

LOTT Groundwater Recharge Scientific Study: Focus Group Summary Report

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Prepared by:



LOTT Focus Group Summary

The Athena group conducted three Focus Groups to test terminology, comprehension and level of interest in the LOTT Groundwater Scientific Study. The focus groups were held on September 19, 20 and 23. Recruitment for participation was concentrated on three segments of the Thurston County population: neighborhood association members, senior citizens, and families. Recruitment was not intended to result in a scientifically representative sample, in terms of replicating local demographics. That would have required a much larger sample size and was outside the scope of this effort. Recruitment did, however, result in participation from a variety of different age groups, education levels, and geographic areas, with participants from each of the three LOTT partner cities and areas of the unincorporated county, as well as one participant from Tenino. A total of 34 people were recruited and pre-registered, with final participation at 97%; 11 neighborhood members, 8 senior citizens, and 14 adult members of the Hands On Children’s Museum. All of the Focus Group participants are interested in continuing their involvement with the Study and wish to be on the contact list for future events.

HIGH LEVEL OBSERVATIONS

- Focus group participants are interested in the Study but not the title.
 - Purpose and implications of the Study are not apparent in the title:
 - "Is the Study going anywhere?"
 - The term Recharge is an unfamiliar term causing confusion and skepticism about purpose of the Study:
 - "Why use Recharge when most people will not know what it means?"
 - "Why are you doing this Study?"
 - The term 'Scientific' also seemed negative to some participants:
 - "Scientific sounds as though the Study is being justified."
 - "Scientific means I won't understand it and/or that it is boring."
- Multiple methods of communication will be most effective for public engagement and education.
 - Focus Group participants expressed a desire that communication is simple enough to understand without being condescending.
 - Comprehension is greatly increased when visual aids (photos, pictures, and diagrams) are paired with words in a familiar context.
- People care about the quality of the groundwater and their drinking water.
 - The engagement of the groups increased steadily as their understanding of the issues and purpose of the Study increased.
 - Participants expressed considerable interest in LOTT water treatment processes.
 - Many understood that concern about reclaimed water is a new issue due to the array of household products that may impact water quality.
- Participants generally understood that their personal actions contribute to the problem.

- Many participants expressed openness to changing their behavior to reduce the introduction of chemicals into groundwater.
- Many participants already reduce the use of chemicals at home.

SUGGESTED TERMINOLOGY

The focus groups were designed to elicit effective and well-understood terms to describe the purpose of LOTT's Groundwater Recharge Scientific Study. We did not find absolute consensus on any of the terms; however, we believe that clear trends emerged from each of the three focus groups. Participants indicated that clear pictures and graphics would be essential to comprehension of the Study and its purpose and strongly recommended that LOTT use a variety of visual strategies to develop shared meaning with the public.

Participants were asked to identify a term or phrase that would represent a variety of household and personal care products. They recommended the products be described using a phrase that includes three main categories, and at least initially including a list with examples of some of the products (rather than using one term for all products):

- **Medicines, household cleaners, and personal care products**

Terminology describing the residues of household products that remain in reclaimed water was the most difficult exercise for the focus groups. All three groups rejected the term 'compounds'. They also rejected the terms 'emerging' and 'potential'. The term 'trace chemicals' was debated, with some participants feeling 'trace' minimizes the level, or significance of, the chemicals that remain in reclaimed water. 'Chemicals' was the only term that most participants understood and is recommended as an alternate to compounds. They also felt the term 'residual' was descriptive. Some indicated that the phrase should be followed initially by the phrase used to describe the origin of the chemicals:

- **Residual chemicals (from medicines, household cleaners and personal care products)**

Focus group participants debated the pros and cons of the terms recycled and reclaimed. Two of the three focus groups soundly selected the term reclaimed as more descriptive, meaningful and positive in describing the treated water.

- **Reclaimed Water**

Discussion about groundwater recharge and infiltration stimulated a great deal of interest in the process and the terminology. Recharge was considered confusing and potentially misleading. Replenishing the groundwater was suggested as an alternate to recharge by two focus groups.

The term infiltration was understood, however participants felt it needed to be described. Some suggested percolation as a better descriptor, or natural groundwater filtration. It was apparent that all participants were interested in having a simple, yet high quality graphic illustrating the process of recharge and infiltration.

- **Graphics illustrating the cycle of wastewater treatment and groundwater infiltration should accompany descriptions of the process - regardless of the terminology used.**

Focus Group Findings

STUDY TITLE and NARRATIVE

LOTT Groundwater Recharge
Scientific Study

LOTT Narrative
Handout #1

We all use water every day. Each day, we also use many household and personal care products, such as soaps, shampoos, household cleaners, and medicines. Portions of those products ...

What we did: The consultant asked participants to read the report title and describe what they thought the study was about. Participants were then asked to read a LOTT narrative and identify terms and/or messages that they didn't understand.

What we were looking for:

- Comprehension and engagement

What they said:

- Not sure what the study is about
- What is "recharge"?
- The title is a little dry
- Makes me curious about what "recharge" is
- "Study" doesn't suggest it will ever go anywhere
- Visuals should be used to help illustrate what this is about

What we heard and saw:

Study Title

- Participants did not find the Study title to be descriptive or engaging
- Generally, the title elicited low comprehension and engagement
- Many participants expressed a negative reaction to the word "scientific"
- Many participants did not understand the meaning of "recharge"
- The outcome statement at the end should be moved up front

LOTT Narrative

- Participants generally found the narrative to be clear and understandable but also that it was too passive and somewhat vague
- Many participants identified the key message as (some version of): "Products we use are entering our drinking water"
- Some phrases in the narrative were confusing, such as "higher reclaimed water standards" and "expanding reclaimed water production and infiltration"
- Many participants did not understand the words "recharge" and "infiltration"

PRODUCTS



Pharmaceuticals and Personal Care Products
Medicines and Household and Personal Care Products
Household and Personal Care Products
Medicines, Cleaning Supplies, and Toiletries
Medicines, Soaps, Make-up, and Other Household Products
Other...?

What we did: The consultant asked participants to look at several images and describe what they saw. They were then asked to look at a list of terms that “other people” have used to describe these items and to tell us which terms they liked best (i.e., terms identified by the focus group or by “other people”).

What we were looking for:

- One or more terms that clearly and simply communicates what “goes down the drain”
- Comprehension and engagement

What they said:

- Medicines, medications, pharmaceuticals, prescriptions, over-the-counter drugs, supplements, healthcare products
- Household cleaners, hazardous products, cleaning supplies
- Beauty products, personal care products, toiletries, personal hygiene, daily necessities

What we heard and saw:

Generally

- Participants consistently used three sets of terms to describe the items presented
- Participants used many similar words to describe items
- Some participants explicitly expressed an interest in making the term sound “harmful” so as to accurately describe their perceived sense of danger
- Participant engagement and comprehension increased when shown images of familiar products in context
- Some participants expressed (directly or indirectly) an understanding of their personal role in contributing to potential groundwater (and drinking water) contamination

Terms they liked:

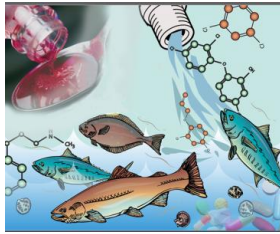
- Medicines/ Medications over pharmaceuticals because it implies over the counter and prescriptions
- Household products, household cleaners, or cleaning products rather than household care products
- Personal care products or self care products

PRODUCTS (continued)

Preferred phrases:

- Medicines, cleaning supplies, and personal care products; Medicines, self care products, and household products
- Household cleaning and personal care products, including medicines
- Personal care and household products, including medicines, soaps, shampoos, cleaning supplies, and other products

WHAT HAPPENS WHEN THESE PRODUCTS GO DOWN THE DRAIN?



Chemicals from medicines and personal care products
Compounds from medicines and...
Compounds of potential concern
Compounds of emerging concern
Trace chemicals
Other...?

What we did: Lisa Dennis Perez explained that not all chemical compounds are fully treated by LOTT; some may remain in the water that is released into the environment. The consultant asked participants to look at the image and describe how to refer to the compounds that may remain in the water.

What we were looking for:

- One or more terms to describe the residue that may be present in water after treatment
- Comprehension and engagement

What they said:

- Residue, leftovers, impurities, pollution, poison
- Chemicals, new chemicals, trace chemicals ("trace may sound too small to worry about")
- Contaminants, toxins, breakdown products
- The legacy of our lifestyle
- Toxic residue
- Harmful substances
- Potentially hazardous
- Persistent, irremovable, remain, stubborn

Preferred Terms

- Residual chemicals
- Chemicals from personal care and household products

What we heard and saw:

Generally:

- Increased comprehension around the wastewater treatment capabilities
- Some participants began to insert their personal values into the terms they used to describe the image
- Increased understanding that untreated chemical compounds are likely to be in drinking water
- Increased engagement about the issue, including an increased appreciation for the complexity of the issue

Terms they liked:

- Chemicals, Contaminants, Impurities, Residue

Terms they did not like:

- Compounds
- Emerging
- Potential

RECLAIMED WATER OR RECYCLED WATER



What we did: Lisa Dennis Perez briefly described the LOTT treatment process. The consultant asked participants to look at a photo showing three levels of treated water (raw sewage, final effluent, and reclaimed water). Participants were asked to select the term that best described water that is treated to a high standard so that it can be used again in our communities.

What we were looking for:

- A preferred term to describe water that the state currently refers to as Class A Reclaimed Water
- Comprehension and engagement

What they said:

- Group 1 was initially split between reclaimed and recycled; after further discussion among themselves, the group was decidedly in favor of the term “reclaimed”
- Group 2 was roughly split between recycled and reclaimed
- Group 3 was significantly in favor of “reclaimed”

What we heard and saw:

Generally:

- Increased comprehension (and curiosity) around the wastewater treatment process
- A few participants (in two separate groups) expressed concern that fish in Budd Inlet were being exposed to “final effluent” (and not the more highly treated “reclaimed” water)
- The terms “recycled” and “reclaimed” mean different things to different people
- Recycled is more generic
- "Reclaimed sounds like something has been done with it, recycled sounds like is being re-used"
- "Recycled makes me think of products that are used as something else"
- Recycled speaks to the fact that water is a cycle; doesn't speak to whether it's clean or not
- Recycled products going downward on a purity scale; reclaimed implies you're getting more of it back
- "Reclaimed sounds like someone owns it...Water belongs to the earth...you reclaim something that was there before"
- In general, the term “reclaimed” connoted a higher sense of treatment and a positive value to participants
- The terms are unlikely to have meaning without context

RECLAIMED WATER OR RECYCLED WATER (continued)

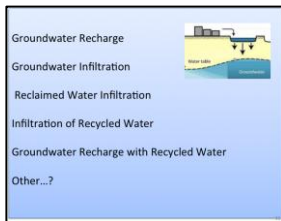
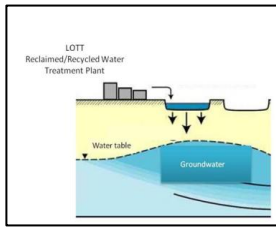
Terms they liked:

- Reclaimed (most participants found this term to be more positive and represent a higher level of treatment)

Terms they did not like:

- Recycled (many participants expressed a negative reaction to this term when applied to their drinking water)

GROUNDWATER RECHARGE



What we did: Asked participants to look at the diagram and describe what was happening.

What we were looking for:

- A term to describe the process of allowing water to soak into the ground, travel through soil, and eventually mix with groundwater
- Comprehension and engagement

What they said:

- Filtration, filtered
- Downward filtration
- Reclaimed water filtration
- Replenish rather than recharge
- Reclaimed water replenishes groundwater
- Percolation through soil
- Natural filtration and recharge, completing earth's natural cycle

What we heard and saw:

Generally:

- No clear pattern around a term to describe the infiltration process
- Participants expressed a higher level of understanding of wastewater treatment capabilities and many participants expressed an interest in knowing more about LOTT treatment processes
- Participants suggested that improved graphics and visuals will help to comprehend the infiltration process
- Some participants began to insert their personal values into the terms they used to describe the image
- Many participants demonstrated an increased understanding that untreated chemical compounds are likely to be in groundwater
- Most, if not all, participants demonstrated increased engagement in the issue

Terms they liked:

- There was not a clear preference of terms, however there was a high level of interest in the graphic and need for additional detail
- Some suggested "replenish groundwater with reclaimed water" or some similar phrase, as they felt all five words were needed to get across the concept

Terms they did not like:

- Groundwater Recharge
- Groundwater Recharge with Recycled Water

TITLE AND “TELL YOUR NEIGHBOR” EXERCISE

LOTT Groundwater Recharge
Scientific Study

Neighbor Story

Work in pairs to describe how you would tell
your neighbor about the LOTT study.

What we did: Participants were asked to look at the Study title again and tell us if their reaction to the title changed because they better understand purpose of the Study. The participants, working in pairs, were then asked to develop a “story” to describe the LOTT Study to their neighbor.

What we were looking for:

- Messages that participants used to describe the Study
- Comprehension and engagement

What they said: Title

- The title does not describe what the Study is about
- It sounds like the Study is about groundwater, but the focus is really on reclaimed water
- The title is misleading, it needs additional information
- “‘Groundwater’ doesn’t feel as personal as drinking water”
- “It needs some sort of visual”
- “The word ‘scientific’ is disingenuous”
- “It still sounds boring”
- “Most people would not understand it”
- “I don’t think most people will know what ‘recharge’ means”
- They suggested deleting the word "scientific"
- They felt "reclaimed water" needed to be in the title, rather than groundwater
- They suggested that a tagline or follow-up phrase might be helpful to provide needed context and interest, i.e. Reclaimed Water Study: Is it safe to replenish groundwater with reclaimed water?

Describe the Study to your neighbor

- "We need to understand the cumulative impacts of our actions - the risks, benefits and trade-offs"
- “LOTT plans to replicate a natural process (to further clean our drinking water)”
- “(Do you know) “What’s in your drinking water?”
- "Is it safe and how safe?"; “We all drink groundwater, what’s in it?”
- "LOTT plans to increase the amount of clean wastewater”
- “(Do you know) The link between sink and drink”
- “LOTT plans to increase the amount of clean waste water”
- "Reclaimed water is the water astronauts drink"
- “The study needs a mascot, like a water drop, or a visual (to brand the study)”

What we heard and saw: Generally:

- Participants actively engaged in the exercise
- Most tailored their message with their neighbors in-mind

TITLE AND “TELL YOUR NEIGHBOR” EXERCISE (continued)

What we heard and saw: Generally: (continued)

- A variety of messages and methods will be needed to reach 'neighbors'
- Most said that they actually do plan to tell their neighbors about the Study
- Participants suggested the KISS credo, "Keep it Simple Stupid"
- They understand that the treatment process doesn't remove everything and are, to varying degrees, concerned about the “stuff” in the drinking water
- They demonstrated a good understanding of the complexity of the issue and the challenge to express it in a concise manner
- Some participants are concerned that the water discharged into Budd Bay doesn't meet the same standards as “reclaimed” water

Terms they liked: N/A

Terms they did not like: Scientific, Recharge

ATTACHMENTS

Focus Group Handout #1: Draft Narrative

Focus Group Handout #2: Tell Your Neighbor

Attachment 1

Focus Group Handout #1

Please read this draft narrative about the study. You will have about 5 minutes to read the narrative and make any notes before the group discussion begins.

The intent of the narrative is to explain what the study is about so that people can decide if they are interested in learning more and providing input. You can help us today by letting us know if this narrative is understandable and/or compelling.

Circle any words you do not know and underline any phrases or sentences that do not make sense. Feel free to mark up the paragraph with notes about what is clear and what is confusing or complicated. Think about questions such as:

- Does this narrative provide a sense of what the study is about?
- What are the top two points you take from the narrative?
- After reading this paragraph, are you interested at all in the study?

Narrative:

We all use water every day. Each day, we also use many household and personal care products, such as soaps, shampoos, household cleaners and medicines. Portions of those products end up going down the drain and into wastewater. Wastewater is collected and cleaned up before it is released back to the environment. Most of our wastewater from urban areas is currently treated and discharged to Budd Inlet. Some is treated to higher reclaimed water standards and reused in the community or infiltrated into the ground, where it eventually mixes with groundwater (the source of drinking water in Thurston County). The long-range plan for managing wastewater in the region is centered on expanding reclaimed water production and groundwater infiltration. Recently, questions and concerns about infiltration of reclaimed water have been raised because of compounds from medicines, shampoos, and other household products that may remain in the water after treatment. To address those questions, a multi-year scientific study is being conducted. Findings will help ensure we are making reclaimed water management choices that protect our health and environment.

Attachment 2

Focus Group Handout # 2

Imagine that you are explaining this study to your neighbor. How would you describe it to him or her to help them understand what the study is about? How would you convince them they should care about the study?

Your group has about 10 minutes to develop an approach for talking with your neighbor about the study. Then each group will be asked to share their ideas with the rest of the focus group. Feel free to make notes on this handout to help you explain your approach. You may wish to:

- Jot down some notes about key points you would make
 - Include a drawing if you think that would help you explain the study to your neighbor
 - Create a slogan or catch phrase if you think that might help get your neighbor interested
-

Notes: