Case study: Ilwaco

The small community of Ilwaco sits on the mouth of the Columbia River in southwest Washington and sources its drinking water from Indian Creek which flows through a forested watershed of 893 acres. While the community owns a portion of its watershed, around 388 acres are owned by a commercial timber company.

Current forest management practices are production-focused and do not prioritize the safety and security of the city's drinking water supply. When not managed for drinking water, current forest practices can introduce sediment, chemicals, and irregular flows into Indian Creek, challenging the city's ability to deliver clean, reliable water to the community.

The solution: Keep community drinking water clean by protecting the water upstream through community ownership of the surrounding forest.

A privately owned forest—managed for timber production—surrounds part of Indian Creek, the watershed that provides drinking water to this coastal community. After intensive logging in the mid-1980s, the community purchased 600 acres around Indian Creek in an effort to protect its drinking watershed. However, the prior owner, a commercial timber company, reserved timber rights on approximately 178 acres of the community-owned land, giving the timber company the right to harvest timber until 2028. The remaining estimated 210 acres of the community’s watershed is still in private ownership and is managed for timber production.

The problem: Threat of unsafe drinking water.

When not managed to protect drinking water, forest management practices can impact the quality and quantity of drinking water, increasing community costs to treat and clean the water and intensifying summer water shortages. While the current landowner adheres to state-defined forest practices when managing these lands, it is not enough to ensure the high standards for drinking water management are met without a significant investment in “gray” infrastructure, such as advanced filtration systems, for the community.

An investment in owning these lands will achieve the same result with better long-term prospects for the water system and the community. Following the last logging operation in the drinking watershed, Ilwaco's water treatment facilities struggled to manage the increased sedimentation.

It became clear that without expensive infrastructure upgrades, Ilwaco's existing system could not handle additional commercial logging activities in the watershed that can cause:

- **Sedimentation:** Trees help stabilize the soil. Removing trees near waterways can lead to erosion and increases runoff—adding sediment to drinking water.
- **Chemicals:** Often pesticides and fertilizers are applied to forests after timber harvests—introducing chemicals into the community drinking water supply.
- **Timing:** With fewer trees to filter and slow flows, water runs faster, overwhelming the treatment plant with too much water after rains and providing less to the groundwater supply. Conversely, removing tree canopy reduces how much water trees recover from off-shore fog—a vital water source in dry summer months.
The solution: Buy the reserved timber rights and remaining forest and manage the watershed as the Bear Ridge Community Forest with the purpose of protecting the community drinking water. Managing the land to protect drinking water will secure clean water for the community, reduce treatment costs while also creating recreational opportunities and supporting a tourism economy. Acquisition costs for timber rights are estimated at $1.3 million for the reserved timber rights and $1.53 million for the land. How they are making it work:

- USDA Community Forest and Open Space Conservation Program, grant $600,000
- Department of Ecology, loan $3.4 million
- Additional pending grants and fundraising

Challenges: Local government bandwidth.

- **Capacity.** Small water utilities often lack capacity to conduct large land transactions and manage land once acquired. Their role is, traditionally, managing water after it enters the municipal water supply system, not the quality of water in the stream and the care and stewardship of the land that supports the community’s water sources.
- **Agency support.** Communicating to state agencies that land can be actively managed for multiple uses while still ensuring the protection of drinking water quality. Multiple uses may include timber production that can provide critical funding for acquisition and long-term stewardship and recreation that can make the project eligible for grant funds and build community support for the project.
- **Funding.** Communities lack resources to make large property acquisitions. Smaller communities are often unable to bear increases in already high utility rates and are solely reliant on complex and competitive federal and state grant and loan programs that are not structured to support land acquisitions to protect community water supply.
- **Community buy-in.** Building community support can mean developing an education and outreach campaign on the link between land uses and drinking water quality and how land protection can protect communities and lower their costs as rate payers.

Opportunities: Partnership.

By working with land trusts, Ilwaco found support for increased:

- Community connections
- Funding planning
- Land protection expertise

The Trust for Public Land (TPL) is providing acquisition support, including negotiation of the acquisition, project financing, conservation planning and legislative advocacy. With existing relationships with private landowners, expertise in structuring, negotiating and executing on land transactions, TPL provides critical capacity to support the purchase. Additionally, TPL provides outreach expertise—highlighting the benefits of land protection and explaining the acquisition process with staff, board members and the community, and helping formulate an acquisition plan. “This project builds on The Trust for Public Land’s legacy of working collaboratively with rural communities across Washington to protect critical natural resources,” said David Patton, Northwest Director for The Trust for Public Land. “This work is made possible through our collaboration with the City of Ilwaco whose administration has been a tremendous partner throughout this project.”

Columbia Land Trust supported early project visioning and planning. The organization used its expertise to support the city’s initial planning around purchasing its watershed, including building community support and assisting with grant applications.