LOTT Clean Water Alliance

LOTT Groundwater Recharge Scientific Study

Public Involvement Plan

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Table of Contents

List of Tables

List of Figures

I. Introduction

The long-range plan for managing wastewater in the future is focused on protecting public health and the environment by encouraging flow reduction and providing effective treatment of wastewater to high water quality standards. This includes treating a portion of wastewater flows to reclaimed water quality and expanding the beneficial uses of reclaimed water in communities for purposes such as irrigation, decorative fountains and ponds, and toilet flushing. Water not used for these purposes is used for groundwater recharge through infiltration. Recently, questions and concerns have been raised about using reclaimed water for groundwater recharge. To address those questions, the LOTT Clean Water Alliance is conducting a multi-year Groundwater Recharge Scientific Study. Findings will be used to help make future decisions about reclaimed water treatment and use. The purpose of this Public Involvement Plan (the Plan) is to support efforts to complete a thorough, objective and credible scientific study and foster community involvement and dialogue about the study and related issues. The Public Involvement Plan outlines comprehensive outreach and involvement efforts to be employed during the design and preparation of the scope of work for the Study, and throughout the Study's implementation.

II. Background

LOTT is responsible for wastewater management services for the urban area of north Thurston County, Washington. Its services include wastewater treatment, reclaimed water services, and long-range planning. "LOTT" stands for its four government partners – Lacey, Olympia, Tumwater, and Thurston County.

In the late 1990s, LOTT – through an environmentally-based planning process with extensive public involvement – developed a long-range Wastewater Resource Management Plan to determine how to handle growing wastewater treatment demands. Alternatives were evaluated that represented all possible alternatives for wastewater management in this region, and most were rejected for significant environmental reasons. The chosen solution included production, distribution, and use of reclaimed water as its core, supported by water conservation programs and increased wintertime discharge to Budd Inlet. The reclaimed water would be treated to meet Class A Reclaimed Water Standards – the highest quality level designated by the Washington State Departments of Health and Ecology. Based on state guidelines, Class A Reclaimed Water is safe for public contact and can be used for irrigation, decorative fountains and ponds, many commercial and industrial uses, and environmental uses such as wetland enhancement and streamflow augmentation. The long-range plan envisions ultimate construction of three satellite reclaimed water treatment plants, in addition to producing reclaimed water at the central Budd Inlet Treatment Plant. Water not used for purposes in the community would be piped to groundwater infiltration basins to recharge underground aquifers. Since the plan was approved in January 2000, LOTT has built a reclaimed water facility at the Budd Inlet Treatment Plant, which began operation in 2005, and its first satellite plant on Martin Way, which began operation in 2006. Water from the Martin Way plant is piped three miles to a series of constructed wetland ponds and groundwater infiltration basins, which have also been in operation since 2006.

Today, LOTT treats about 10 percent of the region's wastewater to Class A Reclaimed Water Standards. Properties have been purchased for the other two future satellite plants and associated groundwater infiltration basins, although no construction of facilities at those sites is anticipated for several years. While LOTT continues to implement the program identified in the Wastewater Resource Management Plan, changing conditions have been identified and new questions are being asked. Water quality studies focused on dissolved oxygen issues in Budd Inlet – including the Department of Ecology's Deschutes River/ Capitol Lake/Budd Inlet Total Maximum Daily Load study and South Puget Sound Dissolved Oxygen Study – could result in further restrictions to LOTT's Budd Inlet discharge, increasing the need for additional reclaimed water production and groundwater recharge. Meanwhile, questions and concerns about infiltration of reclaimed water have been raised in relation to protection of groundwater quality. The primary concern involves pharmaceuticals and compounds from personal care and household products that have been detected at low levels in wastewater and reclaimed water. For these reasons, LOTT has begun a multi-year scientific study to help make informed choices about future wastewater and reclaimed water treatment and uses in the environment.

III. Study Goals

Overall goals of the Study are related to both science and public involvement:

1. Improve scientific understanding of:
    - How reclaimed water interacts with groundwater and other local water resources.
    - Compounds, such as those from soaps, shampoos, household cleaners, medicines, and cosmetics, in the local environment, and what happens to them over time.
    - How to balance influences, risks, costs, and benefits of various water resources to the overall quality of water in our region.

2. Foster meaningful community-wide dialogue about water quality, reclaimed water, groundwater recharge, compounds of potential concern, and related watershed issues.

3. Provide scientific data and community perspectives to help policymakers make informed decisions about future wastewater and reclaimed water treatment and uses in the environment.

4. Ensure that the scientific study and public involvement process are credible, objective, transparent, responsive, and responsible.

The original goals above were developed as part of the early vision of the Study effort. During the first phase of the Study, additional goals have been suggested. Preliminary work on the Study framework also suggests that the goals need to be revised to ensure that they address key community questions. The Study goals will be revised as part of the Scoping Phase of the Study, keeping in mind the following specific suggestions:

- The goals should include mention of the importance of understanding the costs of various treatment processes and other alternatives that may be identified as part of the Study.
- Climate change may impact future wastewater flows and the need to recharge, or discharge, more or less water. The goals should include consideration of climate change impacts. One option is to add a goal such as "Coordinate the Study with other local and regional efforts, such as the City of Olympia's climate change planning, LOTT's interjurisdictional water conservation

program, and state-level studies such as the Deschutes River/Capitol Lake/Budd Inlet TMDL and the South Puget Sound Dissolved Oxygen Study."

- The goals should align clearly with the Study framework and the categories of activities developed as part of the Study scoping effort. Two examples include assessing risk of residual compounds of concern and assessing alternative treatment or plans and their associated costs.

IV. Initial Public Involvement Steps

Public involvement will be a major part of the study and that work has already begun. A Community Advisory Group was convened in 2012 to work closely with the LOTT Board of Directors and the Study team, helping identify community perspectives and questions the Study should address, as well as recommending effective ways to engage the public in the Study. The Advisory Group is expected to continue work for the duration of the Study, serving as a sounding board that represents a diversity of community perspectives. With the aid of the Advisory Group, initial public opinion research was conducted in early 2013 to gain an understanding of existing public awareness, knowledge, interest, and perceptions regarding water, wastewater, reclaimed water, groundwater recharge through infiltration, and related issues. The research involved extensive data collection via 53 one-on-one stakeholder interviews and a random sample telephone survey of 400 people. Input from the Community Advisory Group and data from the public opinion research contributed significantly to the content of this Plan, and will continue to help shape outreach and involvement efforts associated with the Study and LOTT's public outreach efforts in general.

V. Public Involvement Plan Phases

There will be many times throughout the course of the Study when new information will be available, and opportunities for public input and involvement will arise. As with any multi-year study, there will also be extended times when data is being collected and analyzed – resulting in fewer public information and involvement opportunities. This Plan seeks to ensure sustained and appropriate levels of information and engagement throughout the entirety of the Study – from Study Scoping, determining the approach and questions to be answered, to Study Implementation, analysis, and findings.

This Public Involvement Plan is intended to be a living, working document with details to be added, and adjustments to be incorporated in order to continually meet community members' needs and desires for information and opportunities for input. This Plan includes many planned and potential public involvement activities. The goal of this Plan is to implement a proactive and productive public involvement effort throughout the duration of the Study, and it will need to be adjusted over time to achieve that goal while making efficient and effective use of resources. Thus, as the plan is implemented, it is likely that some of these activities will be determined to be lower priorities than others and some will not be implemented.

Eventually, this Plan is expected to have multiple phases that dovetail with the phases of the Study (see Figure 1). Initially it will start with a Study "Scoping Phase," followed by an "Implementation Phase" that will describe public involvement activities recommended when and after the Study is launched.

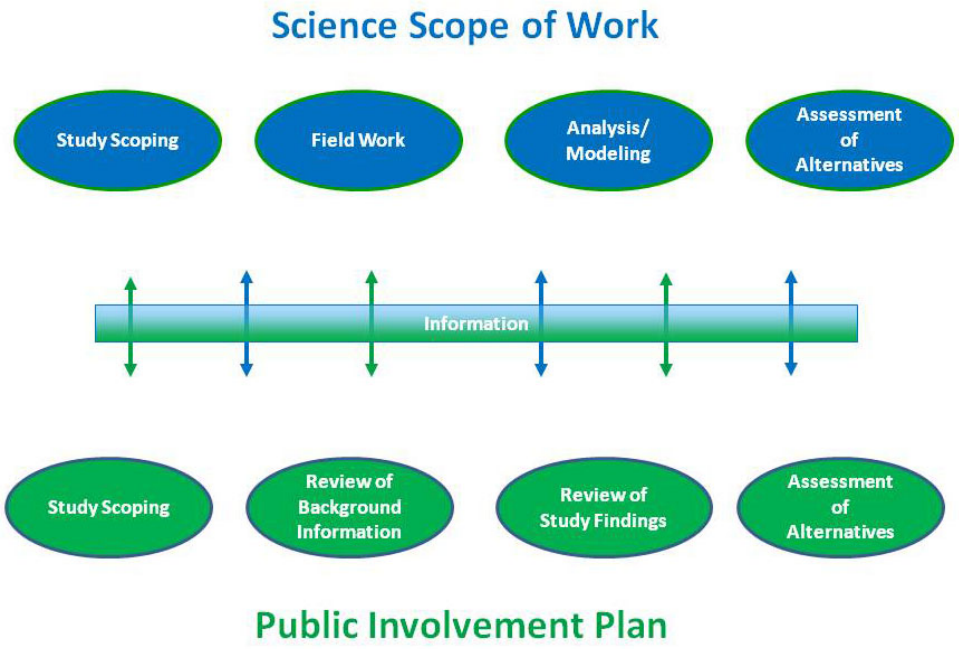

Figure 1: Phases of the Scientific Study and Public Involvement

Study Scoping Phase: This phase of the Plan is specific to ensuring community input into the Study scope of work. "Scoping" is a term used to identify the questions the Study will examine and the technical processes that will be implemented to answer those questions. During scoping, public involvement activities will help to refine Study goals and objectives and link key questions identified by the public to the general framework for the Study. Details of Scoping Phase public involvement activities are more fully described in Section XI.

Study Implementation Phase: This section of the Plan will include activities to ensure public engagement after scoping and throughout the life of the Study. Ultimately, "Study Implementation Phase" public involvement efforts will likely be broken down into additional, distinct, and separate sub-phases. The first public involvement activities in this section of the Plan will be conducted during a period of time in which field work and sampling will be occurring as part of the science track. Since results of the Study will not be immediately available, this period of time provides an opportunity to focus on public information and education on topics related to the Study and others identified as important to the community at large. Educational activities conducted in this phase can also provide background on technical issues that will be helpful in interpreting Study results as they become available.

Subsequent public involvement activities in this section of the Plan will involve community conversations about the Study findings, and review of alternatives for treatment levels and uses of

reclaimed water. Until the Study is fully scoped and defined, activities to be included in the Study Implementation Phase will remain more conceptual. General recommendations are more fully described in Section XII.

VI. Public Information and Involvement Goal

The goal of this plan and public involvement efforts is to achieve a proactive, productive, and sustained public information and involvement process throughout the life of the Study to meet the information and involvement needs of the community, gather input and feedback from the public, and foster meaningful community dialogue about the Study and related issues.

Additional goals for the Scoping Phase of this Plan are to refine Study goals and objectives, identify key community questions and concerns, and develop a framework and scope of work for the Study that addresses those key questions and concerns.

VII. Public Information and Involvement Objectives

- Raise public awareness about the Study and opportunities for involvement
- Refine communication approaches to meet the widely varied level of information desired by the public – from easily understood, overarching concepts to detailed, highly technical explanations.
- Continually evaluate and adjust public involvement activities to ensure efforts are effectively engaging the public and meeting the information needs of diverse audiences.
- Increase public awareness, knowledge, and understanding of reclaimed water, groundwater infiltration, and water resource management issues.
- Create a feedback mechanism to ensure the Study is responsive to community questions and concerns.

VIII. Key Considerations for Public Involvement

Based on public outreach and data collection activities conducted to date regarding the Study, there are a number of challenges associated with communication, outreach, and public involvement. These challenges will be addressed as activities from the Public Involvement Plan are implemented. The table can be used as a reference tool to ensure that the Study team is addressing these challenges in ways that are responsive to community needs. Progress in addressing these challenges will be reviewed and discussed at meetings of the Community Advisory Group.

Table 1: Potential Challenges and Considerations	
Diverse levels of interest in topics related to the Study	The LOTT service area enjoys a population that is generally active in community issues, and many community members are highly interested in issues related to water resources and water quality. Many other community members are busy with day-to-day activities and do not have a high interest or much time to devote to these issues.
Diverse levels of knowledge and understanding	With the wide range of interests come diverse levels of understanding and knowledge about topics related to the Study. This relates to varying levels

	of interest in information – some people will want highly technical, detailed information and others will want non-technical, brief descriptions of issues. Developing a common threshold of understanding will be important for fostering meaningful dialogue.
Multi-year nature of the Study	With the multi-year length of the Study, community members will come and go, engaging and disengaging at varying points in the process. It will take time to gather and analyze data, and keeping the public interested and engaged during information "lulls" will be a challenge.
Highly technical topic	Topics related to the Study are complex and technical in nature, and the issues involved are difficult to explain in a few words. At the same time, the public has become accustomed to getting information in sound bites, and has many topics and activities competing to gain their attention.
Talking about the topic generates concerns	Any topic that is perceived to hold potential risks for public or environmental health can generate fear and concern. As shown in the phone survey, introducing the concept of potential risk tends to generate concerns.
Widely varied viewpoints	Community members who are most likely to be highly engaged and interested have a range of sharply differing views on issues of reclaimed water, its use, and groundwater infiltration in the region.
Science is evolving	Many related scientific studies have been conducted over the past several years, and many others are in process throughout the county and around the world. While these studies provide incremental improvements in scientific understanding about compounds of potential concern and reclaimed water applications, there is much more to learn. The Study will help in this endeavor, but will likely result in additional questions to be answered.
Lack of regulatory guidelines	The lack of federal or state regulations or guidelines regarding compounds of potential concern adds a significant challenge to meaningful communications about potential risk.
Continuing need for wastewater treatment and facility planning	The need to continue treating the region's wastewater will be ongoing throughout the Study. This is an essential public service that cannot be "shut off" or postponed until the Study is completed. The need to plan for regional wastewater facilities will also have to continue while the Study is underway, due to LOTT's obligations to ensure system capacity will be available when needed. That means some additional site evaluations and property purchases are likely during the Study.
Perceptions that the additional water supply is not needed	Many people believe that it rains so much in this area that water shortages are not an issue, therefore using reclaimed water as an additional water supply is not necessary.
Findings may not answer all questions or point to an	Technology and methodology are constantly evolving as is the relatively "new" issue of compounds of potential concern. In addition, the list of

obvious conclusion	compounds of potential concern grows continually as industry creates new compounds and products, and implements marketing efforts to encourage the use of those products. It is possible, and even likely, that the results of the Study will not answer all possible questions or conclusively point to one course of action. Providing information about the use of the results and addressing expectations will be important.
Infiltration already underway	As part of the implementation of the Wastewater Resource Management Plan, LOTT is already infiltrating reclaimed water to groundwater on a site at Hawks Prairie. In addition, the Cities of Lacey and Olympia will begin sub-surface infiltration of reclaimed water as part of their Woodland Creek Infiltration Project in the fall of 2013. Current science and regulations support the use of reclaimed water for recharge as a safe and appropriate use, and for those reasons, operation of existing recharge projects will continue during the Study. It is a challenge for some members of the community to reconcile why infiltration continues while the Study is ongoing.
Source control education	Some stakeholders believe that community and LOTT efforts would be better directed toward source control, versus what happens once contaminants have entered the water table. While activities such as pharmaceutical take-back programs will not address the whole issue, they are positive steps in which the public can participate. Focused educational efforts and activities could effectively complement the Study efforts.
Cost	Issues of cost and cost-benefit analysis form an underlying theme associated with many comments heard from community members: • Cost of the Study • Cost of treating reclaimed water beyond Class A, as well as relative benefits from a greater level of treatment • Cost if groundwater is contaminated This is obviously an issue of great interest to community members, yet it will not likely be a focus of community discussions until late in the Study when assessment of alternatives is underway. It is possible that some members of the public will only become interested and engaged in the Study at that time.
Assumptions of predetermined outcomes	As a public entity, LOTT's motives can sometimes by questioned by those with a general distrust of government. Because LOTT is currently recharging reclaimed water and had planned to expand the effort in the future, some members of the community may expect that the Study is not a genuine, objective effort and that the outcomes are predetermined to favor recharge of reclaimed water as is currently practiced. Independent scientific peer review and an active Community Advisory Group are two of the many steps being taken to ensure that the Study is objective and credible, and that outcomes are not pre-supposed or pre-determined. Involvement of the Cities, County, Squaxin Island Tribe, and Department of Ecology in the technical aspects of the study will also help assure objectivity.

Confusion about options and alternatives that may be considered as a result of the Study findings	Many people jump to the conclusion that recharge with reclaimed water is too risky and that there are simple alternatives that are preferable, like discharging more water to Puget Sound. This was considered as part of the long-range planning process and found to not be a viable option because of water quality issues throughout the Sound. Some suggest a building moratorium to eliminate the need for additional treatment capacity and recharge, but LOTT has no authority to control issues of land use or growth. There are alternatives that can be considered, but they are different alternatives than what were considered in the past. Options that can be considered involve how to manage reclaimed water in the future, including: • How should the water be treated - to what level? • What other reclaimed water uses can be implemented to reduce the need to infiltrate? • What sites make the most sense for infiltration? Which don't make sense? • Should the water be treated differently for different sites?
Peripheral issues	In speaking about the Study, many community members have voiced the importance of considering seemingly peripheral issues as part of LOTT research including: • Association of wastewater treatment or water resources with growth/no growth perspectives • Climate change impacts • Sustainability It will be important to develop a realistic and manageable scope of work for the Study, while at the same time addressing public expectations.
Existing information and case studies	There are many communities in Washington and around the country that already use reclaimed water and employ groundwater infiltration. Many want to learn from those experiences and ensure that LOTT takes advantage of literature and science already available.

IX. Potentially Interested/Impacted Groups

The following audience groups will be a continuing focus of this Plan.

Table 2: Potentially Interested/Impacted Groups	
Academia	Media
Agriculture	Neighborhood Groups and Homeowner's Associations
Business/Economic Interests	Planning Agencies
Civic Groups & Organizations	Reclaimed Water Users
Development Community	Regulators
Educators	Scientists
Elected Officials / Local Government	Site-Specific Neighbors (within Study areas)
Environmental Community & Organizations	Tribes
Faith-Based Organizations	Water Providers and Support Services (public and private)
Health Community	Water Users (public and private, group and individual)
Internal	

X. Pre-Scoping Activities

Before launching the broad public involvement effort, a great deal of groundwork needs to be completed to ensure the initial communication materials and channels are in place. These will include the items listed in Table 3 below.

Table 3: Pre-Scoping Activities	
Mail/email Database	To meet study goals and objectives, LOTT needs to provide information, meeting invitations, reports on the Study progress, and more to interested community members, which requires an accurate and up-to-date mail and email database. The existing mailing list for the Study has been developed with information from public opinion research interviews, Community Advisory Group input, public meeting sign-in sheets, lists from other outreach activities, and individual requests. This database will be continually updated and made to be searchable and sortable. Having email addresses will facilitate the most timely distribution of project information.
Visual Identity	Information regarding the Study will be in front of the community for the next few years. To make its way through the information clutter that faces all of us, communication about the Study will benefit from consistent and unifying references, including the Study name and visual style. Developing a graphic identity that will be recognizable and understandable to broad public audiences may help draw attention to the Study and clearly distinguish Study materials from other LOTT communications materials.
Focus Groups	Focus groups will be used to gather feedback on questions of terminology and informational messaging. Input from members of the public who have not yet been involved in the initial Study planning will be particularly helpful in learning which terms are more understandable to people who are not familiar with or currently following the Study or related issues, and what approaches are most helpful for explaining the issues that are being addressed. Appendix A provides an initial list of terminology to be included.
Terminology	Ensuring consistency of terminology in a broad multi-year program can be a challenge. This challenge grows exponentially when dealing with complex and highly technical subject matter. A terminology guide will be developed for the Study as a resource to be followed by all study team participants to assure consistent communications with both technical and non-technical audiences.
Key Information Points	Key information points will be reviewed and updated. The study team will continue work to simplify and clarify messages that are understandable and relatable for the public. Feedback from the Community Advisory Group, public opinion surveying, and focus groups

	will help with this effort. Appendix B includes draft information points to be refined.
Informational Materials Library	A variety of informational materials and visuals will be needed to foster public involvement throughout the Study. To ensure consistency and to avoid duplicating efforts, all hard-copy materials (see Table 6) will be housed in a centralized library for easy access. An electronic library will also be established as part of the website. Both libraries will also include scientific and technical materials developed as part of the study.
Interactive Online Presence	Today, mobile technology is changing the way we interface with each other and has become the influential means of communication. LOTT already has a strong online website presence and can capitalize on this presence as a way to reach community members and stakeholders, raise awareness about the upcoming Study, provide mechanisms for individuals to weigh in on the scope of the Study, and continue to provide follow-on updates. A web portal dedicated to the Study will be created, reflecting the project's graphic identity described above, to include appropriate project information, materials, presentations, video clips, summaries of input received, and other useful tools to raise awareness. The site will also include interactive opportunities to comment on draft materials, ask and track questions and responses, and allow for feedback during milestone stages of the Study process.
Question & Answer List	Study team members will compile an initial question-and-answer list about LOTT's reclaimed water program, compounds of potential concern, groundwater infiltration, and other key related topics that have been raised by the Community Advisory Group and interviewees. The list will be posted on the website portal and regularly updated throughout the study process.
WET Science Center Program and Exhibits	Building the Study into LOTT's existing education programs will help to maximize educational efforts for audiences including students and families. An initial Study display will be developed for the WET Science Center. Ways to build Study information into existing educational programs and materials will be identified, including displaying Study materials in the WET Center's literature rack.
Outreach Calendar	As the Study unfolds, there will be many simultaneous activities that must be carefully managed and tracked. An internal outreach calendar will be established and maintained to reflect all scheduled activities and key planning deadlines. The calendar will list involved team members to ensure adequate coverage. A streamlined outreach calendar, displaying scheduled public meetings and other activities, will be included on the Study website to inform the public of upcoming events and opportunities.

XI. Study Scoping Phase Public Involvement Activities

The Scoping Phase is anticipated to begin in earnest in July 2013 and be completed by January 2014. The figure below provides a visual layout of the anticipated Scoping Phase activities, including the participation of the various Study team work groups. The table of activities that follows the figure summarizes the steps involved.

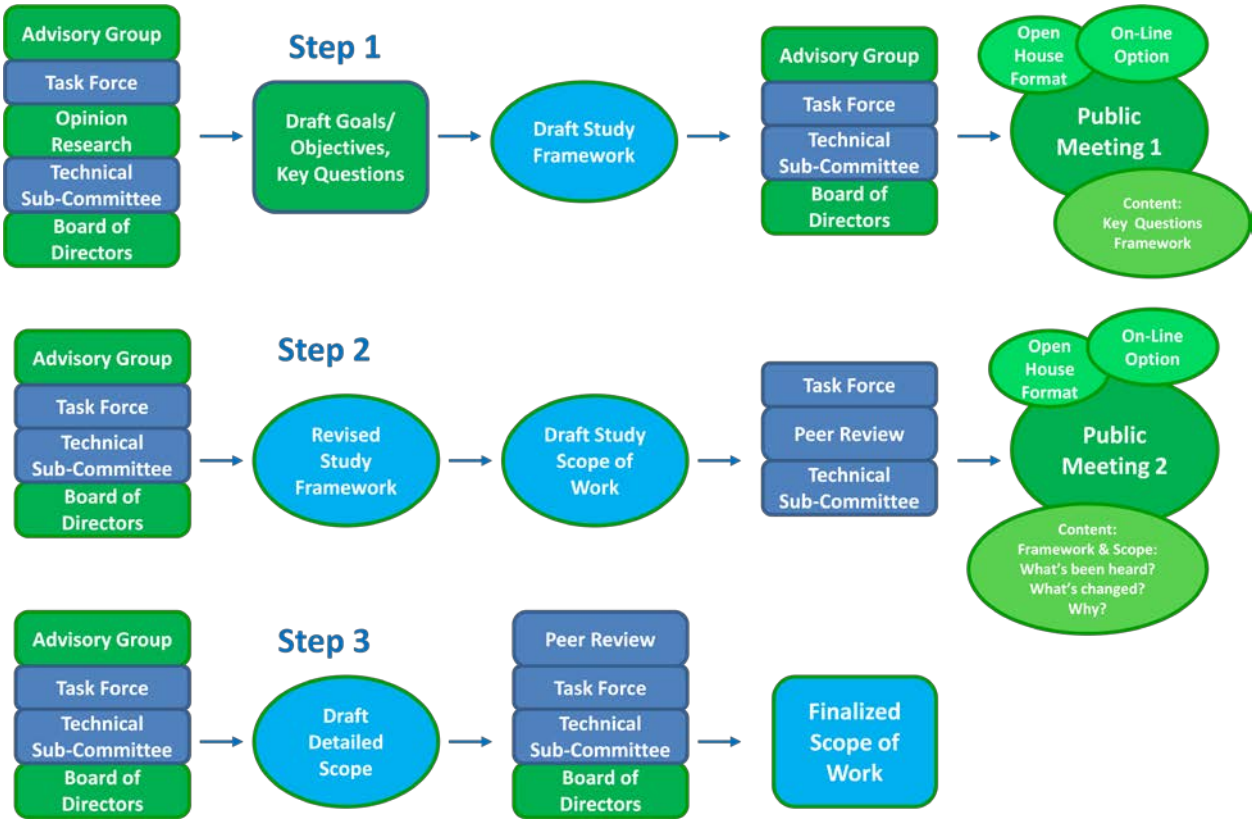

Figure 2: Scoping Process Steps

Table 4: Study Scoping Phase Activities	
Public Meetings	LOTT serves an active and involved community where public meetings are an expected part of the involvement process. Some expect and prefer more formal presentation and discussion sessions, while others prefer one-on-one opportunities to ask questions in a less formal forum. Public meetings will provide an early opportunity to reach people likely to have specific interests and concerns. Scoping Phase outreach will include at least two public meetings (see Figure 2). The goal of the meetings is to present draft iterations of the Study scope of work and gather public feedback to refine and further develop the scope. The public meetings will be dual format – including a presentation and question and answer session, along with an

	informational open house with various stations that allow for one-on-one interactions on specific program topics. Detailed logistics plans and schedules will be created for each meeting to ensure adequate notifications, preparation and implementation.
Interactive Online Presence	The new website portal will include an interactive component in which draft materials, such as the framework for the Study and draft scope of work, can be posted for public review. Viewers will be able to submit comments and questions via the portal. This will serve to complement public meetings by providing an alternative means of interaction for those who cannot or prefer not to attend public meetings. The portal will also include informational materials and presentations or video clips from public meetings.
Internal Board and Staff Updates	LOTT Board members and employees regularly interact with the public and their neighbors and often serve as the face of LOTT and LOTT initiatives. Board members and employees should be part of the outreach process from the beginning so that they are informed about the scoping effort and multi-year plan, are able to provide accurate information about the Study when they are asked, and know where to direct people for more information. This will require regular updates about the Study to the Board members and employees through established and specially scheduled mechanisms and forums. In addition, support will be offered to LOTT Board members to assist in reporting back to their respective city councils and county commission.
Partner Agency Communications	The four LOTT partner jurisdictions are major stakeholders in the Study, and will be affected by the outcomes. In addition, their elected officials and staff are also in the position of responding to questions from the public. Throughout the scoping process, LOTT will ensure that regular updates are provided to its partner jurisdiction elected officials and interested staff through email communications, regularly scheduled inter-jurisdiction meetings, and in-person presentations as needed. In addition to staff, updates will be provided to planning commissions, utility advisory groups, and other committees of the partner jurisdictions, including the local Environmental Educators Technical Sub-Committee (EETAC).
Group Presentations	As part of LOTT's ongoing outreach efforts, LOTT leadership and Study team members will be asked to provide presentations to community groups. These forums provide the opportunity to share information about the Study and the scoping process to groups and individuals that might not otherwise participate, and raise awareness about information resources and opportunities for involvement. At each presentation, a Study Team member will log questions and comments received, which will be used to identify recurring questions that should be addressed in project materials and future presentations.

Newsletter Notices	Numerous opportunities exist to place articles about the Study scoping process in external organization and agency newsletters. LOTT will develop a list of organizational and other appropriate newsletters and will encourage each of these organizations or groups to provide coverage related to the Study. This may involve LOTT-prepared notices about the Study, as well as public meetings and public involvement opportunities. Olympia Power and Light and Green Pages are examples of newsletters that should be utilized.
Public Health Community Outreach	Public health is an important topic associated with water resources and, consequently, the Study. Local and state public health professionals will be asked to provide their input on the scope of the Study, as well as factors to consider when communicating with the public.
Mass Mailings	Mail continues to provide an effective means to reach a mass audience, particularly those who choose not to provide email addresses. A direct-mail informational postcard may be developed and distributed to raise awareness about the Study and how to provide input during the scoping period and beyond. An electronic version could also be developed for distribution to the email list.
Media Outreach	LOTT will work with local media outlets and representatives to provide information about opportunities for input on the scope of the Study. Stories in the media can help raise awareness and share information as broadly as possible about the Study and scoping effort, as well as provide background education on topics such as groundwater and hydrogeology to foster informed community discussion. Media tools could include: • Olympian editorial board briefing • News releases at key scoping steps, including related visuals • A series of informational articles or editorials in The Olympian • Public Service Announcements for radio stations, TCTV, and government access channels • Paid advertisements that provide notice of the Study website and of upcoming public meetings • Special programs on TCTV or other outlets, such as the program Around Thurston County
Record Keeping and Reporting	Providing a record of outreach and involvement activities will be an important tool for documenting the proactive and transparent communications efforts. Summaries of outreach efforts will be prepared and provided to the LOTT Board of Directors, Community Advisory Group, and Study team members.

XII. Study Implementation Phase

Once the Scoping Phase is complete, and the Study scope of work has been determined, outreach efforts will transition to providing updates throughout the duration of the Study, encouraging involvement at key milestone points, providing in-depth information through educational efforts about the many related issues, and fostering community dialogue about Study outcomes and alternatives for wastewater and reclaimed water treatment and uses in the environment. This is referred to as the Study Implementation Phase, which is expected to begin in January 2014. In addition to continuation of the activities shown in Table 4 (modified to focus on Implementation Phase objectives), LOTT will undertake the following:

Table 5: Study Implementation Phase Activities	
Group Presentations	LOTT will actively reach out to a broad range of local groups and organizations to offer presentations at their regular meetings. The audience list included in this plan captures a host of diverse organizations and interests – most of which have periodic meetings or events. Service clubs, civic groups, neighborhood associations, professional organizations, and medical meetings are but a few of the opportunities available. Questions and comments from audience members will be recorded and used to improve future presentations and communications materials. Informational materials can also be distributed at presentations. Study team members who will be presenting may benefit from presentation skills training to ensure speakers convey consistent information in engaging and understandable ways. A detailed record of all presentations will be kept. Presentations that are open to the public will be announced on the Study website.
Source Control Education	Feedback from the Community Advisory Group and the public indicates that LOTT should be expanding its efforts related to source control while the Study is underway to encourage citizens to take actions right away to help protect water quality. LOTT has previously funded Thurston County Environmental Health programs aimed at reducing the use of toxic products, supported past legislative efforts to establish a state-wide pharmaceutical take-back program, and included source control messages in WET Science Center exhibits and programs. These efforts will be expanded and additional opportunities will be explored, including working with partner governments to encourage source control and personal responsibility, promotion of occasional National Prescription Take-Back days, and use of area prescription drop-off boxes.
Flow Reduction/Water Conservation	LOTT will continue to work closely with partner water utilities to implement an on-going regional Water Conservation Program. Incentives for residential and commercial customers encourage water conservation and reduce the need for new wastewater treatment capacity. Over 1,000,000 gallons of water has been conserved through

	this program, and efforts will continue beyond the duration of the Study. While water conservation has already helped and will continue to help reduce the need for new capacity, it cannot eliminate it altogether.
Discussion Roundtables	Smaller meetings or roundtables are popular ways to discuss timely topics in a more informal setting. LOTT will explore opportunities to suggest Study-related topics for appropriate roundtables, invite participants to attend, and participate in or facilitate the discussions as appropriate. This could include small, personalized meetings with neighbors in the vicinity of existing and proposed recharge areas to discuss groundwater information and questions.
Exhibits and Community Events	Public involvement efforts are most effective when the agency adopts a "go to them" vs. "come to us" approach. Signage, exhibits, and displays will likely be more suitable and effective for some venues than presentations – for example displays in government buildings, booths at community events, etc. A list of potential sites and community events will be developed and staff will be assigned to set up stand-alone displays or to staff information/activity booths, depending on the venue and time commitments. Exhibits at events can serve as opportunities to invite comment on the Study or direct people to the program web portal to provide comment and learn more. Providing activities geared toward children can be an effective way to engage parents and guardians in outreach as well. Potential venues include: • School and family-oriented events • Fairs/festivals – Lacey Fun Fair, Capital Lakefair, Olympia Harbor Days, etc. • 5K Races • River/bay cleanup events • Mall displays • Medical fairs
Tours	LOTT already conducts facility tours, but these could be expanded. Throughout the duration of the Study, information associated with the Study should be incorporated into tour presentations, and appropriate materials should be available as handouts. The schedule of tours should be reflected on the Study outreach calendar. In addition to its ongoing tour and meeting activities, LOTT will continue to actively publicize WET Science Center tours, workshops and information as an effective way to raise baseline awareness about wastewater and reclaimed water issues in general and the Study in particular. Tour information and sign-ups will be linked directly from the Study dedicated website.
Community Focused Outreach	Residents and water purveyors who serve or are served by community or individual drinking water wells will likely have specific questions about groundwater recharge, including:

	• existing groundwater conditions • area hydrology as it relates to existing and recommended infiltration sites • likelihood of interaction between reclaimed water and source water • recommendations associated with groundwater infiltration Local community meetings, publicized through homeowners' associations, advertisements, newsletter notices, fliers and media releases, will provide additional opportunities for sharing information with and receiving input from these specific community members.
Newsletter Articles	Following the Scoping Phase public involvement activities, LOTT will broaden efforts to place topical articles in external organization, agency and community group newsletters. Splash, Thurston Talks and Talking Trash are examples of these hard copy and online publications. As part of the Implementation Phase efforts, LOTT will also consider the need to develop its own dedicated electronic newsletter to update interested parties about the Study process, and to educate the public about topic specific issues as well.
Co-sponsored Forums	As shown on the audience list included in this plan, there are multiple groups and organizations whose interest areas touch on topics associated with reclaimed water and water resources. LOTT will identify such groups and explore opportunities to jointly host meetings, or co-sponsor events in which Study information can be shared and input received at appropriate milestones. An example includes working with pharmacies, local government decision makers, law enforcement, and other appropriate agencies to establish additional pharmaceutical drop off events supported with information about proper disposal of pharmaceuticals and personal care products, potential impacts to area resources, etc.
Youth Engagement and Student Education	Youth education offers the opportunity to reach students, educators and families with important information about the role of wastewater treatment and reclaimed water for communities, public health and the environment. Working with existing educator forums, LOTT will explore opportunities to contribute relevant information through existing educator forums, update WET Center information to cover Study-related topics, broaden student tours, create a youth advisory committee comprised of students from area high schools and technical schools, develop internships or field learning experiences, and other ideas focused on student education. Similar discussion will be conducted with local universities to explore educational and field work opportunities.
Public Health Community Outreach	Special roundtables or workshops could be scheduled for these professionals to address specific public health issues. As appropriate, public health professionals should also be tapped to participate in

	presentations, roundtable discussions and media interviews.
Electronic Updates and Social Media	Throughout the Study, the email mailing list will be used to provide updates to interested parties via email. This is an affordable, timely and effective means to reach those who have already expressed an interest in staying current on Study progress and information. Existing social media outlets associated with LOTT's WET Science Center, including Facebook and Twitter, can also be used to provide updates and notices of upcoming public involvement activities. LOTT will evaluate the need to establish social media outlets dedicated to the Study based in part on the benefit gained through use of existing social media outlets.
Video Programs	LOTT has and will continue to assemble video programs highlighting topics associated with reclaimed water and the Study (including pharmaceuticals and personal care products). These video programs will be made available through appropriate means, including the dedicated Study website and other social media. DVD copies can also be made available to interested groups for their meetings and forums. The need to produce topic-specific videos for presentations and for on-line access will also be considered, as well as televising or video-recording public meetings and/or presentations on water quality and similar topics. These video presentations can be part of the informational materials available to the public during the Study. A video record, including brief clips of various public involvement activities, may also be created to document the public involvement process over the course of the Study.
Media Outreach	Media outreach and updates will be a critical part of keeping the community up-to-date on the Study, and providing more in-depth information. Outreach in addition to activities listed under the Scoping Phase may include: • Meet with the Olympian's editorial board at key points • Prepare topics for a series of articles or television pieces • Work with specialty media representatives that cover science, environmental, and public health focused articles • Prepare topics for human interest stories, such as a story associated with youth education efforts and engaged educators • Participate in print and electronic media in-depth interviews • Host media tours • Prepare and update media information kits with releases, background pieces, schematics and visuals
Public Opinion Research	Once the Study data collection and analysis is complete and the community begins discussions relating to assessment of alternatives, it may be helpful to repeat the Public Opinion Research, through either or both a telephone survey and structured interviews. This research

	could measure changes in public awareness and attitudes about reclaimed water, groundwater recharge, and related issues. It could also assess the public's preferences and opinions about costs associated with various levels of treatment or other alternatives.
Record-Keeping and Reporting	Providing feedback on outreach and involvement activities will be a critical step in documenting the open and transparent process. Summaries of all outreach efforts (individually or as categories) and public comment received will be prepared and made available to the Board of Directors and Study Team, and will also be posted online. Reports of public input will include results of surveys, interviews, summaries of questions and comments received (oral and written), and adjustments to planning and/or schedules based on feedback. A complete record will be kept of all public involvement activities implemented as part of the Study. This record will provide a tool for evaluating the effectiveness of the public involvement plan, and may also prove valuable in sharing experiences to benefit future public involvement efforts.

XIII. Informational Materials

Informational materials will be prepared to meet the many and varied needs associated with the activities listed above. Some will be written in technical language to meet scientific needs and others will be written in non-technical language as part of broad outreach and involvement efforts. The following list will support public involvement activities in both the Scoping and Implementation Phases, and will be adapted and refined throughout the duration of the Study.

Table 6: Informational Materials	
NOTE: All documents and information included below will be posted on the Study website and linked from LOTT's main website. Information will be updated to keep the website current while the Study progresses.	
Study Scoping Fact Sheet Scoping Phase and Implementation Phase	Using the Groundwater Recharge Scientific Study fact sheet already developed, an updated, brief fact sheet specific to the Study scoping effort and timetable will be developed for non-technical audiences.
Frequently Asked Questions *Scoping Phase and Implementation Phase*	The Question and Answer list developed prior to scoping will be updated and revised over time to reflect frequently asked questions. It will include easily navigable, topic-specific FAQs that can be rotated, along with other timely information, on LOTT's website periodically to keep the site fresh.
Issues Fact Sheets Implementation Phase	LOTT will prepare issue specific fact sheets and, as additional issues arise, will continue to develop one page sheets highlighting key information. All will be housed in the program materials library. Examples include: • Reclaimed water and treatment levels and standards • What individuals can do to prevent pollution into the

	wastewater stream • Hydrology and personal wells • Update on activities at Hawks Prairie • Proper disposal of pharmaceuticals
Background Papers Implementation Phase	If the need arises, background papers can be prepared combining fact sheets already developed or summarizing input received or previous work, such as case studies of other recharge projects. These papers can be tailored to meet technical or non-technical audiences, as appropriate.
Presentations Implementation Phase	Create presentation materials (using style guide parameters) appropriate for different audiences, including informational boards and PowerPoint presentations. This will ensure that all presentations, regardless of the format, convey key information points using easy to understand, informational graphics.
DVD Implementation Phase	Short video presentations can be prepared about wastewater treatment, groundwater infiltration, and areas being examined in the Study for online use as well as distribution at community presentations to convey key information points and provide memorable visuals. Excerpts could also be used as background footage for television coverage of water issues. For additional exposure, the DVD could be shown on the local cable channel as a public service announcement.
Display Advertisements Scoping Phase and Implementation Phase	Display advertisements can be developed to publicize public involvement opportunities and links to online resources.
Fliers Scoping Phase and Implementation Phase	For some communities and events, fliers – posted in area post offices, grocery stores, and other public venues – may be an effective means of publicizing meetings and special events.
Policy Binders Implementation Phase	Elected officials and their staff members may benefit from binders with technical documents, project background, and other informational materials of interest.
Signage Implementation Phase	Informational posters with simple concepts and images reinforcing information about the Study and water quality issues may be useful as part of exhibits mentioned in Table 4 above, in the WET Center, and in other public venues, as well as for use at open house events.
Comment Cards Scoping Phase and Implementation Phase	Hard copy comment forms and an electronic commenting option will be used throughout the Study to gather public input.
Program Cards Scoping Phase and Implementation Phase	Simple business card-sized cards can be developed to promote the Study website and share the scoping schedule. The cards can be made available to LOTT Board members, LOTT staff, Community Advisory Group members, and others to ensure widespread distribution.

XIV. Adaptive Approach

This Public Involvement Plan is intended to be a living, working document that is continually reviewed and revised in response to community feedback and changing needs. It includes a variety of involvement and outreach activities that will be implemented and others that, once evaluated, may be adjusted or omitted. Activities that are implemented will be documented to create a complete record of public involvement activities associated with the Study. The Plan will be implemented always with its primary goal in mind: achieve a pro-active, productive and sustained public information and involvement process throughout the life of the Study to meet the information and involvement needs of the community, gather input and feedback from the public, and foster meaningful community dialogue about the Study and related issues.

Appendix A: Terminology

The use of consistent and easily-understood terminology makes communications clear and effective. A standard set of terms needs to be established for use in association with the Study and public involvement efforts. The following are terms or phrases that need to be considered:

"Compounds of Potential Concern" or "Pharmaceuticals and Personal Care Products"

Initially, the Study team chose the phrase "compounds of potential concern" to refer to medicines and chemicals from personal care and household products that may be present in water, wastewater, reclaimed water and the environment. This phrase was selected out of a long list of phrases used in literature and the industry. However, it has become clear through recent public communications that the phrase may raise more questions than it answers. It does not provide any indication of where these compounds come from, only that these mystery compounds should be of concern.

Phrases such as "pharmaceuticals and personal care products" are objective and provide the listener with a better sense of the compounds that are in question. Use of this phrase is fairly common in literature and the industry. It could be adopted as the primary phrase in public communications, using the acronym PPCPs, but it borders on jargon. The alternative phrase "compounds from personal care and household products" is quite long and could also be considered jargon, but it is one step closer to plain speak. The alternative "compounds from medicines, shampoos, cleaners, and other products" tells a story about which compounds are being discussed, is inclusive of the variety of compounds in question and meets the plain speak test. It is a long phrase, but once introduced, it could be shortened to "compounds". These phrases will be tested during the scoping phase of the Study to determine one that resonates with the public.

"Safety Assurance" or "Risk Management"

The research report "*Talking About Water*" (WateReuse Research Foundation, 2011) recommends considering use of "safety assurance" rather than "risk management." However, both of these terms could be considered jargon, and may be translated into simpler statements related to safety or risk.

"Groundwater Infiltration" or "Groundwater Recharge"

Feedback suggests that the term "recharge" can be misinterpreted to mean that direct injection is the method used to introduce reclaimed water into groundwater, whereas "infiltration" makes it clear that the method is not direct injection.

"Reclaimed Water" or "Recycled Water"

LOTT has traditionally defaulted to the state-adopted term "reclaimed water" to refer to their tertiary-treated water. However, the term "recycled water" tends to test better with the public – it is more intuitive than reclaimed water. Also, the states of Oregon and Idaho have recently shifted to using "recycled water" instead of "reclaimed water." In Washington, King County has begun using "recycled water" in their public communications.

Appendix B: Key Information Points

During the scoping phase and throughout the Study implementation, LOTT will need to provide information not only related to the Study itself, but also related to a number of specific topics raised by stakeholders. These topics will continue to shift and grow and LOTT must be vigilant in ensuring ample and credible support information is available. The following lists key topic areas identified to date, along with information points and quick facts to frame the technical and complex information in a consistent and understandable way. Supporting details for each topic area will be provided in the informational materials described in the Plan.

The scientific study*: This is the opportune time to pause and pursue a better understanding of local conditions.*

- To address questions about the safety of infiltrating reclaimed water, LOTT is conducting a Groundwater Recharge Scientific Study with help from nationally-recognized and local experts in water, wastewater, toxicology, hydrology, engineering, and related fields.
- The best available science from other studies will be reviewed, as will case studies of related facilities in other communities.
- It is recognized that treatment processes remove some, but not all compounds of potential concern. We need more information about what level of treatment is right for groundwater recharge in the northern Thurston County area.
- Findings will help LOTT and its partner jurisdictions make informed future decisions about reclaimed water treatment and use.
- Public involvement is and will continue to be a fundamental part of the entire Study process.
- The Study will take approximately three additional years to complete. Although answers will not come instantaneously, LOTT is committed to keeping interested groups and individuals informed about progress and findings throughout the duration of the Study.

Study scoping*: Community input is essential to ensure the Study answers the right questions.*

- Study scoping needs to consider topics such as identification of what's in the environment now; what sites should be included in field work; which pharmaceuticals, hormones, and other compounds should be included in lab testing; how water moves through the local groundwater; and more.
- The Community Advisory Group, which represents a variety of community interests, will be involved in review of the Study scope of work.
- There are a variety of ways in which interested individuals and groups can learn more about the Study and provide input into the Study scope.

LOTT's role in the scientific study*: LOTT is the right agency to lead a complex and comprehensive study focused on wastewater and reclaimed water issues affecting the region.*

- LOTT's mission is to preserve and protect public health and the environment by cleaning and restoring water resources for our communities.

- LOTT understands and shares the public's desire to protect our groundwater, consistent with its mission.
- LOTT is the agency responsible for wastewater management throughout the cities of Lacey, Olympia, and Tumwater and their urban growth areas.
- LOTT's team of 67 dedicated and skilled employees have an excellent track record for providing high quality, innovative wastewater treatment and reclaimed water production for the region.
- Like their neighbors, the men and women at LOTT want a healthy environment and safe water supply for families.

What went into the decision to choose groundwater infiltration using reclaimed water? *Public values defined as the result of public opinion research at the beginning of LOTT's long range planning included a direction to "treasure LOTT's treated wastewater as a valuable, long-term resource to be cleaned and restored, reused, then ultimately returned to the environment."*

- There are limits to how much treated wastewater can be discharged to Budd Inlet; the region needs additional outlets for the wastewater effluent.
- Treating to Class A Reclaimed Water standards allows for beneficial uses in the community, as well as groundwater infiltration or other environmental enhancements.
- Class A Reclaimed Water can be used for non-drinking uses such as water features, toilet flushing, or irrigation, reducing the demand on groundwater supplies.
- Strict state water quality standards apply to the production, distribution, and uses of reclaimed water, including protection of groundwater quality.
- This approach benefits Budd Inlet, as less treatment plant effluent needs to be discharged to marine waters if it is being treated to reclaimed water standards and used in the community for irrigation, groundwater recharge, or other purposes.
- The three local cities have been facing water supply challenges, especially during the summer seasons.

Reclaimed water and groundwater infiltration*: Reclaiming water is increasingly widely accepted and widely used for providing a high-quality, locally produced, and sustainable water source.*

- Groundwater infiltration using reclaimed water is practiced throughout the country and several communities in Washington.
- Reclaimed water is used for a variety of purposes across the country that range from restoring wetlands, improving streamflow, recharging aquifers, irrigating landscape and agricultural crops, and augmenting drinking water sources.
- Science and technology research continue to provide additional information about the safe use of reclaimed water for infiltration and other purposes.

Pharmaceuticals and personal care products*: Increasingly sensitive laboratory processes that allow measurement of parts per trillion or even smaller amounts of a substance in water have resulted in awareness that everyday compounds may be present in wastewater effluent, reclaimed water and drinking water at very low levels. The Study will provide more information about local conditions and analyze implications to local water resource management efforts.*

- Every one of us uses personal care and household products and every one of us flushes many of them down the drain and into wastewater throughout the day.
- Compounds from personal care, pharmaceutical and household products can be found throughout the environment. This is not new. These compounds have been entering the environment for as long as people have been using them.
- Advances in science have allowed pharmaceuticals and other compounds to be measured at smaller and smaller concentrations. While science can measure minute traces of various compounds in water, we do not yet know the significance of their presence at such levels on human, fish or environmental health.
- Wastewater is only one avenue for these compounds to move from people to the environment. Wastewater can be treated and cleaned to different levels so that it is safe for a variety of purposes.

Costs*: This Study is an investment in the future of our region.*

- LOTT is tasked with managing wastewater for the region, and investing in appropriate planning to ensure high quality, safe and affordable wastewater treatment and disposition that protects public health and the environment.
- The Study is a critical investment to answer emerging questions and continue to ensure the right steps are underway or will be in place for managing reclaimed water and wastewater in the future.