
Science and Technical Support Section 2014 Business Plan Update

April 2014



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Science and Technical Support Section

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Science and Technical Support Section 2014 Business Plan Update

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Department of Natural Resources and Parks
Water and Land Resources Division

Science and Technical Support Section

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EXECUTIVE SUMMARY

The Science and Technical Support Section (the section) has reviewed and updated its 2008 business plan. The effort to update to the business plan was inclusive of all staff in the section. The update focused on characterizing the section's work, reaffirming the section's mission, describing its customers and products, describing how its work aligns with the King County Strategic Plan, describing its funding sources, identifying customer perspectives, and highlighting how the section can advance the County's equity and social justice goals. Reflecting input at an October 2013 section-wide retreat, the update identifies future goals to continue to improve our work, and specific near-term (2014) actions.

The section's mission is to provide scientific knowledge, information, and analysis in support of regional environmental resource management. Its work is well aligned with King County's strategic plan, the Department's business plan, and the Water and Land Resources Division's (WLRD) business plan. Even with frequent changes in funding sources and work programs, the section has maintained its expertise and reputation for conducting high-quality environmental science and for providing science-based input to multiple projects, programs, and policy initiatives.

Long term goals for the section include: incorporating equity and social justice into its daily business; maintaining regional leadership in environmental monitoring; ensuring that, and articulating how scientific information contributes to decision making on environmental issues facing King County, including climate change; developing and maintaining a strategic financial plan; improved communication; and maintaining a focus on customer service.

2014 priority work actions to support these goals intended to continually improve the section's performance. The priority work actions include:

- Improve Science Section websites;
- Improve client service;
- Improve equipment and asset management;
- Develop strategies for a comprehensive and coordinated ecological monitoring program;
- Improve communication with the King County Environmental Lab;
- Advancing the section's contribution to equity and social justice;
- Develop and implement Science Section performance measures;
- Develop section descriptive information (brochure, web biographies);
- Improve grant application and management processes in the section; and
- Implement new work programs.

It is anticipated that the business plan will be reevaluated in future years to ensure that a culture of continuous improvement is maintained.

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1.0. INTRODUCTION

In 2008, the Science and Technical Support Section (the section) developed a “Business Plan” which articulated its vision, mission, values, future work opportunities, funding constraints and challenges, and contained information to guide its work program.

Since the completion of the 2008 business plan, a variety of changes have occurred that prompted us to review this work, and to develop new materials to keep our plan relevant that guide our section to improve the services we provide. These changes have included the development of the King County Strategic Plan and WLRD Business Plan; the countywide emphasis on continuous improvement in product delivery and customer service, the promotion of equity and social justice; and the increasing and changing demand for applied environmental science.

To start the process to update the business plan, in 2013 several staff teams in the section reviewed and articulated the work it does in light of current conditions and potential future changes. This review led to a series of descriptive documents, discussed at the section retreat in October 2013, that:

- State the Science Section’s vision, mission, and values;
- Briefly describe who we are and what we do;
- Illustrate how our work effort and funding is allocated;
- Show how the section fits into the King County Strategic Plan, and other county programs and initiatives;
- Identify our products and our customers;
- Summarize our customers’ perspectives on the services we provide and can provide in the future; and
- Indicate how equity and social justice practices influences our work.

These documents are incorporated into this Update. In addition to confirming how we describe our work, the section retreat in October 2013 also focused on the path forward – identifying steps the section can undertake to become even more effective. This Update summarizes strategic continuous improvement goals that arose from this discussion, and then identifies activities – including the rationale, scope, and intended outcome – we will undertake in 2014 towards accomplishing those goals. The intent is not to reinvent ourselves, but to articulate our role and continue to improve what we do.

This business plan was undertaken entirely by section staff, and its implementation will be conducted by section staff. This level of section engagement represents staff commitment to the section’s mission, and to continually improve our work and effectiveness.

2.0. THE SCIENCE AND TECHNICAL SUPPORT SECTION

The Science and Technical Support Section (the section) is located within the Water and Land Resources Division of King County's Department of Natural Resources and Parks (DNRP). The section is composed of planners, scientists, and engineers with a wide variety of backgrounds and a broad array of expertise – including but not limited to fisheries biology, aquatic ecology, marine biology, wildlife biology, invertebrate zoology, ecotoxicology, environmental chemistry, ecological and human health risk assessment, limnology, marine water quality, hydrology, hydrogeology, numerical modeling, terrestrial ecology, and field hydrology. We have a depth of experience in applied work, and focus on projects that provide information valuable for management actions and decisions.

2.1 Vision Statement

The section's vision statement focuses on the future by answering the question, "Where do we want to go?", and by defining the ultimate result of our work. The vision statement in the section's 2008 business plan is:

"Healthy and sustainable ecosystems."

This vision statement is maintained in this business plan update.

2.2 Mission Statement

The section's mission statement focuses on the present and is a brief description of purpose. It answers the question, "Why do we exist?" and articulates our purpose both for those internal and external to the organization. The section's mission statement in the section's 2008 business plan is:

"To provide scientific knowledge, information, and analysis in support of regional environmental resource management"

This mission statement is maintained in this business plan update. We collect, analyze, model and interpret information that supports a variety of King County's programs, including those that address land use, habitat management, wastewater treatment, salmon and biodiversity, water resources, and surface water and groundwater management. The section also is responsible for providing objective, scientific knowledge to inform and guide important policy and management decisions and programs that protect and improve the overall quality of life for King County residents.

2.3 Core Values

The section's core values are a reflection of our culture and priorities. The following value statements, developed in 2008 after lengthy discussion, are maintained in this business plan update:

We value “Excellence”

We strive for excellence. We focus our work on making the section, division, department, and county better. We provide quality service through science and solution oriented practices.

We value “Integrity”

Integrity means we value principles over personal interests. We interact with coworkers, clients and the public with a spirit of respect, sincerity, and professionalism. We treat our coworkers, clients and the public in an open, fair, and ethical manner.

We value “Teamwork”

Teamwork means all staff within the section cooperate, communicate, and respect each other in working to realize our mission and vision. Teamwork allows us to combine energy and creativity to benefit the county and those we serve.

We value “Accountability”

We recognize the critical nature of our vision, mission and values and their relation to the quality of life in King County. This compels us to seek solutions and accept responsibility for our actions.

We value “Communication”

We recognize the two-way nature of communication and know the value of listening as well as the importance of expressing ourselves. We value each individual’s point of view. We focus on issue-oriented communication with our coworkers, our clients, and the public.

2.4 Alignment with County, Department and Division Strategic Plans

The section collects and interprets environmental and other data to support decision-making and environmental management throughout the county. Our work is most often linked to the Environmental Sustainability dimension of the King County Strategic Plan, ensuring that efforts to “protect and restore water quality, biodiversity, open space, and ecosystems” are effective. We also assist in “protecting the health of our communities” through toxicology studies, water quality monitoring, and partnerships with state and local agencies. Our monitoring data helps the managers and elected officials to predict and “prepare for the effects of climate change on the environment, human health, and the economy.”

Figure 1 provides an overview of the section in context of other King County plans and programs, our customers, partners, and other ongoing drivers of our work. These drivers are important to the section’s performance and this business plan: in addition to our values, they emphasize the importance of focusing on customer service, maintaining fiscal responsibility, promoting equity and social justice, and maintaining a quality workforce.

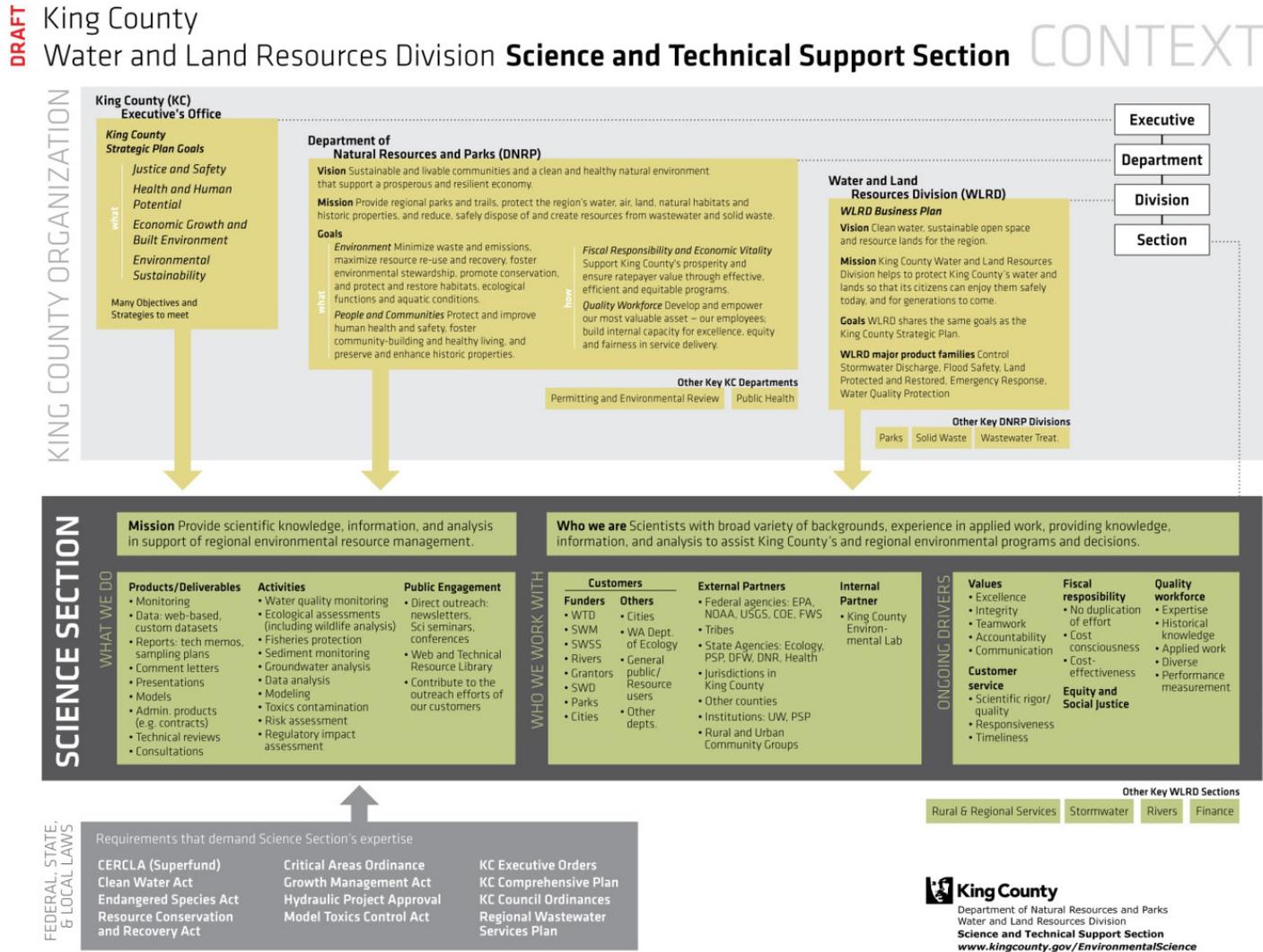


Figure 1. Science Section in Context

2.5 Projects and Programs

We carry out monitoring programs, water quality analyses, perform hydrologic and other modeling work. We conduct stream habitat and fish surveys, wetland plant and animal surveys, and ecological assessments. We work with other groups within King County and the region to provide expertise on salmon issues, restoration ecology, river and floodplain processes, biological diversity, wetland ecology, marine, nearshore, and estuarine processes, and lake ecology. We provide timely and relevant scientific information to inform management and policy decisions. More information about our work can be found on our Projects, Programs, and Products website at

<http://www.kingcounty.gov/environment/wlr/sections-programs/science-section/doing-science.aspx>.

2.6 Our Products and Customers

As articulated above and in our 2008 Business Plan, the WLRD Science and Technical Support Section's mission is to "provide scientific knowledge, information, and analysis in support of environmental resource management." While this statement describes what we do, it does not clearly articulate what our products are and who our customers are. Because this is important to improving our product delivery and customer satisfaction, the following subsections provide some clarity on these terms.

Definitions

We define Products as tangible things created by work, given to someone else to achieve a desired outcome. They are deliverable, can be defined as a noun, countable, expressed as something that can be made plural, and specific. We define Customers as specific people (or organizational entities) who either (1) pay for or (2) directly receive and/or use the products.

Our work adds value by improving the work of others—for example, our products contribute to more effective wastewater, stormwater, and salmon protection programs, projects, and activities. While much of our work involves assembling environmental data, we work to transform that raw data into knowledge that our customers can use to improve their products or services. Our work is manifest in a variety of products or deliverables such as reports, presentations, comment letters, document reviews, and expert testimony. Appendix Table A1 provides a summary of the types of products that our section produces and provides to customers.

Customers for the section's products always include those who pay for these services, but may also include others who use the products but do not directly pay for them. For example, monitoring data funded by the Wastewater Treatment Division (WTD)¹ is often

¹ WTD often is a direct user for these data, even if not always at the time the data are generated. For example, WTD may use these data to support future facility siting decisions, as background data to monitor for regulatory compliance; to monitor for water quality issues that may be affected by WTD facilities; and to evaluate water quality conditions when planning future facilities and facility modifications.

also directly used by the public and other environmental or natural resources agencies that, like WTD, have an environmental mission.

Future Customer Service Improvements

The section will use this clarification of customers and products to assess and improve its service delivery. The effort has suggested several ideas for future exploration and possible next steps:

- Are our customers and users satisfied with our products? We will interview our customers and develop a more solid understanding of their satisfaction with our products and how they could be made more useful.
- Given the section's role in environmental assessment, are there services that would be valuable to the county that are going unmet due to lack of an identified paying customer?²
- How can we measure our success at delivering these products? (i.e., quantity, quality, timeliness, cost of production, customer satisfaction?) We would benefit by having practical and meaningful performance measures for our work.
- How can we improve systems for producing some of these products? Which production processes may be most amenable to improvements (e.g., the process of producing reports – perhaps templates, training, style manuals, guidelines for presentations, data processing programs, etc.).
- Are there other customers for products that we currently or potentially could produce?

² A specific example may be a report predicting and prioritizing emerging environmental issues for King County. There may be an expectation that the section has a role to look to the future, yet no specific work program or product exists to accomplish this.

3.0. FUNDING

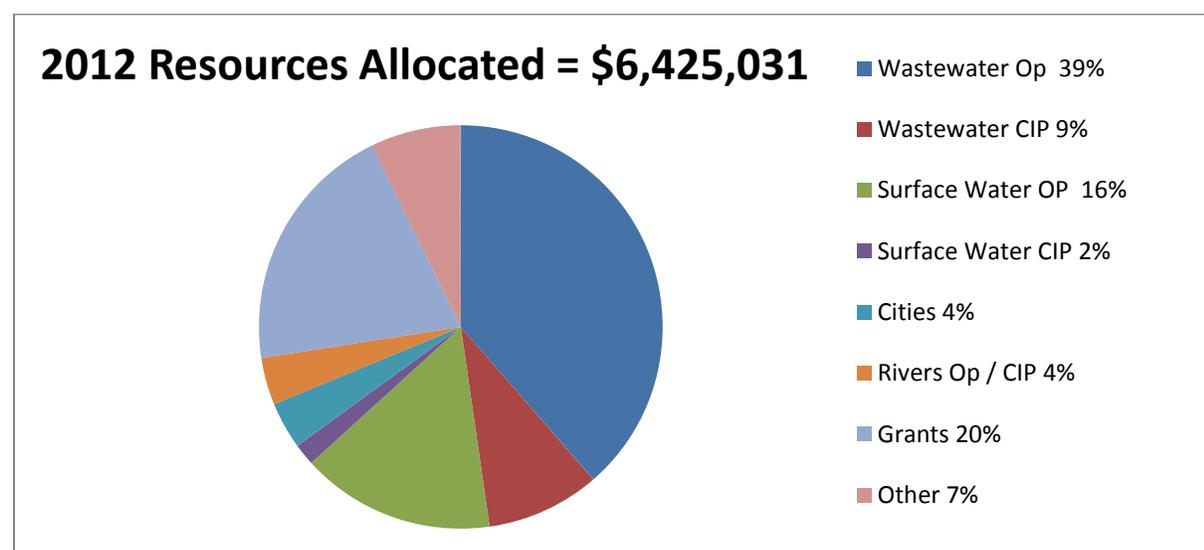
Funding sources, changes over time, and future challenges are described below.

3.1 Sources

Science Section activities are funded by a variety of sources, as shown in Figure 4 for 2012 and 2013. It is important to note that these figures do not match budget figures in the official financial reports, due to the nature of how funds are tracked in WLRD, and how they are received. For example, section contributions to division central charges and overhead are budgeted separately from section expenditures. In addition, much of the work in the section is performed as “loan out” labor, charged to funds managed by other entities. The charts here were constructed simply to provide a quantitative overview of work flows in the section – how and where our work effort is allocated and paid for, to assist in strategic planning.

Much of our work is variable from year to year. About 60-70 percent of our work is funded from operating budgets (either WTD or surface water management [SWM]), reflecting monitoring and science support to WTD or SWM programs; while this is ongoing in nature, it can change from year to year. The collected data and the analyses of these data support other programs in the division and department, including wastewater treatment, stormwater management, river management, and salmon protection. The remainder of our work is even more variable – conducted at the request of clients to support their programs and capital projects, or to work on city contracts or grants.

The majority of section’s costs are comprised of salaries and benefits. This reflects the fact that our work products are comprised of reports, presentations, consultations, data sets, and expertise that require dedicated staff time.



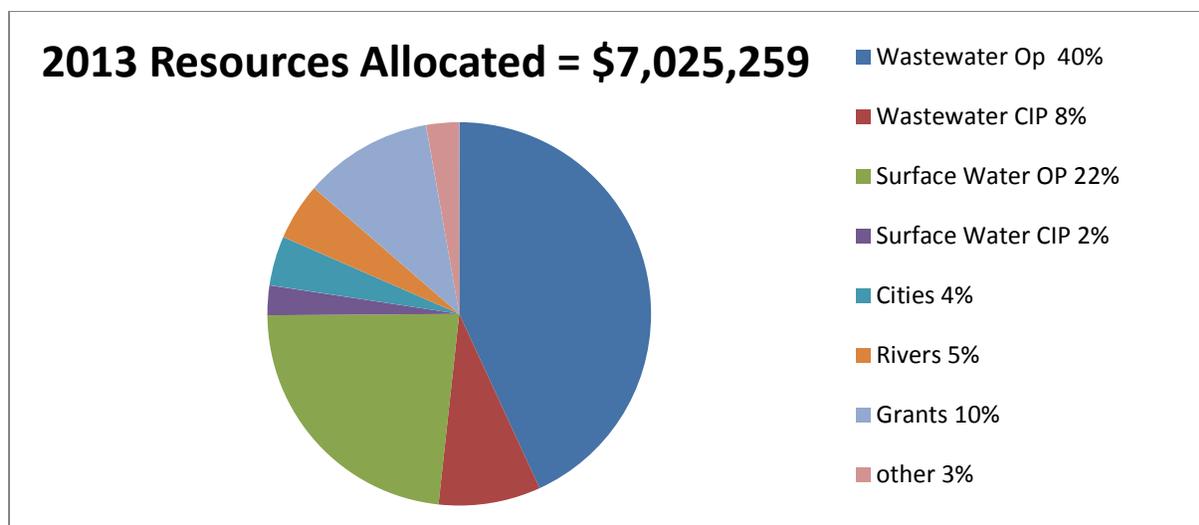


Figure 2. 2012 and 2013 Funding Sources for Science Section Activities

*These figures show the sources of funds for the Science Section's work, and how it has changed since 2012. Because they reflect a variety of funding mechanisms (fund transfers, loan in labor/benefits) and combine several funds, totals do not match budget figures in financial reports.

KEY

Wastewater Op = ongoing monitoring and other work, through the Wastewater Treatment Division (WTD)'s Operating Budget

Wastewater CIP= work to support WTD capital projects (e.g., source control studies, future water quality assessment)

Surface water OP = ongoing support to surface water management (SWM) and stormwater programs, through SWM Operating Budget

Surface water CIP = support to WLRD SWM-funded capital projects (stormwater, restoration projects)

Cities = work funded by cities through interlocal or interagency agreements (e.g., agreements to monitor lakes)

Rivers = work funded by Rivers Section (capital or operating)

Grants = federal, state grants

Other = work to support projects led by the DNRP Director's Office, SWD, etc.

3.2 Major Changes Since 2008 Business Plan

In 2014, proportionately more of the section's work effort will be devoted toward operating programs, and less on more variable components, than in 2013 or 2012. In particular, this reflects a winding down of several large grants, as well as an increase in WTD and SWM funding to support water quality monitoring.

Several other major changes to the section's funding have occurred since the section's 2008 business plan was completed:

- In 2008 and again in 2010, budget reductions were implemented for the routine water quality monitoring program, which is carried out by the section and the King County Environmental Lab. The funding changes from 2008 through 2012 are shown in Figure 3, representing about \$2.5 million annually in year 2012 dollars, or about 39 percent. Associated staff reductions were obtained via attrition and layoffs.

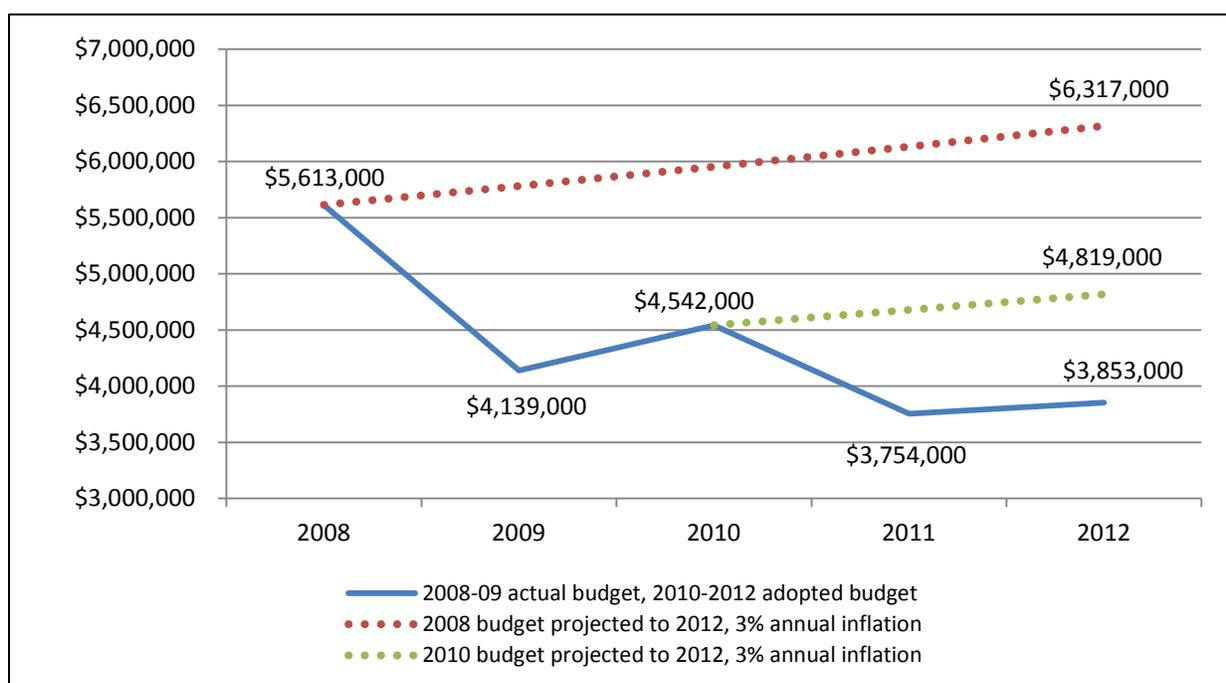


Figure 3. Changes to WLRD budget for the WTD Water Quality Monitoring Program between 2008 and 2012³ (includes projected costs of historical programs adjusted for inflation, rounded to the nearest thousand); includes budget for the Science Section and King County Environmental Laboratory (a separate Section in WLRD).

- Since the adoption of the 2008 Business Plan, the section successfully competed for several grants, including six United States Environmental Protection Agency (USEPA) grants. The USEPA grants, which started between 2008 and 2011 and are finishing in 2013 and 2014, included about \$4.4M in aggregate funding from USEPA over the 3-year period. This affected the nature of section expenditures to some degree. Some of the grant work was performed by external partners and consultants, meaning that the section’s expenditures in these years included a higher proportion of work on contracts and services than would typically be expected.
- In 2010-2013, the section increased the amount of work it performed for the Wastewater Treatment Division as part of the Lower Duwamish Superfund capital project. This work focused on increased monitoring activities to identify contaminant sources to the Lower Duwamish Waterway.
- In the 2013-2014 biennial budget, the section maintained and slightly increased the amount of surface water management (SWM) funding to support King County’s compliance with its municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit and provide technical support to the division’s regional and

³ King County. 2012. Report on King County’s Water Quality Monitoring Program. Prepared by the Wastewater Treatment Division. Seattle, WA.

rural programs.

- In 2013, the routine WTD water quality monitoring program was expanded by about \$500,000 per year. The 2014 adopted budget calls for an additional increase by about \$1.2 million per year. While this is still less than the aggregate \$2.5 million in reductions to the monitoring program since 2008, this reflects a substantial increase. These additional activities are intended to support a wide range of water quality monitoring activities countywide.

The general result of these changes is that since 2011 the section is increasingly focusing on supporting King County programs and clients, and decreasing its focus on other activities, such as grants or contracts for other entities. It underscores the importance of the section providing excellent customer service, and doing high priority applied work for other King County programs. In addition, the funding changes are affecting the section's work program and staffing, and will require careful management to accommodate.

3.3 Future Challenges

This document was prepared prior to the development of the 2015-2016 biennial budget. However, at this time it appears that the division's funding in 2015-2020 will include:

- Maintenance of a robust water quality monitoring programs
- Continued support to other programs, but at changing levels, including:
 - Increased support to stormwater to support basin planning associated with the municipal stormwater NPDES permit;
 - Some decrease in support to wastewater capital projects overall (e.g., decreases in support for "source control" work, with some increases to support WTD's combined sewer overflow program);
 - Continued support to Water Resources Inventory Area groups, solid waste, cities, and other division sections (rivers, regional services, and stormwater); and
 - Some additional work on grants and contracts, but not to the extent of the 2010-2013 period.

While the section has limited ability to alter its financial structure, future challenges include:

- Defining appropriate staffing levels and expertise in the face of uncertainty regarding the monitoring program scope and scale.
- Defining the appropriate level of funding from outside agencies and grants relative to ongoing work to support King County programs and clients.
- Assessing whether the current approach of having the section "loan out" work to other entities (that control funding sources) on an as-requested basis should be replaced with an approach whereby the section receives a base funding level and then allocates it based on customer priorities.

4.0. CUSTOMERS AND CUSTOMER SURVEYS

A significant portion of our work is funded through Wastewater Treatment Division and Surface Water Management programs, but we also provide services to River and Floodplain Management, salmon recovery service provider teams, the Solid Waste Division, and other partners. We work closely with these and other “customers” to ensure our data collection and analyses meet their regulatory requirements and programmatic priorities while also adhering to state and federal standards. Scientific integrity and responsiveness to our customers and the public are our key drivers.

Customer satisfaction is an important driver of the section’s work. In 2012-2013, the section carried out two efforts to survey its customers, to get feedback that could be used to improve services we provide. These included:

- An electronic, web-based survey, primarily aimed at external and internal customers that use our website, focusing on information we provide on the web; and
- Focused interview/discussions with key internal customer groups that use and pay for our services (conducted jointly with the King County Environmental Laboratory).

4.1 Electronic Survey

The electronic survey consisted of a concise web-based questionnaire, circulated in November 2012 to over 900 customers. Besides internal (King County) customers, external parties receiving the survey included individuals from various local, state, and federal governments, Tribes, non-governmental organizations (NGOs) and King County residents.

A full report on the survey can be found on the WLRD Science Section website with other documents from the 2013 business planning process <http://www.kingcounty.gov/environment/wlr/sections-programs/science-section.aspx>⁴. Of customers surveyed, 311 people responded, with the largest group from local or state government. Of the 107 King County government respondents, most were from the Water and Lands Resources Division or the Wastewater Treatment Division within DNRP.

Some of the key findings included:

- Responding customers use us primarily for our data (54%), study reports (54%), and technical support (46%).
- Customer satisfaction was generally high, with web page usability having the most room for improvements.

⁴ King County. 2013. Science Section 2012 Customer Satisfaction Survey Results. Prepared by Jo Wilhelm and Debra Bouchard, Water and Land Resources Division. Seattle, Washington

- The Science Section benefits or contributes to our customers' work in a variety of ways: providing a source of general information/education (65%), providing data or figures for presentations (59%), contributing to policy or decision-making (52%), supporting technical reporting (48%), and contributing to education (36%).
- Primary ways to improve customer service included improving information dissemination and web pages, as well as increased partnerships.
- Two common themes emerged from open-ended survey responses: (1) over 5 percent of the respondents were unfamiliar with the section; and (2) web resources provided by the section are a primary resource for respondents and also the area that would benefit most from increased investment and improvement.

Recommendations/Next Steps from this information:

- The survey results indicated a strong desire for improvements to the section website, which was reaffirmed during a section retreat held in October 2013. As a result, and as discussed later in this document, a work team has been formed to develop specific recommendations for improvement. DNRP senior management has committed to providing assistance to the section in implementing recommendations to improve the site.
- The survey also suggested potential value in greater section visibility, and developed some initial recommendations for improving awareness of the section. These themes also emerged during the section retreat. The development and implementation of additional communication products is likely to be a work program item in 2014. Promoting awareness of the section was also a rationale for customer group interviews, described below.

4.2 Customer Interviews

In the first half of 2013, the Science Section and Environmental Lab Section managers and supervisors conducted interviews or discussions with some key internal customer groups. Participants included 5 to 8 staff members from each of the following groups:

- Rural and Regional Services Section – May 6, 2013
- Wastewater (Environmental and Community Services) – May 30, 2013
- Rivers – May 29, 2013
- Stormwater – Sept 23, 2013

The purpose of each meeting was to make customers aware of services we provide; hear about how we can improve services we provide now, and to explore potential new ways we can contribute to success of their work program. Each discussion was open-ended, and while no formal report was prepared from these discussions, the following themes emerged:

- A general appreciation of (high value put on):
 - Technical rigor, credibility, long-term knowledge

- Provision of committee work/outreach and communication work
- Ability to provide field support (fish surveys, etc.)
- Science seminar⁵
- An emphasis on basic customer service, including responsiveness, reliability, cost-consciousness, and communication. There was some indication that staff provided good customer service in this regard, but there was some room for improvement.
- A growing demand for:
 - Site inspections; e.g., for hazardous materials associated with acquisitions, capital projects
 - Scientific support to ongoing regulatory and legal changes
 - Explaining complex scientific/policy/regulatory issues

Customers also appreciated being asked about their interests and concerns; the interviews themselves demonstrated a commitment to maintaining strong relationships.

While these comments reinforce the section's priority on performing high quality work, they also emphasize skills such as work on project teams, clear communication, responsiveness, reliability, cost consciousness, and attention to customer input and direction. This suggests the ongoing importance of ensuring section staff display these skills in their work.

⁵ The Science Section periodically hosts half-day seminars in which about 10 presentations are made about recent findings from King County's environmental monitoring programs; <http://green.kingcounty.gov/wlr/science/seminar/>

5.0. EQUITY AND SOCIAL JUSTICE

King County's equity and social justice initiative (ESJ) represents an effort to ensure that all residents in King County have equal opportunities in life and King County government acts in a fair and just manner at all times (<http://www.kingcounty.gov/exec/equity.aspx>). "**Fair and Just**" means the County serves all residents by promoting fairness and opportunity and eliminating inequities through actions to which equity and social justice foundational practices are applied. Efforts to improve the fairness and justness of King County government are being implemented in all county departments.

Advancing equity and social justice foundational practices will be an important element of the section's future work program. This is not only mandated by King County policy, it is critically important to the success of our work – that the data and information we provide meet the interests and demands of an increasingly diverse King County population.

The determinants of equity that the Science and Technical Support section can focus on include the following:

Equity in County Practices: Equity in county practices that eliminates all forms of discrimination in county activities in order to provide fair treatment for all employees, contractors, clients, community partners, residents and others who interact with King County;

Education: Education that is high quality and culturally appropriate and allows each student to reach his or her full learning and career potential;

Healthy Built and Natural Environments: Healthy built and natural environments for all people that include mixes of land use that support: jobs, housing, amenities and services; trees and forest canopy; clean air, water, soil, and sediment;

Food Systems: Food systems that support local food production and provide access to affordable, healthy, and culturally appropriate foods for all people; and

Parks and Natural Resources: Parks and natural resources that provide access for all people to safe, clean and quality outdoor spaces, facilities and activities that appeal to the interests of all communities.

While the ways in which the section can best advance the ESJ initiative will continue to emerge from future business plan implementation activities, the section's ESJ commitments, at a minimum will include the following:

- The section recognizes that cultural competency is an ongoing learning process and the section will actively include ESJ training and education into individual and section work program activities.
- Each section staff member shall strive to demonstrate effective, nonbiased, and appropriate interaction with all customers, audiences, co-workers, and institutions.
- The section will look to raise visibility of ESJ by infusing and integrating Equity and Social Justice Practices into all aspects of our work.

- The section will seek to recognize and identify bias in our service delivery and effectively implement corrective practices.
- The section shall communicate and deliver information and education that is beneficial to the health of the environment and resident wellbeing in all communities.
- The section will work to build broader community trust, interest, and support for our work.

6.0. BUSINESS PLAN RETREAT

The section hosted a day-long business planning retreat on October 3, 2013. In the morning session, staff reviewed and discussed the self-assessment work that had been conducted over the previous 12 months. In the afternoon, staff turned their attention to how the section should evolve to continue to improve in the future, discussing such questions as “What does the future hold for us?” “Where do we want to be in 5 years?” and “What should we do to get to where we want to go?” The discussion focused on the following topics:

- Emerging issues
- Customer priorities
- Key relationships
- Skills
- Organizational structure/management and process changes
- Communication tools

Notes from the discussions at the retreat were input into a “word cloud” generator (Figure 2). This figure effectively captures many of the main themes of the discussion in a visual format. It graphically shows some common topics, themes, and action items that emerged from the day.

Two major tasks emerged from the retreat. The first was to finalize the “descriptive document” work that was discussed in the morning; this work is summarized in the preceding section of this document. Going forward, this will be used to characterize and guide our work. The section will review and update this every few years, but we anticipate much of it to remain somewhat constant.

The second major task was to take the information generated at the retreat, and from it create a set of goals to work towards to enable us to continue to improve, or “get where we want to go,” and a specific work plan for activities to develop and implement in 2014 that will start us down this path. Another volunteer staff group met to review the notes from the retreat and generate the information, which appears in the next section.



Figure 4. Business Planning Retreat Word Cloud

7.0. 5-YEAR STRATEGIC GOALS

Discussions at the retreat suggested a number of areas where a major shift or improvement is desired within the next five years. These changes are driven by a combination of internal and external factors. Success in implementing these changes is viewed as critical to continuous improvement and ensuring the long-term relevance and viability of the section.⁶ These are summarized below:

Incorporation of Equity and Social Justice into our Business

The section is committed to implementing the County's Equity and Social Justice goals. The section will actively work to define approaches to implement these goals. Examples of possible approaches include, but are not limited to:

- Implementing efforts to recruit staff that reflect King County's diverse population;
- Modifying our services to better serve King County's diverse population;
- Ensuring staff are appropriately trained and informed; and
- Continuing to assist with environmental science education for at risk youth.

Maintaining and Expanding Regional Leadership in Environmental Monitoring

The King County Science and Technical Support Section is already recognized for its regional expertise and leadership. Over the next five years, we will strive to enhance this reputation via

- Focused support to regional monitoring coordination efforts, such as those advanced by the Puget Sound Partnership.
- Seeking to use our monitoring data to supporting major regional and county environmental initiatives, such as salmon restoration efforts, Puget Sound restoration efforts, Farm/Fish/Flood planning efforts, Green River System-Wide Improvement Framework planning efforts, and other efforts.
- More clearly articulating the breadth, purpose, and benefits of our environmental monitoring programs.
- Working with our partners to develop and implement a comprehensive and coordinated ecological monitoring program in King County. Substantial fish, macroinvertebrate and habitat monitoring occurs within King County. In addition to the Science Section, some of these activities are conducted by other agencies such as the U.S. Fish and Wildlife Service, the Washington Department of Natural Resources,

⁶ Among other things, these goals are consistent with, and will allow the Science Section to assist the Division meet, the division's future "SMART" goals and actions. The SMART goals, under development at this time, are conceived as general areas to guide the Division over the next 5-10 years. While they cut across the division, most goals reflect established programs and are generally led by other WLRD sections, with the exception of the proposed SMART goal to maintain leadership in environmental monitoring. Arguably, the Science Section and the Environmental Lab would play a strong role in this SMART goal, and this Business Plan update includes this as one of its five-year goals.

the tribes, city jurisdictions, and other groups within King County government. However, there is no comprehensive or coordinated strategy within King County for these various activities.

Linking Science to Decision-Making and Environmental Change

Monitoring and analysis conducted by the section is routinely used in multiple decision-making processes. Over the next five years the section will seek to more clearly communicate scientific information (including our monitoring programs) to support King County programmatic and policy decisions. In particular, the section will look to apply its expertise to assisting King County address climate change.

Developing a Strategic Financial Plan, with More Stable and Predictable Funding

The work of the section is variable, and the section continually balances its work with anticipated resources. The section would benefit by having tools (such as a strategic financial plan) that communicate its financial situation, as well as articulate future changes or concerns. The goal would be to develop a funding situation that is more stable and predictable, while still meeting the demands of a broad suite of clients that can vary one year to the next.

Improved Web Presence, Data Sharing, and Communication

Substantial customer input was received that the section's web presence could use improvement. This feedback was reaffirmed at the business planning retreat in October 2013. The section will strive to develop a web presence that provides intuitive and easy to use access to data, access to reports, and information via social media.

Maintain and improve focus on customer service

The section is committed to continuing to improve customer service, and part of this will involve continuing to meet with customers, get feedback on how we are doing, and make improvements as a result. The section will increase its attention to customer service moving forward.

Other Areas for Long-Term Improvement

Several other areas were identified for long-term improvement, including:

- Marketing (making potential customers aware of the services we provide)
- Developing a culture of learning, where all staff are engaged in improving how the section conducts its business
- Providing critical training and skills, such as:
 - Project management
 - Communication; e.g., writing for nontechnical audiences
- Equipment
 - Asset management
 - Storage
 - Replacement

- New equipment/technology
- Grant process improvement
- Improved relationships with partnering agencies, including King County's Environmental Lab

8.0. 2014 PRIORITY ACTIONS

The section will begin in earnest in 2014 to make progress towards these strategic goals, and addressing other areas identified for improvement. This is in keeping with the theme of the retreat, that in regard to business planning that it is important for the section to transition from describing its work towards getting better at what we do; i.e., continuous improvement.

The section below lists major areas where the section will commit to making progress this year towards the 5 year strategic goals. In most (but not all) cases, this will mean that a small team will be assembled that will be charged with developing a work product (e.g., recommendations) by the end of 2014. Every section staff member is expected to participate on at least one of these “teams.” An annual review of the teams and their accomplishments will be conducted each year.

Major areas of focus/implementation in 2014:

- Implement new work programs
- Develop financial planning and tracking tools (working with Finance Section)
- Website improvements (**staff team**)
- Fish and habitat monitoring program development (**staff team**)
- Customer survey and customer service improvements (**staff team**)
- Equipment/asset management (**small staff team**)
- Advancing equity and social justice (**staff team**)
- Improving communication with the environmental lab (**staff team**)
- Section marketing (e.g., brochure, staff bios, etc.) (**staff team**)
- Developing and implementing section performance measure(s) (**staff team**)
- Grant process improvements (**staff team**)

Science and Technical Support Section Website Improvements

There is strong interest throughout the section in improving the section’s web presence. This improvement includes

- Continued development and improvement of publically accessible databases for routine monitoring data. New databases are anticipated for marine sediment benthos and routine marine water quality.
- Improved searchability and ease of locating science section websites.
- Improved presentation of science section reports, including improved ability to find science section reports.
- Decreased redundancy across multiple web pages.

Develop a Section Strategic Financial Planning and Tracking Tools

Working with WLRD Finance, the section will seek to develop an ongoing financial plan that forecasts revenues and expenditures of the division's functions out several years, a tool that will continually allow the section to describe its work, anticipate issues, and ensure expectations are commensurate with resources. Working with WLRD Finance, it will also seek to develop improved budget tracking mechanisms, to ensure compliance with budget constraints.

Improved Customer Service

King County's strategic plan calls for increased focus on customer service. In the past two years the section has conducted an electronic survey of over 900 customers, and also conducted several interviews of key clients. In 2014, staff will develop and implement a more comprehensive approach to conducting customer outreach and interviews. This approach will likely rely on a distributed-implementation approach, where every staff member participates in an outreach approach to customers and colleagues. In 2014-2015, the section will also seek to administer another electronic survey, and also will continue to interview key customer groups.

Equipment Asset Management Improvement

The section will continue to inventory its assets and equipment, and develop replacement plans appropriate for different funding sources. The section will also review its equipment storage requirements and systems, and implement improvements to ensure equipment is efficiently organized, and properly stored.

Develop Comprehensive and Coordinated Ecological Monitoring Program.

The various disparate ecological monitoring projects and programs should be centered around the broader ecosystem monitoring objectives that have been articulated in the King County Comprehensive Plan as well as subordinate division, department, and section plans. They should also be coordinated within the section, WLRD, and with other county, state, and federal agencies. In 2014, we will convene a section team with the interest and diverse expertise to work with our partners towards developing a comprehensive and coordinated ecological monitoring program. The team's product will be a draft plan outline that describes a countywide monitoring program that articulates clear goals, proposed roles, linkages and contributions to existing lines of business within WLRD and other county agencies, and how the program can contribute to regional efforts, such as work to protecting Puget Sound or address climate change.

Improved Communication with the King County Environmental Lab

The section and the Environmental Lab partner on multiple long-term and short-term monitoring programs. However, there is ongoing sentiment among section and laboratory staff that the lines of communication between the two organizations can be improved. In 2014 we will conduct interviews with staff and supervisors from both organizations, work with Lab staff to identify a list of communication issues to improve upon, and identify approaches for improving communication. Both the section and Environmental Lab managers strongly support this effort.

Equity and Social Justice Learning and Implementation

Going forward, advancing equity and social justice foundational practices will be an important element of the section's work program. This is not only mandated by county policy, it is critically important to the success of our work – that the data and information we provide meet the demands of an increasingly diverse King County population. The section will explore how it can promote equity and social justice; at a minimum, it is likely to focus on

- Educating staff on “cultural competency” and the County’s ESJ initiative;
- Implementing efforts recruit staff that reflect King County’s diverse population;
- Striving to increase monitoring services to King County’s diverse population; and
- Continuing to assist with environmental science education of at risk youth.

In 2014, we will

- Review and document section activities supporting equity and social justice;
- Identify ways to improve Science Section equity and social justice; and
- Conduct appropriate training and education to Science Section staff related to equity and social justice.

Develop Science Section Performance Measure(s)

The section annually publishes Environmental Indicators that describe the health of King County’s environment. However, the section is also interested in develop performance measure(s) that describe how well the section is performing, and that can be used to improve our performance. Section measures identified in the 2008 business plan were not implemented. In 2014, we will review these measures, and develop and implement a useful internal performance measure.

Develop Section Brochure and/or Biographical Information

A key finding from our 2012 Survey is that some prospective customers are not familiar with the section, and many customers do not know the full range of work that we do. A small team will work to develop some descriptive information, which is anticipated to include: (1) short biographical summaries all section staff, describing their work and skill sets; and (2) a brochure that summarizes who we are and what we do. The audience for these products is conceived as potential customers or partners. The exact scope and format of the summaries is yet to be determined (although it will likely mainly be distributed via the web).

Grant Process Improvements

Currently, section staff perceive that solicitation of external grants could be improved by clarifying the role of grants in the section, and clarifying and standardizing the approaches for identifying projects, making decisions regarding projects to seek, preparing proposals, and tracking work. During 2014, the section will seek to convene a team with experience in grant solicitation and management to make recommendations to improve grant strategies

and processes for the section. This team will work with staff from the WLRD director's office and finance section to ensure alignment with division systems.

Implement New Work Programs

In the 2014 budget ordinance, the King County Council funded multiple new water quality monitoring activities. In addition, King County's stormwater discharge National Pollutant Discharge Elimination System permit requires completion of a watershed-scale stormwater management plan, which will also begin in 2014. These activities require working collaboratively with the King County Environmental Lab, the Wastewater Treatment Division, the Stormwater Services Section, the WRIA recovery teams, local sewer and stormwater districts, and state and federal agencies. During 2014, the section will work collaboratively with our partners to implement these new activities.

Follow-up

At the end of 2014, the section will assess the work of these staff teams, and again establish a workplan for 2015 work to ensure continuous improvement. These could include new priority actions to address, or to implement and evaluate recommendations that emerge from the efforts described above.

Appendix A

**Preliminary Analysis of Science and Technical
Support Section Products and Customers**

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TABLE A1. Preliminary Analysis of Science and Technical Support Section Products and Customers

PRODUCT	DEFINITION	Customers		Partner/Stakeholder	Notes
		Funders (Who Pays)	Users (Who Uses)		
Data	Information (numeric or otherwise); may be minimally processed but not interpreted or analyzed	WTD and SWM pay for data gathering, storage—use for analysis of their programs	WTD and SWM; other county programs; Exec office for indicators; other environmental agencies; public interested in envir. conditions	Partner—Environmental Lab	Realm of users is larger than who pays; however, is in interest of WTD, SWM that public use & appreciate info
Data sets					
Data on web	Data sets organized and formatted for web display and access				
Custom data	Data acquired by special request	Entity that requests data (if cost is not negligible)	Entity that requests data; others as well can use, as data become publicly available		Example: ...
Reports	Document presenting analysis, interpretation and/or synthesis of data; responds to specific question or information request				
Technical memo					
Extensive report					

TABLE A1. Preliminary Analysis of Science and Technical Support Section Products and Customers

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		Funders (Who Pays)	Users (Who Uses)		
Sampling and Analysis Project Plans, Quality Assurance Project Plans (SAPP/QAPP)					Often for 'internal use only'; occasionally required by regulatory agency as a stand-alone document (and therefore a 'product').
Sections of others' reports					
Scientific papers					Motive for paper may be to enhance credibility of Section/County, or ... 'Product' may have no paying customer
Education/outreach document					
Comment Letters	Formal letter that that provides analysis, review of a proposed regulation, program (e.g. toxics rules, a shoreline master plan)				
Document Reviews	Document that provides input to another document (e.g. track changes)				
Regulatory / Policy Documents	A regulation or policy, e.g., a specific CAO regulation		? County Executive's office; DNRP management		
Citizen Response Letters	Formal letter or email responding to questions or comments received	Overhead? Customer benefits by response	Citizen	Stakeholder—elected officials, senior managers	Customer is the citizen; entity that benefits, benefits by ensuring the citizen receives comments.

TABLE A1. Preliminary Analysis of Science and Technical Support Section Products and Customers

PRODUCT	DEFINITION	Customers		Partner/Stakeholder	Notes
		Funders (Who Pays)	Users (Who Uses)		
	by the public				
Presentations	Verbal reports— interpretation or explanation of scientific information	Can be WTD, SWM, grant; or Overhead	Those hearing the presentation (audience)		May be part of larger project including reports or other products; some presentations are at the request of the (paying) customer, others may be for broader benefit (e.g. agency/county credibility or public service).
To management					
To customers (tech staff)					
To scientific community	Often highly technical				
To community groups	Less technical				
Testimony					
To public (e.g. brown bag, science seminar)	Includes education/ outreach				
Consultations	Informal verbal or written input on a question or issue	Those receiving the consultation.			
Phone calls					
Email					
Representations	Appearance at an event, representing or speaking on behalf of King County, WLRD,	Those on whose behalf the representation is made; can be a combination of sources, if			Product may be highly specific or general but less formal or tangible than a presentation or testimony

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PRODUCT	DEFINITION	Customers		Partner/Stakeholder	Notes
		Funders (Who Pays)	Users (Who Uses)		
	WRIA, etc.	representation is on behalf of King County			
Models	Generally quantitative tool to answer scientific questions (describe or predict impacts)	Generally entity receiving and using the model results; customer can also use models for their own analyses.	Other entities may use these models (are generally publicly available)		Intent is for customer to use model to perform his own analyses
Administrative products		Generally is overhead	Division and Department Management; Executive Office, Council		
Budgets, contracts					