

Willamette River Pollution: A People Problem

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We have dammed it and diked it, filled it and diverted it, choked off its tributaries, and paved over much of its watershed, floodplains, and habitat. We've used it as a ditch, as a dumping ground, and as a sewer and waste conveyor.

Portland, Oregon Mayor Vera Katz
"State of City Speech" January 26, 2001

I. Introduction: Educating the Population

The Willamette River is in dire need of support and restoration by the surrounding citizens living in its watershed; many Oregonians are unaware of the adverse conditions facing their waterway. Although scholars are able to effectively analyze scientific data relating to the chemical and biological regression of the Willamette, few measures have arisen historically to incorporate citizen action and public work groups. Education is the primary goal of current organizations to increase participation in river-related activities and inform citizens of environmentally-friendly consumer products. Currently, citizen apathy has caused a void in the amount of citizen interest and participation concerning the restoration of the Willamette River and its surrounding valley. In order to effectively gain Oregonian interest in improving their watersheds and facilitating public reform, organizations must find ways to create entertaining and creative activities for community members.

II. Objectives, Reform, and Renewal – The Political Aspect

In a campaign speech, Eugene mayor-elect Kitty Piercy reflected upon the current status of the Willamette River. She called for citizen reform and participation.

We used to blame all our river pollution entirely on farm runoff but in recent years have come to know that urban pollution is one of the foremost contributors. Once we blamed smoky factories and indeed the remnants of those bygone industries lie today in our riverbeds and continue to poison our present. We thought the high tech industry would be the clean, non-pollutant future but again, we have learned lethal discharge is emitted from these newer industries as well. Seems like we just have to come to terms with everything we do has its impact and needs our careful oversight (Piercy 1).

While a legislator at the State Capitol, she observed the big-business strategies to lower environmental standards. Her concern heightened as she noticed the slow and gradual decline in constituent interest regarding environmental standards, and more focus on personal gain. These near-sighted objectives are fueled by the fact that many Oregonians are affected by the changes in health care, tax increases, and other social reforms.

Scientific results of pollution, such as cancer and barren farmlands, are significant only when they appear in the media's personal interest stories. Kitty Piercy continued in her speech:

And, as far as the City of Eugene itself is concerned, we are upstream from the majority of industrial waste that is being let into the river, but that doesn't mean our part of the river is clean. There is a large misconception that we're all right here and the whole problem is in Portland (Piercy 1).

Science, in many aspects, must be translated into simpler terms if it to be understood by the Willamette Valley community. Events such as river celebrations and incentives for use of eco-friendly products may be the key to uniting the scientific

population with that of the common citizenry. In their 2000 report to the Governor, members of the Oregon Willamette Restoration Initiative (WRI) outlined a plan to unite all citizens. They created plans to develop the distribution of information regarding the Willamette River, urging the Governor to

[d]evelop a “Willamette-brand” point-of-purchase display to educate consumers about products and practices, such as proper use of pesticides, benefits of high performance plumbing fixtures, and Naturescaping (Willamette 33).

Displays and personal savings from using Willamette-friendly products would not only reduce the amount of pollutants in the river, they would begin to increase the visual relation between citizen effort and watershed enhancement. The WRI also stated that,

People respond to encouragement. We do not, however, have any organized system in place to reward people willing to make extra efforts to protect watersheds. Rewards will motivate far larger numbers of people to join together for watershed health. (Willamette iv).

This system of benefits was originally proposed by former Governor Kitzhaber. In an executive order, he stated that citizens must take full responsibility for the Oregon landscape, including the river (Oregon 1). Kitzhaber was an avid supporter of environmental reforms. His goals for the Willamette River included “helping communities comply with environmental laws” and have all strategies founded on “sound science” (Oregon 2). Although as a Governor, John Kitzhaber relied on the political process of executive orders and fiscal responsibility, his background as a medical doctor facilitated the incorporation of science into his speeches and documentation. During his efforts to clean the Willamette, environmental reform was a high priority in the media. This stimulated the increase of citizen action groups and funding for action committees.

III. Public Opinion and Political Reform

Historically, river clean-up efforts in the Willamette Valley have been predominately the task of governmental organizations and industry. However, in 2000, cleaning the Willamette became the new popular campaign of the general population. A broad range of participants began to combine their expertise, while collaborating at forums and outdoor events; selected students as young as 16 were invited to the Willamette Livability Forum. Governor Kitzhaber made a strong political statement at the event when he took a half hour of his time to meet with all of the high school participants at the event to share their views in reforming the conditions of the Willamette River. During this time, age and interest became a key factor in the recruitment of environmental volunteers.

At the 2000 State Fair in Salem, Oregon, the Willamette Restoration Initiative and the Oregon Plan for Salmon and Watersheds conducted a survey regarding the Willamette River. In total 1875 people participated, with ages ranging from 10 to above 60 years. The primary questions were to gather general information about the participants. Overall, the general majority were middle aged and had completed some or all of college.

One of the first questions relating to the Willamette River asked: “What is the biggest water quality problem facing the Willamette Valley?” (Oregon Plan 2). The primary response was “industrial pollution,” followed by “city sewer spills,” and “farm run off” (Oregon Plan 2). The second of these questions followed by asking, “How long do you think it would take to restore water quality and fish and wildlife habitat in the

Willamette Valley?” (Oregon Plan 2). Shockingly, 23 percent believed that the restoration would take place within 1-10 years. Thirty four percent voted for the 11-25 year recovery, while 23 percent believed that the Willamette River and all of its natural habitat would return in up to 50 years (the rest of the percentages voted for “No Problem” or “51-100 Years”). The inconsistency of information comes from media sources. The survey shows that the vast majority of those surveyed gain their information regarding the Willamette from newspapers and television. Although these sources are popular for those with a rigid schedule, articles and news media lack the scientific awareness and in-depth coverage as academic journals and scientific data.

IV. From Idea to Design – A Paid Position

In order to incorporate citizens into the scientific realm of watershed enhancement, many groups are facilitating volunteer activities and internships. The City of Portland Environmental Services (PES) has created four separate college-level paid positions to incorporate students into business, political, and scientific positions in local governments. The topics include “Engineer Design and Construction,” “Planning,” “Materials Testing Laboratory,” “Modeling,” and “Water Pollution Control Laboratory.”

In these research areas, students work full during the summer season to assist staff at PES in an abundant range of tasks. For example the job description for the “Planning” position states that the student will

[a]ssist with technical work in support of watershed planning as part of a multidisciplinary team of professional planners, scientists and engineers. Typical assignments include field sampling and data collection, presentations to the public, public involvement, stewardship activities, research, data management, report preparation, and preparing maps, figures and drawings (*Student 1*).

Therefore, younger citizens are able to find an educational summer job that not only assists the Willamette River, it stresses the importance of science (while providing a paycheck).

Other organizations are providing workers with new perspectives of the Willamette. The Waste to Work Partnership has been developed by the Institute for Sustainable Environment at the University of Oregon and the Center for Watershed and Community Health. The program is designed to reduce the amount of waste emissions from industry. Jobs are created “to find new uses for discarded materials and alleviating poverty through job training and development” (*Waste 1*). Workers are taught the basic fundamentals of recycling and applied critical thinking.

According to the group, most of America’s potential recyclables are shipped overseas to countries such as Asia. The Waste to Work program develops jobs within the state for underprivileged citizens, while allowing them to participate in creative and diverse activities. Their mission is to “create meaningful employment, job training opportunities, and new revenue streams within economically distressed communities and neighborhoods by developing waste-based business ventures” (*Waste 1*). Organizations such as those mentioned above allow workers to assist with the urban and ecological renewal of the Willamette Valley.

V. Volunteerism – Participation and Parties

Unlike the Portland Environmental Services and the Waste to Work program, many environmental groups are non-profit and are unable to pay wages to those who assist them. Oregonian volunteer groups have designed updated methods to entice

workers to participate in their functions. The Stop Oregon Litter and Violence (SOLV) Adopt-a-River Program has been extremely successful at recruitment and retention of their participants. SOLV requires that the stretch of terrain be two or more miles long and that the work group visit the location at least twice a year for two years. Once this is completed, the group's name is recorded into the Oregon River Registry.

In general, the program awards citizens and work groups for cleaning areas of the Willamette River, while providing all of the necessary materials required.

The program offers free materials, including watershed health information, a step-by-step guide to planning a safe and effective cleanup, sample forms and checklists, a resource guide, garbage collection bags, stickers, window decals, T-shirts and program guidance (*SOLV 1*).

According to SOLV's reports, over 3,000 miles of waterways have been currently adopted. The positive aspect of this organization is its commitment to education. Many groups such as churches, schools, clubs, and businesses have partaken in this event as a community service and social opportunity.

City governments also have channeled the environmental interest regarding the Willamette River to benefit their own natural landscape. In Salem, Oregon, city planners developed volunteer projects near Minto Brown Park, a wildlife habitat surrounding much of the city's riverbank.

To capitalize on the community desire to reconnect to the river and the city's desire to build environmental awareness, the city organized a restoration project that involved residents in the tree planting portion of the project. Over 750 volunteers contributed more than 3,000 hours to plant and mulch 5,000 trees and shrubs (*Salem's River 1*).

Efforts such as these were seen in numerous cities along the Willamette River banks.

Communities and small towns also combined efforts to work with larger non-profit

groups. In Eugene, Oregon, the Eugene Stream Team creates an educational, yet enjoyable atmosphere. Sponsored by the department of Parks and Open Space, this group focuses on many of the different objectives than other organizations. Unlike those who focus on litter clean-up, and salmon rehabilitation, the Eugene Stream Team assists with the re-naturalization of soil and plants.

Volunteers for Stream Team have many opportunities during the year to contribute to enhancement of our local waterways. Gathering seeds, growing them out at the Native Plant Nursery, salvaging plants from sites slated for development, removing non-native invasive species, planting native species and monitoring and maintaining those sites throughout the year (*Eugene 1*).

These scientific operations – the slow and gradual processes of uprooting and planting fauna – have been effectively designed as a family and group-oriented activity. Student groups such as the University of Oregon’s OSPIRG have joined forces with the Eugene Stream Team to host river clean-ups throughout the year. In fact, the amount of volunteers from the university has garnered media attention from the *Oregon Daily Emerald*. Although the Stream Team is active in the Eugene community, it lacks the organization and ability to spread to other cities. However, through careful planning and financial support, other groups take the lead as Oregon environmental organizations.

VI. The Willamette Riverkeeper

The Willamette Riverkeeper is a group based on dedicated staff and volunteers, who focus on the entire length of the Willamette watershed. Like the SOLV organization, it allows citizens to adopt areas of the river. However, the tasks are

dramatically different from merely collecting litter. If volunteers are interested in the adoption of an area of the river, they must visit the site once a month, checking for “excessive erosion, new clearings, illegal dumping, sewer overflows, and other problems that affect the habitat and water quality of the Willamette” (*Willamette Riverkeeper* 1). These tasks incorporate critical observation skills with scientific knowledge; through these inspections, citizens are able to increase their knowledge regarding the evolution of the river.

Another strength of this organization is that it allows citizens to be trained by the Department of Environmental Quality to take water samples. The Riverkeepers supply all of the necessary tools and equipment needed to complete the data collections.

Because of the lack of water quality data on parts of the Willamette River, Willamette Riverkeeper has instituted our Testing the Waters Project. The goal of this project is to collect accurate water quality data that can be used to not only augment the information collected by River Guardians in Project 185, but also to augment and verify data collected by the Oregon Department of Environmental Quality (DEQ) and other agencies (1). Therefore, citizens are being informed of the quality of their local watershed by their own participation in the scientific process. This project is extremely beneficial, because it allows environmental agencies to gain more data regarding the Willamette River – especially since many governmental organizations are being downsized and are unable to send experts out to the field to work. The Willamette Riverkeeper prides itself on building a community between scientific experts and citizen volunteers, claiming that it is the “Ears, Eyes, and Voice of the Willamette” (1).

VII. Conclusion

Due to the increase in governmental awareness, the rise of environmental interest jobs, and volunteer opportunities citizens are gaining an even greater knowledge regarding the Willamette River. Although environmental groups and work parties are seldom portrayed in the media, the outright interest in watershed reform has increased since 1990. This awareness may be related to the gradual efforts of organizations to educate Oregonians on the disadvantages of pollutants in the river and the advantages in a healthy environmental community.

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