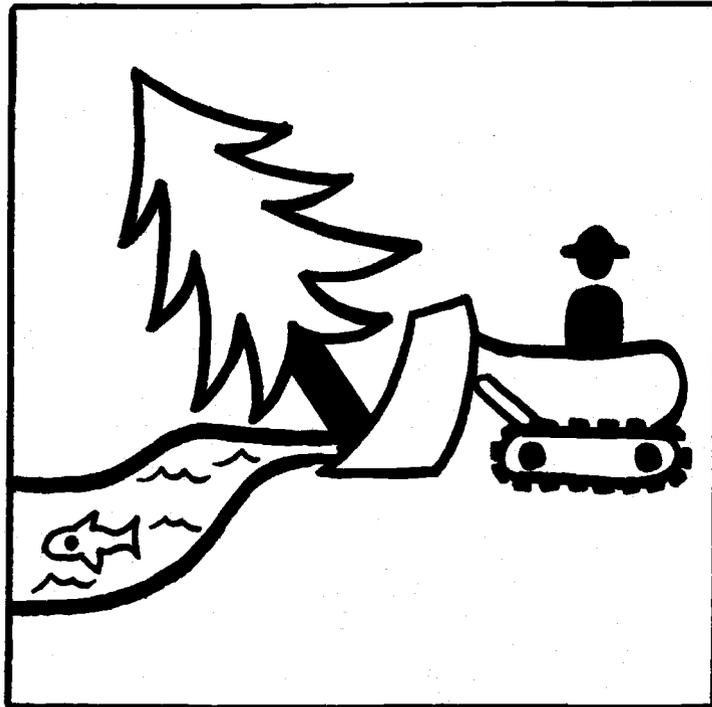


# The Oregon Environment: Development vs. Preservation, 1905-1950



by William Robbins

Oregon  
State  
University

Man's Activities as related to Environmental Quality



## **Preface**

In December 1971, the Rockefeller Foundation announced a grant to Oregon State University for the support of a project entitled, "Man's Activities as Related to Environmental Quality." This grant was made with the expectation 1) that Oregon State University would be strengthened in its capacity to deal with problems of environmental quality, 2) that a multi-disciplinary educational experience would be provided for several graduate students, and 3) that research results would be generated that would be useful to people in state government, to members of the legislature, and to the citizens of Oregon.

The research has attempted to focus on issues that are of burning and crucial importance in Oregon. The impact of environmental policies on income and employment, and the location of people and industry provide examples. A broad range of university disciplines and departments are involved in these studies in an attempt to bring the most appropriate and best talent to bear on the problems identified.

In the conduct of this project, an attempt has been made to present the research results in a way that would be understandable and useful. Liaison activities have been established with those units of state government that might have use for the results. In addition, emphasis has also been placed on issuing research results in an understandable and usable form.

In his third study for this series, Professor Robbins examines the disputes between those favoring development and those favoring conservation in Oregon earlier in this century. He does this by discussing among other topics early conservation and reclamation policy, the cleanup of the Willamette River and more recent controversies over reservoir and dam construction.

Emery N. Castle  
Dean, Graduate School  
Oregon State University -

The Oregon Environment:  
Development vs. Preservation, 1905-1950

by

William G. Robbins  
Assistant Professor  
Department of History  
Oregon State University  
Corvallis, Oregon

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## Preface

Human populations in the advanced technologies of the western world have revealed an increasing tension between advocates who wished to preserve the natural resource environment and those who argued for the full development and utilization of natural resources. These tensions are most apparent in the conservation history of the United States after the Civil War and the emergence of industrialism when conservation developed into a many-faceted issue with different meanings for different people. Some individuals and groups, spurred on by the struggle for financial gain, sought to manage and develop land and water resources with little or no thought given to the consequences of their actions other than promoting economic development. Conservationists of this persuasion, especially in the American West, formulated timber harvesting programs, reclamation and irrigation schemes, and dam construction proposals with the objective of utilizing resources, subjecting otherwise unproductive land to plow and harrow and bringing under control the seasonal alterations in stream flow.

Another group, also defining themselves as conservationists, expressed concern over the activities of the utilitarians and developers who wished to bend the environment to their will. Some of the epic struggles in conservation history involved people who wanted to utilize and develop every available resource as opposed to those who wished to

preserve the natural environment in a relatively untrammelled condition. The long and bitter controversy over the construction of a dam in Hetch-Hetchy Valley in California's Yosemite National Park in the early twentieth century and the more recent struggle to save Dinosaur National Monument in the Grand Canyon are two of the better known conflicts between developers and preservationists.

The state of Oregon experienced similar clashes between people who held opposing views over the extent to which the state's resources should be exploited and controlled. In the first two decades of the twentieth century reclamation and irrigation projects in the Klamath and Malheur basins threatened two natural waterfowl breeding and nesting habitats. In this case conservation in the name of reclamation and irrigation fostered the opposition of conservation-minded naturalists and sportsmen. In the early 1920's other conservationists initiated an effort to clear Oregon's streams, especially the Willamette, of industrial and municipal sewage. The latter struggle spanned a forty year period and only recently has achieved fruition.

The construction of dams on its various tributaries was one of the means devised to eliminate pollutants from the Willamette River. In the eyes of preservationists dam construction posed all kinds of danger-- damage to the esthetic quality of a free-flowing river, and, especially to sportsmen, elimination of the anadromous salmon and steelhead runs. William L. Finley, biologist, naturalist, photographer, and for many years Oregon's leading naturalist, was involved in the reclamation controversies, the struggle to clean pollution from the Willamette, and in

his later years, opposition to the wholesale construction of dams on Oregon streams. This paper, citing Finley's efforts in part, will show that the current national debate between environmentalists (e.g. preservationists) and developers has a long history in the state of Oregon as it does elsewhere.

## Introduction

No topic is currently more popular with the American public than the issue of conservation. To oppose conservation is akin to condemning motherhood, spitting on the flag or throwing out Grandma's cherry pie.<sup>1</sup> On the other hand, nothing is more ethically or morally right than to be for conservation. Even oil company television commercials proclaim their interest and dedication to conservation and protecting the natural environment. Most obvious among these is Exxon's recent public relations gambit concerning the Alaskan pipeline and its attempts to show how the environment is restored to its natural setting after a bout with strip mining.

Public awareness about the effects of the industrial era on the environment increased during the 1960's and reached fever pitch in the first years of the 1970's when a proliferation of published material confronted the reading public. Book and magazine articles carried attractive and compelling titles that included the words "environment," "ecology," and "conservation." Annual Earth Days, the appearance of recycling centers, an emphasis on organically grown foods, the use of biodegradable products, the "emergence" of bicycling for sport and transportation, and a whole host of other concerns exemplify the modern environmental revolution.

The early conservation movement is usually identified with the administration of Theodore Roosevelt and the first decade of the

twentieth century. These were the years of the crusading efforts of Gifford Pinchot who consolidated and expanded the forest reserves and firmly established the Forest Service as a scientifically oriented and efficiently directed public bureaucracy. However, long before the turn of the century thoughtful people were troubled about the heedless and destructive effect of America's expanding industrial economy on the natural environment. Besides transcendentalist figures like Henry David Thoreau and Ralph Waldo Emerson, other writers began turning their attention to humankind's relationship with the environment. George Perkins Marsh in Man and Nature, published in 1864, was one of the first to observe and speculate on the intricate interrelationship of humankind with the natural environment. Writers such as Marsh, John Muir and later Aldo Leopold represent one aspect of the broad range of opinion popularly referred to as conservation.

The more widely known impulse behind conservation originated, in part, when the American Association for the Advancement of Science passed a memorial in 1873 warning the American public about the potential depletion of the nation's standing timber. This led directly to the establishment of the Bureau of Forestry in the Department of Agriculture and set the stage for the emergence of Gifford Pinchot who, more than any other person, defined the predominant trend of conservation for most of the twentieth century.<sup>2</sup>

The central focus of the early conservation movement was a pervading fear that the nation would exhaust its basic natural resources, or at

least those resources that were deemed crucial and necessary to sustain economic growth.<sup>3</sup> Most discussion involving the conservation of resources called for an end to the lumber baron's "cut and get out" policies and advocated the controlled use and development of such resources. During these years newspapers often misconstrued Gifford Pinchot's intentions in their efforts to promote economic development, reclamation of arid lands and other utilitarian schemes they defined as conservation-oriented. Many newspapers overlooked the fact that Pinchot defined himself as a utilitarian.

Conservation has always been a mass of inconsistencies and contradictions. Two tendencies apparent in the conservation movement, one utilitarian and material and the other esthetic and preservationist, caused rifts from the very beginning, and these same conflicts continue to the present day. The contradictions (and confusion) are a problem of definition, because conservation is many things to many people. Its widest application in the early years of the twentieth century centered around the controlled use, development and scientific management of the nation's natural resources. The growth of the Forest Service, with its advocacy of controlled use and management, best exemplified the dominant mood of conservation during these years. For most of the twentieth century utilitarian-oriented conservation predominated, although the preservationist, esthetic propensity was always present.

Utilitarian conservationists waged a fierce struggle against those who wasted and ravaged the nation's resources in the early

twentieth century. However, in their zeal to efficiently order and control every last fragment of natural resource, the utilitarians provoked the displeasure of preservation-minded, esthetic conservationists. The preservationists charged the utilitarians with ignoring balance and harmony between man and the environment, and accused the conservation movement with failing to exercise proper responsibility and caution for the corrosive effects of human exploitation on the natural environment.<sup>4</sup>

The western industrial world tends to view the control and development of natural resources as virtually sacrosanct. A developing technology implies progress and the prevailing social ethic, especially in the United States, has accepted that as an unqualified good. The needs of an expanding economy have encouraged the sometimes unthinking application of technologies and the investment of human resources and talent to further economic development, all in the name of conservation. There is an inclination in the state of Oregon and elsewhere to view dam construction in the interest of flood control, irrigation, and pollution abatement within the general context of conservation. In fact, water resource development and control has been a favored sacred cow for most of the twentieth century throughout the Pacific Northwest.

But, to use the words of the folk song writer and singer, Bob Dylan, "The Times They are A-Changing." In the last few years the meaning of conservation has altered, at least in its public definition, for an ever-increasing number of people. One authority suggests that

the dominant theme in conservation today is a heightened sensitivity to the potential harmful effects of human interference with the natural environment. Predominant here, according to this writer, are unilateral acts which interfere with the public's right to purity of water and air and freedom from noise.<sup>5</sup>

Although this may be true, there really is little that is new in recent trends in conservation. An ever present tendency (e.g. the esthetic and preservationist) merely has gained the national spotlight in an age when the public is increasingly troubled and disturbed about the consequences of human interaction with the environment. Anyone who has seriously read nineteenth century writers like Henry David Thoreau or George Perkins Marsh, or for that matter, a whole host of twentieth century writers, quickly realizes that contemporary concern for the environment is not a recent development.

According to popular lore, and especially that expressed in the national media, the state of Oregon has made strident efforts in recent years and has established precedents for the rest of the nation in providing legislative safeguards for the environment. And, the media would have us believe, the recent emphasis on conservation in Oregon has a new twist to it. Whereas early conservationists in Oregon such as Governors George Chamberlain (1903-1909) and Oswald West (1911-1915), placed major emphasis on regulating and developing the state's natural resources, now livability and preservation are at the center of current environmental attention. Ex-Governor Tom McCall played a major part in a public relations campaign in the late 1960's and early 1970's which helped popularize this concern.

During his administration as governor and especially since he left the governor's office early in 1975, McCall, a most effective publicist, has spread the Oregon story across the land. His administration made claims to the establishment of a Department of Environmental Quality, a statewide land-use planning measure (one of only a handful in the nation), better solid waste disposal methods, legislation to preserve scenic rivers, the beginnings of the Willamette Greenway system, legislation to eliminate the high volume of highway litter caused by throw-away cans and bottles, and restrictions on the use of wilderness areas to protect natural beauty.<sup>6</sup>

The ex-governor attributes these accomplishments to a "unique attitude toward the land, air and water in Oregon. The existence of this attitude surfaced in the 1960's," according to McCall, "when the state turned its efforts towards restoring and preserving its waterways." Cleaning up the polluted Willamette River with the support of citizens and the cooperation of industries along the river is the best example of this effort, according to McCall supporters.<sup>7</sup>

There is much truth, of course, in the governor's claims for the state of Oregon, nevertheless, the heightened rhetoric of recent years about Oregon's achievements in preserving its environment goes well beyond actual accomplishment. But, even more important, it overlooks citizen concern and some of the achievements of conservationists in Oregon many years earlier. Some Oregonians displayed a persisting concern for the consequences of agricultural development and industrial growth throughout the twentieth century. Individuals and groups such

as these urged public agencies to be cautious and expressed increased opposition to the philosophy and activities of utilitarians and developers. Thus, the work of the Forest Service, the Bureau of Reclamation, the Army Corps of Engineers and other like-minded utilitarian conservationists did not go unchallenged. One of the purposes of this study is to indicate that a few people in Oregon shared a holistic view of the environment long before Governor McCall appeared on the scene, and, in their efforts to protect the environment, they sharply opposed some of the policies of the utilitarian conservationists.

## II

### Early Conservation and Reclamation Policy

The predominant mood of conservation in the state of Oregon closely followed patterns established at the national level, a pattern that was primarily utilitarian and development oriented. Two Oregon governors, George Chamberlain and Oswald West, supported the early conservation policies of Theodore Roosevelt and Gifford Pinchot and supported federal control and management of natural resources to protect them from excessive exploitation.<sup>8</sup> Oswald West's initial message to the Oregon legislature in 1911 clearly illustrates his utilitarian approach to conservation:<sup>9</sup>

It is most vital to the future prosperity of this state and of its people that its natural resources be conserved to the fullest extent in order so that they may be fully utilized and developed for the benefit not only of this but of future generations.

Gifford Pinchot expressed a similar attitude toward the nation's natural resources with special reference to the federal forests. "The object of our policy," Pinchot said, "is not to preserve the forests because they are beautiful...or because they are refuges for wild creatures or the wilderness...but...the making of prosperous homes.... Every other consideration becomes secondary."<sup>10</sup>

The Oregon Conservation Commission, first appointed by Governor George Chamberlain in 1908, cogently expressed the utilitarian and development orientation of conservation in its initial published report in 1908. The commission described conservation as orderly development and defined the conservation of resources as "the highest utilization of them. It means...that man has attained a more commanding position over the forces of nature."<sup>11</sup> Two years later the commission saw its duties as having a "most practical meaning." Indeed, "it would have been almost equally appropriate to call it a 'development' commission," whose duties were to formulate "a definite policy for the fullest and most permanent use by the people of Oregon's natural resources."<sup>12</sup>

The traditional approaches to conservation history always cite the Carey Act of 1894 and the more important Newlands Reclamation Act of 1902 as great advances in the conservation of natural resources.<sup>13</sup> Although the Carey Act was relatively ineffective because the amount of capital required to develop difficult irrigation projects was prohibitive, the Newlands Act had a considerably greater impact. The act authorized the Secretary of the Interior to designate irrigation sites

and to set up a reclamation fund from the sale of public lands to finance reclamation projects. These projects, administered by the Reclamation Service, required settlers on reclaimed land to repay the costs of irrigation construction within ten years.<sup>14</sup>

The Oregon Conservation Commission ardently supported both the United States Forest Service and its policies and the Reclamation Service and the projects it promoted.<sup>15</sup> The commission valued the state's water power potential "of far greater importance to the people than any other natural resource." It urged the rapid development and use of the state's water power, the development of irrigation in the Willamette Valley and the enactment of a water law so that water power resources would be protected from monopoly.<sup>16</sup> The commission repeatedly pressed the argument that the growth of the state depended on an increasing agricultural population, and this, in turn, depended especially upon the development of the state's water resources for irrigation. "The highest type of agricultural development," the commission claimed, "is found in irrigated sections."<sup>17</sup>

The Oregon legislature, acting on one of the recommendations of the Oregon Conservation Commission, enacted a state water code in 1909. The act gave the state control of all waters in Oregon, provided police powers to enforce its regulations and placed a limit on the use of water for power development at forty years.<sup>18</sup>

Despite the enactment of federal legislation to encourage the development of irrigation projects, most efforts in Oregon were voluntary,

cooperative and accomplished through private capital investment. Until well into the twentieth century privately financed irrigation projects far surpassed acreage irrigated under the provisions of the Carey Act and through the assistance of the United States Reclamation Service. The following table indicates the percentage of the total acreage irrigated in Oregon under private, cooperative and public sponsorship by 1909:<sup>19</sup>

	% of total land under irrigation
U.S. Reclamation Service.....	3.2
U.S. Indian Service.....	0.1
Carey Act.....	3.6
Irrigation Districts.....	0.2
Cooperative Enterprises.....	21.8
Individual Enterprises.....	59.8
Commercial Enterprises.....	<u>11.3</u>
	100.0%

Early irrigation efforts in Oregon, like forest fire prevention and protection, was primarily voluntary and cooperative. The failures of state and federal irrigation initiatives caused the Oregon Conservation Commission to urge in 1912 the public development of water resources, because "private capital will not lead the way to lowering prices..."<sup>20</sup>

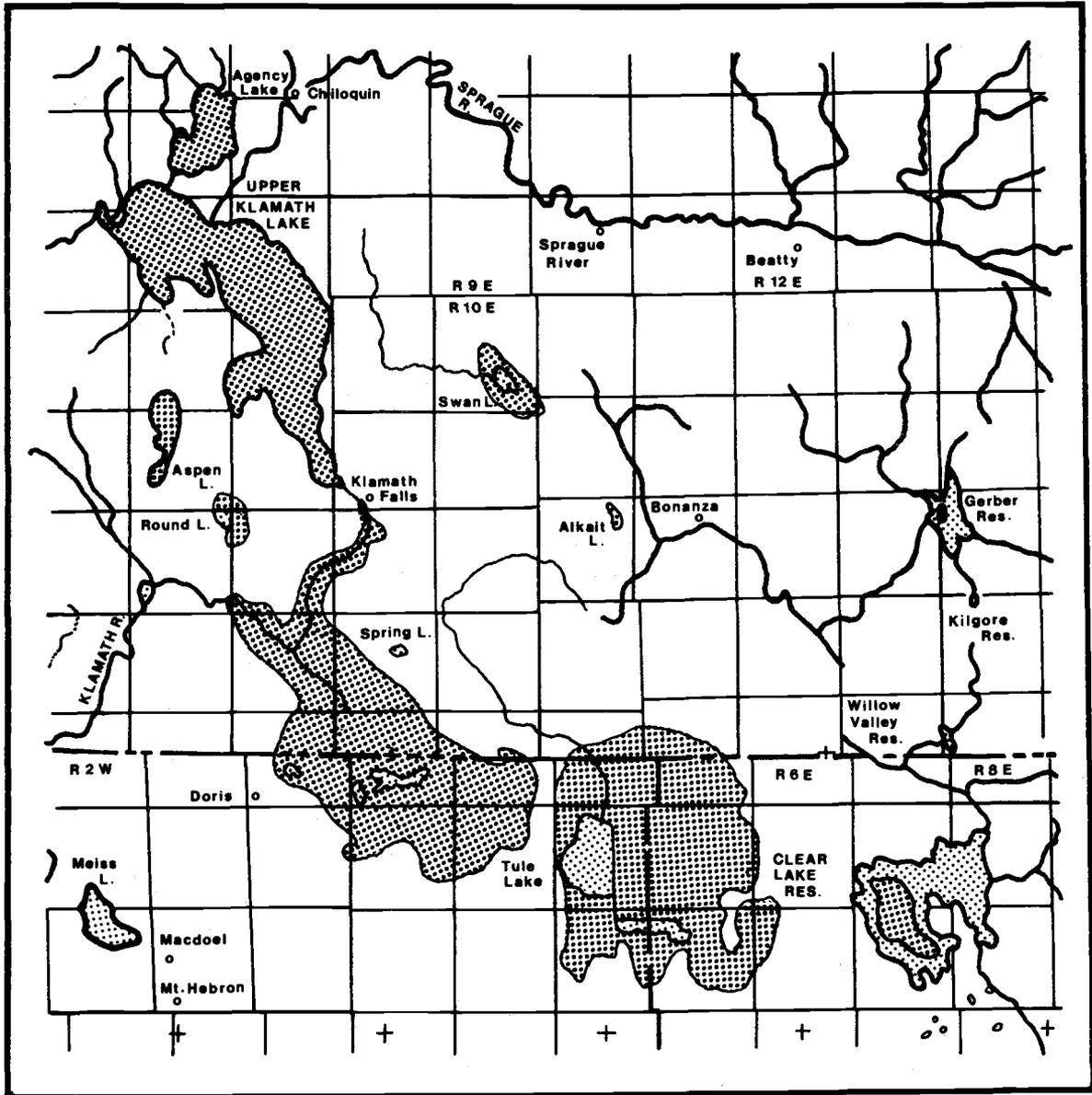
The first attempt to develop and reclaim irrigable land in Oregon under the Reclamation Act of 1902 began in the Klamath basin in 1906.<sup>21</sup> This Bureau of Reclamation project, the second oldest in the nation, was partially responsible for the subsequent growth of agriculture in Klamath County. By 1970, Upper Klamath Lake served as one of the primary sources of water for over 300,000 acres of irrigated land.<sup>22</sup>

However, implementation of part of this reclamation scheme brought conflict to the ranks of those who viewed themselves as conservationists. More appropriately, it was another classic conflict between utilitarians and preservationists.

Before man-made structures altered it, a natural basalt dike at the southern end of the lake served as the outlet for Upper Klamath Lake. This dike created a natural falls and is the headwaters of Link River, a short stream which empties into Lake Ewauna. During flood periods Lake Ewauna overflowed into Lower Klamath Lake, a large natural marsh that covered an area which extended from the Klamath River into California and covered approximately 94,000 acres (see adjoining map). The area had long been of interest to agriculturists and some of the earliest private irrigation efforts took place in the lake bed of Lower Klamath Lake. The area on the Oregon side of the border is now almost entirely reclaimed for agricultural purposes.<sup>23</sup>

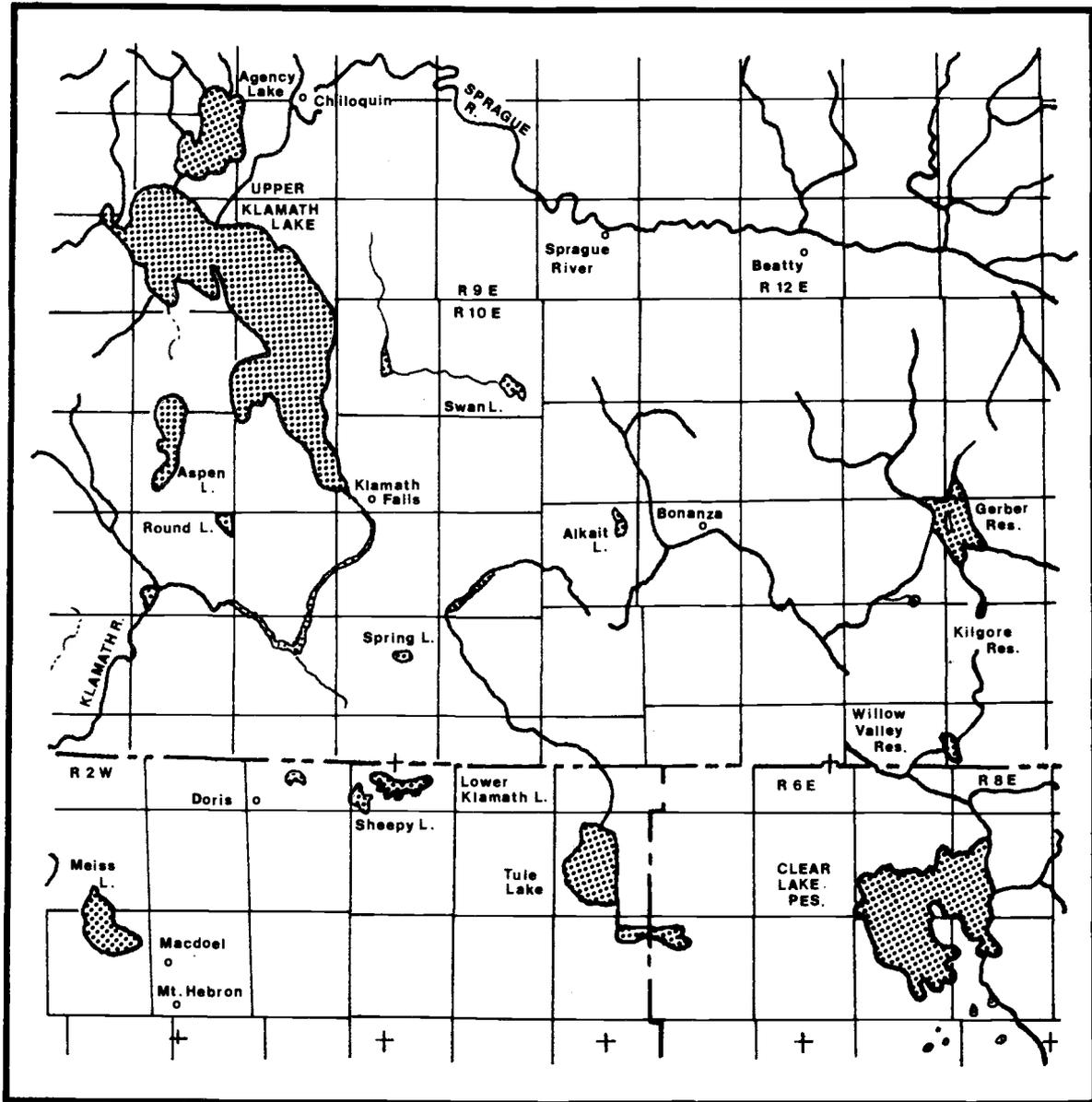
The Reclamation Service conducted a reconnaissance survey of the Klamath basin in 1903, and the survey, in turn, led to congressional approval in 1905 of the Klamath Reclamation Project and the subsequent organization of the Klamath Water Users Association. At the same time, the Oregon legislature took steps to advance the irrigation and reclamation of the Klamath basin. The legislature authorized the United States Government to: (1) lower the water level of Upper Klamath Lake, (2) lower and drain Lower Klamath Lake and Tulelake in Klamath County, and (3) cede to the United States any lands uncovered by the lowering or drainage of said lakes. In 1907 the Reclamation Service authorized

COMPARATIVE WATER SURFACE AREAS



Klamath Basin, circa 1904

COMPARATIVE WATER SURFACE AREAS



Klamath Basin, 1970

the building of a structure at the Klamath straits crossing to control the overflow from the Klamath River into the Lower Klamath Lake area.<sup>24</sup>

### III

#### William L. Finley and the Wildlife Refuges

Enter William Lovell Finley, the person singularly responsible for urging President Theodore Roosevelt to establish the Klamath Wildlife Refuge in 1908. The national wildlife refuge system dates from 1903 when the Pelican Island Refuge was designated in Florida. The reason for the creation of this initial refuge, and most of the other

Roosevelt-created refuges, was to protect the plumage bird population from being decimated for profit in the millinery trade. The so-called "plume hunters" were active in Klamath marsh and the Malheur Lake area, both in Oregon, in the late nineteenth and early twentieth century. Partly out of his interest in photography and because of a growing interest in birdlife, young William Finley photographed and studied the depletion of the bird populations in several natural waterfowl nesting areas in Oregon. Finley sent the results of his studies, accompanied with photographic evidence, to President Roosevelt. The president, persuaded by both Finley's photography and his written testimony, designated Three Arch Rocks, off the northwest Oregon coast near Oceanside, Malheur Lake, and Lower Klamath Lake as bird refuges.<sup>25</sup>

Finley's studies and the president's subsequent actions exposed much of the market hunting for game birds. Waterfowl, especially those with colorful and unique plumage, were valuable because it was fashionable for women to wear plumes in their hats around the turn of the century. Leading Oregon stores like Lipman Wolfe and Company, and Meier and Frank, purchased plumage in large quantities. William Finley's exposes ended market hunting for game birds in Oregon, although it took a few years to completely suppress the practice because of a lack of enforcement personnel.<sup>26</sup>

Governor Oswald West appointed Finley, who was rapidly becoming the state's leading naturalist (and preservationist), as the first member of the Oregon Fish and Game Commission in 1911. The following year he was appointed the state's first Game Warden, and a few years

later Finley was appointed to the newly created position of State Biologist.<sup>27</sup>

The floating tule islands and clubrushes of Lower Klamath Lake provided a nesting and feeding ground for a vast multitude of waterfowl. Grebes, terns, herons, sandhill cranes and more common waterfowl species lived in the vast marsh that Roosevelt's order set aside as a wildlife refuge in 1908.<sup>28</sup> The refuge area, however, was subject to the prior claims of the Klamath Reclamation Project, because Lower Klamath Lake was included as part of the project under the Reclamation Act.<sup>29</sup>

The Reclamation Service ordered the Bureau of Plant Industry of the Department of Agriculture to experiment on the beds of Lower Klamath Lake as part of its Klamath project. Experts thought frequent irrigation would leach the alkali out of the soil. This evidently was not the case since a subsequent Department of Agriculture report on the productivity of Lower Klamath Lake proved to be largely negative. The report concluded that the presence of alkali content would prevent the land from being agriculturally productive.<sup>30</sup> Despite the negative testimony in the Department of Agriculture report and oblivious of the potential damage to the waterfowl habitat, private individuals organized the Klamath Drainage District and applied for assistance from the Reclamation Service. William Finley astutely reckoned a few years later that "promoters are always ready to step in where experts fear to tread."<sup>31</sup>

This brings the story back again to the dike controlling the waters which flow from the Klamath River into Lower Klamath Lake. In 1917 the

gates regulating the overflow waters were closed and Lower Klamath Lake dried up through evaporation. What once had been a productive breeding and nesting area for wild bird populations was reduced in a few years to a virtual wasteland. William Finley's correspondence with the Secretary of the Interior in 1923 revealed that the "reclaimed land" was agriculturally unproductive although some money was spent on the construction of ditches. The soil simply proved to be too alkaline.<sup>32</sup>

Finley and his wife, Irene, reported in 1925 that Lower Klamath Lake was "a great desert waste of dry peat and alkali..." Fire, which ravaged the area annually, had burned to a depth of three feet. "One of the most unique features of North America is gone," the Finley's claimed. "It is a crime against our children. Their birthright has been sold for a mess of pottage."<sup>33</sup> Thus, "for thousands of game birds and insect-eating birds that might have been raised on this reservation, the public got nothing in return." The Finley's contended that the destruction of Lower Klamath Lake deprived sportsmen of a great number of game birds that formerly nested in the area around the lake. In addition, following the drainage of the lake a great infestation of grasshoppers covered the country to the east of the lake in 1922. This, according to the Finley's, illustrated the tenuous and close relationship of birds with the rest of the environment, especially in natural insect control. "In the annihilation of the great marsh areas of the Klamath country, the balance of nature has undoubtedly been overthrown to a considerable extent."<sup>34</sup>

Finley, with the assistance of his wife, expressed in his writings a deep awareness and concern for the interrelatedness of living things and their environment. Furthermore, he used photographic evidence to support his writing in the finest tradition of the skilled naturalist. Finley's opposition to the draining of Lower Klamath Lake was based firmly on long familiarity with the area and an equally convincing awareness of the cost-related benefits of the reclaimed land. Because Finley was an active writer and because he held leadership positions in organizations like the Audubon Society and the Izaak Walton League, the full extent of his influence may never be entirely or fairly evaluated.<sup>35</sup> Finley also was an inspiration for many people who subsequently were involved in preservationist causes in Oregon.<sup>36</sup>

#### IV

#### Malheur and the Battle for Water

The Malheur Lake region in central Oregon's Harney Basin experienced a series of circumstances somewhat similar to that of the Lower Klamath Lake area. In the late nineteenth century plume hunters entered the area in large numbers and nearly exterminated egrets and greatly reduced the number of terns and grebs. In addition, settlers in the Malheur area began diverting the already scarce water for irrigation, and in the process they destroyed many acres of natural nesting and feeding habitat. These circumstances, along with William L. Finley's studies

and photographs, prompted President Theodore Roosevelt to establish a waterfowl and bird sanctuary in the Malheur Lake area in 1908.<sup>37</sup>

The establishment of the sanctuary also provided a water right to promote waterfowl nesting and breeding on the fringes of Malheur and Harney Lakes. However, irrigation activities on the Silvies and Blitzen Rivers which feed the basin lakes dried up most of the water before it reached Malheur Lake. Irrigation activities and a series of droughts caused almost continuous drying of the refuge area from 1912 to 1934, although the most serious problems did not occur until a decade after the Lower Klamath Lake was drained.<sup>38</sup>

The issue of water control and water rights was the most important single factor in retaining the Malheur as a valuable waterfowl nesting and breeding area. A biological survey revealed that water rights to the Blitzen River was crucial if the refuge were to fulfill its purpose. Nevertheless, diversion for irrigation continued into the 1930's when Franklin Roosevelt and the New Deal provided funds to protect migratory waterfowl. In 1935 the United States Fish and Wildlife Service purchased the "P" Ranch holdings in the Blitzen Valley from the successors to Peter French, a late nineteenth century cattle baron. The newly designated Malheur National Wildlife Refuge then gained water rights to most of the Blitzen's runoff through purchase of the ranch and assured that the habitat would be protected. Three Civilian Conservation Corps camps subsequently were set up at the refuge and its corpsmen employed in building an extensive water control system, new roads, a site for a

lookout, a dam, bridges, reservoirs and cattle guards. In 1941, the 15,000 acre "00" Ranch to the west of Harney Lake was added to the refuge.<sup>39</sup>

The purchase of large ranch holdings to preserve the refuge watershed did not end the struggle to protect the Malheur Refuge from predatory interests. In the immediate aftermath of World War II, real estate promoters in Burns proposed that 23,000 acres in the heart of the old "P" Ranch holdings be transferred from the United States Fish and Wildlife Service to the Bureau of Reclamation and then subdivided into 160 acre lots and sold to war veterans.<sup>40</sup> The 23,000 acres was a critical part of the refuge, because it included water rights on the Blitzen River. Conservationists, naturalists and duck hunters strongly opposed the transfer and the proposition was defeated.<sup>41</sup>

The Malheur Refuge contains about 180,000 acres of habitat today and hosts one of the largest concentrations of migrating waterfowl in the nation. Unlike most of the marshlands in the United States, the Malheur is relatively unchanged. Use and control of water in the Malheur area has been directed toward improved waterfowl management in recent years and the effort to preserve the natural habitat is a much more successful one than in some of the other strictly reclamation developments in the western United States.<sup>42</sup>

Water control in the Malheur Refuge is successful to the extent that adequate water level is available over ninety-five percent of the refuge, furthermore, haying and grazing are allowed under permit on the refuge and are considered important operations. Sometimes as many as

35,000 cattle are grazed during low water periods. Malheur Lake appears today as a vast, shallow marsh, interspersed with open areas and stands of emergent vegetation. The lake is surrounded by vast meadows and has an average depth of less than three feet during most years. Most important and vital for the health of the refuge is the fact that since 1937 the waterfowl habitat receives top priority for all late summer and fall water.<sup>43</sup>

The same cannot be said of the effects of water management on waterfowl in the Klamath basin. Although the area is still a prime nesting and breeding area for waterfowl, the habitat is much reduced in size because of the draining of Lower Klamath Lake. The fact that the Reclamation Service established prior claims before designation of the refuge was most significant in this case. The economic argument to promote the interests of agricultural development in the Klamath region prevailed over claims of preservationists who wished to see the area remain in its natural state.

The influence of preservationists in these years was due to their influence at the national level more than their abilities to control the direction of state politics. At least, this was true of the establishment of the refuges during the administration of Theodore Roosevelt. The Oregon legislature and most state administrative agencies were more interested in developing and utilizing the state's resources than preserving them. Certainly the Klamath example supports this propensity. At the same time, there were groups and individuals in the state who urged restraint upon the heedless development of resources, who cautioned

against disturbing certain natural areas, and who were increasingly mindful of the effects of industrialism and urban growth on the streams and rivers in the state.

## V

## Cleaning-up the Willamette

The governorship of Tom McCall (1967-1975) has been one of the most popular in recent Oregon history. His relations with both local and national media people was exceptional and the media, in return, has reciprocated and proclaimed the ex-governor one of the nation's leading environmentalists.

The clean-up of the Willamette River is one of the accomplishments that McCall has been applauded most for. A National Geographic article in 1972 praised the McCall administration for bringing the river "from shame to showcase." During McCall's tour as governor, the article claimed, Oregon accomplished "the most successful river-rejuvenation program in the country." The governor was quoted as saying that fall runs of chinook salmon were unable to make their way upstream "until we cleaned up the Willamette River." Most pollution was eliminated from the river, according to the National Geographic, after the election of McCall in 1966, "both candidates for the governorship...campaigned vigorously for conservation and an end to pollution. Shortly thereafter, leadership and legislature kept their promise to the people by eliminating loopholes in existing laws and writing more forceful ones."<sup>44</sup>

As one might expect, the accomplishment of eliminating municipal and industrial wastes from a river is a difficult and lengthy task. The story of pollution abatement in the Willamette River is no exception. The major decisions and actions that improved river water conditions took place many years before Tom McCall became governor. It is merely the cumulative effect of the "clean-up" effort that became apparent in the 1965-1970 period. Although McCall always has been a firm advocate of cleaning-up the environment, credit for the real achievements should not be misplaced.

Very early in the twentieth century the Oregon State Board of Health, organized sportsmen, and the Oregon Fish and Game Commission became concerned about the effects of river pollution on human health and the migrating anadromous fish. The initiative and efforts of such groups were the prime ingredients in awakening the people of Oregon to the fact that there was a stream pollution problem.<sup>45</sup> Anti-pollution groups thus forced the state legislature to make some hard decisions which eventually contributed to a cleaner river by the time McCall became governor in 1966.

The biennial reports of the Oregon State Board of Health which date from 1905 were one of the first public testimonies to indicate a problem of stream pollution in Oregon. The board's second biennial report in 1907 referred to the inadequate sewage disposal systems in the state, with special reference to the undesirable sewer arrangements in the Willamette Valley. The 1911 report emphasized that stream pollution was becoming a menace to human health and warned that drinking

water from any of the streams was dangerous. The report also disclosed that pollution in some cases made fish unsuitable for food.<sup>46</sup>

State Board of Health reports between 1910 and 1920 repeatedly called the attention of the legislature to the worsening conditions of the state's streams. The board's reports mentioned legislative measures designed to abate the pollution of streams and the beginnings of a permit system for waste disposal.<sup>47</sup> Despite this, pollution in the Willamette River continued to worsen as the population in the valley's industrial areas increased and pulp and paper processing plants expanded their facilities. Little effective progress occurred until public pressure forced the Oregon legislature to begin taking corrective action to clean up the Willamette River, and then, when the legislature passed pollution abatement measures, progress was painfully slow.

Sports-oriented groups first expressed their collective concern about the condition of Oregon's streams in the 1920's. But, as early as 1914 the official publication of the Oregon Fish and Game Commission, The Oregon Sportsman, mentioned the increasing amount of pollutants in the Willamette River. It cited the pollution of Oregon's streams and rivers as one of the leading causes of the destruction of fish life. "Dumping the sewage of cities, the waste of mills and factories and filth of all kinds into our public waters is a factor that will completely deplete our streams of fish, if it is allowed to continue." The Fish and Game Commission publication asserted that pollution made waters unfit for use further downstream, destroyed the fish supply and spread disease among people. "These things are wrong, both morally and legally," it contended.<sup>48</sup>

The same issue of the Sportsman referred to a State Board of Health warning to prohibit the city of Silverton from dumping sewage into Silver Creek through its newly constructed sewer system. When Silverton officials lost in a court attempt to have the Board of Health decision reversed, the Sportsman was ecstatic. It viewed the decision as an important precedent, because now "all towns and cities using creeks and rivers as dumping grounds for sewage will have to make some other arrangement. This will mean that towns along the Willamette, such as Eugene, Albany, Salem, Portland...must eventually dispose of their sewage in a scientific way, such as by means of septic tank and filter process."<sup>49</sup> The magazine's prediction was obviously far too optimistic.

The Oregon Sportsman also carried an advertisement in 1914 which condemned the dumping of sewage into rivers and urged the public to pressure the state legislature to adopt statewide the "Deschutes River Law." The Oregon legislature passed the law to prohibit the dumping of any raw sewage, whether it be municipal or private, into the Deschutes River. The Sportsman urged the widespread enforcement of such a law "before it is too late. Many of our most beautiful streams are being transformed into public sewers."<sup>50</sup>

The state of Oregon did not have a strong preservationist-oriented group actively concerned about river pollution until the 1920's. The Oregon Alpine Club, now the Mazamas, was organized before the turn of the century and was instrumental in the creation of Crater Lake National Park, the designation of the Bull Run timber reserve for Portland's

watershed in 1892, the Ashland watershed in 1893 and the Cascade Range Reserve in the same year.<sup>51</sup> However, since club members were amateurs rather than professionals like some of the members of their California-based counterpart, the Sierra Club, some Mazama activities tended to be of the chamber-of-commerce type. They promoted programs for illuminating Mt. Hood on the Fourth of July and constructing a bicycle path from Portland to Mt. Hood. For most of the twentieth century the Mazamas directed their energies toward the preservation of wild areas and left stream pollution to sportsmen's groups.<sup>52</sup>

The Izaak Walton League, founded in Chicago in mid 1922, organized a chapter in Portland later the same year. Water pollution abatement, referred to in those days as stream purification, was a major objective of the Portland chapter from the beginning. Two men who were leaders in the effort, William Finley and Ed Averill, served as State Game Wardens at one time. Both men contributed a number of articles to the Oregonian and the Oregon Journal dealing with wildlife, fish and water pollution. To convince Portland city officials and the public that the Willamette River would not support fish life, William Finley once induced city officials to take boat trips through the Portland Harbor area, then lowered cages containing live trout into the water to indicate how quickly they expired. When one prominent Portland citizen noted the open sewers discharging wastes along the shore line, he asked city officials if the sewers could be lowered below water level so the discharges could not be seen.<sup>53</sup>

The efforts of the Izaak Walton League and the emergence of a few leaders in the pollution abatement struggle accompanied an increase in industrial activity in the Willamette Valley in the 1920's. The Oregon Sportsmen, which was discontinued between 1917 and 1925, once again took up the issue of water pollution when the Game Commission decided to reissue the journal in 1925 (the Fish and Game Commission operated as separate commissions between 1921 and 1975). In one of its first editorials after republication, it drew attention to the fact that industrial and municipal waste was being dumped into public waters to the extent that some streams were little better than open sewers.<sup>54</sup> The continuation of such practices, the Sportsman cautioned, would destroy the anadromous fish runs, "the very misfortune that has fallen to many of the rivers on the Atlantic coast." The editorial continued:

Why is a pulp mill or woolen mill allowed to wash its acids, dyes and other wastes into public waters? It is the duty of the officers of municipal corporations to take some steps toward relieving our rivers from their load of filth.

The Game Commission, through its journal, commended the cities of Bend, Redmond, Pendleton and Ashland for disposing of their sewage in a hygienic way and urged that similar efforts be made in cities along the Willamette River.<sup>55</sup>

By the mid 1920's enough evidence had accumulated to indicate extensive pollution on the lower Willamette River. These studies indicated that industries and municipalities on the river dumped their untreated wastes directly into the river.<sup>56</sup> There was also evidence, in addition to Finley's demonstration, which showed the harmful effects of

oxygen depletion on the fall salmon run. In this case the up-river pulp mills were cited as the prime causative factor.<sup>57</sup>

In November, 1925, the Oregon State Game Commission, probably without any enforcement power, served notice on cities and towns pumping sewage into streams that they were expected to plan immediately for the installation of sewage disposal facilities. The Oregon Anti-Stream Pollution Committee which included both public and private organizations (e.g., the State Board of Health, the State Game Commission, the Salmon Protective Association, and the Multnomah Hunters and Anglers Club) was organized to promote this program. During the summer of 1926 the committee made efforts to convince Milwaukie and West Linn, towns which were installing new sewers, to construct disposal plants and thereby avoid dumping their raw sewage into the rivers.<sup>58</sup>

The Oregon State Board of Health in conjunction with the State Game Commission called the first official conference on stream pollution on May 13, 1926. Members of the Multnomah Hunters and Anglers Club as well as the engineers of most large Willamette Valley cities were present. As a consequence of the meeting, the city of Portland initiated the first systematic sampling and testing in the lower river to determine the dissolved oxygen content of the water and the degree of bacterial contamination. The study was conducted in cooperation with the State Board of Health and with advice and guidance from a sanitary engineer in the United States Public Health Service Office in San Francisco.<sup>59</sup> David B. Charlton, who was beginning a long and unheralded career in anti-pollution efforts, was a technician in the Bureau of Health Laboratory who carried out the bacteriological work.<sup>60</sup>

Another anti-stream pollution conference met in Salem on September 10, 1926, to discuss ways to prevent pollutants from entering the Willamette River. The conference reported its findings to the Oregon legislature the following year, but the legislature refused to act.<sup>61</sup> There is also evidence that the anti-stream pollution movement was not confined to Oregon alone. Washington sportsmen led a meeting in Bremerton in the fall of 1926 to consider the broader implications of stream pollution throughout the Pacific Northwest.<sup>62</sup> Thus, in a number of ways the stream purification movement continued to grow.

Following these initial publicly conducted studies of pollution in the Willamette River, a host of other studies were made in succeeding years. These merely elaborated the conclusions of the 1926 studies, however. The Portland City Club conducted an investigation of the lower river in 1927 and reported it to be "ugly and filthy" and "intolerable." The club also surveyed Portland area residents and found that 48.6 percent of the people favored anti-stream pollution legislation, 18 percent were opposed to any such legislation, and 27 percent expressed no opinion. The city club survey also cited Portland as the worst offender in dumping industrial and municipal pollutants into the river.<sup>63</sup>

Partly due to increased public pressures and a growing concern for Oregon's polluted waters, the League of Municipalities requested Oregon Agricultural College to conduct a study of the river. These studies of the Willamette River subsequently were carried out in

1929-1930 in cooperation with the Oregon State Board of Health and the Oregon Game Commission. Now considered classic, the surveys were complete and thorough for a work done at such an early date. The results showed the Willamette River "to be polluted and grossly so in the lower reaches."<sup>64</sup>

By the early 1930's agencies charged with public health and groups interested in preserving the Willamette in its natural state were well aware that the river was badly polluted. William Levin, State Epidemiologist and Director of the State Board of Health Laboratory, testified that "the odor, the stench, and the filthy appearance of the river violate our aesthetic senses" and make it impossible for fish to survive in the river, particularly during July and August.<sup>65</sup> John Veatch, Chairman of the State Fish Commission, reported that the "Willamette has nearly reached its saturation point in raw sewage after which it will be impossible for fish to survive in it."<sup>66</sup> William L. Finley restated what he had said many times, that dumping raw sewage into the river was "a menace to fish, as well as to health...Our rivers must be made assets instead of liabilities of the state."<sup>67</sup>

Economic considerations weighed heavily in the effort to clean up the Willamette and its tributaries. Most towns and cities evidently regarded the expense of installing sewage disposal facilities more important than cleanliness or esthetic values and their industrial counterparts used the same arguments. Until the late 1930's a combination of municipal and industrial lobbyists effectively kept the state legislature at bay in its attempts to force through significant pollution

abatement legislation. At the same time sports and outdoor groups who valued the Willamette Valley streams for recreational purposes, struggled to move a complacent legislature to action and urge caution on the reluctant towns, cities and industries who dumped sewage and wastes untreated into Willamette waters.<sup>68</sup> The decade of the 1930's marked a turning point in efforts to remove the sources of pollution from the Willamette River. And, once again determined sportsmen led the fight.

Various anti-pollution organizations, many of them fronts for sports fishermen, urged the passage of bonds to provide money for financing pollution abatement programs during the 1930's. The Oregon Wildlife Federation, formed in 1935 to promote "the conservation, restoration, management and protection of our wildlife," was one of these organizations.<sup>69</sup> The public relations activities of the Oregon Wildlife Federation, the various Izaak Walton League chapters and other like-minded groups forged a public atmosphere that forced the legislature and the governor's office, somewhat reluctantly, to take action.

In 1933, Governor Julius Meier ordered a conference of town and city mayors in the Willamette Valley in response "to a statewide demand for abatement of stream pollution..." The conference resulted in a request for, and the governor appointed, a committee of engineers to examine again the sources and causes of river pollution. In their investigation the engineers separated industrial from municipal waste problems and eventually turned out a comprehensive report in 1936 that

clearly cited the pulp and paper industry as a major source of industrial waste.<sup>70</sup>

Conference and committee reports and other official state actions relative to pollution abatement appeared with increasing regularity by the mid 1930's. The sense of crisis generated by the depression and the administration of Franklin D. Roosevelt and its penchant for social engineering probably contributed to this atmosphere. As part of the state's effort Governor Charles Martin created the Oregon State Planning Board in 1935 "to study Oregon's resources and to prepare plans and recommendations for their conservation and greater use."<sup>71</sup> The State Planning Board, of which more will be said later, in turn, created a special "Stream Purification Committee" which recommended that the 1937 legislature put teeth into state pollution laws. There was unmistakable evidence, according to the board, that "portions of the Willamette River had become so polluted with municipal sewage and industrial wastes that these waters were a menace to life, destructive to fish life, and unfit for certain other beneficial uses."<sup>72</sup> The legislature passed a pollution abatement bill in 1937, but Governor Martin vetoed it.<sup>73</sup>

The Oregon Council of the Izaak Walton League and the Oregon Wildlife Federation acted quickly, and with the support of other conservation-oriented groups, backed an initiative measure in 1938 which led to the establishment of the State Sanitary Authority, the first positive step in Oregon's pollution abatement program.<sup>74</sup> Many years later the Oregon

Game Commission praised the Oregon Wildlife Federation and others who worked for the establishment of the State Sanitary Authority:<sup>75</sup>

If it had not been for the determination of a lot of conservationists, sportsmen, and other public-spirited citizens, the program to clean up the Willamette River and other public waters may have been delayed for years. This group didn't know the meaning of the word 'defeat,' and promptly took steps to place the measure on the ballot by initiative petition.

The initiative measure, known as the "Water Purification and Prevention of Pollution Bill," established the State Sanitary Authority and passed with 247,685 voters favoring it and 75,295 opposed, or a three to one margin. The Voters Pamphlet did not include a single argument against the bill.<sup>76</sup>

Thus, while the state legislature dragged its feet, while city and town governments procrastinated because of the costs involved, and while industries continued their practice of indiscriminately dumping untreated wastes into Willamette Valley streams, an aroused public forced the state's government to begin taking action. The Oregon Wildlife Federation and the various Izaak Walton League chapters in the state deserve a major share of the credit for this initiative.

Another thirty years passed before significant numbers of fish were able to survive the trip through Portland Harbor during the low flow months of July, August and September. Part of this was due to the retarding effects of World War II on pollution abatement, and thereafter to the opposition of municipal and industrial users of the

river who fought each step that the Sanitary Authority took to clean up the river systems in the valley.

After repeated warnings, the Oregon Sanitary Authority finally issued an order to the pulp mills in 1950 stating that beginning in 1952 sulphite pulping liquors, a major contributor to oxygen depletion, must not be discharged into rivers during the low flow period. To add to the Sanitary Authority's problems, town and city governments were painfully slow in installing, first primary, and then, secondary sewage facilities. Most of the cities along the Willamette River had primary treatment facilities by 1957 and secondary facilities by 1967.<sup>77</sup> The attractions of profit were too compelling for industrial polluters to devote money to keep their wastes from the river, that is, until the State Sanitary Authority, with the backing of the state legislature, forced them to comply.

## VI

### Preservationists and the Army Corps of Engineers

Clearing Oregon's streams and lakes of pollution has been a key objective of preservationist groups since the 1920's. In the process, however, they helped foster a hydra-headed monster that continues to haunt them to the present day. Progress-oriented planning engineers cooperated with preservationist groups during the 1930's to bring the problem of municipal and industrial pollution to the attention of the public. Planning engineers then initiated programs of dam construction

in the 1930's that created as many problems as it solved for preservationists. Their dam building scheme for the Willamette drainage was a conservation-oriented panacea that would control flooding on the main stem of the Willamette, deepen channels for navigation, provide storage water for irrigation users, produce electrical power, and, only as a fifth objective, help clear pollution from the river. This was the substance of what became known as the Willamette Valley Project, a make work project to promote jobs. Cleaning the river of pollution was only an incidental objective and recreation, at first, was treated in similar fashion. Developers now took a leading role in attempting to bend the Willamette system to its will. In this effort they enjoyed for some time the massive financial support of the federal government.

In 1935 Governor Charles Martin appointed a voluntary forty-two member Willamette Valley Project committee representing different phases of economic activity in the Willamette Valley. Douglas McKay, a future governor, and later Secretary of the Interior, served as the first chairman of the committee.<sup>78</sup> The Oregon State Planning Board actually proposed the establishment of the Willamette Valley Project in its first biennial report published in 1935. The project, according to the State Planning Board report, "aims at a more complete utilization of natural resources of this watershed than has been brought about by individual or group efforts during the last three quarters of a century."<sup>79</sup>

The Planning Board urged that the Willamette Valley Project be adopted as a federal project with its objective the development of a comprehensive program for the development of the Willamette Valley:<sup>80</sup>

The project proposes the greater utilization of the natural resources of this watershed for the economic and social betterment of its inhabitants and of newcomers who may settle there. The drainage basin of the Willamette River is a natural geographic-economic unit; hence, the development of each of its natural resources should be carried out concurrently in a closely coordinated program.

The board recommended that the project undertake the construction of reservoirs and storage facilities on the tributaries of the Willamette to prevent winter flooding, to help regulate the flow of the main river more evenly throughout the year and to store water for the future use of irrigators. The project organizers recommended that the Army Corps of Engineers be commissioned to carry out the task.<sup>81</sup>

A three member Willamette Basin Commission, appointed to bring the proposal to the attention of federal authorities, was successful in getting congressional approval for the Willamette Valley Project in 1938 and construction on two of the proposed dams began immediately.<sup>82</sup> Subsequently, the Army Corps of Engineers constructed Cottage Grove Dam and Fern Ridge Dam, both in the upper Willamette Valley, and the first two dams completed under the project. These dams, as well as others constructed later, eliminated the worst flooding in the valley.

The Willamette Valley Project was the first of its kind in the Pacific Northwest and one of the more ambitious in the nation at that

time.<sup>83</sup> When information about the project's general proposal became more widespread, sports and preservationist groups sounded a storm of protest that threatened to curtail many of the proposed dams and caused the project planners to drop some of their more ambitious ideas. Most of the opposition to dam construction, however, did not surface until the end of World War II. By this time, knowledge about the Willamette Valley Project dams was fairly widespread.

Sports fishermen and preservationists in Oregon faced a dilemma in the aftermath of the Second World War. On the one hand the state faced the herculean task of cleaning pollutants from the Willamette River, a problem that steadily worsened as the state's population increased and industrial activity widened. At the same time the Willamette Valley Project organizers proposed an engineering feat which disturbed sportsmen and preservationists--build dams on the major tributaries, control stream flow so that extreme low flow periods can be avoided and thus keep pollutants from concentrating and reducing the oxygen content of the river.

As early as 1941 the Oregon Wildlife Federation went on record as opposing "high dam" construction on Oregon's rivers and streams.<sup>84</sup> The Oregon Anglers and Hunters Bulletin, a Portland based sportsmen's magazine, cautioned its readers about the project dam proposals in 1945 in one of its first issues. These dams "should give all of us some food for thought, particularly their effect on our migratory fish--salmon and steelhead."<sup>85</sup> At the same time the Bulletin recognized that the state faced a monumental problem in dealing with river pollution:<sup>86</sup>

The Willamette River alone should make the people of Oregon blush with shame. In almost any article on pollution...the glaring example of the Willamette River is used to prove the point in regard to the abatement of pollution. However, we receive constant reports throughout the state complaining of industrial and human waste pouring into creeks and rivers.

Ed Averill, a former State Game Warden and associate and friend of William Finley, attacked the dam proposals and the Army Corps of Engineers in a lengthy article in the August, 1946, issue of the Bulletin. Averill asked that the fishing resource be given early and equal consideration along with power and flood control in the planning of dams. "We do not attack dams merely because they are dams." He advised that flood dams should be numerous and placed on the headwaters of streams where damage to fishlife would be negligible. "Dams in the Columbia River," he warned, "would provide a series of pools in which the biology of the river would be changed." Averill expressed concern about the dams filling with silt which, in turn, would destroy their capacity for flood control.<sup>87</sup> Then he attacked the rationale for constructing any of the dams:<sup>88</sup>

Why all this feverish haste to build all these dams at this time? Is it because the engineers feel that if they are ever going to build them it must be now before atomic energy is developed to the point where dams will not be needed either for power, irrigation or river navigation?

The rivers and the fish belong to the people. Fishing--sport and commercial--are major industries. They should not be sacrificed to provide employment for any army of engineers or a handful of river steamboat men who are still living in the dead and almost forgotten past.

One of the Willamette Valley Project proposals that came under severe criticism was Meridian Dam, scheduled to be built on the Middle Fork of the Willamette River. The Oregon Angler and Hunter assailed Meridian Dam as "100% bad--it's unjust, nonconservational, and economically unsound." The Army Corps of Engineers, according to the magazine, was persecuting the sportsmen of Oregon and a full-scale investigation of the Willamette Valley Project should be ordered before more money was spent. "We'll go along with Detroit Dam on the North Santiam, tributary plans on the McKenzie and with Dorena Dam, but not on Meridian on the Middle Fork. It's unjust, and unnecessary with tributary plans available."<sup>89</sup>

One editorial in the Angler and Hunter called the attention of sportsmen to the number of dams "to be built on some of the finest angling and salmon rivers in the United States." It urged sportsmen to awaken "to the danger that lurks on the drawing boards of the U.S. Bureau of Reclamation and the U.S. Engineers," and criticized a proposed dam on the Rogue River which would eliminate steelhead and salmon runs. The Angler and Hunter editorial supported the construction of Detroit Dam for flood control, but questioned the effect that higher water temperatures might have on fish propagation. The editorial also warned of proposed dams on the Deschutes River below Bend and on the Little North Fork of the Santiam, and to counteract such developments, it urged the formation of community committees to attend hearings and look into the dam projects to assure that they have adequate fish

ladders and provide free downstream movement for migrating salmon and steelhead fingerlings.<sup>90</sup>

Opponents of the Willamette Valley Project dams were well organized and in many cases financially capable of presenting formidable opposition, especially in the case of dam proposals for the main stem of the McKenzie and Rogue Rivers, both long time favorites of sportsmen. Donel Lane, former Executive Secretary of the Oregon Water Resources Board, was General Manager of the Springfield area Chamber of Commerce during the great spate of dam building in the mid 1940's. When the Army Corps of Engineers was in the planning stages of a proposed dam on the main stem of the McKenzie River, Lane recalls that an official of the McKenzie River Guides Association informed him late one evening that the Guides Association could raise \$50,000 in twenty-four hours to finance a campaign to oppose construction of a dam on the main stem of the McKenzie. Opponents of dam construction were not referred to as environmentalists, according to Lane, but they were engaged essentially in the same struggles. They pressured the Army Corps of Engineers to alter their plans in some instances, and, in the case of the McKenzie, to propose alternative dams on its tributaries.<sup>91</sup>

Many people who opposed reclamation and dam construction projects were interested primarily in preserving Oregon's streams to protect the anadromous fish runs for recreational fishing, yet other considerations, like esthetic appreciation and unspoiled scenic beauty, weighed heavily in arguments used against schemes such as the Willamette Valley Project and other similar proposals in Oregon. One preservationist

argument was directed against a United States Bureau of Reclamation proposal for a dam on the Rogue River in the late 1940's as part of a series of thirteen dams included in the Rogue Basin Project. A sportsmen's magazine weighed the potential damage to the scenic Rogue River:<sup>92</sup>

The damage to the aesthetic value of the Rogue River Basin can never be figured in dollars and cents. It would be irreparable. Where the recreational and aesthetic value lost outweighs the dubious benefits many times over such a project should be tossed in the ash can.

The magazine maintained that the Rogue River belonged to everyone, and, "being everyone's river, it is everyone's fight to preserve it in its present state of nearly unspoiled beauty."<sup>93</sup>

Private sports groups were joined by certain state agencies in opposing high dams on primary river systems because of the potential for damaging fisheries and depreciating esthetic values. P. R. Needham, Director of Fisheries for the Oregon State Game Commission, criticised the proposed dams for the Willamette River and other streams as a dire threat to the anadromous salmon and steelhead. In the case of Detroit Dam and the proposed Meridian Dam on the Middle Fork of the Willamette, Needham feared that the biological make-up of the Willamette and Santiam Rivers would be changed, and the sports fisheries, scenery along the Willamette River and its tributaries, and the accompanying esthetic values destroyed.<sup>94</sup> Ed Averill, the former State Game Warden, condemned the entire rationale justifying the construction of high dams, because it stemmed "from the white man's belief that everything nature does should

be rectified by man made works." Averill called on sportsmen to be alert, informed and united to "demand and get the satisfaction necessary to prevent the destruction and mutilation of the best that is Oregon."<sup>95</sup>

The combined efforts of the Oregon Wildlife Federation, the Izaak Walton League, other conservationists, and business people interested in tourism and recreational values forced some changes in the original proposals for the Willamette Valley Project. The original plan called for the construction of high dams on the North and South Santiam, the McKenzie and the Middle Fork of the Willamette River. Preservationists and sportsmen's organizations first centered their opposition around the dam proposed for the main stem of the McKenzie River.

The Army Corps of Engineers conducted hearings on the McKenzie Dam proposal on March 27, 1946, and because opposition to the proposal was so strong, the corps abandoned their plan for a high dam on the McKenzie and developed alternative plans for dams on tributary streams. The construction of Detroit Dam on the North Santiam River effectively eliminated all spawning areas behind the dam to migrating steelhead and salmon. Although Congress authorized the proposed Meridian Dam on the Middle Fork of the Willamette River, appropriations were withheld for a time. Lookout Dam finally was constructed on the Middle Fork, and, like Detroit Dam, it blocked the area to upstream salmon and steelhead.<sup>96</sup>

Most of those who opposed the Army Corps of Engineers and Bureau of Reclamation projects were not strict preservationists in the sense that they opposed all development. But, in the case of dam construction and because they were apprehensive about the migrating anadromous fish, sportsmen and their preservationist friends provided strong arguments against the more ambitious plans of the dam builders. Alternatives were proposed in some instances and compromises accepted in others.

As one alternative the Oregon Wildlife Federation proposed the construction of a series of levees and bank protection works along the Willamette River to protect against flooding in lieu of a system of dams and reservoirs.<sup>97</sup> The twelve completed Army Corps of Engineers' dams on the Willamette drainage testify to the alternatives chosen, and the numerous tributary dams on the McKenzie, Santiam and upper Willamette emphasize some of the compromises. The developers failed to gain approval for all the high dams on the main stem rivers in their original proposals, but they were successful in most instances in getting approval for tributary dams.

The seventy year struggle between utilitarian-oriented conservationists and preservationists continues to our present day. Recently Oregon's senior senator, Mark Hatfield, announced his opposition to the proposed Cascadia Dam project on the South Santiam River because of economic and environmental considerations. Hatfield claimed that already existing Willamette basin flood control dams had achieved 97 percent of

the flood protection needed in the valley, and that "reservoir recreation opportunities are already present nearby--Green Peter and Foster dams--making the sacrifice of the free-flowing South Santiam a poor trade."<sup>98</sup> The senator's opposition makes it unlikely that the Army Corps of Engineer's project will be funded and is one indication of the continuing strength of preservationists.

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Through the long struggles and compromises to protect Oregon's environment from human exploitation, some recognition should be directed toward people who questioned the wisdom and necessity of the wholesale exploitation and utilization of natural resources. The promotional schemes of developers often created more problems and caused more harm than they solved, especially in the destruction of a portion of the bird sanctuary at Lower Klamath Lake, the disruption of the Malheur sanctuary, and the impairment of the fish runs on the Willamette drainage. The preservationist arguments of individuals like William L. Finley, of sports groups interested in promoting fish runs in Oregon streams and people who wished to protect the esthetic qualities of the natural environment caused the developers to pause, and in some instances, to modify their plans. Oregonians today owe a debt of gratitude to people who fought to protect the natural environment from the ravages of human exploitation and alterations by man-made works.

## Notes

1. For some of these suggestions see Grant McConnell, "Prologue: Environment and the Quality of Political Life," in Richard A. Cooley and Geoffrey Wandesforde-Smith, eds., Congress and the Environment (Seattle, 1970), 6.
2. Ibid., 8.
3. Richard A. Cooley, "Introduction: Politics, Technology, and the Environment," in Congress and the Environment, xii.
4. H. Duane Hampton, "The Twisted Legend of Gifford Pinchot," Western Outdoors Annual (Spring, 1971), 8.
5. Max Nicholson, The Environmental Revolution (New York, 1970), 17.
6. The Fight to Save Oregon: An Environmental Progress Report (Portland, 1972).
7. Tom McCall, "Oregon Story Offers Choice," STRidoes (privately published, Portland, 1974), 3.
8. Oswald West, "The Battle of Life," Oregonian, November 14, 1937.
9. Oregon, Messages of the Governor (1911), 19.
10. Quoted in McConnell, "Prologue: Environment and the Quality of Political Life," 8.
11. Oregon, Report of the Oregon Conservation Commission to the Governor (1908), 7.
12. Ibid. (1910), 5.

13. See Samuel P. Hays, Conservation and the Gospel of Efficiency (Cambridge, Mass., 1959) and Elmo R. Richardson, The Politics of Conservation: Crusades and Controversies, 1897-1913 (Los Angeles, 1962).
14. Donald C. Swain, Federal Conservation Policy, 1921-1933 (Los Angeles, 1963), 75.
15. Report of the Oregon Conservation Commission (1909), 14.
16. Ibid. (1908), 37, 46 and 65.
17. Ibid. (1909), 25.
18. Ibid. (1910), 17.
19. Ibid. (1912), 44.
20. Ibid. (1912), 65.
21. Arthur S. King, A History of the Water Resources Congress (published by the Oregon Water Resources Congress, Salem, 1972).
22. Stephen Douglas Reiling, "The Estimation of Regional Secondary Benefits Resulting From an Improvement in Water Quality of Upper Klamath Lake, Oregon: An Interindustry Approach," (M.S. thesis, Oregon State University, 1970), 36.
23. Klamath Basin (Salem, Oregon, 1971), 4.
24. Ibid., 9. The Southern Pacific Railroad Company built the structures (actually the rail bed provided a dike between the river and the lake).
25. James C. Albrecht, "The Recreation Resources of the Malheur National Wildlife Refuge," (M.S. thesis, Oregon State University, 1965), 20; Ed Averill, "A Thumbnail Sketch of William Lovell Finley,"

- Oregon Angler and Hunter, Vol. 2 (September, 1947), 4;
- Larry Rymon, "A Critical Analysis of Wildlife Conservation in Oregon," (Ph.D. dissertation, Oregon State University, 1969), 137.
26. Rymon, "Wildlife Conservation in Oregon," 117.
27. Averill, "A Thumbnail Sketch of William Lovell Finley," 4.
28. William L. and Irene Finley, "The Destruction of Lower Klamath," The Oregon Sportsman (September, 1925), 3-4. The Oregon Sportsman was the official publication of the Oregon Fish and Game Commission.
29. Klamath Basin, 10; Rymon, "Wildlife Conservation in Oregon," 148.
30. Finley and Finley, "The Destruction of Lower Klamath," 4.
31. Ibid., 5.
32. Rymon, "Wildlife Conservation in Oregon," 149-151.
33. Finley and Finley, "The Destruction of Lower Klamath," 3.
34. Ibid., 6.
35. Rymon, "Wildlife Conservation in Oregon," 156.
36. Conversation between David B. Charlton and the author, November 4, 1975. David B. Charlton is a long time resident of Portland whose personal interest and involvement in pollution abatement of the Willamette River dates from January, 1926, when he was appointed as a technician in the Portland Bureau of Health Laboratory, a position he held for two years.
37. Albrecht, "Malheur National Wildlife Refuge," 44. The Malheur National Wildlife Refuge was designated in 1935.

38. Ibid.; Rymon, "Wildlife Conservation in Oregon," 154.
39. Albrecht, "Malheur National Wildlife Refuge," 44-45.
40. Western Outdoors, Vol. 5 (February-March, 1948), 8.
41. Ibid., 9.
42. Malheur Lake Basin (Salem, Oregon, 1967), 59-62.
43. Ibid., 63-64; Albrecht, "Malheur National Wildlife Refuge," 42.
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