Nutrient Management in Oregon Community Engagement

Executive Summary

Background

During the winter and spring of 2025, the Oregon Department of Environmental Quality (DEQ) partnered with Oregon's Kitchen Table (OKT). The goal was to hear from people who live in Oregon about water quality issues caused by excess nutrients. We wanted to hear their experiences, concerns, and ideas about this topic. This will help DEQ create a strategy for Oregon to address water quality issues caused by too many nutrients.

Nutrients are found in soil, water, and other places. Fertilizer, compost, and human and animal waste are high in nutrients. These include nitrogen and phosphorus. They are vital for all aspects of life.

But when too many nutrients get into our water, they become pollutants. They cause harmful blooms of algae. They can make water unsafe to drink or swim in.

High levels of nutrients result from:

- Runoff from cities, forests and farms.
- Leakage from septic systems in rural areas.
- Certain sources like sewage treatment plants.

Over 1000 people shared what they think about nutrients in water. This is a summary of how we reached people during the process and what they said. There are also suggestions for DEQ about ways to engage people in the future.

This summary is available in English and Spanish. To read the full report, visit https://www.oregonskitchentable.org/engagements/water-quality-and-nutrient-management-oregon.

Participation

OKT used these methods to hear people's thoughts and ideas about nutrients and water quality:

- 16 individual and small group interviews
- Online surveys in English and Spanish
- 13 community conversations
- Tables at cultural and community events
- Partnerships with community organizers and organizations
- Joining regular meetings of organizations

Findings: Common themes

Experience with water quality

- People care deeply about water quality.
- Most people feel Oregon's water is clean and safe. Most feel their drinking water is clean. But, almost all can also point to a body of water they felt was not clean or safe.
- Many people do not know for sure how clean and safe their water is but often they still use it. People also have different points of view on what "clean and safe" means. Clean and safe for drinking water is different from clean and safe water for swimming or irrigation. The time of year and what is happening nearby also makes a difference in how clean and safe people think their water is.
- To decide if water is unsafe or unclean, people often pay attention to:
    - Garbage and debris.
    - How close the body of water is to sources of pollution.
    - How the water looks or smells.
    - Public warnings or word of mouth.
- People, especially students, are concerned about water quality in schools, particularly lead pipes.

- People can see the effects of climate change and drought in their communities.
- Many people feel there is a lack of understanding about what causes problems with water quality. Many people would also like more information from DEQ about sources of pollution and where problems exist.

Excess nutrients

- Many people are not familiar with the term "nutrients" and many people are confused about what it meant. People also find it hard to untangle the effects of excess nutrients from temperature, bacteria, and other water quality concerns.
- And, most people are concerned about water quality issues that can be linked to nutrients. The most common way people experience excess nutrient issues is through:
  - Signs that say a body of water is closed
  - Warnings not to swim or eat fish or shellfish from the water
  - Algae blooms
- Some people had questions about whether excess nutrients cause invasive weeds (milfoil), E.coli, the ocean becoming more acidic, or other issues.
- Recreational users reported high rates of experiencing algae blooms.
- Farm workers talked about sickness and health issues from drinking and bathing water as well as headaches caused by smells.

Solutions

- Some people feel frustrated and distrustful about what the strategy will achieve. Some people are afraid that this will lead to more regulations. Other people are concerned that there will not be real action.
- People are thinking about other people's needs in considering solutions.

Preferred approaches

We asked people to choose from five options about possible actions that DEQ could take. Across all our conversations, people mostly felt that one approach is not enough. People said DEQ should address the issues in various ways.

- People agree that there is a lot of good work already happening. Many people would like to see DEQ invest resources in approaches that already exist and are successful.
- People highlight that education, funding, and regulation are solutions that go together. Education can increase awareness. In turn, this can influence the actions people take. If people do not understand why a regulation exists, they may be less likely to follow it. If people can not afford to follow a rule and there is no help available, it creates conflict.
- Some issues may be caused by actions that were taken a long time ago. There are also places that do not have water quality problems now but might in the future. It is important to think long-term about water quality issues and not just react in the moment.
- People want to see solutions that benefit and work for many different people and groups. It is important for DEQ to balance protecting water quality and supporting agriculture as an important way of life and part of Oregon's economy. It will be important to find solutions that benefit farmers, industry and communities alike.

Outreach and Education

People would like to see outreach and education about:

- The causes of nutrient pollution and its effects.
- Modern agricultural practices.
- The public's role in reducing nutrient pollution. For instance, the impact of lawn fertilizer, pet waste, and runoff from paved surfaces.

People would also like to see more outreach and education in Spanish about contaminated drinking water so that farmworkers and people who are new to Oregon will understand the impacts of contaminated water.

People want DEQ to use clear, locally relevant examples that show how everyday actions impact water quality. That means the examples may be different in different parts of the state.

People suggested working with schools and expanding community education programs.

Monitor and Test

Many people feel they do not know enough about what is causing nutrient pollution to have detailed ideas about solutions. They would like to see more monitoring and testing so that resources are directed where they are most needed.

Many people would like to see more testing and information about drinking water quality. This includes:

- How water is tested.
- How often it is tested.
- What chemicals are found in drinking water.
- The potential health impacts of those chemicals.

There is interest in science programs where people (including recreational groups and students) help to monitor water.

Regulation

Some people believe that voluntary measures have not been enough. They believe that only regulations that can be enforced will drive change.

Some people were frustrated with approaches that place the burden on individuals. Instead, they urged the authorities to focus on big polluters.

Some people talked about specific gaps where regulations would help. One example is to create regulations about riparian buffers on agricultural land. Riparian buffers are strips of land next to bodies of water like creeks or streams. They have trees and plants growing on them. They help filter runoff before it reaches the body of water.

People have conflicting ideas about increasing regulations in agriculture. People see that farming is both a source of runoff and a vital part of Oregon's economy and way

of life. Some farmers feel unfairly blamed. People would like DEQ to find ways to reduce nutrient pollution from agriculture while respecting farmers' need to make a living.

Funding

People felt that funding is key to support the other strategies, like outreach and education, testing, and regulation. People talked about the need for funding to:

- Support farmers to make changes that protect water quality;
- Monitor and upgrade septic systems or create sewer systems in rural areas.
- Upgrade aging infrastructure, like pipes, roads, and systems that filter water.

Priorities

In deciding between where and how to act, people would like to see DEQ make these a priority:

- Human health.
- Areas where there is the most risk of negative impacts.
- Areas where action is very likely to have an impact.

One area of tension was that some people said DEQ should make it a priority to prevent and take action where there are low levels of problems, before the problem gets bigger. Other people felt that the state should focus on areas with the worst water quality issues first.

Some people stressed that fish populations are often the most sensitive to nutrient pollution. So, prioritizing fish would also meet human needs.

Partnerships

We asked people what types of partnerships DEQ should pursue to support the strategy to reduce nutrients. People suggested partnering with:

- Schools
- Recreational groups like kayakers and fishing clubs
- Universities

- Farmers
- Soil and Watershed Conservation Districts
- Watershed Councils
- Cooperative extension, including Master Gardeners
- Other state agencies like the Oregon Department of Agriculture and Oregon Department of Forestry
- Other environmental and civic groups
- Businesses that sell fertilizers like hardware stores or wholesale distributors

In rural areas, many people suggested that DEQ should work with individuals to gather people or help them form new groups. “In rural places, there may not be a lot of existing infrastructure with these types of groups in place,” one person shared.

What Happens Next

Over the next year DEQ will create the statewide nutrient management plan. There may be more opportunities for community members to provide input.

Based on what we heard, we encourage DEQ and other groups working on these topics to:

- Create more opportunities for people to get involved and help with water quality monitoring
- Create ways for people to learn more about excess nutrients and water quality problems.
- Communicate how the nutrient reduction strategy reflects people’s input from this engagement.
- Keep people informed about the nutrient reduction strategy and its implementation.

About Oregon's Kitchen Table

Oregon's Kitchen Table is a statewide community engagement program that invites all Oregonians to participate in the decisions that affect their lives. We particularly focus on reaching, engaging, and hearing from Oregonians that have been left out of traditional engagement processes.

Using culturally specific and targeted outreach, as well as community partnerships, we work with organizers, translators, and interpreters to assure that materials and online and in-person engagement activities are available for and relevant to all Oregonians. We honor and value the wide range of values, ideas, and lived experiences that community members share with us and with public decision-makers.

OKT is housed in the Hatfield School of Government at Portland State University.