.12 #	3.68 #	6.55 #	5.31 #	1.37 #	4.70 #	4.77 #	3.95 #	1.51 #	0.97 #	0.22 #	0.48

Year To Date Total: 36.63 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

43U North Vashon

2006 Water Year 01Oct to 22Feb

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.79	0.33	0.17	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.32	0.15	0.15	0.30	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.01	0.39	0.01	0.22	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.49	0.00	0.03	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	1.06	0.00	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.15	0.06	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.01	0.23	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.03	0.02	0.00	0.06	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.01	0.00	0.00	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.02	0.01	0.00	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.01	0.42	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.06	0.04	0.09	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.05	0.80	0.09	0.47	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.24	0.00	0.00	0.15	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.01	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.03	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.08	0.00	0.42	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.48	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.63	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.21	0.00	0.87	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.11	1.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.09	1.02	1.04	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.01	0.00	0.42	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.04	0.12	0.71	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.34	0.06	0.51	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.08	0.42	0.38	1.32		0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.34	0.00	0.90	0.91		0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	1.17		0.26	0.61		0.00		0.00		0.00	0.00	
Total	3.55	6.19	9.07	13.28	2.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Year To Date Total: 34.10 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

65U Tahlequah

2005 Water Year 05Nov to 30Sep

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.20	0.00	0.28	0.57	0.03	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.06	0.05	0.36	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.01	0.00	0.40	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.46	0.00	0.20	0.00	0.00	0.03	0.00	0.00	0.00	0.00
5	0.00	0.02	0.10	0.00	0.00	0.00	0.04	0.00	0.02	0.28	0.00	0.00
6	0.00	0.00	0.27	0.10	0.73	0.00	0.01	0.00	0.00	0.21	0.00	0.00
7	0.00	0.00	0.54	0.18	0.01	0.00	0.20	0.00	0.14	0.00	0.00	0.00
8	0.00	0.00	0.69	0.13	0.00	0.00	0.00	0.14	0.03	0.49	0.00	0.00
9	0.00	0.00	0.89	0.23	0.00	0.05	0.00	0.40	0.00	0.00	0.00	0.00
10	0.00	0.00	0.97	0.00	0.00	0.00	0.36	0.26	0.01	0.01	0.00	0.08
11	0.00	0.00	0.04	0.00	0.00	0.00	0.66	0.00	0.01	0.01	0.00	0.00
12	0.00	0.00	0.00	0.00	0.11	0.00	0.07	0.00	0.02	0.03	0.00	0.00
13	0.00	0.00	0.25	0.00	0.00	0.00	0.01	0.00	0.10	0.00	0.00	0.00
14	0.00	0.07	0.19	0.00	0.00	0.00	0.01	0.23	0.00	0.00	0.00	0.00
15	0.00	0.35	0.00	0.35	0.00	0.00	0.56	0.57	0.00	0.00	0.00	0.00
16	0.00	0.07	0.02	0.26	0.00	0.25	0.73	0.03	0.40	0.02	0.00	0.07
17	0.00	0.20	0.00	2.56	0.00	0.00	0.03	0.11	0.15	0.00	0.04	0.00
18	0.00	0.17	0.00	1.40	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.01	0.00	0.46	0.00	0.42	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.19	0.00	0.34	0.01	0.29	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.03	0.00	0.12	0.00	0.19	0.03	0.00	0.00	0.00
22	0.00	0.03	0.00	0.26	0.00	0.00	0.00	0.10	0.01	0.09	0.00	0.00
23	0.00	0.04	0.00	0.01	0.00	0.04	0.18	0.00	0.00	0.00	0.00	0.00
24	0.00	0.73	0.00	0.01	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
25	0.00	0.15	0.40	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.00
26	0.00	0.01	0.04	0.02	0.00	1.90	0.00	0.00	0.10	0.00	0.00	0.00
27	0.00	0.00	0.00	0.08	0.00	0.82	0.00	0.00	0.03	0.00	0.00	0.00
28	0.00	0.00	0.00	0.02	0.19	0.34	0.01	0.00	0.00	0.00	0.03	0.00
29	0.00	0.20	0.16	0.07		0.26	0.44	0.00	0.00	0.00	0.02	0.54
30	0.00	0.16	0.02	0.00		0.00	0.06	0.00	0.00	0.00	0.01	0.01
31	0.00		0.01	0.04		0.28		0.01		0.00	0.00	
Total	0.00 #	2.20 #	5.05 #	6.15 #	1.25 #	5.20 #	4.51 #	3.82 #	1.09 #	1.14 #	0.10 #	0.70

Year To Date Total: 31.21 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

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King County Water and Land Resources Division (206) 296-6519

65U Tahlequah

2006 Water Year 01Oct to 07Feb

Rainfall in inches

Data are provisional until end of year

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.97	0.27	0.13	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.32	0.17	0.30	0.30	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.03	0.31	0.01	0.24	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.51	0.00	0.01	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	1.08	0.00	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.23	0.05	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.02	0.14	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.08	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.01	0.00	0.00	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.04	0.01	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.16	0.55	0.00	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.08	0.05	0.08	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.04	1.04	0.02	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.27	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.10	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.03	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.15	0.00	0.39	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.35	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.48	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.16	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.11	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.08	1.18	0.95	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.01	0.42	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.04	0.05	0.51	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.31	0.16	0.52	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.10	0.47	0.36	1.70		0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.36	0.00	0.99	0.81		0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	1.12		0.49	0.42		0.00		0.00		0.00	0.00	
Total	3.74	6.91	8.28	13.98	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Year To Date Total: 34.60 inches

s = snow

e = estimated

Precipitation is measured with a tipping bucket rain gauge.

Ice and snow accumulations in the rain gage are not recorded until they melt.

Precipitation from snow is not measured accurately

Download streamflow and rainfall data from the Hydrologic Information Center at the King County Department of Natural Resources website: http://dnr.metrokc.gov/hydrodat

King County Water and Land Resources Division (206) 296-6519

Appendix B

Groundwater Water Quality Data

PROJECT: 421195DC	Locator:	VAS_S-03				Locator:	VAS_W-02A				Locator:	VAS_W-04			
	Descrip:	S-03-ATLAS WATER				Descrip:	W-02A-HEIGHTS W #1				Descrip:	W-04-RODRIQUES			
	Client Loc:					Client Loc:					Client Loc:				
	Sampled:	Jun 23, 2005				Sampled:	Jun 21, 2005				Sampled:	Jun 22, 2005			
	Lab ID:	L35832-9				Lab ID:	L35832-5				Lab ID:	L35832-7			
	Matrix:	GRND WTR				Matrix:	GRND WTR				Matrix:	GRND WTR			
	% Solids:					% Solids:					% Solids:				
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
		-Wet Weight Basis					-Wet Weight Basis					-Wet Weight Basis			
COMBINED LABS															
M=CV SM4110B (03-03-002-003)															
Chloride	6.14		0.05	0.1	mg/L	3.97		0.05	0.1	mg/L	4.03		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)															
Nitrite + Nitrate Nitrogen	2.18		0.02	0.04	mg/L	0.474		0.02	0.04	mg/L		<MDL	0.02	0.04	mg/L
M=ES NONE															
Sample Function															
M=MT EPA 200.8 (06-03-004&004A-001)															
Antimony, Total, ICP-MS		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS	1.9	<RDL	0.5	2.5	ug/L	7.06		0.5	2.5	ug/L	17.5		0.5	2.5	ug/L
Beryllium, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS	4.65		0.4	2	ug/L		<MDL	0.4	2	ug/L		<MDL	0.4	2	ug/L
Cobalt, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS	8.49		0.4	2	ug/L	1.2	<RDL	0.4	2	ug/L	1.7	<RDL	0.4	2	ug/L
Molybdenum, Total, ICP-MS		<MDL	0.5	2.5	ug/L	1	<RDL	0.5	2.5	ug/L	5.98		0.5	2.5	ug/L
Nickel, Total, ICP-MS	2.04		0.3	1.5	ug/L	0.84	<RDL	0.3	1.5	ug/L	1.1	<RDL	0.3	1.5	ug/L
Selenium, Total, ICP-MS		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS	6.96		0.3	1.5	ug/L	3.18		0.3	1.5	ug/L	0.34	<RDL	0.3	1.5	ug/L
Zinc, Total, ICP-MS	14.9		0.5	2.5	ug/L	8.62		0.5	2.5	ug/L	15		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)															
4,4'-DDD		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDE		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDT		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Aldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Beta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Delta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Dieldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan I		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan II		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan Sulfate		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin Aldehyde		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-BHC (Lindane)		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Heptachlor		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Heptachlor Epoxide		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Methoxychlor		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Toxaphene		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L
M=OR EPA 3520C/8270C (7-3-01-004)															
Bis(2-ethylhexyl)adipate	0.302	B	0.048	0.0952	ug/L	0.104	B	0.048	0.0952	ug/L	0.091	<RDL,B	0.048	0.0952	ug/L
Bisphenol A		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Chlordecone (Kepone)		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L
Methyltestosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Progesterone		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Testosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Total 4-Nonylphenol		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Vinclozolin		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
M=OR EPA 3520C/8270C (7-3-04-001)															
Chlorpyrifos		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L
Diazinon		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L
Disulfoton		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L
Malathion		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L
Parathion-Ethyl		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L
Parathion-Methyl		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L
Phorate		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L
M=OR SW-846 8151A GCMS MODIFIED															
2,4,5-T		<MDL	0.032	0.08	ug/L		<MDL	0.033	0.0806	ug/L		<MDL	0.033	0.0813	ug/L
2,4,5-TP (Silvex)		<MDL	0.019	0.08	ug/L		<MDL	0.019	0.0806	ug/L		<MDL	0.019	0.0813	ug/L
2,4-D		<MDL	0.014	0.08	ug/L		<MDL	0.014	0.0806	ug/L					
2,4-DB		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.0806	ug/L		<MDL	0.024	0.0813	ug/L
Dalapon		<MDL	0.033	0.08	ug/L		<MDL	0.033	0.0806	ug/L		<MDL	0.034	0.0813	ug/L
Dicamba		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.0806	ug/L		<MDL	0.024	0.0813	ug/L
Dichloroprop		<MDL	0.041	0.08	ug/L		<MDL	0.042	0.0806	ug/L		<MDL	0.042	0.0813	ug/L
Dinoseb		<MDL	0.021	0.08	ug/L		<MDL	0.021	0.0806	ug/L		<MDL	0.022	0.0813	ug/L
MCPA		<MDL	0.015	0.08	ug/L		<MDL	0.015	0.0806	ug/L		<MDL	0.015	0.0813	ug/L
MCPP		<MDL	0.016	0.08	ug/L		<MDL	0.016	0.0806	ug/L		<MDL	0.016	0.0813	ug/L
M=OR TERNES (2002)(SOP 07-03-022-D)															
Estradiol															
Estrone															
Ethynyl estradiol															

PROJECT: 421195DC	Locator:	VAS_W-06				Locator:	VAS_W-07				Locator:	VAS_W-10A			
	Descrip:	W-06-PACKARD/HEADL				Descrip:	W-07-TOOMEY/SORGE				Descrip:	W-10A-GOLD BEACH W			
	Client Loc:					Client Loc:					Client Loc:				
	Sampled:	Jun 20, 2005				Sampled:	Jun 23, 2005				Sampled:	Jun 22, 2005			
	Lab ID:	L35832-20				Lab ID:	L35832-10				Lab ID:	L35832-12			
	Matrix:	GRND WTR				Matrix:	GRND WTR				Matrix:	GRND WTR			
	% Solids:					% Solids:					% Solids:				
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
		-Wet Weight Basis					-Wet Weight Basis					-Wet Weight Basis			
COMBINED LABS															
M=CV SM4110B (03-03-002-003)															
Chloride	3.25		0.05	0.1	mg/L	2.99		0.05	0.1	mg/L	9.88		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)															
Nitrite + Nitrate Nitrogen	1.31		0.02	0.04	mg/L		<MDL	0.02	0.04	mg/L	3.61		0.02	0.04	mg/L
M=ES NONE															
Sample Function															
M=MT EPA 200.8 (06-03-004&004A-001)															
Antimony, Total, ICP-MS		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS	0.96	<RDL	0.5	2.5	ug/L	24.1		0.5	2.5	ug/L	1.3	<RDL	0.5	2.5	ug/L
Beryllium, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS	1.7	<RDL	0.4	2	ug/L		<MDL	0.4	2	ug/L	2.11		0.4	2	ug/L
Cobalt, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS	0.69	<RDL	0.4	2	ug/L	0.9	<RDL	0.4	2	ug/L	5.92		0.4	2	ug/L
Molybdenum, Total, ICP-MS		<MDL	0.5	2.5	ug/L	5.4		0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Nickel, Total, ICP-MS	0.48	<RDL	0.3	1.5	ug/L	0.78	<RDL	0.3	1.5	ug/L	2.97		0.3	1.5	ug/L
Selenium, Total, ICP-MS		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS	3.38		0.3	1.5	ug/L	0.33	<RDL	0.3	1.5	ug/L	3.22		0.3	1.5	ug/L
Zinc, Total, ICP-MS	4.73		0.5	2.5	ug/L	16.4		0.5	2.5	ug/L	5.31		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)															
4,4'-DDD		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDE		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDT		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Aldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Beta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Delta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Dieldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan I		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan II		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan Sulfate		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin Aldehyde		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-BHC (Lindane)		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Heptachlor		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Heptachlor Epoxide		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Methoxychlor		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Toxaphene		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L
M=OR EPA 3520C/8270C (7-3-01-004)															
Bis(2-ethylhexyl)adipate	0.373	B	0.048	0.0952	ug/L	0.304	B	0.048	0.0952	ug/L	0.075	<RDL,B	0.048	0.0952	ug/L
Bisphenol A		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Chlordecone (Kepone)		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L
Methyltestosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Progesterone		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Testosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Total 4-Nonylphenol		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Vinclozolin		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
M=OR EPA 3520C/8270C (7-3-04-001)															
Chlorpyrifos		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L
Diazinon		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L
Disulfoton		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L
Malathion		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L
Parathion-Ethyl		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L
Parathion-Methyl		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L
Phorate		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L
M=OR SW-846 8151A GCMS MODIFIED															
2,4,5-T		<MDL	0.032	0.08	ug/L		<MDL	0.032	0.08	ug/L		<MDL	0.032	0.08	ug/L
2,4,5-TP (Silvex)		<MDL	0.019	0.08	ug/L		<MDL	0.019	0.08	ug/L		<MDL	0.019	0.08	ug/L
2,4-D		<MDL	0.014	0.08	ug/L		<MDL	0.014	0.08	ug/L		<MDL	0.014	0.08	ug/L
2,4-DB		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.08	ug/L
Dalapon		<MDL	0.033	0.08	ug/L		<MDL	0.033	0.08	ug/L		<MDL	0.033	0.08	ug/L
Dicamba		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.08	ug/L
Dichloroprop		<MDL	0.041	0.08	ug/L		<MDL	0.041	0.08	ug/L		<MDL	0.041	0.08	ug/L
Dinoseb							<MDL	0.021	0.08	ug/L		<MDL	0.021	0.08	ug/L
MCPA		<MDL	0.015	0.08	ug/L		<MDL	0.015	0.08	ug/L		<MDL	0.015	0.08	ug/L
MCPP		<MDL	0.016	0.08	ug/L		<MDL	0.016	0.08	ug/L		<MDL	0.016	0.08	ug/L
M=OR TERNES (2002)(SOP 07-03-022-D)															
Estradiol															
Estrone															
Ethynyl estradiol															

PROJECT: 421195DC	Locator:	VAS_W-12				Locator:	VAS_W-13				Locator:	VAS_W-15			
	Descrip:	W-12-HOLLYMERE				Descrip:	W-13-MISTY ISLE FA				Descrip:	W-15-ANDERSON			
	Client Loc:					Client Loc:					Client Loc:				
	Sampled:	Jun 22, 2005				Sampled:	Jun 23, 2005				Sampled:	Jun 21, 2005			
	Lab ID:	L35832-14				Lab ID:	L35832-17				Lab ID:	L35832-15			
	Matrix:	GRND WTR				Matrix:	GRND WTR				Matrix:	GRND WTR			
	% Solids:					% Solids:					% Solids:				
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
		-Wet Weight Basis					-Wet Weight Basis					-Wet Weight Basis			
COMBINED LABS															
M=CV SM4110B (03-03-002-003)															
Chloride	4.23		0.05	0.1	mg/L	8.95		0.05	0.1	mg/L	5.05		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)															
Nitrite + Nitrate Nitrogen		<MDL	0.02	0.04	mg/L	1.81		0.02	0.04	mg/L		<MDL	0.02	0.04	mg/L
M=ES NONE															
Sample Function															
M=MT EPA 200.8 (06-03-004&004A-001)															
Antimony, Total, ICP-MS		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS	5.25		0.5	2.5	ug/L	1.1	<RDL	0.5	2.5	ug/L	1.3	<RDL	0.5	2.5	ug/L
Beryllium, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS		<MDL	0.4	2	ug/L	2.44		0.4	2	ug/L		<MDL	0.4	2	ug/L
Cobalt, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS	10.3		0.4	2	ug/L	1.5	<RDL	0.4	2	ug/L	0.5	<RDL	0.4	2	ug/L
Molybdenum, Total, ICP-MS	3.45		0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Nickel, Total, ICP-MS	0.47	<RDL	0.3	1.5	ug/L	1.3	<RDL	0.3	1.5	ug/L	0.47	<RDL	0.3	1.5	ug/L
Selenium, Total, ICP-MS		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS		<MDL	0.3	1.5	ug/L	5.06		0.3	1.5	ug/L	0.85	<RDL	0.3	1.5	ug/L
Zinc, Total, ICP-MS	3.45		0.5	2.5	ug/L	7.44		0.5	2.5	ug/L	40.8		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)															
4,4'-DDD		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDE		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDT		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Aldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Beta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Delta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Dieldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan I		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan II		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan Sulfate		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin Aldehyde		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-BHC (Lindane)		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Heptachlor		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Heptachlor Epoxide		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Methoxychlor		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Toxaphene		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L
M=OR EPA 3520C/8270C (7-3-01-004)															
Bis(2-ethylhexyl)adipate	0.079	<RDL,B	0.048	0.0952	ug/L	0.369	B	0.048	0.0952	ug/L	0.072	<RDL,B	0.048	0.0952	ug/L
Bisphenol A		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Chlordecone (Kepone)		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L
Methyltestosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Progesterone		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Testosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Total 4-Nonylphenol		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Vinclozolin		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
M=OR EPA 3520C/8270C (7-3-04-001)															
Chlorpyrifos		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L
Diazinon		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L
Disulfoton		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L
Malathion		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L
Parathion-Ethyl		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L
Parathion-Methyl		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L
Phorate		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L
M=OR SW-846 8151A GCMS MODIFIED															
2,4,5-T		<MDL	0.032	0.08	ug/L		<MDL	0.033	0.0826	ug/L		<MDL	0.033	0.0826	ug/L
2,4,5-TP (Silvex)		<MDL	0.019	0.08	ug/L		<MDL	0.019	0.0826	ug/L		<MDL	0.019	0.0826	ug/L
2,4-D		<MDL	0.014	0.08	ug/L		<MDL	0.014	0.0826	ug/L		<MDL	0.014	0.0826	ug/L
2,4-DB		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.0826	ug/L		<MDL	0.024	0.0826	ug/L
Dalapon		<MDL	0.033	0.08	ug/L		<MDL	0.034	0.0826	ug/L		<MDL	0.034	0.0826	ug/L
Dicamba		<MDL	0.024	0.08	ug/L		<MDL	0.025	0.0826	ug/L		<MDL	0.025	0.0826	ug/L
Dichloroprop		<MDL	0.041	0.08	ug/L		<MDL	0.043	0.0826	ug/L		<MDL	0.043	0.0826	ug/L
Dinoseb		<MDL	0.021	0.08	ug/L		<MDL	0.022	0.0826	ug/L		<MDL	0.022	0.0826	ug/L
MCPA		<MDL	0.015	0.08	ug/L		<MDL	0.016	0.0826	ug/L		<MDL	0.016	0.0826	ug/L
MCPP		<MDL	0.016	0.08	ug/L		<MDL	0.017	0.0826	ug/L		<MDL	0.017	0.0826	ug/L
M=OR TERNES (2002)(SOP 07-03-022-D)															
Estradiol															
Estrone															
Ethynyl estradiol															

PROJECT: 421195DC	Locator:	Locatc	VAS_W-16A				Locatc	GROUNDDUP				Locator:	VAS_W-17			
	Descrip:	Descri	W-16A-BAKER/KLEMKA				Descri	Groundw ater Duplic				Descrip:	W-17-PERLA			
	Client Loc:	Client Loc:					Client I	- W-16A				Client Loc:				
	Sampled:	Sampl	Jun 20, 2005				Sampl	Jun 20, 2005				Sampled	Jun 20, 2005			
	Lab ID:	Lab ID	L35832-16				Lab ID	L35832-21				Lab ID:	L35832-4			
	Matrix:	Matrix:	GRND WTR				Matrix:	GRND WTR				Matrix:	GRND WTR			
	% Solids:	% Solids:					% Solids:					% Solids:				
Parameters	Value	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			-Wet Weight Basis					-Wet Weight Basis					-Wet Weight Basis			
COMBINED LABS																
M=CV SM4110B (03-03-002-003)																
Chloride	6.14	3.6		0.05	0.1	mg/L	3.69		0.05	0.1	mg/L	4.03		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)																
Nitrite + Nitrate Nitrogen	2.18	4.02		0.02	0.04	mg/L	3.89		0.02	0.04	mg/L	1.82		0.02	0.04	mg/L
M=ES NONE																
Sample Function							FREP@L35382-16				none					
M=MT EPA 200.8 (06-03-004&004A-001)																
Antimony, Total, ICP-MS			<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS	1.9		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Beryllium, Total, ICP-MS			<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS			<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS	4.65	2.3		0.4	2	ug/L	2.14		0.4	2	ug/L	1.1	<RDL	0.4	2	ug/L
Cobalt, Total, ICP-MS			<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS	8.49	8.65		0.4	2	ug/L	3.97		0.4	2	ug/L	2.94		0.4	2	ug/L
Molybdenum, Total, ICP-MS			<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Nickel, Total, ICP-MS	2.04	0.73	<RDL	0.3	1.5	ug/L	0.76	<RDL	0.3	1.5	ug/L	1.4	<RDL	0.3	1.5	ug/L
Selenium, Total, ICP-MS			<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS			<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS	6.96	3.63		0.3	1.5	ug/L	3.45		0.3	1.5	ug/L	1.59		0.3	1.5	ug/L
Zinc, Total, ICP-MS	14.9	20.1		0.5	2.5	ug/L	36.2		0.5	2.5	ug/L	12.5		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)																
4,4'-DDD			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
4,4'-DDE			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
4,4'-DDT			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Aldrin			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Alpha-BHC			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Alpha-Chlordane			<MDL	0.012	0.02	ug/L		<MDL	0.012	0.02	ug/L		<MDL	0.012	0.02	ug/L
Beta-BHC			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Delta-BHC			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Dieldrin			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Endosulfan I			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Endosulfan II			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Endosulfan Sulfate			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Endrin			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Endrin Aldehyde			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Gamma-BHC (Lindane)			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Gamma-Chlordane			<MDL	0.012	0.02	ug/L		<MDL	0.012	0.02	ug/L		<MDL	0.012	0.02	ug/L
Heptachlor			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Heptachlor Epoxide			<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L		<MDL	0.0024	0	ug/L
Methoxychlor			<MDL	0.012	0.02	ug/L		<MDL	0.012	0.02	ug/L		<MDL	0.012	0.02	ug/L
Toxaphene			<MDL	0.024	0.05	ug/L		<MDL	0.024	0.05	ug/L		<MDL	0.024	0.05	ug/L
M=OR EPA 3520C/8270C (7-3-01-004)																
Bis(2-ethylhexyl)adipate	0.302	0.09	<RDL,B	0.048	0.1	ug/L	0.3	B	0.048	0.1	ug/L	0.077	<RDL,B	0.048	0.1	ug/L
Bisphenol A			<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L
Chlordecone (Kepone)			<MDL	0.12	0.48	ug/L		<MDL	0.12	0.48	ug/L		<MDL	0.12	0.48	ug/L
Methyltestosterone			<MDL	0.24	0.48	ug/L		<MDL	0.24	0.48	ug/L		<MDL	0.24	0.48	ug/L
Progesterone			<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L
Testosterone			<MDL	0.24	0.48	ug/L		<MDL	0.24	0.48	ug/L		<MDL	0.24	0.48	ug/L
Total 4-Nonylphenol			<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L
Vinclozolin			<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L		<MDL	0.12	0.24	ug/L
M=OR EPA 3520C/8270C (7-3-04-001)																
Chlorpyrifos			<MDL	0.032	0.05	ug/L		<MDL	0.032	0.05	ug/L		<MDL	0.032	0.05	ug/L
Diazinon			<MDL	0.041	0.05	ug/L		<MDL	0.041	0.05	ug/L		<MDL	0.041	0.05	ug/L
Disulfoton			<MDL	0.026	0.05	ug/L		<MDL	0.026	0.05	ug/L		<MDL	0.026	0.05	ug/L
Malathion			<MDL	0.046	0.05	ug/L		<MDL	0.046	0.05	ug/L		<MDL	0.046	0.05	ug/L
Parathion-Ethyl			<MDL	0.043	0.05	ug/L		<MDL	0.043	0.05	ug/L		<MDL	0.043	0.05	ug/L
Parathion-Methyl			<MDL	0.034	0.05	ug/L		<MDL	0.034	0.05	ug/L		<MDL	0.034	0.05	ug/L
Phorate			<MDL	0.031	0.05	ug/L		<MDL	0.031	0.05	ug/L		<MDL	0.031	0.05	ug/L
M=OR SW-846 8151A GCMS MODIFIED																
2,4,5-T			<MDL	0.032	0.08	ug/L		<MDL	0.032	0.08	ug/L		<MDL	0.034	0.08	ug/L
2,4,5-TP (Silvex)			<MDL	0.019	0.08	ug/L		<MDL	0.019	0.08	ug/L		<MDL	0.02	0.08	ug/L
2,4-D			<MDL	0.014	0.08	ug/L		<MDL	0.014	0.08	ug/L		<MDL	0.015	0.08	ug/L
2,4-DB			<MDL	0.023	0.08	ug/L		<MDL	0.024	0.08	ug/L		<MDL	0.025	0.08	ug/L
Dalapon			<MDL	0.033	0.08	ug/L		<MDL	0.033	0.08	ug/L		<MDL	0.034	0.08	ug/L
Dicamba			<MDL	0.024	0.08	ug/L		<MDL	0.024	0.08	ug/L		<MDL	0.025	0.08	ug/L
Dichloroprop			<MDL	0.041	0.08	ug/L		<MDL	0.041	0.08	ug/L		<MDL	0.043	0.08	ug/L
Dinoseb			<MDL	0.021	0.08	ug/L		<MDL	0.021	0.08	ug/L		<MDL	0.022	0.08	ug/L
MCPA			<MDL	0.015	0.08	ug/L		<MDL	0.015	0.08	ug/L		<MDL	0.016	0.08	ug/L
MCPP			<MDL	0.016	0.08	ug/L		<MDL	0.016	0.08	ug/L		<MDL	0.017	0.08	ug/L
M=OR TERNES (2002)(SOP 07-03-022-D)																
Estradiol			<MDL	0.00048	0	ug/L										
Estrone			<MDL	0.00029	0	ug/L										
Ethynyl estradiol			<MDL	0.00048	0	ug/L										

PROJECT: 421195DC	Locator:	GROUNDDUP				Locator:	VAS_W-18				Locator:	VAS_W-20			
	Descrip:	Groundw ater Duplic				Descrip:	W-18-WHELAN-MILLER				Descrip:	W-20-JOHNSON			
	Client Loc:	- W-17				Client Loc:					Client Loc:				
	Sampled:	Jun 20, 2005				Sampled:	Jun 23, 2005				Sampled:	Jun 20, 2005			
	Lab ID:	L35832-22				Lab ID:	L35832-18				Lab ID:	L35832-19			
	Matrix:	GRND WTR				Matrix:	GRND WTR				Matrix:	GRND WTR			
	% Solids:					% Solids:					% Solids:				
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
		-Wet Weight Basis					-Wet Weight Basis					-Wet Weight Basis			
COMBINED LABS															
M=CV SM4110B (03-03-002-003)															
Chloride	4.19		0.05	0.1	mg/L	6.02		0.05	0.1	mg/L	3.59		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)															
Nitrite + Nitrate Nitrogen	1.85		0.02	0.04	mg/L		<MDL	0.02	0.04	mg/L	2.78		0.02	0.04	mg/L
M=ES NONE															
Sample Function	FREP@L35382-4				none										
M=MT EPA 200.8 (06-03-004&004A-001)															
Antimony, Total, ICP-MS		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS		<MDL	0.5	2.5	ug/L	2.85		0.5	2.5	ug/L	0.58	<RDL	0.5	2.5	ug/L
Beryllium, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS	1.1	<RDL	0.4	2	ug/L	1.1	<RDL	0.4	2	ug/L	3.1		0.4	2	ug/L
Cobalt, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS	3.13		0.4	2	ug/L	4.47		0.4	2	ug/L	4.75		0.4	2	ug/L
Molybdenum, Total, ICP-MS		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Nickel, Total, ICP-MS	1.4	<RDL	0.3	1.5	ug/L	0.71	<RDL	0.3	1.5	ug/L	0.53	<RDL	0.3	1.5	ug/L
Selenium, Total, ICP-MS		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS	1.56		0.3	1.5	ug/L	1.1	<RDL	0.3	1.5	ug/L	2.72		0.3	1.5	ug/L
Zinc, Total, ICP-MS	13.1		0.5	2.5	ug/L	30.1		0.5	2.5	ug/L	99.4		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)															
4,4'-DDD		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDE		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
4,4'-DDT		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Aldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Alpha-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Beta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Delta-BHC		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Dieldrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan I		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan II		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endosulfan Sulfate		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Endrin Aldehyde		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-BHC (Lindane)		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Gamma-Chlordane		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Heptachlor		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Heptachlor Epoxide		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L		<MDL	0.0024	0.00476	ug/L
Methoxychlor		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L		<MDL	0.012	0.0238	ug/L
Toxaphene		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L		<MDL	0.024	0.0476	ug/L
M=OR EPA 3520C/8270C (7-3-01-004)															
Bis(2-ethylhexyl)adipate	0.614	B	0.048	0.0952	ug/L	0.344	B	0.048	0.0952	ug/L	0.26	B	0.048	0.0952	ug/L
Bisphenol A		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Chlordecone (Kepone)		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L		<MDL	0.12	0.476	ug/L
Methyltestosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Progesterone		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Testosterone		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L		<MDL	0.24	0.476	ug/L
Total 4-Nonylphenol		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
Vinclozolin		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L		<MDL	0.12	0.238	ug/L
M=OR EPA 3520C/8270C (7-3-04-001)															
Chlorpyrifos		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L		<MDL	0.032	0.0476	ug/L
Diazinon		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L		<MDL	0.041	0.0476	ug/L
Disulfoton		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L		<MDL	0.026	0.0476	ug/L
Malathion		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L		<MDL	0.046	0.0476	ug/L
Parathion-Ethyl		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L		<MDL	0.043	0.0476	ug/L
Parathion-Methyl		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L		<MDL	0.034	0.0476	ug/L
Phorate		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L		<MDL	0.031	0.0476	ug/L
M=OR SW-846 8151A GCMS MODIFIED															
2,4,5-T		<MDL	0.032	0.08	ug/L		<MDL	0.032	0.0794	ug/L		<MDL	0.032	0.08	ug/L
2,4,5-TP (Silvex)		<MDL	0.019	0.08	ug/L		<MDL	0.019	0.0794	ug/L		<MDL	0.019	0.08	ug/L
2,4-D		<MDL	0.014	0.08	ug/L		<MDL	0.014	0.0794	ug/L		<MDL	0.014	0.08	ug/L
2,4-DB		<MDL	0.024	0.08	ug/L		<MDL	0.023	0.0794	ug/L		<MDL	0.024	0.08	ug/L
Dalapon		<MDL	0.033	0.08	ug/L		<MDL	0.033	0.0794	ug/L		<MDL	0.033	0.08	ug/L
Dicamba		<MDL	0.024	0.08	ug/L		<MDL	0.024	0.0794	ug/L		<MDL	0.024	0.08	ug/L
Dichloroprop		<MDL	0.041	0.08	ug/L		<MDL	0.041	0.0794	ug/L		<MDL	0.041	0.08	ug/L
Dinoseb		<MDL	0.021	0.08	ug/L		<MDL	0.021	0.0794	ug/L		<MDL	0.021	0.08	ug/L
MCPA		<MDL	0.015	0.08	ug/L		<MDL	0.015	0.0794	ug/L		<MDL	0.015	0.08	ug/L
MCPP		<MDL	0.016	0.08	ug/L		<MDL	0.016	0.0794	ug/L		<MDL	0.016	0.08	ug/L
M=OR TERNES (2002)(SOP 07-03-022-D)															
Estradiol															
Estrone															
Ethynyl estradiol															

PROJECT: 421195DC	Locator:	VAS_W-21				Locator:	VAS_W-03				Locator:	VAS_W-08			
	Descrip:	W-21-KUPERBERG				Descrip:	W-03-GLEN ACRES				Descrip:	W-08-KIRO/ENTERCOM			
	Client Loc:					Client Loc:					Client Loc:				
	Sampled:	Jun 21, 2005				Sampled:	Jun 20, 2005				Sampled:	Jun 23, 2005			
	Lab ID:	L35832-8				Lab ID:	L35832-6				Lab ID:	L35832-11			
	Matrix:	GRND WTR				Matrix:	GRND WTR				Matrix:	GRND WTR			
	% Solids:					% Solids:					% Solids:				
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
		-Wet Weight Basis					-Wet Weight Basis					-Wet Weight Basis			
COMBINED LABS															
M=CV SM4110B (03-03-002-003)															
Chloride	3.89		0.05	0.1	mg/L	7.53		0.05	0.1	mg/L	8.96		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)															
Nitrite + Nitrate Nitrogen		<MDL	0.02	0.04	mg/L	0.332		0.02	0.04	mg/L		<MDL	0.02	0.04	mg/L
M=ES NONE															
Sample Function															
M=MT EPA 200.8 (06-03-004&004A-001)															
Antimony, Total, ICP-MS		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS	3.1		0.5	2.5	ug/L	1.1	<RDL	0.5	2.5	ug/L	2.2	<RDL	0.5	2.5	ug/L
Beryllium, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS		<MDL	0.4	2	ug/L	0.78	<RDL	0.4	2	ug/L		<MDL	0.4	2	ug/L
Cobalt, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS	1.4	<RDL	0.4	2	ug/L	0.45	<RDL	0.4	2	ug/L	2.67		0.4	2	ug/L
Molybdenum, Total, ICP-MS		<MDL	0.5	2.5	ug/L	7.58		0.5	2.5	ug/L	9.39		0.5	2.5	ug/L
Nickel, Total, ICP-MS	0.55	<RDL	0.3	1.5	ug/L	0.49	<RDL	0.3	1.5	ug/L	0.84	<RDL	0.3	1.5	ug/L
Selenium, Total, ICP-MS		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS		<MDL	0.3	1.5	ug/L	5.51		0.3	1.5	ug/L		<MDL	0.3	1.5	ug/L
Zinc, Total, ICP-MS	3.34		0.5	2.5	ug/L	1.6	<RDL	0.5	2.5	ug/L	5.22		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)															
4,4'-DDD		<MDL	0.0024	0.00476	ug/L										
4,4'-DDE		<MDL	0.0024	0.00476	ug/L										
4,4'-DDT		<MDL	0.0024	0.00476	ug/L										
Aldrin		<MDL	0.0024	0.00476	ug/L										
Alpha-BHC		<MDL	0.0024	0.00476	ug/L										
Alpha-Chlordane		<MDL	0.012	0.0238	ug/L										
Beta-BHC		<MDL	0.0024	0.00476	ug/L										
Delta-BHC		<MDL	0.0024	0.00476	ug/L										
Dieldrin		<MDL	0.0024	0.00476	ug/L										
Endosulfan I		<MDL	0.0024	0.00476	ug/L										
Endosulfan II		<MDL	0.0024	0.00476	ug/L										
Endosulfan Sulfate		<MDL	0.0024	0.00476	ug/L										
Endrin		<MDL	0.0024	0.00476	ug/L										
Endrin Aldehyde		<MDL	0.0024	0.00476	ug/L										
Gamma-BHC (Lindane)		<MDL	0.0024	0.00476	ug/L										
Gamma-Chlordane		<MDL	0.012	0.0238	ug/L										
Heptachlor		<MDL	0.0024	0.00476	ug/L										
Heptachlor Epoxide		<MDL	0.0024	0.00476	ug/L										
Methoxychlor		<MDL	0.012	0.0238	ug/L										
Toxaphene		<MDL	0.024	0.0476	ug/L										
M=OR EPA 3520C/8270C (7-3-01-004)															
Bis(2-ethylhexyl)adipate	0.072	<RDL,E	0.048	0.0952	ug/L										
Bisphenol A		<MDL	0.12	0.238	ug/L										
Chlordecone (Kepone)		<MDL	0.12	0.476	ug/L										
Methyltestosterone		<MDL	0.24	0.476	ug/L										
Progesterone		<MDL	0.12	0.238	ug/L										
Testosterone		<MDL	0.24	0.476	ug/L										
Total 4-Nonylphenol		<MDL	0.12	0.238	ug/L										
Vinclozolin		<MDL	0.12	0.238	ug/L										
M=OR EPA 3520C/8270C (7-3-04-001)															
Chlorpyrifos		<MDL	0.032	0.0476	ug/L										
Diazinon		<MDL	0.041	0.0476	ug/L										
Disulfoton		<MDL	0.026	0.0476	ug/L										
Malathion		<MDL	0.046	0.0476	ug/L										
Parathion-Ethyl		<MDL	0.043	0.0476	ug/L										
Parathion-Methyl		<MDL	0.034	0.0476	ug/L										
Phorate		<MDL	0.031	0.0476	ug/L										
M=OR SW-846 8151A GCMS MODIFIED															
2,4,5-T		<MDL	0.032	0.0794	ug/L										
2,4,5-TP (Silvex)		<MDL	0.019	0.0794	ug/L										
2,4-D		<MDL	0.014	0.0794	ug/L										
2,4-DB		<MDL	0.023	0.0794	ug/L										
Dalapon		<MDL	0.033	0.0794	ug/L										
Dicamba		<MDL	0.024	0.0794	ug/L										
Dichloroprop		<MDL	0.041	0.0794	ug/L										
Dinoseb															
MCPA		<MDL	0.015	0.0794	ug/L										
MCPP		<MDL	0.016	0.0794	ug/L										
M=OR TERNES (2002)(SOP 07-03-022-D)															
Estradiol															
Estrone															
Ethynyl estradiol															

PROJECT: 421195DC	Locator:	VAS_W-09A				Locator:	VAS_W-11				Locator:	VAS_W-14			
	Descrip:	WHITE #1				Descrip:	W-11-DOCKTON				Descrip:	W-14-KRISHNAN			
	Client Loc:					Client Loc:					Client Loc:				
	Sampled:	Jun 22, 2005				Sampled:	Jun 22, 2005				Sampled:	Jun 21, 2005			
	Lab ID:	L35832-13				Lab ID:	L35832-1				Lab ID:	L35832-2			
	Matrix:	GRND WTR				Matrix:	GRND WTR				Matrix:	GRND WTR			
	% Solids:					% Solids:					% Solids:				
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
		-Wet Weight Basis					-Wet Weight Basis					-Wet Weight Basis			
COMBINED LABS															
M=CV SM4110B (03-03-002-003)															
Chloride	5.11		0.05	0.1	mg/L	5.21		0.05	0.1	mg/L	4.45		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)															
Nitrite + Nitrate Nitrogen		<MDL	0.02	0.04	mg/L		<MDL	0.02	0.04	mg/L	0.032	<RDL	0.02	0.04	mg/L
M=ES NONE															
Sample Function															
M=MT EPA 200.8 (06-03-004&004A-001)															
Antimony, Total, ICP-MS		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS	4.72		0.5	2.5	ug/L	1.5	<RDL	0.5	2.5	ug/L	1.3	<RDL	0.5	2.5	ug/L
Beryllium, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS		<MDL	0.4	2	ug/L		<MDL	0.4	2	ug/L	1.4	<RDL	0.4	2	ug/L
Cobalt, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS	18.1		0.4	2	ug/L						2.42		0.4	2	ug/L
Molybdenum, Total, ICP-MS	1.1	<RDL	0.5	2.5	ug/L	0.98	<RDL	0.5	2.5	ug/L		<MDL	0.5	2.5	ug/L
Nickel, Total, ICP-MS	0.41	<RDL	0.3	1.5	ug/L	0.71	<RDL	0.3	1.5	ug/L	0.32	<RDL	0.3	1.5	ug/L
Selenium, Total, ICP-MS		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS		<MDL	0.3	1.5	ug/L		<MDL	0.3	1.5	ug/L	3.06		0.3	1.5	ug/L
Zinc, Total, ICP-MS	22		0.5	2.5	ug/L	79.2		0.5	2.5	ug/L	125		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)															
4,4'-DDD															
4,4'-DDE															
4,4'-DDT															
Aldrin															
Alpha-BHC															
Alpha-Chlordane															
Beta-BHC															
Delta-BHC															
Dieldrin															
Endosulfan I															
Endosulfan II															
Endosulfan Sulfate															
Endrin															
Endrin Aldehyde															
Gamma-BHC (Lindane)															
Gamma-Chlordane															
Heptachlor															
Heptachlor Epoxide															
Methoxychlor															
Toxaphene															
M=OR EPA 3520C/8270C (7-3-01-004)															
Bis(2-ethylhexyl)adipate															
Bisphenol A															
Chlordecone (Kepone)															
Methyltestosterone															
Progesterone															
Testosterone															
Total 4-Nonylphenol															
Vinclozolin															
M=OR EPA 3520C/8270C (7-3-04-001)															
Chlorpyrifos															
Diazinon															
Disulfoton															
Malathion															
Parathion-Ethyl															
Parathion-Methyl															
Phorate															
M=OR SW-846 8151A GCMS MODIFIED															
2,4,5-T															
2,4,5-TP (Silvex)															
2,4-D															
2,4-DB															
Dalapon															
Dicamba															
Dichloroprop															
Dinoseb															
MCPA															
MCPP															
M=OR TERNES (2002)(SOP 07-03-022-D)															
Estradiol															
Estrone															
Ethynyl estradiol															

PROJECT: 421195DC	Locator:	VAS_W-19			
	Descrip:	W-19-THORSEN			
	Client Loc:				
	Sampled:	Jun 23, 2005			
	Lab ID:	L35832-3			
	Matrix:	GRND WTR			
	% Solids:				
Parameters	Value	Qual	MDL	RDL	Units
		-Wet Weight Basis			
COMBINED LABS					
M=CV SM4110B (03-03-002-003)					
Chloride	2.97		0.05	0.1	mg/L
M=CV SM4500-NO3-F (03-03-012-003)					
Nitrite + Nitrate Nitrogen	0.592		0.02	0.04	mg/L
M=ES NONE					
Sample Function					
M=MT EPA 200.8 (06-03-004&004A-001)					
Antimony, Total, ICP-MS		<MDL	0.5	2.5	ug/L
Arsenic, Total, ICP-MS	1.9	<RDL	0.5	2.5	ug/L
Beryllium, Total, ICP-MS		<MDL	0.2	1	ug/L
Cadmium, Total, ICP-MS		<MDL	0.1	0.5	ug/L
Chromium, Total, ICP-MS		<MDL	0.4	2	ug/L
Cobalt, Total, ICP-MS		<MDL	0.2	1	ug/L
Copper, Total, ICP-MS		<MDL	0.4	2	ug/L
Molybdenum, Total, ICP-MS		<MDL	0.5	2.5	ug/L
Nickel, Total, ICP-MS	0.93	<RDL	0.3	1.5	ug/L
Selenium, Total, ICP-MS		<MDL	1.5	7.5	ug/L
Silver, Total, ICP-MS		<MDL	0.2	1	ug/L
Vanadium, Total, ICP-MS	1.86		0.3	1.5	ug/L
Zinc, Total, ICP-MS	78.8		0.5	2.5	ug/L
M=OR EPA 3520C/608 (7-3-03-002)					
4,4'-DDD					
4,4'-DDE					
4,4'-DDT					
Aldrin					
Alpha-BHC					
Alpha-Chlordane					
Beta-BHC					
Delta-BHC					
Dieldrin					
Endosulfan I					
Endosulfan II					
Endosulfan Sulfate					
Endrin					
Endrin Aldehyde					
Gamma-BHC (Lindane)					
Gamma-Chlordane					
Heptachlor					
Heptachlor Epoxide					
Methoxychlor					
Toxaphene					
M=OR EPA 3520C/8270C (7-3-01-004)					
Bis(2-ethylhexyl)adipate					
Bisphenol A					
Chlordecone (Kepone)					
Methyltestosterone					
Progesterone					
Testosterone					
Total 4-Nonylphenol					
Vinclozolin					
M=OR EPA 3520C/8270C (7-3-04-001)					
Chlorpyrifos					
Diazinon					
Disulfoton					
Malathion					
Parathion-Ethyl					
Parathion-Methyl					
Phorate					
M=OR SW-846 8151A GCMS MODIFIED					
2,4,5-T					
2,4,5-TP (Silvex)					
2,4-D					
2,4-DB					
Dalapon					
Dicamba					
Dichloroprop					
Dinoseb					
MCPA					
MCPP					
M=OR TERNES (2002)(SOP 07-03-022-D)					
Estradiol					
Estrone					
Ethynyl estradiol					