

ACKNOWLEDGEMENTS

King County Department of Natural Resources and Parks

Joanna Richey, Assistant Division Director, Water and Land Resources Division
Sarah Ogier, Program Manager, Groundwater Protection Program, Water and Land Resources Division
Wayne Sugai, Business and Finance Officer, Finance Unit, Director's Office

Additional support:

Sandy Kraus, Graphic Designer, Water and Land Resources Division
Dave Monthie, Water Resources Policy Manager, Director's Office
Jim Simmonds, Water Quality and Quantity Unit Supervisor, Water and Land Resources Division
Susan Oxholm, Communications Specialist, Water and Land Resources Division

Public Health - Seattle & King County

Larry Fay, Deputy Division Director, Environmental Health Services Division
Bill Lasby, Supervisor, Drinking Water Program, Environmental Health Services Division

This report and its authors owe significant thanks to the members of the 2005 Groundwater Task Force. The insights and discussions of the Task Force are reported in Chapter 3. Thank you to the 2005 Groundwater Task Force participants:

Ginny Stern
Kelly Peterson
Ron Garrow
Tim Osborne
Don Perry
Len Olive
Carolyn Boatsman
Don Wright
Celia Kennedy
Jerry Liszak
Bob Pancoast
Ron Little
Hank Thomas
Gareth Grube
Michael Johnson
Jim Dam
Jim English
Jeremy Pratt

A full list of Task Force invitees and their affiliation can be found in Appendix E



Please recycle



CONTENTS

EXECUTIVE SUMMARY	1
SPECIFIC SERVICE RECOMMENDATIONS	3
SPECIFIC FUNDING RECOMMENDATIONS	5
CHAPTER 1 - THE NEED FOR A REGIONAL GROUNDWATER PROTECTION PROGRAM IN KING COUNTY	7
REGIONAL PROGRAM PURPOSE AND GOALS	7
WHY IS GROUNDWATER IMPORTANT?.....	7
THREATS TO GROUNDWATER QUALITY AND QUANTITY	8
TODAY’S CHALLENGES.....	10
CHAPTER 2 – PROPOSED SERVICES AND COSTS.....	17
PRIMARY RECOMMENDATIONS OF KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS AND SEATTLE KING COUNTY PUBLIC HEALTH	17
RANGE OF SERVICES CONSIDERED	18
RANGE OF FUNDING MECHANISMS CONSIDERED	18
FINDINGS LEADING TO PRIMARY RECOMMENDATIONS	18
POSSIBLE ACTIONS FOR THE METROPOLITAN KING COUNTY COUNCIL AND THE SEATTLE KING COUNTY BOARD OF HEALTH	21
LACK OF A COUNTY-WIDE PROGRAM	21
CHAPTER 3 – GROUNDWATER TASK FORCE ACTIVITIES AND RECOMMENDATIONS	25
TASK FORCE PURPOSE AND PROBLEM STATEMENT	25
SERVICE PROVISION AND STATUTORY AUTHORITIES	27
TASK FORCE REVIEW OF POTENTIAL SERVICES AND FUNDING MECHANISMS.....	29
PERCEIVED VALUE AND BENEFIT OF SERVICES	32
FUNDING PREFERENCES.....	34
CONCLUSIONS AND RECOMMENDATIONS OF THE TASK FORCE	37
CHAPTER 4 – ASSESSMENT OF SERVICES AND FUNDING NEEDS JUNE 2004 TO JUNE 2005	41
GROUNDWATER PROTECTION PROGRAM PROVISIO REPORT - 2004.....	41
SUBREGIONAL AREAS MOVING FORWARD – <i>ILAS AND VMI WORK</i>	41
GROUNDWATER PROTECTION COMMITTEES RENEWED	42
REQUEST TO STATE FOR FUNDING AND SERVICES	43
GROUNDWATER TASK FORCE - 2005	43
OUTSTANDING NEED – GENERAL POPULATION BASED PROBLEMS AND SERVICES	44
CHAPTER 5 – HISTORY OF GROUNDWATER PROGRAM PRIOR TO 2004.....	45
GROUNDWATER MANAGEMENT PLANS	45
GROUNDWATER PROTECTION ORDINANCE.....	46
GROUNDWATER PROTECTION COMMITTEES	46
GROUNDWATER PROTECTION PROGRAM OVERSIGHT.....	47
APPENDIX A - COMMONLY USED ACRONYMS & TERMS	49
APPENDIX B – GROUNDWATER TASK FORCE EVALUATION OF RELATIVE NEED FOR SPECIFIC GROUNDWATER SERVICES	51
APPENDIX C – FINAL TASK FORCE ASSIGNMENT – PERCEIVED BENEFIT AND FUNDING PREFERENCES FOR PROPOSED GROUNDWATER SERVICES - DNRP.....	56

**APPENDIX D – FINAL TASK FORCE ASSIGNMENT – PERCEIVED BENEFIT AND
FUNDING PREFERENCES FOR PROPOSED GROUNDWATER SERVICES - PUBLIC
HEALTH.....72**

APPENDIX E – TASK FORCE PARTICIPANTS AND AFFILIATION81

APPENDIX F – STATE AGENCY LETTERS REGARDING FINANCIAL SUPPORT.....82

INDEX OF TABLES

TABLE 1 – EXAMPLES OF PERCEIVED BENEFIT DISTRIBUTION FOR DNRP GROUNDWATER SERVICES ...	33
TABLE 2 – AGGREGATED PREFERENCES FOR FUNDING DNRP GROUNDWATER SERVICES	35
TABLE 3 – AGGREGATED PREFERENCES FOR FUNDING PUBLIC HEALTH GROUNDWATER SERVICES	36

EXECUTIVE SUMMARY

The purpose of this report is to make recommendations to the Metropolitan King County Council and the Seattle King County Board of Health regarding groundwater protection services and how to fund them. These recommendations come from an evaluation completed in 2005 by King County's Department of Natural Resources and Parks (DNRP) and Seattle-King County Public Health's (PUBLIC HEALTH). A primary component of this evaluation was the involvement of a multi-stakeholder Task Force, formed for the sole purpose of advising King County on these issues.

This report is a follow up to the King County Groundwater Protection Program 2004 Proviso Report and accounts for how the recommendations in the Proviso Report were pursued during 2004 and 2005.

In this report King County Department of Natural Resources and Parks and the Seattle King County Public Health recommend a reduction in the scope of the King County Groundwater Program from the comprehensive, regional program authorized in K.C.C. 9.14 to an area-specific program that addresses specific management concerns in parts of King County where targeted County funding or cost shared interlocal agreements exist and to integrating regional groundwater management priorities with related regional water resource services within available, limited resources.

The changes to the groundwater program include the following legal and programmatic shifts:

- integrating King County's groundwater management services with other watershed-based regional services, including the implementation of the Salmon Recovery WRIA Plans and the development of a Regional Water Supply Plan in cooperation with multiple parties;
- a comprehensive program on Vashon-Maury Island where a sole source aquifer and Island geography mandate a different approach; and
- limited, fee-specific services in other parts of the County provided by DNRP with cost shared ILAs in the Redmond Bear Creek and Issaquah Valley areas and by Public Health throughout the County.

These recommendations reflect the Washington State Department of Ecology's current policy and legal framework for managing surface and groundwater as a single, hydrologically continuous natural resource. Due to the lack of adequate county-wide revenues for a comprehensive regional groundwater program and no support for either new revenues or re-allocation of existing revenues, this modified approach seeks to honor the importance of groundwater resources to King County and build on the state's integrated approach within the constraints imposed by limited revenues.

Why is Groundwater Important?

Groundwater is a regional asset that, if managed properly, is a renewable resource. In King County, groundwater is used as a potable water supply by approximately 30 percent of the population. Groundwater supplies cool, clean water to the county's abundant rivers, streams and wetlands and serves to maintain base flows during late summer and fall months when precipitation is low. Increasing land development, decreased infiltration and increased withdrawal due to population growth throughout the county are stressing groundwater quality and quantity and consequently putting public health at risk. Changes in climate due to global warming are predicted to increase these stresses during the coming years.

In the mid 1980's, available information suggested that surface and groundwater supplies were diminishing during certain times and for certain uses. During recent years, some groundwater wells that supply drinking water have run dry in rural and suburban King County. The Washington State Department of Ecology has restricted groundwater withdrawals for water supply during parts of the year in some areas. Monitoring data collected by King County have documented degradation to groundwater quality. The data show increasing nitrate concentrations and high levels of arsenic in many drinking water supply wells.

Another contributing factor that threatens the integrity of a safe groundwater system is the domestic and commercial use of pesticides, herbicides, chemicals, oils and petroleum products throughout King County. If aquifer contamination occurs, drinking water could be permanently or temporarily unavailable while an expensive clean up is conducted.

A significant loss of groundwater recharge due to increased impervious surfaces and decreased infiltration can eventually lead to the depletion of the resource over time. This can, in turn, inhibit the recovery of Endangered Species Act listed salmonids (Chinook salmon and bull trout). Extreme low flows that, in some areas appear to block fish migration during late summer, have been observed in rivers and streams in King County on an increasing basis during the past few years.

Evaluation of Program Options

The King County Groundwater Protection Program 2004 Proviso Report recommended that over a period of 18 months (July 2004-December 2005), King County's Groundwater Protection Program should become more comprehensive and coordinated countywide with defined regional and area-specific priorities. To fund these activities, a new source of dedicated, countywide funding was recommended. This recommendation was based on an evaluation of risks to public health, and loss of public and ecosystem benefits that could occur if the groundwater quality and quantity throughout the county could not be sustained.

In 2004, King County sought funding from the Washington State Department of Health (DOH) and Department of Ecology (ECOLOGY) to fund a comprehensive regional program. While the two state agencies agreed with the need for such an effort, neither was able to offer any stable funding. Copies of the response letters from Ecology & DOH are included in Appendix F.

In January 2005, King County, Department of Natural Resources and Parks and Seattle King County Public Health convened a countywide task force to evaluate the scope and geographical distribution of existing services and advise the County on funding options associated with a regional program. Some members of the Task Force thought that current risks to groundwater warranted regional services to protect shared regional aquifers. Other members felt that the risks were low to non-existent and did not warrant new services given existing local services provided by utilities. No members supported any new broad-based or regional funding.

After discussion with the Groundwater Task Force, King County Department of Natural Resources and Parks and Seattle King County Public Health have concluded that at the present time, while immediate risks to groundwater quantity and quality exist, they are limited. It is likely these risks will become more significant with population growth and as future water supply needs increase. However, in some areas these risks may be reduced as small systems integrate with larger ones and benefit from services provided by jurisdictions and water utilities.

In the next few years, additional information will be forthcoming regarding in stream flow needs for fish recovery and an evaluation of the impacts of climate change on rain and recharge patterns. This information will make it possible to better quantify potential risks to King County's groundwater.

Recommendations

Based on these findings, King County Department of Natural Resources and Parks and the Seattle King County Public Health recommend a reduction in the scope of the groundwater program from the regional and comprehensive program authorized in K.C.C. 9.14 to an area-specific, limited program that addresses specific management concerns in parts of King County where targeted county funds already exist. For DNRP this will be primarily the Vashon-Maury Island area, for Public Health this will be primarily services where fee structures are already in place. In addition, King County Department of Natural Resources and Parks will provide services in the Bear Creek and Issaquah Creek areas where three-year cooperative cost-sharing agreements have been negotiated with local purveyors and cities. Seattle King County Public Health will be expanding their services only to address water quality concerns in Quartermaster Harbor, Vashon-Maury Island.

As a result of these changes King County Department of Natural Resources and Parks will lose some of its existing Groundwater Protection Program staffing and will not

provide any regional groundwater services in 2006. Seattle King County Public Health groundwater services will also be limited in nature and constrained by current funding levels.

Clearly lacking will be the coordination and consistent management of impacts to, and withdrawals of, groundwater at a regional level where aquifers are shared. A comprehensive program would collect and analyze water quality and quantity data, review land use regulations around sensitive recharge and wellhead areas for cross jurisdictional consistency, facilitate regulatory and policy consistency among King County agencies, and educate the public about groundwater resources and protection measures.

Perhaps most importantly, no mechanism or organization currently exists to manage (much less monitor) the cumulative effects of the number of wells and quantity or quality of water being withdrawn from King County's groundwater system. Water quality monitoring data are not being collected in a systematic way. Because of this there is no way to measure effective change in either how much or how clean our drinking water is. Without this, there is no way to predict how long King County aquifers can sustain our growing population with clean drinking water.

Specific Service Recommendations

King County Agency Recommendations on Service

- In 2006, King County Department of Natural Resources and Parks proposes a local groundwater protection program to manage the sole source aquifer on Vashon-Maury Islands. King County staff will work with community groups and state agencies (Ecology & DOH) to fund and obtain grants for priority actions related to groundwater protection such as those identified in the 2005 Vashon Watershed Plan generated as part of the WRIA 15 planning process.
- Outside of the Vashon-Maury Island aquifer, DNRP's groundwater services will only be provided in the Issaquah Creek Valley and Redmond-Bear Creek groundwater management areas, where joint cost-sharing, inter-local agreements are in place.
- Seattle King County Public Health will continue to provide site specific services as fees and current expense funds allow within their Drinking Water and On-Site Septic programs. Specific attention to address on-site septic problems associated with water quality degradation in Quartermaster Harbor on Maury Island will also be provided.
- Neither King County agency will be able to meet the regional services priorities or coordination role defined in K.C.C. 9.14. Instead regional interests will be addresses within the implementation of the WRIA Salmon Recovery Plans and the Regional Water Supply Plan.
- The lack of a regional or area-wide monitoring program will limit the County's ability to identify areas of increased risk for quantity or quality impairment of aquifers in King County in the coming years.
- The Groundwater Program Manager will participate in the County's upcoming Regional Water Supply Plan and work to ensure that an analysis of risks to

groundwater quantity and quality associated with future population growth and climate change are included.

Task Force Recommendations on Service

- While there was little consensus, Task Force participants did identify regional (or of a broad geographic scope) service areas and needs that, if provided, would result in greater protection of King County's groundwater.
- Services identified included coordinated and consistent land use policy and regulations; coordination among land use authorities and purveyors; coordination of educational efforts; and integrated surface and ground water management.
- Many of the representatives from the larger water utilities felt that they were already providing an adequate level of groundwater protection services within their districts or service areas and did not support these regional services.

Specific Funding Recommendations

King County Agency Recommendations on Funding

- King County Department of Natural Resources and Parks does not recommend that any new funding mechanisms be considered for 2006. Drainage (stormwater) fees will be used, where available in limited areas, to provide local services and as King County's local match to partner with others on sub-regional projects.
- Seattle King County Public Health is not proposing any new funding mechanisms at this time but may consider assessing a limited Group B (2-14 connections) public water system or other targeted fee in the future.
- Seattle King County Public Health funding for increased services regarding management of on-site septic systems around Vashon-Maury's Quartermaster Harbor during 2006 may need to be continued depending upon progress made in one year.

Task Force Recommendations on Funding

- Task Force participants were opposed to any new or increased costs to water users and were generally of the opinion that Group A (15 or more connections) public water systems and larger utilities are already providing adequate groundwater services.
- Task Force participants unanimously supported a recommendation to the County Board of Health to authorize Group B public water system fees as necessary and appropriate. It should be noted that the Task Force did not have any Group B representation.
- Task Force participants generally thought that existing funds and in particular current expense (CX) funds should be used to provide any needed comprehensive, improved or coordinated services.

CHAPTER 1 - THE NEED FOR A REGIONAL GROUNDWATER PROTECTION PROGRAM IN KING COUNTY

Regional Program Purpose and Goals

A regional groundwater protection program as described by K.C.C. 9.14 would provide coordinated services to ensure the long term protection of shared groundwater aquifers across incorporated and unincorporated areas of King County. Such a program would include: monitoring, data management and analysis; public outreach and awareness about the value and vulnerability of ground water and education regarding best management practices for homeowners and business owners; policies and standards for better management and protection of the groundwater in our region; and facilitation of information sharing and cross-aquifer consistency among groundwater regulators and managers. A history of recent regional groundwater management and planning efforts provided by King County and in coordination with multiple stakeholders is provided in Chapter five.

Why Is Groundwater Important?

The majority of groundwater lies hidden from our eyes, slowly entering the aquifer beneath us, and replenishing stream flows and wetlands over the course of a year. Like many valuable natural resources, groundwater is often overlooked, and only becomes a concern when the supply fails to meet the demand. Protecting groundwater against threats to its quality and quantity is crucial to ensuring the long-term safety and reliability of water supplies in King County. The protection of groundwater is central to King County's commitment to the health and safety of the county's residents, and to the protection of the region's rich and abundant natural resources.

Groundwater is a critically important public water supply for people and a critically important natural resource for sustaining the aquatic and aquatic dependent elements of the ecosystems in King County. Groundwater provides drinking water to approximately 30 percent of King County's residents. Increasing land development and growing populations throughout the county are stressing groundwater supplies. During the past few years, groundwater wells have run dry in various locations, and King County monitoring data have documented degradation to groundwater quality in other areas. Similarly, a reduction in groundwater recharge may be linked to recent low flows and concomitant high temperatures in some of King County's rivers and estuaries during August and September that have resulted in temporary blockages for in-migrating spawning salmon.

Groundwater is hydrologically connected with surface waters. Cool, high-quality, groundwater feeds streams, wetlands and rivers, and helps these surface waters support a rich and diverse flora and fauna. Equally vital to humans, fish, and wildlife, these groundwater contributions become especially important during the late summer and early fall, when precipitation is limited and other sources of water are gone. However, in the absence of improved management and protection, it's unlikely that

the quality and quantity of groundwater can be sustained, at a level that will suffice for future human and natural resource needs.

Over the next 20 years – as the population of King County increases by an estimated 300,000 people, as surface water supplies become more limited, as climate changes reduce high elevation snow packs and alter regional precipitation patterns, as the use of materials that cause contamination (pesticides, fertilizers, etc.) and aquifer pumping rates increase – groundwater will become an ever more valuable and vulnerable regional asset.

In the past few years state and county staff have observed conditions indicating that both surface water and groundwater supplies are limited during certain times and for certain uses due to quality and quantity concerns. Sub-regional monitoring data show increasing nitrate concentrations in many wells. In recent summers, several groundwater wells in King County have gone dry. Homeowners had to bring in temporary water supplies and drill new wells. In both the Sammamish River at Kenmore and the lower Duwamish/Green River, low flows combined with high temperatures during the summers of 2002 and 2003, created temporary blockages to the upstream migration of Chinook salmon spawners. In 2005, data have shown continued, albeit isolated, areas of aquifer decline, low stream flows, and groundwater quality degradation.

Threats to Groundwater Quality and Quantity

As the population grows, and lands continue to develop, groundwater faces greater and greater risks. Land use activities have the potential to degrade or alter both the quality and quantity of groundwater.

Impervious Surfaces - An increase in impervious surfaces in areas of significant groundwater recharge reduces the amount of infiltration which can result in a reduction of groundwater available for water supply use. Reduced infiltration, if left un-managed eventually leads to depletion of the resource over time. This situation can force the re-development of wells to deeper depths at a great expense to homeowners and water suppliers. Deeper wells and increased withdrawals can also negatively impact surrounding wells. Because surface and groundwater are inextricably linked, any increase in non-permeable surfaces reduces the area's ability to recharge its aquifers and also adds to surface runoff peaks during storm events. The resulting high storm flows damage salmon populations and can contaminate wells when floodwaters are polluted with contaminants (such as chemicals, animal waste, or sewage) and enter drinking water wells.

In King County, the amount of impervious surfaces is increasing. The King County Benchmarks 2005 – Environment reports that “the rate of increase in impervious surface appears to have accelerated over the last 20 years in the urban area of King County. By 1994, over 25% of the urban area was already paved or built, and by 2001, it had reached 31%.” If this rate of impervious surface development continues

there will be an accompanying reduction in groundwater recharge and infiltration. As more stormwater is piped off paved surfaces to wastewater facilities or discharged to the Sound, more and more rainwater never makes it into the groundwater, and never replenishes our aquifers.

Contaminants – The spraying of chemical herbicides or pesticides, storage and/or spillage of chemicals, oils and petroleum products can also lead to toxic contamination of groundwater that is, or could be, used as a drinking water source. Contamination may make a water source permanently unavailable or delay its use for years while an expensive cleanup is carried out. Nitrate is a good indicator of groundwater quality changes caused by human activities like land development. In 2005, only a small percentage of water systems exceeded the state nitrate standard of 5mg/L. However, nitrate levels in most areas of the County increased from previous years (King County Benchmarks 2005 – Environment). This trend is most likely an early indication of a slow but progressive degradation of the region’s aquifers.

Over-production and Increased Demand – Groundwater is also at risk when aquifers are over-pumped. If demand for groundwater exceeds supply at a well-head, a lowering of the water table may result. This type of over production can lead to aquifer depletion over time. Many aquifers in the central and southwestern United States have experienced this phenomenon in a dramatic fashion. Thankfully, in the King County area, aquifer depletion and reduction have been seen primarily at a seasonal and/or an isolated level. However, as the region’s population and land development grows, over-production and supply problems will likely be an increasing issue -- especially for the numerous small water systems that depend exclusively on groundwater and are not networked to other water sources or suppliers.

Already, some water systems in King County are struggling to meet current demand or projected near-term growth. Cities and purveyors in King County that depend on groundwater have experienced water moratoriums, seen their future growth capacities limited by available water supplies and found themselves seeking other water supply partners to prepare for future water supply demands. In response to these shortages several cities and purveyors have recently joined together as the Cascade Water Alliance to evaluate future, long term water supply. Together with King County, the Alliance is working to update existing, and perhaps expand Coordinated Water Supply Plans to apply at a countywide level. Members of the Alliance currently include the City of Bellevue, Covington Water District, City of Issaquah, City of Kirkland, City of Redmond, Sammamish Plateau Water & Sewer District, Skyway Water & Sewer District, and the City of Tukwila.

As populations grow, the use of exempt wells (withdrawal of groundwater in certain quantities and for certain purposes that is exempt from state permitting requirements) will likely expand in areas where utilities are not able to serve demand in a timely and reasonable fashion. More wells will puncture aquifers withdrawing un-quantified water quantities and increasing conduits for aquifer contamination. Currently, there are very few constraints on the use of exempt wells in place and sparse resources for enforcement of existing limits imposed by the State Department of Ecology. In

several cases, local communities have looked to King County to control the use of exempt wells, but local authority regarding exempt wells is poorly defined and limited.

Looking Ahead – Preventing, rather than reacting to, the contamination of groundwater, the reduction in available recharge, or supply and demand imbalances, is often the least expensive form of groundwater resource protection. Prevention requires pro-active protection and consistent management and education of home and business owners who depend upon the resource.

Without adequate management and protection measures, our region risks reduced water supply and in stream flows associated with loss of groundwater in future years. However, due to the perception (and in certain cases the fact) that groundwater and water supply conditions are currently stable, it may take a large scale crisis to motivate any additional support for such protections.

Key components of a successful groundwater protection and management program are careful planning and policy implementation, based on sound technical information (including some limited, on-going monitoring). This information can be used to determine existing aquifer conditions, evaluate the potential maximum usage of the resource under ideal recharge, and evaluate the effectiveness of protection strategies.

It is anticipated that King County will grow by at least 300,000 people over the next twenty years. Based on current allocations, at least one third or 100,000 of these people will rely on

groundwater as a primary water supply. Can King County’s aquifers and in stream needs sustain this higher demand? How will this additional demand affect our regional aquifers? How will those who are already dependant on these aquifers be affected? And, how will related land use and development affect the quantity and quality of groundwater recharge in King County? These are some of the issues a regional groundwater protection program would attempt to anticipate and address.

Today’s Challenges

There is a general understanding among cities and larger purveyors of the potential risks to groundwater. Based on the results of the Groundwater Task Force and Groundwater Protection Committee discussions over the past months, these parties acknowledge that data limitations, piecemeal educational efforts and uncoordinated critical area regulatory protections contribute to these risks. However, many of these water managers do not believe generating new dollars for a King County regional program is appropriate at this time. They feel that individual groups (utilities and cities) are doing the best they can within available financial resources. There is little support to consider increasing costs to King County residents and water users despite the risks of not doing so.

What will be lost without a regionally funded groundwater program?

The following bullets summarize what will be lost without the creation of a regionally funded groundwater program. Each work item is discussed in greater detail in the “Unmet Groundwater Needs” section that follows.

- **Ecological health of the Green River Watershed** – Conduct a “zones of contribution” and land use analysis to ascertain how groundwater withdrawals are affecting the health of the Green River and the groundwater surrounding it.
- **Address failing septic systems in the Snoqualmie Valley** – Work with WRIA 7 partners to study and address failing septic systems that are contributing to groundwater pumping limits and building moratoriums.
- **Resolve sluggish flows and high temperatures in the Sammamish River** – Continue water quality and quantity data collection on groundwater withdrawals in the Sammamish River Basin.
- **Loss of early “warning” system** – Continue countywide water quality and quantity sampling and analysis to give property owners notice when drinking water becomes polluted or is at risk for running out.
- **Solve loophole of allowing exempt wells in “closed” basins** – Advocate for a statewide or local regulatory solution to the problem of exempt wells being drilled and water withdrawn in basins declared “closed” by the Washington State Department of Ecology.
- **Investigate South King County citizen generated concerns about groundwater quantity and quality from mining** – Analyze groundwater quantity and quality around Enumclaw and Black Diamond and the City of Kent for potential risk from past mining and waste dumping.
- **Lack of resources to implement well head protection measures** – Actively consider implementation of any recommended land use changes or other groundwater protections identified by utilities in their water supply system plans and wellhead protection plans.
- **No help for areas with wells that dry up** – Assistance to Seattle King County Public Health when wells run dry or water becomes polluted.

What areas have the greatest risk of groundwater degradation?

Different geographic areas within King County have different levels of risk for losing access to high quality and needed volumes of groundwater if a comprehensive, consistent and coordinated regional management program for groundwater is not implemented. Risks are greatest in:

- Areas where groundwater is a larger portion of the potable water supply and where existing and near-term land development increases are highest.
- Where citizens or purveyors have documented intermittent dry wells during recent years.
- Areas where no alternative water supply is available such as designated sole source aquifers like the Cedar Valley (Renton Aquifer), Cross Valley Aquifer, and Vashon Maury Islands Aquifer System.
- Where monitoring data from the state Department of Ecology, the County or purveyors and municipalities show declining water levels and/or increasing concentrations of contaminants such as nitrate and arsenic.
- Where biological data have shown fish passage limitations and other fish blockages during late summer and early fall months.

Unmet Groundwater Needs

Green River / WRIA 9– In the Green River Watershed, studies have shown that groundwater contributions are a major limiting factor to the ecological health and recovery of salmon populations. As surface flows are limited due to flood control and water supply withdrawals, the groundwater contribution to the river has become more important. To protect this contribution, “zones of contribution” still need to be identified and land use standards analyzed to insure adequate protection. Without regional funding, King County cannot support this type of field investigation and analysis.

Snoqualmie Valley / WRIA 7 – In the Snoqualmie Watershed, Forum members have agreed that their mission is broader than salmon conservation and recovery. They have concerns about the entire hydrologic system including flood control, water quality, water supply and the groundwater components related to these issues. For example, septic systems in some Snoqualmie Valley neighborhoods are overloaded. As density increases and septic systems age, the concentration of sewage-related contaminants in the groundwater increase risks to local well water and carry contaminants to nearby tributaries and the mainstem of the Snoqualmie River. To consider management or repair of this problem, the Snoqualmie Watershed Forum will need to work with its members and stakeholders to identify and minimize groundwater problems in the valley. King County has extremely limited financial and technical resources allocated to this effort in 2006 and will depend on the Forum to identify

priorities and potential grant sources to assist in funding priority analyses and management needs. WLRD has no budget allocation to address this need.

In 2003, the East King County Groundwater Protection Committee identified a number of priority actions needed for groundwater protection in the Snoqualmie Valley. However, in 2004 cooperative funding proposals to implement these actions failed. While the community representatives who participated in the Committee felt more needed to be done to protect their local groundwater, there was no support from any of the valley cities (including those that have current building moratoriums due to regulated limits on groundwater pumping or to overloaded and failing on-site septic systems) for coordinated evaluation of problems and protection needs.

Sammamish River / WRIA 8 – Since the Sammamish River was straightened into a channel during the 1960's, its ecosystem has suffered from sluggish flows and warm water temperatures. Local theory held that groundwater withdrawals from the immediate area were contributing to these problems.

An initial analysis on how local groundwater withdrawals affected flows and temperatures in the Sammamish has been conducted. More of this type of analysis needs to be done so that groundwater withdrawals can be reduced and river flows increased. This work may be conducted during implementation of the WRIA 8 Recovery Plan, during the development of a coordinated Water Supply Plan for King County, and/or during market evaluations for reclaimed water.

Countywide Groundwater Testing and Monitoring – King County has five state-recognized Groundwater Management Areas. Protection Plans written for each of these areas depended on an initial analysis of groundwater conditions. A key element of this analysis was the development of a number of ambient monitoring sites in each area. King County collected data at these sites in the late 1980s and early 1990s to develop these plans. In 2001, King County began another sampling program at the monitoring sites in four of the five areas and has used this information along with state records to track background conditions in the groundwater of these areas. Ideally, these sites would be revisited routinely every two to five years to track long term trends in groundwater quality and water levels. Without funding for a regional program, King County will not be able to continue this monitoring. The region will lose the benefit of this routine tracking and will be lack timely “warning” information to know when a change in quantity or quality that would trigger new management needs occurs.

Cost-shared services in Redmond-Bear Creek and Issaquah Creek Vallley GWMA's - King County is partnering with cities and utilities in the Redmond Bear Creek and Issaquah Creek Valley Groundwater Management Areas under two cost-share agreements. Through these agreements King County and its partners are funding a three year effort (2005-2007) that includes hydrogeologic mapping, surface and groundwater interaction studies, investigation of the extent of exempt wells, education and public outreach, policy analysis and regulatory research, and the continuation of the local multi-stakeholder Groundwater Protection Committees. This work concludes

in 2007 and there is no guaranteed funding for continuation of any these services beyond that point.

Closed Basins and Exempt Wells – Washington State Department of Ecology has identified a number of basins that are closed to further water appropriation. However, in King County, the use of exempt wells in these basins is not restricted under current regulations. In other areas of King County, the state may not have “closed” the basin but residents are beginning to worry about over-appropriation of their local aquifers. Some view the exempt well standard as a loop hole for continued water withdrawal despite anecdotal indications that the water supply may be limited. This issue has been raised in the Issaquah basin and will be looked at to some extent via the interlocal agreement between King County, City of Issaquah and the Sammamish Plateau Water and Sewer District. This investigation is limited in geographic scope and will not clarify or resolve concerns elsewhere in the County.

While some communities and citizens expect King County to resolve this inconsistency, others believe the issue is exclusively one for the state to resolve. Solutions may be advocating for better management at the state level or considering local policy standards that could reduce the risk of over-extraction and contamination from exempt wells. In the absence of dedicated or additional financial resource, King County will not be able to address, let alone help resolve this issue.

Black Diamond and Enumclaw – In south King County, in the communities surrounding Black Diamond and Enumclaw landowners have expressed concerns about the impact of past land use (mining) and future development on their groundwater supplies. King County does not currently have the resources to investigate and better understand groundwater conditions in these areas.

Kent – The City of Kent has concerns about the potential risk of contamination to their groundwater from historic waste dumps. King County’s Groundwater Protection Program has encouraged the further investigation and diagnosis of these risks, but will not be able to contribute further resources to this problem.

Local Water Purveyor Coordination – Local water purveyors, including Covington Sewer and Water District would like increased coordination for land use development and aquifer protection services in their service area. Concerns include the increased use of exempt wells and Group B system proliferation in unincorporated King County. Without a regional program, King County will not be able to support this type of coordination.

Countywide Well Head Protection Strategies – Group A public water supply systems are required to prepare water system plans and well head protection area plans. In doing so, land use actions or other activities and materials inappropriate in a well head protection area are identified as a potential threat to groundwater. While these plans are submitted to King County and to the State Department of Health for approval, the County is not able to review land use recommendations nor actions believed necessary by the water purveyor on an ongoing basis.

In the case of city-owned water utilities, the city can pursue land use and zoning changes or activity restrictions they deem necessary to protect their supplies. However, if the purveyor is not a city, they have no land use or zoning authority. In many cases, where a Group A supplier and unincorporated development overlap, the County is the local jurisdiction with these authorities. A comprehensive King County groundwater protection program would actively review and consider any well head protection strategies requested by purveyors that require local jurisdiction regulatory actions. This is yet another activity which will remain inconsistent and ad-hoc without additional resources and a more coordinated regional program.

Each year, Seattle King County Public Health is contacted by well owners who are experiencing problems with their water supply. Sometimes there is a problem with the quality of the water and sometimes the wells have ceased to produce adequate water. Public Health is asked to advise and assist these well-owners to restore reliable water supplies. Without routine monitoring, it is often difficult to diagnose and offer solutions to problems that have already occurred. Without a better understanding of the surrounding conditions and trends over-time, Public Health and others cannot identify effective groundwater management services – that might actually prevent these problems in the first place.

CHAPTER 2 – PROPOSED SERVICES AND COSTS

Primary Recommendations of King County Department of Natural Resources and Parks and Seattle King County Public Health

After extensive evaluation and consultation with the Groundwater Task Force King County staff recommend the following services for 2006.

In 2006 Department of Natural Resources and Parks should:

- **Provide local groundwater service on Vashon-Maury Island (unincorporated King County)**
- **Participate in the Regional Water Supply Plan and other related regional water resource management processes including Salmon Recovery WRIA Plan implementation as resources allow**
- **Coordinate sub-regional services with local jurisdictions and purveyors using cost-shares in the Issaquah Creek Valley and Redmond Bear Creek Groundwater Management Areas.**

During 2006, Seattle King County Public Health should:

- **Continue to use specific fees-for-service in existing drinking water and on-site septic system programs including evaluation of well site locations, design review and regulatory compliance (Group Bs and exempt wells), and on-site septic operation and maintenance services**
- **Conduct a one-year effort focused on resolving water quality problems associated with failing septic systems in Quarter Master Harbor on Maury Island**
- **Meet Group B management obligations as defined by the Joint Plan of Operations with Washington State Department of Health;**

Additionally, to the extent feasible given scarce resources, Seattle King County Public Health will coordinate with King County Department's of Development and Environmental Services and Natural Resources and Parks regarding land development and the Regional Water Supply Plan. Recognizing limited staff and financial resources, the departments' coordinated services will focus on:

- **Meeting the Growth Management Act mandates for protection and regulation of critical aquifer recharge areas (CARA)**

- **Coordination of land use authorities and water supply protections including limiting, to the extent possible, exempt wells within areas that are served by Group A systems**
- **Limited education regarding best management practices**
- **Evaluation of ground and surface water interactions and conditions.**
- **Participation in the County’s upcoming Regional Water Supply Plan to ensure that an analysis of risks to groundwater quantity and quality associated with future population growth and climate change are included**

These recommendations are based on the following findings and conclusions.

Range of Services Considered

For ease of conversation, groundwater services have been organized into three categories based on who benefits from them and their scope:

- Regional groundwater services – that respond to impacts from increased populations and development. These include accurate and timely groundwater quality and quantity information and education and outreach to reduce risks of contamination and depletion;
- Sub-regional groundwater services – that provide sampling and analysis of groundwater conditions in particular geographic areas. For example, studying the impact of exempt wells on the Issaquah Creek Valley and recommending management or regulatory solutions; and,
- Localized and targeted groundwater services – Such as mapping to define aquifer characteristics and support Critical Aquifer Recharge Area designations.

Range of Funding Mechanisms Considered

Matching the appropriate funding mechanism to the service should be dictated in great part by its characteristics and geographic range. Funding mechanisms have been divided into three categories based on who benefits from the service and the scope of service. These categories and the mechanisms authorized under Washington State law are listed below:

- Regional funding – Aquifer Protection Area (APA) or Board of Health (BOH) fees
- Sub-regional funding – cost shares or inter-local agreements (ILA) with Surface Water Management (SWM), or County general funds (CX) as the King County match

- Localized and targeted funding – County general funds (CX), Surface Water Management (SWM) and specific fees for services (permits, billable hours etc)

While a great variety of funding mechanisms have been discussed over time, the above options constitute the primary options under consideration in this most recent evaluation.

Based upon King County Staff and Task Force discussions about service needs, a countywide revenue of approximately \$800,000 - \$1,000,000 per year would support the high priorities services in both departments. Based on analysis of all water users, such a revenue would cost each connection approximately \$1-2 per year.

Findings Leading to Primary Recommendations

In developing these recommendations Groundwater Program Staff considered recommendations from the Ground Water Task Force and research conducted in previous years work (including review of state certified or completed groundwater management plans).

- The 2005 Groundwater Task Force was made up of diverse stakeholder interests (large and small Group A purveyors, business representatives, exempt well owners, municipalities, state departments of Ecology and Health). There was very little consensus on issues of funding and priority services
- The state Growth Management Act and Surface Water Management authorities are the major regulatory vehicles that authorize county groundwater services.
- No formal process exists to evaluate or consider land use changes recommended by non-municipal water suppliers. Tensions between suppliers and land use agencies are exacerbated in areas traditionally served largely by exempt wells and Group B systems that are within urban growth areas (i.e., areas that have been annexed to city jurisdictions). Because these areas are shifting to more suburban and urban land uses, greater land use restrictions such as well head and critical aquifer recharge area protections are typically needed. For example, in the City of Covington, Covington Water District appears more frustrated in cases where their district overlaps King County's unincorporated area. The District has expressed concerns that King County's land use and public health policies are not adequately protecting their interests (example presence or new exempt wells on unincorporated lands within the District's service area).
- Task Force participants either did not support or only weakly supported a broad-based fee for Seattle King County Public Health services related to groundwater. This lack of support was expressed regardless of the nature and scope of services that are provided. Traditionally Public Health has provided direct, single-property services with site-specific fees. Population growth and

increased dependence on groundwater have created new needs where shared aquifers are cumulatively impacted by many users – both direct (e.g., well users) and indirect (e.g., in stream users).

- There is limited incentive for purveyors to pay any additional fees for services historically provided by King County agencies without charge in recent years. This includes technical assistance and coordination services. These services will become increasingly limited due to reduced funding.
- No single funding source may be adequate or appropriate to fund the suite of services needed for the long term protection of groundwater in King County.
- If King County wishes to authorize and fund a comprehensive groundwater program then a Board of Health, or an Aquifer Protection Area designation and fee, is the most appropriate funding mechanism to address the regional, population-based services that are currently lacking.
- **As of the writing of this report, there is little support for any new fees. Utilities and water users contend that existing costs are too high and the County should use existing current expense (CX) funds to support unmet service needs.**
- Targeted services for use by a specific group or individual may best be funded by specific fees (one-time application fee, permit fee, hourly fee-for-service etc.).
- Some, limited fees were supported by some Task Force participants. Most Task Force participants supported increased use of Group B fees. However, it should be noted that there was no Group B representation on the Task Force.
- Task Force participants felt that some services may not warrant funding at all. For example, participants did not support increased monitoring and analysis of rainfall patterns despite existing data suggesting that climate changes will affect water levels in aquifers, and surface waters.
- Assessment of a new fee would be most equitable on a per-user rather than a per-utility basis. This is because all water users depend upon the whole hydrologic system that includes both ground and surface water. A per-user fee could either be flat rate or pro-rated based on use. Use could be determined by general categories, such as residential or commercial or by actual, metered use.
- Any new fee should allow for the adequate representation of the parties being assessed. For a groundwater fee, representatives should include water suppliers or purveyors of varying size to include: large Group A (both municipal and non-municipal), small Group A, Group B, and transient systems, and private (exempt) well owners. This group could provide direction

on the scope of work, service evaluation, and advice to the Board of Health or King County Council on annual budget allocations. An excellent model is Seattle King County's Local Hazardous Waste Program. It has, for example, representation from the suburban cities, Seattle, and King County.

Possible Actions for the Metropolitan King County Council and the Seattle King County Board of Health

Due to a lack of support for assessing new fees, it is recommended that King County stop efforts to provide a consistent and coordinated regional groundwater program and focus its groundwater priorities instead on providing targeted services and participating in related regional water resource processes including the Salmon Recovery Plan implementation and the Regional Water Supply Plan, as funding allows. This decision comes despite the knowledge that areas exist with greater risk of groundwater depletion or pollution. Those areas include: The Middle Green and other parts of South King County, the Snoqualmie Valley, Vashon Maury Island, and potentially the Issaquah and Bear Creek areas.

It must be noted that King County's ability to provide local groundwater services is limited. This is due to competition for decreased Surface Water Management revenues and scarce general funds (CX). Additional funding may be considered in the future, depending on the findings of the Regional Water Supply Plan and further evaluation of in-stream flow needs for fish recovery. These efforts will likely better document risks to groundwater resources that could prompt sufficient stakeholder and public support for a fee.

Given these circumstances, the following legislative actions may be appropriate:

- The King County Council may wish to consider modifying K.C.C. 9.14 to recognize a changed scope of work related to groundwater and the Department of Natural Resources and Parks' inability to perform the envisioned lead agency responsibilities.
- Seattle King County Board of Health may wish to consider additional targeted fees for small scale and local services, including management fees for Group B systems.

Lack of a County-Wide Program

As discussed in the "Today's Challenges" section of the previous chapter, many indicators point to the need for a coordinated groundwater program in King County that fully recognizes the hydraulic continuity between ground and surface water and the near term changes expected:

- Our population is predicted to grow, increasing demand for water;

- Lands will become more developed reducing infiltration and introducing more chances for contamination;
- Use of exempt wells will likely expand in areas where utilities are not yet able to serve in a timely and reasonable fashion, creating un-quantified water use and increasing conduits for contamination of the aquifer;
- Current supplies are at already at risk in some locations and at some times of the year; and,
- Not enough information is available about current groundwater conditions to direct best management practices and protection measures.

The proposed service approach identified in this report will greatly limit and reduce the current Groundwater Protection Program from its broader scope as defined in King County Code 9.14. King County Department of Natural Resources and Parks is using inter-local, cost-share agreements in two parts of the county where members of the Groundwater Management Plans and Protection Committees support continued, coordinated work. Surface Water Management funds are being used to cost share limited, sub-regional and unincorporated local groundwater projects with cities and purveyors in there two areas. In 2006, this will consist of two inter-local agreements (in the Redmond-Bear Creek and Issaquah Creek Valley Groundwater Management areas) and a customized local program on Vashon-Maury Island.

Under DNRP's local and sub-regional service approach, more than 90 % of King County's geography will not receive DNRP Groundwater Program services such as analysis, early warning, response to inquiries, or education regarding groundwater and its protection. Only eight percent of King County's total geographic area will receive coordinated groundwater services and protection from DNRP in 2006.

Without new funding, the South King County Groundwater Management Area, the East King County Groundwater Management Area, the Cedar Valley (Renton Aquifer) Sole Source Aquifer, the urbanized communities around Lake Washington (NW King County) and the city of Enumclaw and rural environs will be without access to coordinated groundwater protections or services from DNRP. Parts of these areas will receive services from their local water utility. In addition evaluation of groundwater resources will be evaluated in parts of these areas within the Regional Water Supply Plan and are included within the Salmon Recovery Plans.

In many cases the larger Group A water systems that rely on groundwater are confident that the services they currently provide (maintenance, monitoring and education) are adequate for the protection of local groundwater resources – in particular, within their wellhead protection areas. Many large Group A systems that depend on surface water frequently believe they have no shared responsibility for the

groundwater resource. As a result, there are many areas across King County where no entity is managing nor evaluating the long-term protection of the aquifer and the cumulative impact of, or interaction between, multiple systems that depend on it.

Several surface-water dependent communities with tangential groundwater impacts will not be tracked or evaluated for groundwater conditions. These areas will receive services from incorporated municipalities and Group A systems which in some areas are fairly comprehensive. These areas include: Portions of South King County (particularly in the Auburn, Kent, Covington and Federal Way, or lower Green River sub-region) and Renton. However, in other parts of the County, the services provided will be largely uncoordinated or specific to single Group A service area. Where aquifers are shared by multiple groundwater users, protection and management will be spotty. In the Green and Snoqualmie Watersheds, an alternative coordination forum may exist through the continued work of the Watershed Forums although appropriate technical staff and resources are very limited.

While County agencies may recognize the need for a program that could address these issues head on, it can only succeed with broad-based public support. At this time, any such support appears to be lacking. Perhaps in the future, when the risks to groundwater become more critical or tangible to a broader number of people, there may be more support for a consistent and coordinated regional program and dedicated funding. The findings of the Regional Water Supply Plan and the first few years of Salmon Recovery Plan implementation and monitoring will help quantify risks and may prompt this support.

CHAPTER 3 – GROUNDWATER TASK FORCE ACTIVITIES AND RECOMMENDATIONS

Task Force Purpose and Problem Statement

On January 14, 2005 the Groundwater Task Force convened for their first meeting. A list of the invitees and participants is included in Appendix E. At this meeting the group reviewed a 6 month (ultimately the group held their final meeting in July, 2005) schedule and work program and considered draft purpose and problem statements provided by the staff. The problem statement and purpose were revised as a result of the group discussion.

The revised purpose was written as follows:

**The purpose of the 2005 Groundwater Task Force is
First to determine:**

1. What type of groundwater services (in addition to local services provided by municipalities and purveyors) should be provided regionally?
2. What entities should provide these services?
3. What revenues should be used to fund these services?

And lastly:

4. Develop a regional recommendation for Seattle-King County Board of Health, local legislative bodies, and utility boards.

The Task Force meeting dates and primary topics were:

Mtg#	Date	Topics
1	Friday January 14	Introductory Meeting - Background, group purpose & work program; problem statement; regional services exercise – initial identification of service needs
2	Friday Feb 11	Facts and Figures – Existing groundwater use, existing distribution system, risks to quality and quantity Refine Problem Statement – Review revised statement Regional Services – Review list generated in first meeting, discussion Discussion on Needs vs. Wants <i>Group Assignment #1: Evaluation of relative need for proposed services</i>
3	Friday March 18	Review of Task Force Assignment #1 –Discussion on needs and wants. <i>Request for King County to Draft Services Proposal</i>
4	Friday April 15	Statutory Authorities for Groundwater Services – Review and discuss King County Initial Proposal for New Groundwater Services – Review and discuss Initial Funding Proposal – Discussion of possible Board of Health fees
5	Friday May 13	Revised Statutory Authorities for Groundwater Services – Review and discuss King County Revised Proposal for New Groundwater Services – Review and discuss <i>Group Assignment #2: Survey: do your or your constituents benefit from proposed services?</i>
6	Friday July 8	Review of Task Force Assignment #2 –Review Survey results & discussion on who benefits from proposed services Draft Recommendations and Sections for Services and Funding Report – Discussion and editing

The revised problem statement was written as follows:

Problem Statement

- Groundwater is in hydraulic continuity with surface water
- Groundwater is a shared resource that multiple individuals and small and large purveyors use throughout King County
- 30 percent of King County residents drink groundwater
- King County population is predicted to grow by about 600,000 people in the next 20 years
- Additional surface and groundwater supplies will be needed to serve this population growth
- Information (monitoring data, predictive models, etc) to ensure that future groundwater withdrawals from shared aquifers will be available and protected is limited
- Anecdotes (water shortages, contamination, wells running dry) as well as limited monitoring and mapping information identify some areas of potential water quality and quantity risk relative to meeting supply needs (and in-stream needs)
- Group B water system operating, construction and monitoring violations are common
- There are closed* basins in King County limiting future growth in parts of King County
- Ability to serve** low density population growth is difficult thus promoting exempt well proliferation
- While the drafting of the plans was funded with state grants, there is no funding source currently identified to coordinate implementation and service provision of the actions called out within the five existing Groundwater Management Plans
- There is no regional plan, mechanism or funding source to coordinate services among the various parties that depend upon shared aquifers in parts of King County that do not have Groundwater Management Plans

Related Bodies of Work

Salmon Recovery Plans

- Watershed Plans for Salmon Recovery that involve all jurisdictions and some purveyors in King County are scheduled to be completed in June 2005
- Discussions regarding implementation (governance, funding, services) of these regional plans are underway
- Watershed plans focus on salmon habitat but include technical information and in some cases action recommendations pertinent to management of water quantity and quality

Water Supply Plan

- King County and Cascade Water Alliance are entering into an MOU to initiate a Coordinated Supply Planning Process in King County
- Many of the parties interested in groundwater management are partners or participants in this planning process

Existing Plans

- Water system Well-Head Protection Area plans.
- Coordinated Water Supply Plans for four critical water supply service areas: Vashon-Maury Island, South King County, East King County and Skyway.

* "closed" basins are closed to future water appropriations per Dept of Ecology.

** "Ability to serve" means provide water supply.

Service Provision and Statutory Authorities

In order to better understand the range of services that could be provided and the authorities that may be either endorsing or driving the need for these services, the group spent portions of their April and May meetings reviewing statutory authorities behind certain groundwater services.

There are several legal authorities in the state of Washington State that give certain responsibilities for the protection of groundwater quantity and quality to general purpose governments including counties and/or cities; other responsibilities are given clearly to the state or to purveyors. The following section reviews these authorities and corresponding services and identifies those that are well developed in King County and those that are only partially or not at all developed. The information is presented for King County departments first and for state agencies second.

King County

Executive Departments (DNRP, DDES, etc.)

- Storm and Surface Water Management RCW 36.89
- King County Groundwater Protection Program K.C.C. 9.14
- Growth Management Act RCW 36.70A
 - Land use plans include protection of public health and critical areas (e.g., CARAs, aquatic areas, etc)
 - Ensure adequate long-term infrastructure
 - Protect groundwater quantity and quality in land use elements of comprehensive plans
 - Make determinations on adequate supplies for subdivisions (RCW 58.17.110), individual building permits (RCW 19.27.097)
- County obligation for receivership of last resort for small and failing systems RCW 43.70.195(1); this obligation has been required infrequently.¹
- Coordinated Water Supply Planning RCW 70.116
- Municipal Water Law 2003 - RCW 90.03, 90.48, 90.46, 90.14, 90.82, 43.20, 70.116, 70.119A -- Includes a number of undefined terms affecting utility service areas and exempt wells/group B's including "duty to serve", "timely

¹ Recent Examples of County Receivership of Small and Failing Systems under RCW 43.70.195(1) : Counties are "receiver of last resort" under state law as occurred in Snohomish County, Mar 2005; Superior Court Judge Eric Lucas ordered the county to be the receiver of the Rimrock water system, a private, well-fed system near City of Monroe that originally had 57 connections. The former owner is in bankruptcy. Also, DOH has expressed a desire to have King County assume receivership of a Group A system in the Ravensdale area. The owner has failed to respond to formal orders from DOH, and the customers have been ordered by DOH to boil their water. It appears that operation of the system will be assumed by a current customer or customers of the system under written agreement with the current owner.

and reasonable”, “local government consistency”; DOH “guidance” is of limited use

- Groundwater Management Areas and Programs WAC 173-100
- Potential groundwater/aquifer impacts due to operation of regional wastewater system (e.g., I&I) 35.58 RCW and K.C.C. 28.81.020
- KC’s Utilities Technical Review Committee (UTRC) process under King County Code 13.24 appears to be unique; may need amended procedures to facilitate water system plan reviews
- KC comp plan policies in particular Chapter 7 Service, Facilities and Utilities Section as adopted via K.C.C. 20.12

Seattle King County Public Health

- Approve new source locations, small systems and investigations incl. both Group A’s and B’s, RCW 70.05.070(8), RCW 43.20.050(4), WAC 246-290-030, WAC 246-291, Title 12 PHSKC BOH Code
- Approval/inspection of well tagging, sealing, decommissioning per authority delegated by Department of Ecology under RCW 18.104.043
- Approve septic systems RCW 70.05.060, RCW 70.118, WAC 246-272, Title 13, PHSKC BOH Code
- Enforce provision re no new public water systems, unless satellite owned/managed, or conditioned on routine review of performance, RCW 70.119A.060 (2); K.C.C. [comp plan 2004]
- Ongoing oversight for Group B water systems, RCW 70.119A.060(2), WAC 246-291 under Joint Plan of Operation (JPO)
- Authority for local jurisdictions to operate separate operating permit/fee system, providing it does not duplicate functions paid for by state fee, RCW 70.119A.130
- Ongoing oversight for on-site sewage systems (OSS)
- General duty to carry out rules and regulations of both SBOH and DOH re public water systems, RCW 70.119A.060(3)
- SCKPH is monitoring more than 1600 small Group B systems; many are in substantial noncompliance with health and safety requirements primarily with routine water quality sampling requirements (58% in 1st quarter 2004) WAC 246-291, Title 12 PHSKC BOH Code, Contract with DOH

Washington State and State Agency Authority

Department of Health

- DOH is primary regulator for Group A systems RCW 43.20, RCW 70.119 and 70.119A, WAC 246-290 , and has authorities pertaining to Group B systems WAC 246-291; local health has duty to enforce SBOH regulations (including drinking water), may carry out other functions per JPO

- Of the 217 currently identified Group A systems in DOH database, only 57 percent have “green” operating permits, i.e., compliance with drinking water requirements WAC 246-294; of the remaining 43 percent (94 systems), 78 are “unknown,” the others known problematic (“yellow” or “red”) WAC 246-294; department may impose permit conditions necessary to ensure safe and reliable water supplies. (NOTE: some Task Force members noted that “yellow” operating permits should not be described as problematic.)

Task Force Review of Potential Services and Funding Mechanisms

Services

Over the course of several Groundwater Task Force meetings, the group developed a working list of possible services.

At the first meeting in January, the group was invited to list and identify any groundwater service needs or problems they felt were important. This list was compiled by staff and sorted into similar categories.

At the following meeting (February) the group discussed whether these services were essential. The group felt that some were “needs” as in an essential service, and others were just “wants” as in possible good ideas but maybe not necessary, and still others were activities that should be avoided all together. The group decided to do a take-home assignment: a simple ranking exercise where they would individually comment on each proposed service (or specific groundwater problem that could be addressed) and identify whether they believed the service was a want, need or something to avoid.

Staff compiled the results of the ranking exercise and presented them at the third meeting of the Task Force. At this meeting each participant spoke about their answers and explained their perspectives. Appendix B shows the results of the exercise – comments have been sorted to show the services in rank order, with the services receiving the highest level of support shown first. Many participants spoke about the unique needs of the geographic area they live or work in, or represent. At this point the group asked that King County put forward a proposal of what the County agencies thought would be important to do.

After this meeting, KC staff from Public Health and DNRP took into consideration the comments of the Task Force plus previously identified service needs – such as those identified in the 2004 Proviso Report – and current agency concerns to develop a draft list of services the agencies could provide as part of a coordinated regional Groundwater Protection Program.

At the fourth meeting, staff presented this King County working draft proposal for services. Additionally, staff presented an initial funding concept to support the proposed services. The funding concept was based on a per connection water user fee that could be implemented by the Seattle King County Board of Health. The group

had several questions about the service proposal and suggested changes and additions. While some participants felt the proposal was too vague, others felt the descriptions were appropriate in nature for describing a long-term ongoing program. As a next step, staff agreed to make revisions to the service proposal and to provide more detail on the types of services proposed.

At the fifth meeting, staff had hoped to discuss with the group how the proposed services could be provided and by whom (King County and others). However, the group was not in agreement that the proposed services were appropriate. Thus, the group developed a final assignment for each Task Force participant to complete before the next meeting. Each participant was to review each proposed service and comment on it as to whether they and their constituents would benefit and/or if others would benefit. They also agreed to provide recommendations about how each service should be paid for and who should provide the service. Staff compiled the results of this survey and presented the compilation at the final Task Force meeting in July 2005. (see Appendices C & D).

At the final Task Force meeting the group reviewed the compiled survey results. At this meeting King County also put forward some draft documents summarizing the work of the Task Force and trends in the Task Force recommendations.

Funding

While there was some limited discussion about funding mechanisms at the early meetings of the Task Force, discussion focused primarily on services and legal authorities. At the fourth meeting (April), staff presented an initial proposal for a funding construct that focused on the use of a Board of Health fee. The group made some additional suggestions for funding mechanisms at this meeting.

At the fifth meeting of the Task Force (May), staff presented the group with a list of the most likely funding sources for the services under consideration they were:

1. **Board of Health GW Fee**

Summary. BOH is authorized under RCW 70. put in statute...to adopt a county-wide GW fee assessed on a per-connect basis. May include “primary-source” GW utilities only or also “secondary-source” GW utilities (e.g. Seattle and its purveyor customers).

Proposed Conditions:

- Separate GW subfund. A separate GW subfund established by the King County Council would segregate GW fee revenues and could specify specific uses for those revenues. Interest earnings would accrue to the GW subfund. A

separate subfund is needed make all revenue collections and program expenditures transparent.

- GW program management committee. A program management committee comprised of external stakeholders would propose an annual GW program budget to guide annual program expenditures. The management committee members would be nominated by the King County Executive and confirmed by the King County Council. This is the management structure presently in place for the County's Local Hazardous Waste Management, Noxious Weed Abatement, and Conservation Futures programs.
- Fee sunset. A sunset clause written into the GW fee ordinance would automatically discontinue the fee unless the King County Council reauthorized the fee. Reauthorization would provide an opportunity to enact changes to different aspects of the program, such as fee reduction or increase, programmatic and/or governance changes, and/or changes to the sunset provision. Reauthorization would require a formal recommendation from the GW program advisory committee. A sunset clause would preclude the use of debt financing as a funding instrument, since a long-term repayment stream would also be precluded by the sunset clause.

2. Aquifer Protection Area (APA)

Summary. State law (36.36.020 RCW) provides for the creation of an aquifer protection area (APA), requiring approval by both voters and legislative bodies within the geographic area covered by the APA. If the APA covers territory within a local jurisdiction or adjacent county, the approval of the local governing body must be secured. APA option was reviewed by the original groundwater advisory committees during development of the original groundwater management plans.

3. Interlocal agreement (ILA)

Summary. Interlocal agreements are essentially service contracts between public entities, usually for a limited duration and specific scopes of work. ILAs could only be established with cities, towns, utilities, and districts, thereby eliminating some smaller Group A, all Group B, and all private well owners from the service contracts.

Additional Funding mechanisms suggested by GWTF

The Task Force also recommended consideration of a few additional sources or mechanisms:

- Have the state perform the work (this was often suggested in cases where the service is considered by some to be the exclusive purview of the state)
- Council should expand use of County general funds or CX (this was often suggested for services with authority derived generally from GMA)
- Use ILAs and willing partners for services considered good idea but not essential
- Reactivate or implement the existing authority for Group B water system fees.

These additional funding mechanisms were recommended by many of the Task Force participants in their final assignment (Appendices C & D).

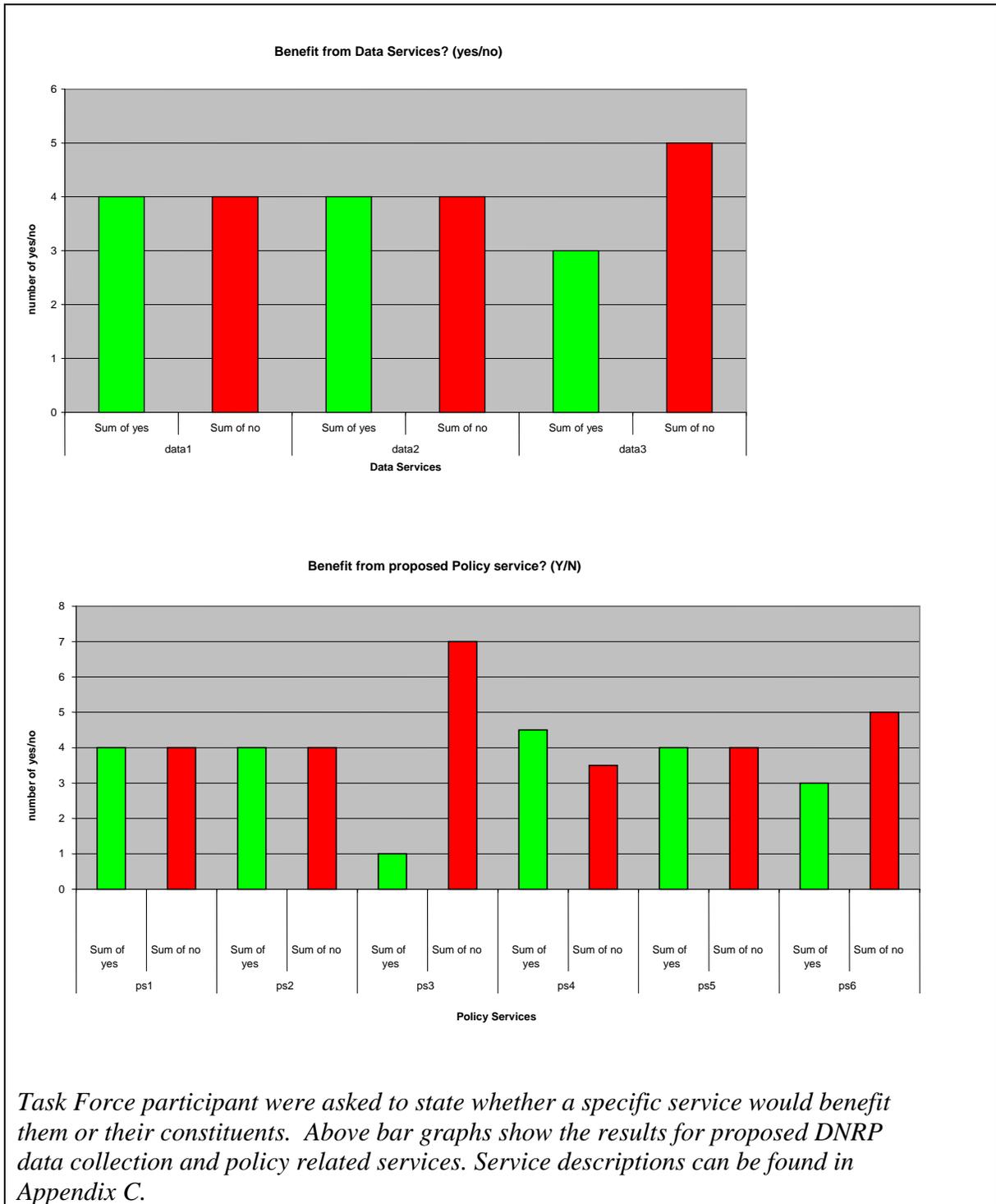
Perceived Value and Benefit of Services

The final section of this chapter identifies most of the suggestions and conclusions of the Task Force; however, these are some of the most significant findings related to service provision:

Varying perceptions of Value and Benefit

The Task Force group was divided in its opinions about the value of the proposed services: where some saw benefit and value others felt the service was redundant or of little to no value. In many cases the group was split fairly evenly. For example, see the fairly equal distribution of “benefit” and “no benefit” votes for most data collection services and most policy related services in the bar graphs of Table 1 below. (Note: the individual services are identified with a simple tag such as “PS1” representing that it is Policy Service #1 as listed in the survey - see Appendix C for the full service description.)

Table 1 – Examples of Perceived Benefit Distribution for DNRP Groundwater Services



Subregional Differences in Opinion

Participants from different areas of the County had differing opinions about the potential benefit a service could deliver due in part to varying local conditions and problems. One trend was that representatives from rural areas with smaller and fewer utilities tended to see a greater need for services, while representatives from urbanized areas and areas with large municipal water systems tended to see less of a need for, and less direct benefit from, the proposed services.

Funding Preferences

The final survey also provided some helpful information about the Task Force participant preferences for funding new groundwater services. The final section of this chapter identifies most of the suggestions and conclusions of the Task Force; however, these are some of the most significant findings related to funding mechanisms:

Lack of Agreement on funding

Suggestions for how to fund the specific services were quite varied among participants and for each individual service. See for example the aggregated preferences for DNRP (Table 2) and PH services (Table 3).

Very Little Support for New Fees

One trend that did appear in the funding recommendations was the lack of support for new fees. Very few participants suggested using new fees to fund the proposed services. The most common suggestions for how to fund the services were: “don’t know how to fund”, or “don’t fund”.

Some limited Support for Target Audience Fees

In a few cases such as bottled water standards or Group B system issues there seemed to be some support for targeted fees.

State Responsibilities Identified

In many cases, participants felt the proposed services were a state responsibility and should be provided and funded by the state.

Directive to County to use General Funds

A final trend that can be seen in the survey results was a frequent suggestion that the proposed services should be funded with available local government dollars – in the case of the County the General Fund (or CX).

Table 2 – Aggregated Preferences for Funding DNRP Groundwater Services

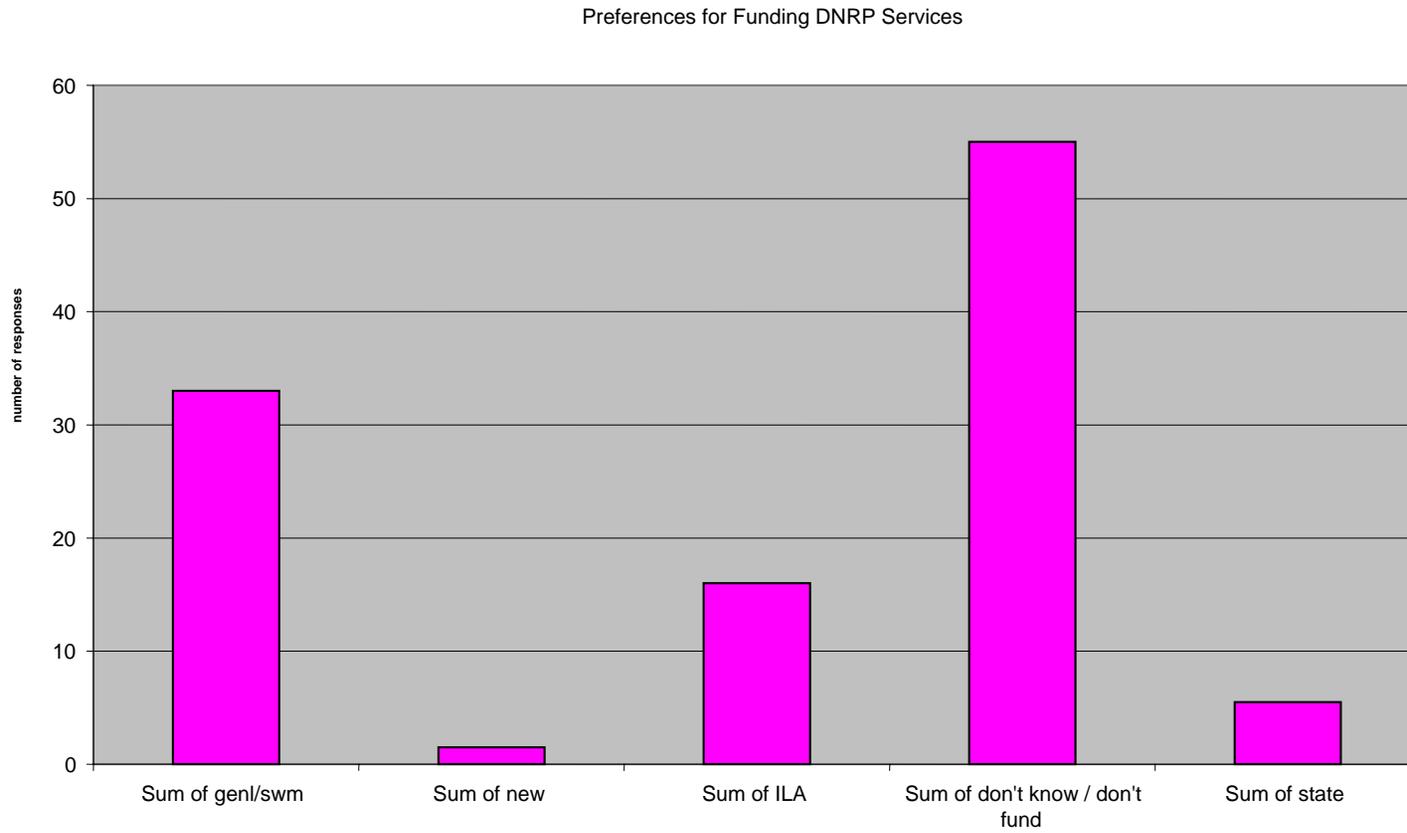
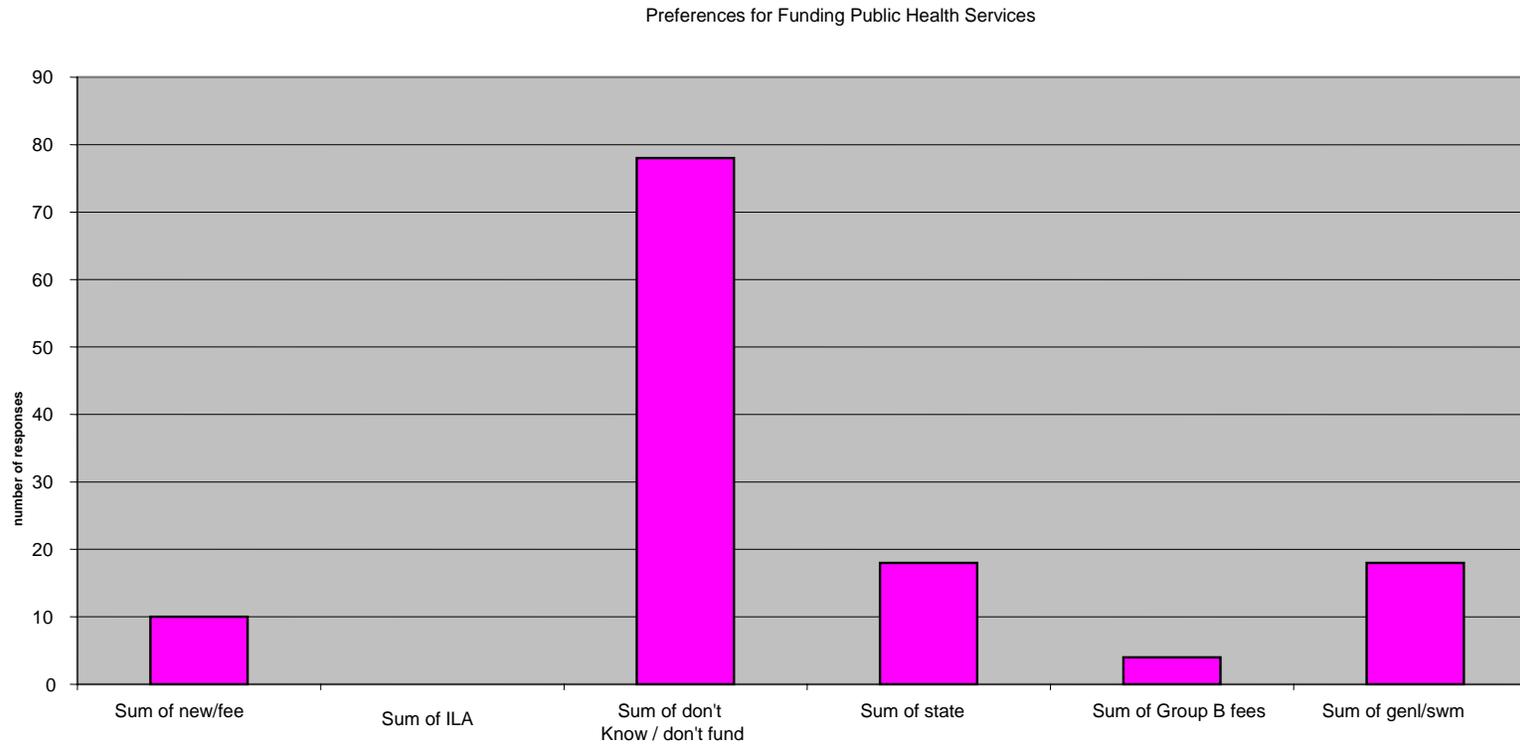


Table 3 – Aggregated Preferences for Funding Public Health Groundwater Services



Conclusions and Recommendations of the Task Force

The following is a list of the general conclusions and recommendations developed by the Task Force participants:

- While a variety of opinions were expressed, there was a persistent base level of support for, and perceived benefit from, the KC groundwater services. For all but one service proposed in the May/June survey, there were members who felt they or their constituents would benefit from this service. (The green bars) There was only one service proposed that no member saw benefit in.
- The participants expressed/supported idea of joint responsibility for protection of water; however, most participants felt that the remaining or outstanding work in this arena should be the responsibility and expense of another entity – not the participants.
- A number of participants expressed concern that fees must be related to the person paying the fee. The group discussed the differences between a fee and a tax.
- Majority of participants felt the services would not be appropriate for funding via a new Board of Health fee.
- Group A system representatives questioned to what extent Public Health services benefit their systems.
- The large water supply systems feel they are doing enough (through action and finance) to protect the resource.
- The Task Force generally saw the majority of DNRP services as deriving from the responsibilities and authorities of the state Growth Management Act, and consequently, the Task Force felt the services should be funded via existing local funds by the County. Participants noted that other Jurisdictions bear the same burden and should not be expected to pay for the County's GMA responsibilities.
- Non-city-owned water suppliers participating in the Task Force expressed some concerns regarding King County's land use controls and the potential for impacts on the utility's water supply. Participants from city-owned water supplies expressed less concern about King County land use controls.
- Some members of the task force acknowledged that exempt wells and Group B systems can present problems (both isolated problems affecting only the direct users and problems larger in scale and possibly affecting regional water resources). However, the Group As – for the most part - have consistently

expressed that it is not their responsibility to fund improvements or protections related to exempt wells and Group Bs.

- Some proposed services were ranked significantly more or less beneficial than others. (See Appendices C & D) For example, when comparing the service proposals overall, the educational services proposed appeared to have the most significant level of support by a large majority of participants. Another striking example is evident while looking at the range of support within the single service area of proposed policy related services; while most policy related services were evenly split with half the group supporting and half not, there was significantly less support for Policy Service #3 than the others.

Policy Service #3 was identified as follows:

Support efforts & policies of Group A water utilities

- *Review/comment on policy, technical and regulatory documents re: Grp A policies and practices incl. impacts/consistency with KC and countywide planning policies and codes. Potential hosting of/participation in a coordinating group (local or county wide)*
- Public health services were seen to be mostly a benefit to Group Bs and exempt well owners.
- Participants felt Public Health’s role in providing services to Group As was very limited. Some members were unaware of Public Health’s existing authorities related to Group As, such as well-siting approvals. However there was limited recognition of local health authorities relative to Group As.
- The group recommended revisiting and possibly activating existing Group B fee authority in order to fund Group B related groundwater services and benefits as appropriate.
- The group suggested considering possible fees for on-site septic systems and private or “exempt” wells in order to fund services that specifically benefit those constituents or respond to their impacts on the resource.

Overarching Financial Conclusions:

Top funding recommendations from the GWTF are to

- 1) reallocate general funds,
- 2) not fund,
- 3) assess Group Bs as necessary and appropriate,
- 4) pursue ILAs for subregional services among interested parties, and
- 5) have the state fund and provide service.

Note: suggestions varied to some extent depending on the service, however options 1 (general CX fund) and 2 (not fund or don't know how to fund) were the most common suggestion and very high ranking overall.

The Task Force did not endorse the use of a single funding source to support all the proposed services.

CHAPTER 4 – ASSESSMENT OF SERVICES AND FUNDING NEEDS JUNE 2004 TO JUNE 2005

Groundwater Protection Program Proviso Report - 2004

In June 2004, DNRP and Public Health with the support of DDES and LHWMP submitted a report to the King County Council summarizing the status of groundwater service provision to-date and identifying likely methods for stable long-term funding of these services.

The Proviso Report identified groundwater related services currently provided by the four participating King County Divisions (DNRP, Public Health, DDES, LHWMP). The report then went on to identify an outstanding need for funding for services currently provided by DNRP and Public Health as well as additional services deemed important and to be provided by these two agencies should funding be secured.

The report endorsed the use of interlocal agreements where feasible to fund some of these services in the interim. At the time, DNRP was negotiating ILA proposals in three groundwater management areas at the direction of local groundwater protection committees (Redmond Bear Creek GWMA, Issaquah Creek Valley GWMA, and East King County GWMA)

The top three recommendations for securing long-term stable funding were, in priority order:

1. Requests service provision and or funding by state agencies (Dept of Health and Dept of Ecology)
2. Develop and through the Board of Health adopt an annual fee on water users.
3. Create an Aquifer Protection Area (or multiple APAs) and through election adopt an annual fee on water users and or on-site septic systems.

The Proviso Report was submitted to Council and Board of Health in the summer of 2004. Groundwater Program staff followed up with presentations before both the Utilities Committee of the Council (late summer, 2004) and the Board of Health (fall, 2004). The Utilities Committee endorsed the strategies identified in the report and directed the DNRP and Public Health to move forward with pursuit of the identified funding mechanisms in priority order. The Board of Health asked for an update on the implementation and evaluation of the proposed funding strategies.

Subregional Areas Moving Forward – *ILAs and VMI work*

As recommended in the Proviso Report, DNRP proceeded to negotiate interlocal agreements where feasible to fund groundwater services in specific sub-regional areas.

Interlocal agreements have been secured in both the Issaquah Creek Valley GWMA and the Redmond Bear Creek GWMA. These ILAs have been approved by the legislative bodies of each signing partner (approvals concluded with King County Council approval in September 2005). Despite the late signing, it is anticipated that the majority of the proposed 2005 work under the ILAs will be completed. The ILAs will remain in effect through 2007 unless other funding for the specific services is secured or the partners (including King County) decide to terminate the agreement prematurely.

While an interlocal agreement was proposed in the East King County GWMA, no potential city or utility partners were interested in finalizing such an agreement. While DNRP has maintained some basic monitoring and analysis for groundwater in the EKC area during 2005, the subregional program for EKC will be discontinued in 2006

In the Vashon-Maury Island GWMA, DNRP has continued a subregional program with a solid level of local support and endorsement of use of Rural Drainage Program (surface water management) funds to support this work. A seven year water resources evaluation was started in 2004. A preliminary level groundwater model has been constructed based on the first year's work and will be used to develop a basic water budget. In 2005 and future years, additional data collection (with additional new well locations) and analysis will ultimately contribute to a more complex modeling and better understanding of how to protect the groundwater systems on Vashon and Maury Islands.

Groundwater Protection Committees Renewed

Per K.C.C. 9.14, King County has four Groundwater Protection Committees. They are Vashon-Maury Island, Redmond-Bear Creek, Issaquah Creek Valley, and East King County. When originally created by ordinance in 2001, the committees were given a sunset date of December 31, 2004. During the 2004 year, each committee evaluated their mission and the possibility of continuing or concluding their work. Ultimately, each committee recommended that their committee term be extended beyond the 2004 sunset date. Following this sentiment and recognizing the value in continued sub-regional coordination, DNRP recommended an amendment to the code to remove the 2004 sunset date. The King County Council passed an ordinance in November 2004 that extends the sunset date for each committee to December 31, 2009.

Work with the GWPCs has continued in 2005. In both the Issaquah Creek Valley and Redmond Bear Creek areas, the GWPC has helped scope the work to be performed under interlocal agreements and will continue to advise the ILA partners as this work progresses. In the Vashon-Maury Island area, the GWPC has helped shape a multi-year water resources evaluation study funded with local drainage fees and led by DNRP groundwater program staff. Despite earlier endorsements for continuing the East King County GWPC, at the end of 2004 the committee decided to conclude their work. This was due in great part to the fact that no cost-share agreement could be secured between King County and local cities or local utilities to share the costs of

continuing the committee or to financially support cooperative groundwater services in the area.

It is worth noting that since June of 2004 a new subregional groundwater management group has emerged in South King County. Representatives of the South King County Groundwater Management Area have decided to create a Groundwater Management Committee in order to work collectively on sub-regional groundwater issues of common interest. King County has participated in this group and intends to continue working with local groundwater stakeholders in the South County area, as funding permits, to identify current issues and pool resources as appropriate to address these issues.

Request to State for Funding and Services

In late summer of 2004, DNRP and Public Health staff met with representatives of both the Ecology and DOH to discuss their ability to provide funding and or direct services to fill the void in King County groundwater funding. Letters formally requesting the state's support were sent to both agencies in September.

While the state agencies supported the concept and services King County proposed for its groundwater protection program, the agencies were not able to financially support the program (see Appendix F -*copies of state response*).

Given that state agencies were unable to provide direct service or fund the services, DNRP and Public Health began to look at the second recommended funding mechanism from the Proviso Report: a possible BOH fee.

Groundwater Task Force - 2005

The Proviso Report and its recommendations for funding mechanisms generated a good deal of concern among King County water utilities. Staff and electeds heard of this concern at various groundwater protection committee meetings and at Council committee meetings. Water utility representatives expressed disappointment about the level of stakeholder involvement in production in the Proviso Report.

After publication of the Proviso Report, DNRP staff made a significant effort to keep the groundwater committees and other interested water utility representatives informed of the County's progress in evaluating the various funding mechanisms identified in the report. In addition to presentations at each groundwater committee, DNRP hosted a special meeting for utilities and others in order to provide for additional discussion of the Proviso Report. Staff alerted GWPC members and others that a stakeholder group or Task Force would be formed to evaluate the second and third funding options should the request for state funding fail.

The involvement of concerned utilities and stakeholders was key not only in evaluating new funding but also in evaluating specific service needs and in evaluating the notion whether to fund these services generally.

In December 2004, DNRP issued letters of invitation to participate in a Groundwater Task Force. Invitations went out to Chairs and Vice Chairs of the GWPCs plus other GWPC members who had expressed interest in the Task Force and to other community and water utility representatives who had expressed interest or were understood to have an interest in both the proposed KC services and the potential funding mechanisms. Appendix E includes a list of invitees and their affiliation.

The Task Force convened for its first meeting in mid-January. At this meeting the group agreed to meet six times over the first half of 2005. Also, at this first meeting a draft purpose statement for the Task Force was reviewed, edited and agreed to by the group (see Chapter 3). A draft problem statement was circulated which identified the current status of King County's groundwater and groundwater protection services; with some additions and edits the group also endorsed this problem statement (see Chapter 3).

Outstanding Need – General Population Based Problems and Services

A general need for public health services related to water supply was recognized by staff but not really highlighted by the Task Force. To the extent that the need was recognized, the Task Force felt that most public health drinking water related activities and services that are population based tend not to be specific to groundwater supplies; rather they cover the gamut of public concern about safe drinking water regardless of source. This contributed to the group's recommendation that a groundwater based fee system would not be the best mechanism to fund Public Health. Regardless, with current funding levels, neither King County DNRP or Seattle King County Public Health nor other service providers will be able to provide comprehensive services for protection of groundwater resources. Such population based services would consistently address the interaction of surface and ground water, assist citizens and businesses in understanding and reducing actions that increase risks to groundwater quantity and quality, protect aquifers that provide water and, in some places, ensure adequate instream flows.

Groundwater Management Plans

For many years, groundwater protection and related groundwater management activities have been an important part of King County's public health and environmental stewardship responsibilities. DNRP is involved in groundwater protection as part of its public health and safety, natural resources management, and environmental protection missions. Public Health administers programs related to safe drinking water, on-site sewage systems and more as part of its on-going responsibilities. DDES considers groundwater impacts of proposed new development and/or redevelopment, and reviews water supply availability for all proposed development. Additionally, staff members from Public Health, DNRP and the suburban cities work in cooperation to carry out the Local Hazardous Waste Management Program in King County, which includes services designed to reduce groundwater contamination.

Beginning in 1986, Public Health and subsequently DNRP worked closely with local groundwater advisory committees over a 10- to 15-year period to develop groundwater management plans for five Groundwater Management Areas in King County: East King County, Issaquah Creek Valley, Redmond-Bear Creek, South King County and Vashon-Maury Island (see Map 1). Five geographically specific advisory committees were created to address each area's distinct needs. Each advisory committee identified significant problems that threatened groundwater resources in its area and included strategies to manage these problems in its plan. These five management areas constitute nearly 30 percent of King County's geography and represent a significant portion of the county's area in which the majority of residents depend upon groundwater for a potable water supply.

In 1998, the King County Council approved the plans for four of the five management areas: East King County, Issaquah Creek Valley, Redmond-Bear Creek and Vashon-Maury Island. The Washington State Department of Ecology then certified these four plans in 2000. The South King County plan was withdrawn from the final review and approval process at the request of the advisory committee members. (However, in 2004 the advisory committee published a plan for South King County that is currently being reviewed by a committee of participating entities to evaluate shared management interests. In October 2001, an ordinance adopted into code by the King County Council called for the formation of four groundwater protection committees to implement the certified management plans.

Groundwater Protection Ordinance

It was partly in response to the need for coordinated management-plan implementation that the King County Council created Ordinance 14214 mandating a King County Groundwater Protection Program. The County Council adopted the groundwater protection ordinance into code (King County Code 9.14) in October 2001, and the ordinance went into effect in December 2001 (the full text is available on the Web at <http://www.metrokc.gov/mkcc/Code/>). Implementation of the Groundwater Protection Program began in January 2002.

The groundwater protection ordinance named DNRP as the lead agency for all groundwater-related work within King County. The ordinance also identified specific responsibilities for the Groundwater Protection Program and directed DNRP to coordinate groundwater protection services with other King County agencies, such as Public Health and DDES.

A primary focus of the ordinance was the establishment of local groundwater protection committees to oversee implementation of the four certified groundwater management plans. The ordinance directed DNRP to assist in organizing these committees and to provide staff support using available resources.

Groundwater Protection Committees

In 2001, the King County Council directed DNRP to coordinate implementation of the groundwater management plans, and to staff and manage the East King County, Issaquah Creek Valley, Redmond-Bear Creek and Vashon-Maury Island groundwater protection committees.

By fall 2002, the members of all four committees had been appointed by King County Executive Ron Sims and confirmed by the County Council. Committee membership includes representation from local governments, water and sewer purveyors, businesses, agriculture, environmental interests, and residential well users. Each tribal nation with federally recognized rights within a Groundwater Management Area was invited to participate as well. In addition, Public Health, Ecology, the Washington State Department of Health, and governments of those counties adjacent to the management areas were each invited to participate as non-voting members.

In 2003, all four committees met regularly to consider their responsibilities as outlined in King County Code 9.14, including the following work:

- Advise the King County Executive and County Council on groundwater activities and issues, and keep elected officials and their organizations informed.
- Monitor and participate in the implementation of groundwater management plans, and develop and recommend modifications to the plans.
- Review and make recommendations on short- and long-term work plans for regional groundwater needs.
- Coordinate community groundwater needs with local organizations.
- Provide annual status reports on committee activities.

- Recommend changes to King County planning policies affecting groundwater protection.
- Recommend services tailored to the unique needs of the local area.
- Provide advice on state groundwater regulation.

Because the groundwater management plans were based on data collected between 1986 and the early 1990s, a primary focus and substantial responsibility of the committees has been to review their respective management plans and develop prioritization of groundwater issues and management activities in the context of current conditions and needs. Each committee has also been engaged in reviewing critical local groundwater issues (including proposed groundwater regulations), reporting on the actions taken since the management plans were adopted, and working to identify priorities for future actions.

Additionally, in 2003, Groundwater Protection Program staff convened several joint meetings of the chairs and vice chairs of the committees to discuss the overall King County program and solicit preferences on future funding alternatives. King County also invited representatives from the South King County Groundwater Management Area and the Cedar Valley (Renton Aquifer) Sole Source Aquifer to participate in these meetings.

Under the provisions of King County Code 9.14, each of the committees was originally proposed to sunset as of December 31, 2004. Thus, 2004 was viewed as the final year for the committees to review the aging management plans. Each committee made progress in identifying the top priorities for its geographic area with the expectation that implementing agencies would use the information to guide their next phase of plan implementation. Mid-way through 2004 each committee voted to continue its operation into future years. In November, 2004 the King County Council endorsed this extension of the Committee terms extending each until December 31, 2009. However, the East King County Committee did agree to disband at the end of 2004 as cooperative funding for the group could not be secured.

Groundwater Protection Program Oversight

King County Code 9.14 mandated that two specific internal reviews of the Groundwater Protection Program were to be conducted in 2003 – one by the King County Auditor's Office and the other by the Regional Water Quality Committee (RWQC). The reviews were intended to evaluate the extent to which groundwater protection services were being provided by the program. In July 2003, the Auditor's Office issued a management letter to the King County Council reporting the findings of the functional audit. These findings were also presented to the King County Council Utilities Subcommittee and to the RWQC.

King County Auditor's Office

The Auditor's Office was directed to review the delivery of groundwater protection services in King County and to provide an inventory of those services to the King

County Council. The Auditor's Office management letter reported on activity through spring 2003.

The letter, dated July 22, 2003, highlights the accomplishments of the program:

"The program appears to have been most successful in supporting the groundwater management committees, collecting and managing data, and participating in policy discussion where groundwater is a concern."

And the letter notes the challenges of the program:

"The program appears to have been less successful in resolving its funding constraints, developing work plans for groundwater management plan implementation, and coordinating efforts across agencies and jurisdictions."

The letter draws the following conclusion:

"While the groundwater protection program appears to be offering services in line with its mandate, ongoing oversight may be needed to ensure that current challenges are overcome."

Findings of the review may have led to the King County Council's proviso condition in the 2004 budget requiring DNRP, Public Health and DDES to prepare a report by June 15, 2004, describing interdepartmental coordination, program integration and future funding options. The Groundwater Protection Program 2004 Proviso Report was presented in 2004 and the recommendations within it dictated the course of work for 2005 and ultimately this report on services and funding.

Regional Water Quality Committee

King County Code 9.14 directed the RWQC to make recommendations on the efficacy of the Groundwater Protection Program. In early 2003, RWQC staff met with staff from the Auditor's Office and the Groundwater Protection Program to discuss this pending review. RWQC staff chose to use the Auditor's Office management letter as the foundation for the initial review. In September 2003, staff members from both the Auditor's Office and the Groundwater Protection Program were asked to attend a routine RWQC meeting and to present findings from the Auditor's review. Soon after this meeting, the RWQC recessed for the fall. Should the RWQC choose to continue its review of the program both the Proviso Report and this final report on services and funding should provide a sound background for any discussion.

APPENDIX A - COMMONLY USED ACRONYMS & TERMS

APA	Aquifer Protection Area
BOH	Seattle King County Board of Health
CAO	King County Critical Areas Ordinance
CARA	Critical Aquifer Recharge Area(s)
CX	King County general property tax revenue: Current Expense fund
DDES	King County Department of Development and Environmental Services
DOE	Washington State Department of Ecology
DOH	Washington State Department of Health
DNRP	King County Department of Natural Resources and Parks
Ecology	Washington State Department of Ecology
EKC	East King County
Exempt Well	a well exempt from State permitting requirements (RCW 90.44.050)
GMA	Washington State Growth Management Act
Group A	a public water system with 15 or more water connections
Group B	a public water system with 2 to 14 water connections
GWMA	Groundwater Management Area
GWMP	groundwater management plan
GWPC	groundwater protection committee
ILA	interlocal agreement
JPO	Joint Plan of Operation (between DOH and Public Health)
KC	King County
K.C.C.	King County Code
LHWMP	Local Hazardous Waste Management Program in King County
OSS	on-site sewage system
Public Health	Public Health - Seattle & King County

RCW	Revised Code of Washington
RDP	Rural Drainage Program
RWQC	Regional Water Quality Committee
SWM	Surface Water Management
UTRC	King County Utilities Technical Review Committee
VMI	Vashon-Maury Island
WAC	Washington Administrative Code
WLRD	Water and Land Resources Division, King County Department of Natural Resources and Parks
WRIA	Water Resource Inventory Area

APPENDIX B – GROUNDWATER TASK FORCE EVALUATION OF RELATIVE NEED FOR SPECIFIC GROUNDWATER SERVICES

Participants are identified by initials – see Appendix E for full names.

Scoring method: Need = 2; Want = 1; Avoid = -1

Preferred Actions		Score	HT	SL	JD	GG	MJ	BP	CB	JL	GS	DW
Policy	Assure land use policy, public health policy and resource management encourage viable water system creation – minimize small systems (group Bs)	13	1	2	2	1	2			1	2	2
Policy	Support efforts to coordinate/standardize rules/regulations/policies to protect groundwater.	11	1		1	2	2	1		2	2	
Policy	Support efforts & policies of Group A water utilities	10	2	2	1		1	1	1	1	1	
Policy	Wellhead Protection Area land use and zoning changes to protect groundwater.	10	2	2	2	1	-1		1	1	2	
Ed	Educate the public re: water resource protection with sufficient emphasis on groundwater component.	9	1	2	1		1		1	2	1	
Coord.	Integrate surface and groundwater protection seamlessly. Minimize program activities that are unique to what we call “groundwater protection”	9	1	2		2	2		1	1	1	-1

Preferred Actions		<i>Score</i>	HT	SL	JD	GG	MJ	BP	CB	JL	GS	DW
<i>Ed</i>	Increase general public's awareness of: What is an aquifer? When and how do we use groundwater?	8	1	2	1		1		1	1	1	
<i>Coord.</i>	Coordination (passive) of groundwater protection activities – provide a clearinghouse /consolidation of information from disparate sources needed to support regional/county landuse/protection/activities.	8	2		1		1		1	1	2	
<i>Coord.</i>	Support better communication/coordination between water purveyors & King County.	8	2			2					2	2
<i>Data</i>	Exempt well locations and water rights	7	1		2	2	2			1		-1
<i>Data</i>	Documentation of extent of groundwater resources beyond existing focused well-head/unique supply studies. Determine extent of regional aquifers.	7	1		1	2	1		-1	1	2	
<i>Data</i>	Better best available science (BAS) for use in CARA rules	6	1	2			1	1		1		
<i>Policy</i>	County lead for environmental public health impacts -look at the "cumulative impact"	6	2		1					1	2	

Preferred Actions		<i>Score</i>	HT	SL	JD	GG	MJ	BP	CB	JL	GS	DW
<i>Coord.</i>	Routine forum for coordinating/sharing in the implementation of regional groundwater protection efforts as needed. (A way to jointly perform/fund work if appropriate.)	6	2		1	2				1	1	-1
<i>Data</i>	Documentation of all existing well withdrawals (location of well, quantity of water used)	5	1		1	2	2	-1	-1	1		
<i>Data</i>	Integration of existing studies and data sets to develop comprehensive conditions datasets	5	1		1	2			-1	1	1	
<i>Policy</i>	Irrigation wells need regulations and standards (what is effect on regional water resources?)	5	1		1		2		-1	2		
<i>Coord.</i>	Routine forum for coordinating/sharing info about ongoing groundwater management issues.	5	2		1				1		2	-1
<i>Coord.</i>	Coordination of groundwater recharge area protections.	5	1	2	1						1	
<i>Data</i>	Determine effect of exempt well groundwater withdrawals on stream flows	4	1		1	1	1		-1	1	1	-1
<i>Data</i>	Determine impact of exempt wells on groundwater quantity	4	1		2		1		-1	1	1	-1
<i>Policy</i>	Wellhead protections measures for small wells.	4	1	2	1		-1			1	1	-1

Preferred Actions		<i>Score</i>	HT	SL	JD	GG	MJ	BP	CB	JL	GS	DW
<i>Policy</i>	Need to come to some agreement on whether any risk really exists. Does science objectively support this?	4	1		2	2			-1	1	-1	
<i>Policy</i>	Need for compliance/enforcement by DOE on existing users	3	1		1		2	-1		1	-1	
<i>Ed</i>	Need to identify real connection between the actions of the individual and impacts on groundwater	2				2						
<i>Data</i>	Provide reference dataset of critical groundwater data, references to local resource investigations and groundwater condition assessments, lists of studies and contacts	2									2	
<i>Policy</i>	Problem: most of future growth will be on exempt wells. Service: well permits contingent on sufficient groundwater	2	2		1				-1	1	-1	
<i>Policy</i>	Better model ordinances for jurisdictions to consider/use as a resource for developing an ordinance	2	1						-1	1	1	
<i>Coord.</i>	Risk: Existing fuel underground storage tanks.	2	1		2		-1		-1		1	

Preferred Actions

	<i>Score</i>	HT	SL	JD	GG	MJ	BP	CB	JL	GS	DW
<i>Ed</i> An unfulfilled possibility is for groundwater purveyors to make optimal use of the resources provided by the Local Hazardous Waste Management Program. The LHWMP can be brought into a wellhead protection area to focus attention on best management practices at local businesses and to educate the public re: minimizing and properly handling hazardous waste. In addition, LHWMP may be willing to distribute through the County and cities the new aquifer brochure at appropriate opportunities.	1							1			
<i>Data</i> Provide a county assessment of where and how exempt wells and other small supplies may be at risk or pose a threat to other groundwater dependent resources.	1									1	
<i>Policy</i> Problem: King County liability as receiver of last resort. How does KC insure itself against/for this burden?	1	1									

**APPENDIX C – FINAL TASK FORCE ASSIGNMENT – PERCEIVED
BENEFIT AND FUNDING PREFERENCES FOR PROPOSED
GROUNDWATER SERVICES - DNRP**

Survey RE: Potential Department of Natural Resources and Parks Services

Instructions: Please review each service and provide your opinion in response to the questions in the 6 columns on the right. Please answer all columns to the extent you can – in particular the first three columns – if you do not have an opinion or are undecided you may indicate this by writing “U” for undecided or “N/O” for no opinion. If you want to add comments to any answers, please do.

Participants are identified by initials – see Appendix E for full names.

Commenter	Does this benefit you or your constituency? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
DNRP Policy Service #1	Assure land use policy, public health policy and resource management to provide viable water system development – minimize small systems (group Bs and exempt wells) comprehensive plan amendments, CAO development, new system reviews (UTRC)					
MJ	Y	G	All	All	DNRP	Gen'l Fund
JD	Y	G	ALL	ALL	KC	SWM
RG	YES	General	General Public	Local & County Governments	This service Is already Provided by Local & County Governments	No Additional Funding
BP	Very little benefit - Mostly NO	General	General benefit to county residents	General Government tasks and responsibility	This is or should already be an on-going govt responsibility	This should already be funded - no need to transfer funding
JL	Y	G	ALL	ALL	COUNTY HEALTH	
HT	No, Our City is already doing this	Neither	I don't see a benefit for any agency beyond our City	State Department of Public Health if any work is done	I don't think there is a service required beyond that of Cities and Counties Comp Plan work	It is currently an unfunded mandate for everyone

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	No	yes		no	no	no
DNRP Policy Service #2	Support efforts to coordinate/standardize rules/regulations/policies to protect groundwater; coordinate consistency in policy and regulatory standards across aquifer areas; work with local juris on CARA development & modifications;					
MJ	Y	G	All	All	DNRP	Gen'l Fund
JD	Y	G	ALL	ALL	KC	SWM
RG	YES	General	General Public	Local & County Governments	This service Is already Provided by Local & County Governments	No Additional Funding
BP	NO	General	General benefit to county & regional residents	General Government tasks and responsibility	This is or should already be an on-going govt responsibility	This should already be funded - no need to transfer funding
JL	Y	G	ALL			
HT	No, Our City is already doing this	Neither	I don't see a benefit for any agency beyond our City	State Department of Public Health if any work is done	I don't think there is a service required beyond that of Cities and	It is currently an unfunded mandate for everyone

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
					Counties Comp Plan work	
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	No	yes		no	no	no
DNRP Policy Service #3	Support efforts & policies of Group A water utilities Review/comment on policy, technical and regulatory documents re: Grp A policies and practices incl. impacts/consistency with KC and countywide planning policies and codes. Potential hosting of/participation in a coordinating group (local or county wide)					
MJ	N	Neither	State F'n	State F'n	State F'n	State F'n
JD	Y	D	GRP A USERS	GRP A USERS	KC & DOH	DOH FEE SHARE
RG	NO	General	General Public	Local & County Governments	This service Is already Provided by King County	No Additional Funding
BP	Yeah Right, that is going to happen. Very little benefit - Mostly NO	General	General benefit to county residents	General Government tasks and responsibility	This is or should already be an on-going govt responsibility	This should already be funded - no need to transfer funding
JL	N		UTILITY			

Commenter	Does this benefit you or your constituency? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
HT	No, Our City is already doing the Comp Plan work	Neither	<i>I don't see a benefit for any agency beyond our City unless a Critical Water Service Area is designated and we don't meet the criteria</i>	<i>State Department of Public Health if any work is done</i>	<i>I don't think there is a service required beyond that of Cities and Counties Comp Plan work</i>	<i>It is currently an unfunded mandate for everyone</i>
CB					Should be done via the UTRC	
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKCRWA	No	yes	CAO	no	no	no
DNRP Policy Service #4	Wellhead Protection Area land use and zoning changes to protect groundwater in unincorporated King County; Review WHPA plans; ID areas for potential land use modifications, addl protections, provide technical review for DDES or other app KC entities; Communicate with Grp As on the current need for any of these changes, engage them in conv with DDES (others).					
MJ	Y	Both	<i>Group A activities should stay with State</i>	<i>All</i>	<i>DNRP and State</i>	<i>Gen'l Fund</i>
JD	Y	G	ALL	ALL	DDES	SWM
RG	YES	Direct	Any Group A or B Systems	Local & County Governments & Group A & B Systems	This service Is already Provided by Local & County Governments	No Additional Funding

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
BP	Limited Yes - some minor benefit to Districts & associations. No benefit to Cities	Some Direct benefit and Mostly General	Local Water sys customers & general benefit to county residents	Part of general cost of county govt.	This is or should already be an on-going govt responsibility	This should already be funded - no need to transfer funding
JL	N		UTILITY			
HT	Yes	General	Consumers in the Aquifer Service Area	The Consumers already are paying their respective Purveyor	The Purveyors	This is already part of the rate structure
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	No	yes	CAO	no	no	no
DNRP Policy Service #5	Evaluate cumulative impacts of groundwater withdrawals (w/ PH) Maintain records of existing and new withdrawals, work with appropriate staff and entities to model/assess the effects of withdrawals. Work with DOE on cumulative imp. Assessments - make avail KC data/reports.					
MJ	Y	G	All	All	State or DNRP	Gen'l fund
JD	Y	D	ISLAND RES.	ISLAND RES	KC	SWM
RG	NO	General	D.O.E.	No One	D.O.E., Records already kept by Group A's	Do not fund

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
BP	NO	General	Unknown	No one	State Dept of Ecology	Do not fund - limited value
JL	Y	G	ALL			
HT	Yes	Direct	<i>The consumers of Groundwater from our aquifer</i>	<i>Our consumers are already paying as part of their water charges</i>	<i>Purveyors are already responsible and Cities and counties are already meeting the requirements of GMA</i>	<i>This is already an unfunded mandate we all have to live with</i>
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes		no	no	No
DNRP Policy Service #6	Irrigation well regulations and standards; Draft new development rww standards, work with DDES & PH to insure irrig wells are identified. Consider local standards for permitting. Work with DOE to id their potential increased role and or better coordination and notification to affected water districts and jurisdictions.					
MJ	<i>Sort of</i>	<i>Gen'l</i>	<i>All</i>	<i>All</i>	<i>State or DNRP</i>	<i>Fee on Irrigation Wells?</i>
JD	Y	G	WA RES	WA RES	DOE & KC	GEN REV
RG	NO	General			D.O.E.	

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
BP	NO	General	Unknown	No one	State Dept of Ecology	Do not fund - limited value
JL	Y	D	ALL		COUNTY HEALTH	
HT	Yes	General	The consumers of Groundwater from our aquifer	The State already funds the Department of Ecology in the regulation of Water Rights	Department of Ecology	It is already part of the States Revenue
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes	No KC land use authority in Cities	no	no	no
DNRP Education Service #1	Educate the public re: water resource protection with sufficient emphasis on groundwater component. Integrate GW messages into King County educational materials. Work with management groups including WRIA teams, noxious weeds groups, flood hazard reduction, wastewater and solid waste/LHWMP to identify GW interactions and integrate within their programs.					
MJ	Y	G	All	ILA	ILA	ILA
JD	Y	G	ALL	ALL	PER LEGISLATION	PER LEGISLATION

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
RG	YES	General	General Public	Individual purveyors & King County	Individual purveyors & King County (for areas outside Water Service Areas)	ILA with interested parties if done jointly
BP	NO	General	Small general benefit to county & regional residents			ILA for any interested parties
JL	Y	G	ALL		DNRP	
HT	Yes	General	<i>The consumers of groundwater from our aquifer</i>	<i>The County, Cities, and Purveyors of groundwater</i>	<i>The County, Cities, and Purveyors of groundwater</i>	<i>The funding mechanism is already part of the applicable RCWs</i>
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes		no	no	No
DNRP Education Service #2	Increase general public's awareness and understanding of hydrologic cycle and human role/impact/usage. Maintain web list of education resources and web educational pieces (what is GW, How does it work? What is hydraulic continuity, etc)					
MJ	Y	G	All	ILA	ILA	ILA

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
JD	Y	U	U	U	U	U
RG	YES	General	General Public	Individual purveyors & King County	Individual purveyors & King County (for areas outside Water Service Areas)	ILA with interested parties if done jointly
BP	NO	General	Small general benefit to county & regional residents			ILA for any interested parties
JL	Y	G	ALL		DNRP	
HT	Yes	General	<i>The consumes of groundwater from our aquifer</i>	<i>The County has this responsibility by RCW</i>	<i>The County</i>	<i>The funding mechanism is part of the RCW</i>
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes		no	no	no
DNRP Coord/stkh Idr Service #1	Integrate surface and groundwater protection programs with cities, purveyors, counties, districts, etc. Coordinate storm water, flooding, salmon recovery programs and plans with groundwater programs and other local water related programs, policies and codes. Work with appropriate staff from those programs to develop efficiencies and consistency between policies and standards. Provide a clearinghouse /consolidation of information from disparate sources needed					

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
	to support regional/countywide/city/county land use protection activities.					
MJ	Y	G	All	DNRP / ILA	DNRP / ILA	DNRP / ILA
JD	Y	G	ALL	ALL	PER LEGISLATION	PER LEGISLATION
RG	YES	General	General Public	Local & County Governments	This service is already provided	No Additional Funding
BP	NO to a very low potential benefit	General	Reg. Agency/ General Public?	General Govt.	This is or should already be an on-going county govt responsibility	ILA for any interested parties
JL	Y	G	ALL		DNRP	
HT	Yes	General	The County in general	The County	The various jurisdictions are already required to coordinate their activities	These are either unfunded mandates or the funding mechanism already exists
CB					County and cities each within their own jurisdictions	
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes		no	no	No

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
DNRP Coord/stkh ldr Service #2	Maintain a web site with resources about groundwater generally and specifically (data about current and historic conditions in King County). Facilitate understanding and access to that data by the general public and other stakeholders with vested interests.					
MJ	Y	G	All	All	DNRP / ILA	DNRP / ILA
JD	Y	G	ALL		PER LEGISLATION	PER LEGISLATION
RG	NO	General		Interested Parties	No One in Particular	ILA with interested parties
BP	NO	General	Unknown	Interested parties	Unknown	ILA for any interested parties
JL	U					
HT	Yes	General	The consumers of groundwater from our aquifer	The County, Cities, and Purveyors of groundwater	The County, Cities, and Purveyors of groundwater	The funding mechanism is already part of the applicable RCWs
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes		no	no	no

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
DNRP Coord/stkh Idr Service #3	Support better communication/coordination between water purveyors & King County. Work with purveyors to id shortcomings in KC communication links. Id purveyors concerns/interests. Participate in water supply forums as appropriate.					
MJ	Y	G	All	All	State / DNRP	Gen'l Fund
JD	Y	G	ALL	ALL	KC DOH	DOH FEE SHARE
RG	NO	General	Everyone	No One, this should be standard operating procedures	Everyone, this should be standard operating procedures	No Additional Funding
BP	NO (this sounds nice in theory; in practice it is: "were here from the govt., were here to help"	General	Minor to Local Water sys customers & general benefit to county residents	Part of general cost of county govt.	This is or should already be an on-going county govt responsibility	This should already be funded - no need to transfer funding
JL	N					
HT	Yes	General	The consumers of groundwater from our aquifer	The County, Cities, and Purveyors of groundwater	The County, Cities, and Purveyors of groundwater	The funding mechanism is already part of the applicable RCWs
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKCRWA	no	yes		no	no	No

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
DNRP Data Service #1	Exempt well locations and water rights (in cooperation w/ others)					
MJ	Y	G	All	All	State / DNRP	Gen'l Fund
JD	Y	G	ALL	ALL	DOE	GEN REVENUE
RG	NO	General	Regulatory Agencies	General Government	D.O.E./Health Dept	No Additional Funding
BP	NO	General	Reg. Agency/ General Public?	General Govt.	State Dept of Ecology / King County	ILA for any interested parties
JL	Y	G				
HT	Yes	Direct	The consumers of groundwater from our aquifer	The Department of Ecology has the responsibility	The Department of Ecology	The funding mechanism is part of the enabling RCWs
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes	yes	no	no	no

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
DNRP Data Service #2	Documentation of extent of groundwater resources beyond existing focused well-head/unique supply studies. Determine extent of regional aquifers (in cooperation w/others).					
MJ	Y	G	All	All	State / DNRP	Gen'l Fund
JD	Y	G	ALL	ALL		GEN REVENUE
RG	NO	General	Regulatory Agencies	General Government	D.O.E.	ILA with interested parties
BP	NO	General	Reg. Agency/ General Public?	General Govt.	State Dept of Ecology	ILA for any interested parties
JL	Y	G				
HT	Yes	General	Future groundwater users	The County	The work would be in unincorporated King County so it follows the County would have the responsibility	It is an unfunded mandate under GMA
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	yes		no	no	No

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
DNRP Data Service #3	Limited Ambient monitoring program.					
MJ	Y	G	All	All	State / DNRP	Gen'l Fund
JD	Y	G	ALL	ALL		GEN REVENUE
RG	NO	General	Regulatory Agencies	General Government	D.O.E.	ILA with interested parties
BP	NO	General	Reg. Agency/ General Public?	General Govt.	State Dept of Ecology / King County	ILA for any interested parties
JL	U					
HT	Yes	General	The State Department of Ecology	The State in general	The Department of Ecology	The funding mechanism is part of the enabling RCWs
CB						
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	maybe		no	no	no

CK for SPU:

Generally, as I have stated before at Task Force meetings the proposed services do not directly benefit Seattle customers since these are groundwater services and we are a surface water utility. It seems to me that Group Bs would be the largest beneficiary to these services,

especially the public health services, so if they are willing to pay for them they should be provided. In addition to that for certain areas like Vashon that have specific needs, I suggest using the Aquifer Protection Area funding approach or the ILA approach, then you have the buy-in from those that will be charged the fee, creating transparency which is very important in any public effort.

CB wrote:

"It would be helpful to streamline this survey by considering only proposed countywide DNRP services. We needn't debate existing services that DNRP wants to provide and can continue to provide with their own resources. It would be best also not to get sidetracked by discussions of what specific local areas need. This is evidenced by Vashon, Issaquah, and Redmond negotiating ILAs with DNRP as they saw fit. We would also be more focused were we to take Public Health existing and proposed services out of the discussion since they can appropriately be supported by fees. This would leave a clear discussion of possible countywide services and how they could be funded. The results of the survey might be less divergent and more useful were its scope to be tightened up in this way."

APPENDIX D – FINAL TASK FORCE ASSIGNMENT – PERCEIVED BENEFIT AND FUNDING PREFERENCES FOR PROPOSED GROUNDWATER SERVICES - PUBLIC HEALTH

Survey RE: Potential Public Health Services

Instructions: Please review each service and provide your opinion in response to the questions in the 6 columns on the right. Please answer all columns to the extent you can – in particular the first three columns – if you do not have an opinion or are undecided you may indicate this by writing “U” for undecided or “N/O” for no opinion. If you want to add comments to any answers, please do.

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
PH Service #1	Respond to complaints/provide office consultations for operators and users of Group B public water systems. (ranked #1 by PH)					
MJ	N	G	Public	Public	Health	Gen'l fund
JD	Y	G	ALL	ALL	KC	GEN REVENUE
RG	NO	Direct	Group B Systems	Group B Systems	DOE & Health Dept	
BP	NO	Direct	,Grp B			
JL	N/O					
HT	Yes	General	Primarily Group B Operators	State via Annual Budget and Group B Operators via fees for service	Public Health seems to have the mandate to provide the service.	This internal to State Department of Public Health
CB	NO	Direct	Group B purveyors	Group B	Public Health	Fees on Group B
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government	In your view could this be supported	Does your utility support new fees or charges for	Is this item a benefit to water utilities?

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
			services?	by a Group A Water Utility Fee	this item	
SKC RWA	Group Bs	no		no	no	Group Bs
PH Service #2	Conduct routine field surveys of each Group B public water system once every three years. (ranked #3 by PH) NOTE: Long-term funding is needed for ongoing surveillance.					
MJ	N	D	Group B Users	Group B	Health	Connect Fee or inspect fee
JD	Y	G	ALL	ALL	KC	GEN REVENUE
RG	NO	General & Direct			This service Is already provided	
BP	NO	General & Direct	Grp B		Oversight of Grp B systems is already a county requirement	General Govt funding and perhaps limited fee on Grp B systems that are being inspected
JL	Y	G				
HT	Yes	General	Primarily Group B Operators	State via Annual Budget and Group B Operators via fees for service	Public Health seems to have the mandate to provide the service.	This internal to State Department of Public Health
CB	No	Direct	Group B purveyor and customers	Group B	Public Health	Fee on Group B
SKC revised questions:	Is this item a benefit to water	Is this item a benefit to general	Is this item included in existing	In your view could this be	Does your utility support new fees or	Is this item a benefit to water utilities?

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
	utilities?	public?	government services?	supported by a Group A Water Utility Fee	charges for this item	
SKC RWA	Group Bs	no		no	no	Group Bs
PH Service #3	Map all Group B public water systems within the service area of each Group A public water system with an approved King County Comprehensive Water System Plan; update every five years after initial mapping. (ranked #5 by PH)					
MJ	Y	G	Public	Public	DNRP	Gen'l fund
JD	Y	G	ALL	ALL	DOH	STATE GENERAL REVENUE
RG	YES	General	Group A Systems and Local Government	Group A Systems and Local Government	Group A Systems and Local Government, If needed	
BP	NO	Genl Gov	Genl Gov		General Govt service - not sure the service is needed	
JL	N					
HT	No	Neither	I don't see a real benefit	State via Annual Budget and Group B Operators via fees for service	Public Health seems to have the mandate to provide the service.	This internal to State Department of Public Health

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
CB	No	General	Some Group A's may benefit	Group B purveyors and customers	Public Health	Group B fee
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKCRWA	no	no		no	no	No
PH Service #4	Participate on the Utility Technical Review Committee for review of Group A public water system Comprehensive Water System Plans. (ranked #4 by PH)					
MJ	N	G	Public	?		
JD	Y	G	ALL	ALL	KC	GEN REVENUE
RG	NO	General			This service Is already provided	
BP	NO	Genl Gov			This service is already done and is part of general govt.	No new funding requirements
JL	N					
HT	No	Neither	I don't see a real benefit	State via Annual Budget and Group B Operators via fees for	Public Health seems to have the mandate to provide the service.	This internal to State Department of Public Health

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
				service		
CB	No	Neither	No one	No one	No one	None
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	no		no	no	no
PH Service #5	Inspect irrigation wells for siting, location approval and other necessary services. (ranked #2 by PH) NOTE: Proposed service would require some significant regulatory work but would be fee supported in the long run as is the case with other local public health departments					
MJ	Y	G	Public	Public	DNRP	Fee from well owners
JD	Y	G	ALL	ALL/ IRRIGATORS	DOE/KC/DOH	IRRIGATOR FEE
RG	NO	General & Direct	Owners Installing the Wells	Owners Installing the Wells		
BP	NO	Genl Gov			General Govt service - not sure the service is needed	
JL	Y	D	ECOLOGY UTILITIES COUNTY	ALL	COUNTY HEALTH	ECOLOGY \$ DELEGATED TO COUNTY HEALTH TO PAY 1/2

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
HT	No I think this is responsibility of the Department of Ecology	Neither	I don't see a real benefit	State via Annual Budget and Group B Operators via fees for service	Public Health seems to have the mandate to provide the service.	This internal to State Department of Public Health
CB	Yes	General	All	Well owner	Public Health	Fee
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	no		no	no	No
PH Service #6	Evaluate need for the inspection of sources and water systems of bottled water companies. NOTE: Proposed service with a possible user fee.					
MJ	Irrelevant					
JD	N					
RG	NO	Direct	Bottling Co	Bottling Co	Health Dept	
BP	NO	Direct	Bottle Co.	Bottle Co.		
JL	N					

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
HT	No	Neither	I don't see a real benefit to Water Purveyors Consumers of bottled water do benefit	Bottled Water manufacturers	This responsibility should be part of the Food Processor regulations for the Department of Agriculture	Inspection Fee
CB	No	Direct	All	Bottled Water Mfg	Not sure which agency	Fee on water mfgs
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	no	FDA	no	no	no
PH Service #7	Provide services within the On-site Sewage System Operation and Maintenance Program. Septic outreach and education, septic repair and upgrade promotion					
MJ	Y	G	Public	Public	Health/DNRP	Gen'l fund
JD	Y	G	ALL	ALL	KC	GEN REVENUE
RG	YES	General & Direct	Septic System Owners	Septic System Owners	Health Dept & City	
BP	NO	G & D	Gov & Septic owner	Septic Owner/ perhaps also general gov task	County Health	
JL	N/O					

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
HT	No	Neither	I don't see a real benefit to Water Purveyors Septic System Operators do benefit	State via Annual Budget	Public Health seems to have the mandate to provide the service.	This internal to State Department of Public Health
CB	Yes	General and direct benefit	Septic system owners and public	From OSS fees	Public Health	Fee on (OSS) owner
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	no		no	no	No
PH Service #8	Respond to complaints and provide office consultations for on-site sewage system owners.					
MJ	Y	G	Public	Owners	Helath/DNRP	Fee
JD	Y	G	ALL	ALL	KC	GEN REVENUE
RG	YES	Direct	Septic System Owners	Septic System Owners	Health Dept	
BP	NO	D	Septic Owner	Septic Owner/ perhaps also general gov task	County Health	
JL	N					

Commenter	Does this benefit you or your constituency ? (Y / N)	Is this a general or direct benefit? (G / D)	Who benefits?	Who Should pay?	Who should be responsible for providing the service?	Suggestions for funding mechanism?
HT	No	Neither	I don't see a real benefit to Water Purveyors Septic System Operators do benefit	State via Annual Budget	Public Health seems to have the mandate to provide the service.	This internal to State Department of Public Health
CB	No	General and direct	Septic system owners/public	From OSS fees	Public Health	Fee on owners
SKC revised questions:	Is this item a benefit to water utilities?	Is this item a benefit to general public?	Is this item included in existing government services?	In your view could this be supported by a Group A Water Utility Fee	Does your utility support new fees or charges for this item	Is this item a benefit to water utilities?
SKC RWA	no	no		no	no	no

CK for SPU

Generally, as I have stated before at Task Force meetings the proposed services do not directly benefit Seattle customers since these are groundwater services and we are a surface water utility. It seems to me that Group Bs would be the largest beneficiary to these services, especially the public health services, so if they are willing to pay for them they should be provided. In addition to that for certain areas like Vashon that have specific needs, I suggest using the Aquifer Protection Area funding approach or the ILA approach, then you have the buy-in from those that will be charged the fee, creating transparency which is very important in any public effort.

APPENDIX E – TASK FORCE PARTICIPANTS AND AFFILIATION

Groundwater Task Force Invitee List

NAME	Initials*	AFFILIATION
Ginny Stern	GS	WA Department of Health
Kelly Peterson	KP	City of Kent
Ron Garrow	RG	City of North Bend
Tim Osborne	TO	City of Auburn
Len Olive	LO	Covington Water District
Don Perry	DP	Lakehaven Water District
Carolyn Boatsman	CB	City of Renton
Don Wright	DW	South King County Regional Water Association
Celia Kennedy	CK	Seattle Public Utilities
Jerry Liszak	JL	WA Department of Ecology
Dick Jones	DJ	East King County Groundwater Protection Committee
Robin Boynton	RB	East King County Groundwater Protection Committee
Bob Pancoast	BP	East King County Regional Water Association & East King County Groundwater Protection Committee
Ron Little	RL	Sammamish Plateau Water & Sewer District
Judy Passey	JP	Washington Water Service
Hank Thomas	HT	City of Issaquah & Issaquah Creek Valley Groundwater Protection Committee
Sheldon Lynne	SL	City of Issaquah
Gareth Grube	GG	City of Woodinville & Redmond-Bear Creek Groundwater Protection Committee
Michael Johnson	MJ	Redmond-Bear Creek Groundwater Protection Committee
Jim Dam	JD	Vashon-Maury Island Groundwater Protection Committee
Jim English	JE	Vashon-Maury Island Groundwater Protection Committee
Jeremy Pratt	JP	Vashon-Maury Island Groundwater Protection Committee
KC STAFF:		
Joanna Richey		KC WLRD
Larry Fay		PUBLIC HEALTH
Sarah Ogier		KC WLRD
Wayne Sugai		KC DNRP
Bill Lasby		PUBLIC HEALTH

*Note: Participant responses in the Task Force assignments are identified by initials

APPENDIX F – STATE AGENCY LETTERS REGARDING FINANCIAL SUPPORT



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
OFFICE OF DRINKING WATER

NewMarket Industrial Campus, Bldg. 3 • PO Box 47822 • Olympia, Washington 98504-7822
Tel: (360) 236-3100 • FAX: (360) 236-2252 • TDD Relay Service: 1-800-833-6388

February 22, 2005

Daryl Grigsby, Director
Water and Land Resources Division
Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 600
Seattle Washington 98104-3855

Dear Mr. Grigsby:

Thank you for your letter of December 20, 2004. As discussed at the initial meeting between your staff and the Office of Drinking Water (ODW), we strongly support continued funding of the groundwater programs described in Tables 5 and 6 of your letter. Unfortunately, the nature of the state and federal funding to the ODW is such that we are not able to use it to provide direct funding to King County Department of Natural Resources and Parks to support ongoing local groundwater protection efforts.

We will look for additional opportunities to provide in-kind services to support your groundwater protection efforts. We will also work to identify any federal grants that may be able to provide fiscal resources for your program.

Sincerely,

A handwritten signature in cursive script that reads "Denise A Clifford".

Denise Addotta Clifford,
Director



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
TTY 711 or 800-833-6388 (For the Speech or Hearing Impaired)

RECEIVED
JAN 24 2005

KING COUNTY
WATER & LAND RESOURCES DIV
MANAGER'S OFFICE

January 20, 2005

Mr. Daryl Grigsby, Division Director
Water and Land Resources Division
King County Department of Natural Resources and Parks
King Street Center
201 South Jackson Street, Suite 600
Seattle, WA 98104-3855

Dear Mr. Grigsby:

Thank you for your letter of December 20, 2004, detailing King County's efforts to establish a regional Ground Water Protection Program. The Department of Ecology (Ecology) agrees with the view of the county and many of its citizens that the protection of ground water resources is of paramount importance.

As you know, Ecology has already supported the establishment and development of five groundwater management area programs (GWMAs) within King County for the East King County, Redmond-Bear Creek, Issaquah, South King County, and Vashon-Maury Island areas. Four of these programs were certified as being consistent with Ch. 173-100 WAC, Ground Water Management Areas and Programs. We see those programs as forming a good foundation for ongoing ground water management and protection efforts.

Ecology remains supportive of the efforts of King County to adequately protect its ground water resources. However, we are unable to provide funding support for the county's Ground Water Protection Program. As Doug McChesney pointed out in a meeting with some of your staff, some funding may be available from Ecology's grants programs such as the Centennial Clean Water Fund. Another alternative might be to approach the Legislature for direct funding support.

A key component of Ecology's participation in the GWMA processes of the past was to provide technical support to the different planning areas. Ecology sees considerable value in supporting the county's ground water protection efforts and intends to continue providing this support in the future to the extent resources permit.

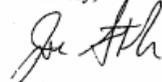


Mr. Daryl Grigsby, Division Director
Water and Land Resources Division
King County Department of Natural Resources and Parks
January 20, 2005
Page 2

We support the concepts of ground water protection and planning and strongly encourage the county to work cooperatively with all interested parties to develop an effective Ground Water Protection Program. Should the county decide to seek legislative funding for its program, Ecology would be willing to endorse in principle the county's efforts.

If you have questions or need further information, please feel free to contact me at 360-407-6602 or by e-mail at jost461@ecy.wa.gov.

Sincerely,



Joe Stohr, Manager
Water Resources Program
