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Environmental Law

Fall, 2006

36 Env'tl. L. 1125

**LENGTH:** 15504 words

**SYMPOSIUM ARTICLE:** SOMETIMES A GREAT NOTION: <sup>n1</sup> OREGON'S INSTREAM FLOW EXPERIMENTS

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**SUMMARY:**

... Oregon has been a pioneer in adopting legislation to protect instream flows, beginning with waterfall protection statutes early in the twentieth century, followed by a mid-century water code overhaul designed to protect minimum streamflows, and culminating in explicit legislative recognition of instream water rights in 1987. ... Given these important water uses, the committee recommended that the legislature maintain minimum streamflows for the benefit of fish propagation and "dilution of pollution" and suggested "that the proposed central agency be authorized ... to withdraw from appropriation any unappropriated water sufficient to establish minimum flow requirements necessary for preservation of public health in the area of stream pollution and for the preservation of fish life. ... Oregon's minimum streamflow program was held out as the pioneer of instream flow protection, as indeed it was in 1955. ... A decade later, the Oregon Department of Fish and Wildlife's leading expert on the minimum streamflow program offered yet another perspective on the program's flaws. ... The Instream Water Rights Act authorized the state's fish and wildlife, environmental quality, and parks and recreation agencies to apply for instream water right certificates to support habitat, pollution abatement, and scenic and recreational values, respectively. ...

**HIGHLIGHT:** Along the western slopes of the Oregon Coastal Range ... come look: the hysterical crashing of tributaries as they merge into the Wakonda Auga River ...

Oregon has been a pioneer in adopting legislation to protect instream flows, beginning with waterfall protection statutes early in the twentieth century, followed by a mid-century water code overhaul designed to protect minimum

streamflows, and culminating in explicit legislative recognition of instream water rights in 1987. Other states in the western United States have looked to Oregon as a model, even though Oregon's various experiments have not always achieved the goals of protecting and restoring flowing water. Recently, however, the experiments have begun to show tangible results - and more importantly, results that are being replicated outside of Oregon. This Article examines key events and statutory enactments in Oregon's streamflow protection history, evaluates their successes and failures, and explores how the most workable devices for protecting streamflows are spreading through the Pacific Northwest and beyond.

The first little washes flashing ... forming branches ... the branches crashing into creeks, into streams. Finally ... the actual river ... .<sup>n2</sup>

**TEXT:**

[\*1127]

I. The **Oregon Way: Things Look Different** Here<sup>n3</sup>

The Wakonda Auga River, tumbling down out of the Oregon Coast Range to the Pacific Ocean, was a fictional river imagined by writer Ken Kesey, but his description brings to mind any number of real-life Oregon rivers - at least those on the wet, western side of the Coast and Cascade mountain ranges. Many rivers in the arid, eastern part of the state - and even the western rivers in the summer and fall - do not crash or tumble, but rather trickle or disappear altogether at times due to over-appropriation. Yet flowing rivers are still considered an integral part of Oregon's natural beauty and quality of life, part of what makes things look different here.<sup>n4</sup>

Kesey, who described an iconic Oregon river and the human drama interwoven with its currents in his novel *Sometimes a Great Notion*,<sup>n5</sup> is one of Oregon's favorite sons. He became (in)famous for his travels around the United States with the Merry Pranksters in "Furthur," an old school bus painted with psychedelic designs on the outside and loaded with psychedelic [\*1128] experiments on the inside.<sup>n6</sup> Kesey was also respectably famous and commercially successful as an author. *Sometimes a Great Notion*<sup>n7</sup> and an earlier novel, *One Flew Over the Cuckoo's Nest*,<sup>n8</sup> earned him a place among the great American writers of the twentieth century.<sup>n9</sup> In addition to his serious literary reputation and irreverent countercultural bent, Kesey was also just a regular Oregonian. Except for a few years in California and his travels with the Pranksters in "Furthur," he lived on his family's farm in Oregon's Willamette Valley until his death in 2001. Nearby, Kesey's brother and sister-in-law created a thriving business selling Nancy's Yogurt and other natural dairy products, and many customers assumed that Ken was also part of the business.<sup>n10</sup>

Kesey was a beloved native son regardless of - or perhaps in part because of - his quirky complexities.<sup>n11</sup> When Kesey died in 2001, the Eugene Register-Guard eulogized him as an "Oregon ... icon" who understood the [\*1129] state "better than most ... . As if Kesey and Oregon were one, like saltwater and freshwater at a river's mouth, nothing to define where one started and the other ended but clearly part of one another. Kesey had to be from Oregon ... ." <sup>n12</sup> Albeit with some hyperbole, this river-metaphor eulogy claims Kesey as a personification of the Oregon character. Kesey is considered an iconic Oregon character because of his independent spirit, his willingness to experiment and challenge authority, and his love of nature. As an author, Kesey was eloquent in bringing the state to life on the page:

Kesey considered both people and place actors on life's stage; to him, Oregon wasn't just a state in the union, it was a living, breathing character all its own. And so, then, were its trees, waters and weather ... . In Kesey's Oregon, nature was alive... . Kesey's Oregon was much like Kesey himself: full of independence, rough-hewn realness and a brooding darkness known to explode, at winter's end, into Day-Glo delight.<sup>n13</sup>

Ken Kesey? Brooding darkness and Day-Glo delight? What could any of this possibly have to do with instream flows? Lest the reader think this introduction is some Merry Prankster hallucination, bear with us while we draw the

connection.

Kesey wrote lyrically about his home state's natural beauty, and about the circulatory system of rivers that nourish Oregon's beauty:

The Wakonda has not always run this course... . Along its twenty miles numerous switchbacks and oxbows, sloughs and backwaters mark its old channel. (You want me to tell you a thing or two about rivers?) Some of these sloughs are kept clean by small currents from nearby streams, making them a chain of clear, deep, greenglass pools where great chubs lie on the bottom like sunken logs; in the winter the pools in these sloughs are nightly stopovers for chevrons of brant geese flying south down the coast; in the spring the pole willows along the banks arch long graceful limbs out over the water; when an angler breeze baits the tree, the leafy tips tickle the surface and tiny fingerling salmon and steelhead dart up to strike, sometimes shooting clear into the sunshine like little silver bullets fired from the depths. <sup>n14</sup>

Oregon's rivers are not just captured in fiction, but figure in the state's statutes as well. In fact, the same experimental character that is embodied in the state's colorful citizens like Kesey is also manifested in a spectrum of social experiments codified in black and white in Oregon statutes. Among these innovative laws are a number of statutes designed to preserve the state's natural bounty, including those addressing rivers. <sup>n15</sup> The state has [\*1130] pioneered instream flow protection, beginning in the early 1900s and continuing through to the present. Two innovative state statutes bookend the twentieth century: in the early 1900s, the state protected the scenic waterfalls in the Columbia River Gorge, <sup>n16</sup> and in 1987, Oregon became the first state to codify recognition for full-blown instream water rights. <sup>n17</sup> Between those two bookends, in 1955, the state overhauled its water code and built in protections for minimum streamflows and the fish and wildlife dependent on them. <sup>n18</sup>

However, Oregon's legal treatment of its rivers is full of conflict and inconsistency, like Ken Kesey and the characters he wrote about. <sup>n19</sup> Like all of the western states, Oregon's laws primarily encourage use of the rivers - for diversion and irrigation, for impoundments and hydroelectric turbines, for city and country living. These uses are embodied in water rights fiercely defended by the independent-minded Oregonians who hold them. Nonetheless, the state has sometimes had great notions to protect its rivers as rivers, with water flowing in them. In this regard, Oregon has often been held up as a model for the rest of the West. <sup>n20</sup> Throughout the state's history, the two impulses of consumption and protection have pushed and pulled at the rivers. Which force is winning and what can other states learn from the tug-of-war? Those questions are the focus of this Article.

Part II briefly tells the story of Oregon's early instream flow protection laws during the first half of the twentieth century. Part III discusses the pioneering 1955 statutory overhaul, assessing the statute's promise and performance with regard to codifying streamflow protection. Part IV considers the most recent chapter of Oregon's expanded attempts at instream flow protection, growing out of scenic waterway designations and the 1987 Instream Water Rights Law. Part V concludes that the Oregon experiments are finally beginning to show results in keeping the state's rivers flowing and that the "sometimes great notions" are slowly spreading [\*1131] to other western states, improving the prospect for putting water back into the rivers of the West.

## II. Oregon's Early Notions of Instream Flow Protection

Oregon became a state in 1859. During the first several decades of statehood, the state's courts and legislature recognized rights to use water under both riparian <sup>n21</sup> and prior appropriation <sup>n22</sup> legal schemes. Early in the twentieth century, with some 127 uncoordinated water use statutes on the books, growing conflicts between riparians and appropriators, and the resulting tremendous uncertainty about water rights, then-Governor George Chamberlain called for a "complete, concise, and definite code of law governing the use and distribution of water." <sup>n23</sup> In response, the Oregon legislature enacted a comprehensive Water Code in 1909, declaring that all waters within the state belonged to the public and specifying procedures for obtaining water rights from that point forward. <sup>n24</sup> The 1909 code eliminated

unvested riparian rights and embraced prior appropriation as the governing doctrine for all water uses.<sup>n25</sup> The code also adopted a state administrative permit system as the method for acquiring water rights.<sup>n26</sup>

The code required the state engineer to approve a permit for beneficial use of water unless the proposed use conflicted with determined rights "or [was] a menace to the safety and welfare of the public"; in such a case, the application was to be referred to the Board of Control for decision and denial if "the public interest demands."<sup>n27</sup> The law thus allowed for rejection of private consumptive use requests in favor of the public interest. Presumably, the public interest could include in situ or instream uses of water. However, the historical record does not reveal any administrative referrals relating to public concern for instream values. The state engineer's office began issuing water [\*1132] permits under the new code, and, by 1955, existing permits numbered approximately 24,000, all for consumptive purposes.<sup>n28</sup>

Although the vague public interest provision in the 1909 law did not seem to slow the pace of issuing consumptive water rights, the Oregon legislature did withdraw some water sources from appropriation during those early years; however, the withdrawals were mostly for future municipal use and other consumptive purposes.<sup>n29</sup> In 1915, the legislature used the withdrawal tool for a different purpose - notably, a non-consumptive purpose. As construction of the vaunted Columbia River Scenic Highway neared completion through the Columbia River Gorge, the legislature withdrew twenty-three streams and waterfalls along the highway in the Gorge from appropriation or diversion to protect their scenic attributes.<sup>n30</sup> This withdrawal to preserve esthetic values established perhaps the earliest official instream protection in a state that embraced water use under prior appropriation. Over the years, the legislature occasionally enacted additional ad hoc withdrawals to protect fish and wildlife and recreational values.<sup>n31</sup> Since legislative withdrawals prohibit any further applications for appropriation from the withdrawn water source, they can serve, to some degree, as self-enforcing protections for instream flows.<sup>n32</sup>

In addition to making direct statutory withdrawals, the legislature authorized the state engineer to perform administrative withdrawals. The 1913 provision allowed the engineer to "withdraw and withhold from appropriation any unappropriated water which may be required for project [sic] under investigation."<sup>n33</sup> Over the next half century, a succession of state engineers made thirty-seven separate withdrawals for future storage and development, most in support of major reservoirs to be constructed by the [\*1133] Bureau of Reclamation to supply water for consumptive purposes.<sup>n34</sup> The state engineer appears not to have used the administrative withdrawal mechanism to support instream flows or uses.

By mid-century, despite a few hopeful glimmers of legal protection for instream values, Oregon's streamflow protection effort was still mostly an unrealized notion. With only a few protected stream segments scattered throughout the state, business as usual meant primarily diversion for consumptive uses. Between 1945 and 1955, successive state engineers issued more permits on some Oregon streams than had been issued in the previous thirty-six years since the 1909 Water Code's adoption.<sup>n35</sup> More importantly, successive state engineers issued permits for more water than was available on many Oregon streams, in some cases authorizing water diversions in amounts double the amount of minimum flows.<sup>n36</sup> This untenable situation led to a significant overhaul of the Water Code, again placing Oregon on the cutting edge of streamflow protection.

### III. The Story of Oregon's 1955 Minimum Streamflow Protections

#### A. Prologue: Federal Water Policy and the Pelton Dam Controversy

Federal water policy developments mid-century provide an important part of the back story for Oregon's overhaul of its water laws in 1955. In 1950, the Hoover Commission (chaired by former President Herbert Hoover) issued the first volume of its report, *A Water Policy for the American People*.<sup>n37</sup> This particular commission is one of many federal commissions constituted to examine aspects of water policy over the nation's 200-plus-year history.<sup>n38</sup> Federal water commissions reflect the "dominant thinking of their time" and at the same time often signal the "transition from one era to another" in terms of policy.<sup>n39</sup> In that regard, the Hoover Commission reflected not only the then-dominant theme of

large federal water development projects, but also recognized the emerging need to pay more attention to efficiency, conservation, and multiple uses of water. <sup>n40</sup>

[\*1134] One story line weaves consistently through two centuries of federal water policy reports: the idea that the drainage basin is the best organizing unit for multiple-purpose water development and management. <sup>n41</sup> This notion was a central theme in the 1950 report as well, which called for federal agencies to cooperate with each other and with the states to prepare multi-purpose basin plans. Indeed, basin planning was well underway in the Columbia Basin at the time of the Hoover Commission's work, but federal agencies were proceeding independently rather than in coordination, and were not necessarily working cooperatively with the states. Both the United States Bureau of Reclamation (Bureau) and the Army Corps of Engineers (Corps) had already been active in planning for the Pacific Northwest. <sup>n42</sup> These agencies both had in mind massive water development projects for flood control, irrigation, navigation, and water supply, while water values supported by instream flows got short shrift. <sup>n43</sup>

The Hoover Commission's 1950 report noted the importance of pollution control and the need to protect salmon and other fish resources, in addition to promoting traditional water development projects. The report called for releases of water from new storage projects to "guarantee continuous use of the river by wildlife and fish" and to improve low flows and aid in pollution abatement. <sup>n44</sup> However, the approach to protecting fish resources focused on adapting the fisheries by moving them to the lower reaches of the system, below dams and reservoirs, rather than on preserving either free-flowing rivers or existing upriver fisheries. <sup>n45</sup>

The second volume of the Hoover Commission's final report, *Ten Rivers in America's Future*, highlighted the importance of rivers for recreation, noting that "the roar of turbulent waters [is] perhaps more eagerly sought [\*1135] today than ever." <sup>n46</sup> The report called for protecting outstanding scenic areas, like national parks, from the impacts of reservoir development. Outside of those special places, however, much of the discussion of recreation addressed flat water recreational activities on reservoirs to be impounded behind new dams, where the only "roar of turbulent waters" would likely be in the spillways below the dams. <sup>n47</sup>

Thus, 1950s federal water policy as represented in the work of the Bureau, the Corps, and the Hoover Commission, officially promoted federal-state cooperation, federal interagency coordination, multipurpose basin planning, and in situ water values. But even as the Hoover Commission Report was touting flowing streams and federal-state cooperation in water resources development, a dispute was playing out between the federal government and Oregon concerning the state's interest in its free-flowing rivers. In 1951, the Federal Power Commission granted a license to Portland General Electric (PGE) for construction of the Pelton Dam on Oregon's Deschutes River (a tributary to the Columbia) over the state's objection. <sup>n48</sup> The Oregon legislature had withdrawn waters in the Deschutes sub-basin from appropriation over the years in order to preserve the water for scenic, fishery, and recreational purposes. <sup>n49</sup> In 1955, the United States Supreme Court upheld the federal government's power to override the state decision and grant a license to dam the river under federal law. Oregon's state engineer later testified to Congress that the Court's Pelton Dam decision thwarted the "intent and desire of the people of Oregon, as expressed by the legislature." <sup>n50</sup> The decision and its implications for state water management were a major water policy issue in Oregon in 1955, fueling the state's desire to take control of its water destiny.

[\*1136]

#### B. The Plot Thickens: Polluted Rivers and Low Flows

Water pollution was also a serious concern nationwide by mid-century, drawing the state's attention to cleaning up its rivers. <sup>n51</sup> The Oregon Sanitary Authority had been created in 1939 to address widespread pollution in Oregon rivers. <sup>n52</sup> In 1939, just under seventeen percent of the state's population was served by sewage treatment plants; by 1955, the percentage had increased to over seventy-seven percent of the state's population served by 121 public sewage treatment plants, but some of those plants had already become overloaded. <sup>n53</sup> Twenty cities totaling nearly 32,000 in population discharged raw sewage from sewers without any treatment, while about thirty other communities had no sewers at all.

<sup>n54</sup> Industrial waste treatment had increased from 0.1% of total waste receiving treatment in 1939 to 64% in 1952, but pollution from the mining and timber industries was a significant problem. <sup>n55</sup> Inadequate streamflow to dilute pollution was specifically recognized as a problem in the 1950s, in addition to the effect of the pollutants themselves on water quality, fish habitat, recreation, and water users. <sup>n56</sup>

Low flows were not just a problem for dilution of pollution. Tourism and recreation were the state's third largest industry in the mid-1950s, and commercial and sports fishing and wildlife activities also contributed tangible dollars to Oregon's economy and intangible benefits to the state's quality of life. <sup>n57</sup> These industries and pursuits depend on adequate streamflows. <sup>n58</sup> Nonetheless, seemingly heedless of the importance of flowing streams for these purposes, the state issued permits in excess of available water in low-flow months on many streams. <sup>n59</sup>

Over-appropriation and low flows were thus already threatening Oregon's rivers a half century ago. Oregon's citizens and the legislature were well aware of these problems throughout the state, just as Congress had recognized these same issues nationwide by chartering the Hoover Commission. These concerns, coupled with the sting of the Pelton Dam defeat, spurred the state legislature to take action.

[\*1137]

### C. A New Protagonist for Oregon's Rivers: The Water Resources Committee

In 1953, the Oregon legislature charged an interim committee <sup>n60</sup> of seven to be appointed by the Governor with the task of making a "comprehensive study" and "critical analysis" of Oregon's water resources. <sup>n61</sup> The Water Resources Committee was directed to evaluate present and future water needs and to study water conservation. <sup>n62</sup> The legislature also required the committee to consider a number of specific topics, including "water for recreation and scenic attractions," "fish and wildlife propagation," and "pollution abatement." <sup>n63</sup>

The interim Water Resources Committee held fifteen hearings throughout the state and received testimony from a broad spectrum of interests, including state, federal, and local agencies, sportsmen's organizations, conservation groups, commercial fishers, farmers, timber companies, power companies, cities, irrigation districts, and other water user organizations and individuals. <sup>n64</sup> In June of 1954, the committee met with Governor Patterson to discuss three major issues arising from their conversations with the public. <sup>n65</sup> The first issue was the nature of the coordinating body that should deal with water policy conflicts across state government, such as those that had occurred on the Pelton Dam project. <sup>n66</sup> The discussants acknowledged that the new body should not supplant the state engineer's authority over administration of water resources, but that if a new policy body were to be created, some existing commissions should be absorbed into it so as not to bloat state government. <sup>n67</sup>

The second item of discussion was the pervasive problem of over-appropriation of streams, both on paper and in actuality. <sup>n68</sup> The Governor himself expressed his concern about excessive paper water rights:

Now we all know that we have got to do something with this question of the promiscuous, unlimited filing of water rights on streams, at least that is my belief, by people who ... think they have a property right in that river. Well they don't have any such a thing. If all the permits that have been filed on the [\*1138] Tualatin River were to be allocated and adjudicated today, we would need the upper stem of the Willamette River to supply it. <sup>n69</sup>

Discussion ensued about the laxness of the administrative system with respect to enforcing actual beneficial use, as well as the difficulty of canceling unused water rights. <sup>n70</sup>

The third issue the assembled group considered was the challenge of providing sufficient flows for fish and game. <sup>n71</sup> The Fish and Game Commissions had no way to protect or enforce flows needed for habitat against diversion by

those with consumptive appropriation rights, even when those flows were released from storage projects created by the Fish or Game Commissions themselves. <sup>n72</sup>

These three issues remained front and center when the Water Resources Committee delivered its report to the legislature in January of 1955, forming the basis of the committee's specific recommendations and proposed legislation. The committee recommended creating a new state agency vested with broad powers to establish state water policy and to carry out a statewide coordinated plan of water resource management. <sup>n73</sup> The committee also proposed to eliminate or transfer authority from five other state and regional agencies to the new water agency. <sup>n74</sup>

The committee's report called out the problem of inadequate regulation and enforcement of consumptive water rights, describing a lack of enforcement against waste, failure to cancel water rights forfeited by non-use, and the need for fulltime state-paid watermasters. <sup>n75</sup> For example, the report cited an Oregon State University study that estimated on-farm irrigation water losses as high as sixty percent and irrigation conveyance losses exceeding a million acre feet per year, enough to irrigate 370,000 acres of land. <sup>n76</sup> Furthermore, the state's records showed extant irrigation water rights for 2.6 million acres of land, while only 1.4 million acres were actually being irrigated. <sup>n77</sup>

The committee lamented the over-appropriated state of Oregon's rivers and affirmed that it was essential to protect streamflows to maintain the state's scenic beauty, public health, recreational opportunities, fishing and other water dependent industries, and the potential for future economic [\*1139] growth. <sup>n78</sup> At the time of the report, sixty percent of the recreational developments in the state depended upon minimum streamflows to operate. <sup>n79</sup> Although the committee did not explicitly quantify water needs for fish and wildlife, it emphasized the importance of water for sports and commercial fisheries and wildlife, especially waterfowl. <sup>n80</sup> Given these important water uses, the committee recommended that the legislature maintain minimum streamflows for the benefit of fish propagation and "dilution of pollution" and suggested "that the proposed central agency be authorized ... to withdraw from appropriation any unappropriated water sufficient to establish minimum flow requirements necessary for preservation of public health in the area of stream pollution and for the preservation of fish life." <sup>n81</sup> The report further recommended that fish, wildlife, and water-dependent recreation be provided legal status in the "use, management, development, and treatment of water," by various means, such as setting aside a portion of stored water in major water development projects to provide minimum flows. <sup>n82</sup> Based on testimony about the ongoing problems of water pollution, the committee also proposed maintaining specified minimum flows in streams to provide "adequate dilution of pollution and sewage and industrial effluent." <sup>n83</sup>

The committee's recommended legislation listed purposes for which waters of the state could be beneficially used or controlled, and included on that list was the "protection of commercial and game fishing, public recreation and scenic attraction." <sup>n84</sup> The proposed legislation also provided clear authorization for the board to withdraw unappropriated waters when in the public interest, "including waters released from storage or impoundment into the natural flow of a stream for specified purposes." <sup>n85</sup> In addition to providing a complete draft of a proposed bill to enact its recommendations, the committee included detailed data on permits and water rights issued throughout the state, and on "suggested optimum flows to sustain fish life" at numerous specific locations along nearly seventy rivers across Oregon. <sup>n86</sup> The action then moved to the legislative chambers.

#### D. A Great Notion: Explicit Protection of Minimum Streamflows

The forty-eighth legislature adopted the 1955 act establishing the State Water Resources Board and its authorities and duties largely as recommended by the interim Water Resources Committee, and even went beyond the committee report in important respects. <sup>n87</sup> The act included the [\*1140] withdrawal powers recommended by the committee, but also addressed minimum flow needs directly in its charge to the board to formulate a comprehensive plan for future use of the state's waters. Section ten of the act instructed the board to "take into consideration" a long list of policy considerations as it formulated a water resources program, including this specific mandate: "the maintenance of minimum perennial stream flows sufficient to support aquatic life and to minimize pollution shall be fostered and encouraged if existing rights and priorities under existing laws will permit." <sup>n88</sup>

A contemporaneous Oregonian editorial praised Governor I.L. Patterson for providing the impetus to address "the increasingly grave problems of over-appropriation and misuse of the state's greatest asset, its water." <sup>n89</sup> The editors noted a bit of the act's legislative history directly concerning the protection for instream uses:

After house hearings in which major complaints about the original interim committee's bill came from agricultural interests and fish and game groups, the house rewrote the bill to meet virtually all of the irrigationists' complaints, but did nothing for fish. The senate committee, however, balanced the score by adopting several important amendments proposed by the fish and game commissions and sportsmen's groups ... . The result is a better bill.

Instead of being low on the totem pole, the fishery resource now is declared of equal importance with other water uses with the exception of human and livestock consumption. <sup>n90</sup>

The state touted its new law as a model for other states. <sup>n91</sup> Indeed, taking the new law and its history at face value would suggest that protection for instream uses would soon fall into place, thus fulfilling Oregon's claim to being a trailblazer. But the reality was somewhat different. The act was implemented in ways that undermined its potential for protecting water instream.

E. An "Integrated, Coordinated Program for the Use and Control of Water Resources of the State," One Basin at a Time

The board spent many agonizing hours debating whether to set minimum flows on an expedited basis, or in the context of individual basin plans. For many reasons the board settled on the latter approach, with [\*1141] resulting long delays before minimum flows were established in many streams. <sup>n92</sup> In the meantime, additional consumptive rights were issued without constraint, thus lessening the effectiveness of the minimum streamflows when they were ultimately set. <sup>n93</sup>

The choice to develop the new statewide water policy and coordinated plan basin-by-basin was driven by funding constraints and the "wide diversification of water yield, topography, and of present and future water uses between the river basins of the state." <sup>n94</sup> The general approach taken by the board in the basin plans was to apportion or "classify" each basin's water for certain designated uses based upon present and projected future needs. The basin plan's classification did little to prioritize water needs, however; even the plans with more "restrictive" classifications of water often had built-in conflicts between consumptive and instream uses. <sup>n95</sup> In spite of the emphasis on fish protection at the time of the act's passage, the first official report by the Water Resources Board contains a decidedly engineering bent, focusing on the need to control water through structures and flow management. <sup>n96</sup> The goal was described as achieving "maximum control of [\*1142] the resource" although the basin plans refrained from proposing specific water development projects. <sup>n97</sup> Maximum control, however, is often at odds with healthy streamflows.

The newly constituted Water Resources Board relied upon the Oregon Department of Fish and Wildlife (ODFW), the Sanitary Authority, and the Parks Department to provide information on current and future water needs in their specific areas of responsibility. It also sought information from federal agencies. In addition, the board hired its own planning staff independent from the state engineer and began, for the first time in the state's history, to engage the public in developing water resource policy and management. Specifically, the board helped form local, county-level volunteer groups representing various water users to provide information and opinions and held public meetings around the state as part of the basin planning process. The board explicitly recognized that "no plan or program ... can succeed without the full support of those directly involved" and represented that it would base programs "to a considerable extent on local desires." <sup>n98</sup> Although public acceptance was certainly important, "local desires" undoubtedly favored consumptive uses and undermined the statute's goal of developing a statewide policy and water resources plan.

Through the basin planning process the board did eventually establish minimum perennial streamflows by administrative rule; <sup>n99</sup> in fact, it set 547 such flows. <sup>n100</sup> The "base perennial flows" to be "preserved against future appropriation" were characterized at the time as a withdrawal of water from appropriation. <sup>n101</sup> The minimum streamflows would thus preclude the exercise of later-issued water rights whenever total streamflow dropped to the established minimum. <sup>n102</sup>

Identifying adequate base perennial flows was not necessarily an easy task. The board established a test stream program to develop quantitative values for "the effects of barriers, diversions, floods, sanitation, low flow, pollution, predators, and all watershed conditions on the fisheries resource." <sup>n103</sup> This ambitious data gathering program was intended to, among other things, satisfy the statutory requirements of minimum desirable [\*1143] streamflows "sufficient to support aquatic life" for each stream. <sup>n104</sup> The initial fish and wildlife flows that were set, however, really just kept some water running in the streams during low flow periods, rather than ensuring the flow necessary to meet scientifically-determined biological, recreational, and water quality needs. <sup>n105</sup> The board itself noted the challenge of setting effective minimum fishery flows in a 1959 report sent to the United States Senate:

One common misconception concerning the establishment of minimum stream flow figures is that the aquatic environment can be maintained if the flow is leveled off at that quantity throughout the year. Minimum stream flow figures are the smallest volumes that can be tolerated in the natural low flow season. The biology of anadromous fish is geared to the natural variation of stream flows at different seasons of the year. A minimum flow that would be satisfactory through the late summer months might be completely inadequate through the winter and spring months. <sup>n106</sup>

But it was not until later in the 1960s that ODFW developed the so-called "Oregon Method" for setting minimum and optimum flow amounts throughout the year at varying levels, using stream surveys and a somewhat more complex and nuanced habitat model to determine flow needs. <sup>n107</sup> Methods for setting recreation flows were not developed until the late 1980s.

Competing interest group demands in the basins made the board's job difficult, too. Oregon reported to the United States Senate in 1959 about conflicts over unappropriated waters:

Fishery interests want continuous streamflows unimpeded by dams that will block spawning areas for anadromous fish. Consumptive users of water wish to take water from the streams, particularly during hot, dry summers when streams have their lowest discharge. Recreation interests want full reservoirs during the summer, at the same time when irrigationists must effect drawdowns. <sup>n108</sup>

The board viewed its role as one of facilitating "necessary compromises" and bringing opposing interests together "so that each may fully be appraised of the other's needs." <sup>n109</sup> That approach is understandable for a brand new [\*1144] policy board of citizens appointed by the Governor, but fish cannot necessarily swim in "compromised" flows. Combining an approach based on compromise with these interest group pressures and with an emphasis on local desires certainly tilted the board's lofty mandate of establishing statewide, comprehensive, coordinated water policy more in the direction of political horse trading.

#### F. Stacking the Deck Against Streamflows

Oregon's minimum streamflow program was held out as the pioneer of instream flow protection, as indeed it was in 1955. The legislature's listing of instream uses as beneficial uses on par with traditional diversionary water uses, together with the mandate to foster and encourage maintenance of adequate minimum streamflows, represented significant improvements on the consumptive focus of the prior appropriation doctrine and were quite revolutionary for

their time. With this new legal framework in place, one would expect to find a record of rapid change both in the legal status of fishery, wildlife, and recreational water resources and in on the ground water management for those resources; however, there were many impediments to protecting actual "wet" water for these purposes.

First, as noted, even in 1955 many streams were already over appropriated, and others did not have sufficient unappropriated water to meet even minimal needs.<sup>n110</sup> Yet the program did little to address these existing flow problems. The legislature and the agency focused on guaranteeing set-aside of releases from future storage projects, rather than on immediately setting appropriate minimum flows and protecting or restoring those flows.<sup>n111</sup> This approach avoided the unpleasant task of coming to grips with waste, cleaning up the profusion of unexercised rights on the books, and putting the brakes on the continued issuance of rights junior to minimum flows even where there was no realistic possibility of consistently available and usable flow for those new users.

Second, the statute's recognition of instream uses as beneficial uses of water did not immediately lead to effective legal status and protection for instream flows. Although the 1955 statutory changes should logically have been interpreted as authorizing applications by agencies, or even private parties, for instream water rights equal in standing to out of stream water rights, that did not happen. The state engineer, backed by attorney general advice, held to the traditional interpretation that no water right could be perfected without diversion from the natural watercourse.<sup>n112</sup> Interestingly, that hard and fast rule had not been so hard and fast when an irrigator wished to establish a water right protecting his use of natural spring flood flows without need of diversion structures,<sup>n113</sup> but it did mean that the state engineer rejected any attempt to apply for a permit on behalf of instream [\*1145] values.<sup>n114</sup> This interpretation struck at the heart of the statute and meant that streamflows were still less in the eyes of the law than other water uses.

The board was quite demanding in the standards it applied to agencies requesting minimum flows, in terms of justifying and quantifying the required flows,<sup>n115</sup> in contrast to the less rigorous process applied by the state engineer to new requests for diversion rights.<sup>n116</sup> The board declined to establish a minimum flow unless it could find that unappropriated water remained available to fulfill that flow a substantial portion of the time. Thus, a minimum streamflow request would generally not be acted upon until extensive stream studies in the basin or subbasin had been completed.<sup>n117</sup> No such certainty of water availability was required for consumptive water rights, however. That was precisely how the streams had become over appropriated in the first place.

Furthermore, the state assigned priority dates to minimum streamflows only when the flows were officially adopted, not when they were first proposed or noticed for hearing. But traditional appropriative water rights "relate back" to the date the application was filed. Again, this allowed many months or years worth of additional consumptive filings on the stream to acquire senior status. The "promiscuous, unlimited filing of water rights" bemoaned by Governor Patterson in 1954 thus continued despite the new law.<sup>n118</sup>

The board disadvantaged minimum streamflows in other ways as well, including granting junior rights holders temporary waivers or outright exemptions from the limits imposed by the flows. In critical low flow years, waivers became almost routine as the board faced a growing army of water users dependent on water rights junior to the streamflows.<sup>n119</sup> These widespread waivers were directly contrary to the specific statutory provision allowing curtailment of later issued consumptive rights to protect [\*1146] established minimum flows.<sup>n120</sup> The board also completely exempted many new water rights from being limited by the established minimum flows. The statute itself recognized some exemptions, but the board went beyond what the statute provided. The 1955 act provided that human and livestock use took precedence over minimum flows.<sup>n121</sup> By itself, this would be an understandable and not particularly burdensome condition. However, the board interpreted human use broadly and excepted a variety of water applications from operation of the minimum flows, variously citing domestic use, household garden irrigation, and the like.<sup>n122</sup>

As noted earlier, the statute allowed withdrawal of water from appropriation as a tool for protecting instream uses. Indeed, the structure of the statute suggested that this mechanism was expected to play a large role.<sup>n123</sup> But the board used its administrative withdrawal powers a limited number of times for the purpose of flow preservation.<sup>n124</sup> One

example involves Dutchy and Church lakes in the Goose and Summer Lake Basin near the California border. In 1965, the board withdrew the unappropriated waters of these lakes in perpetuity to provide resting areas and breeding grounds for migratory and resident waterfowl.<sup>n125</sup> Since the withdrawal order only protected unappropriated waters, the withdrawal did not impose any additional enforcement or monitoring burden on the state beyond what it should have been doing to enforce the terms of existing consumptive water rights. Yet in the late 1980s the board modified its program for the Goose and Summer Lake Basin to classify the surface water of Dutchy, Church, and No Name lakes, and the tributaries that feed and connect the lakes, for summer irrigation use "provided that such use is compatible with management programs for migratory and resident waterfowl."<sup>n126</sup> The board then rescinded the 1965 withdrawal order.<sup>n127</sup>

So much for perpetuity. This change would seem to shift the burden to those interested in the instream purposes to show incompatibility of proposed uses, conceivably resulting in issuance of extensive additional [\*1147] diversion rights. The change also presumes that adequate waterfowl management programs were in place against which to assess irrigation diversions. At the very least, the amendment increased the burden on the state to closely monitor the effect of the irrigation rights on the waterfowl habitat.

In the same year that the board modified the Goose and Summer Lakes Basin Plan, a board member stated:

Oregon can properly be proud of its Water Resources Board ... . The early period of many conservation activities is necessarily one of determining the extent of the resource and its adequacy to meet public needs by wise use. The board as a planning and policy agency has certainly proved adequate thus far.<sup>n128</sup>

A 1965 law review article went so far as to say that "establishment of the State Water Resources Board has eliminated the battles between various water users at each legislative session."<sup>n129</sup> Perhaps there was a hiatus for some time, but at least from the 1980s forward, the legislative battles have resumed, with instream flow interests and consumptive water users often at loggerheads.<sup>n130</sup>

Indeed, the rivers were certainly not "fixed" in 1965. The same board member who felt that the board had done well on planning and policy identified the lack of administrative control of water use - in other words, the board's lack of control over the state engineer's actual administration of water rights - as a significant remaining problem.<sup>n131</sup> The state's 1959 report to the United States Senate had expressed a similar frustration in commenting on the problem of getting water instream: "Some scarcities could be overcome if a method of control was established which would insure the proper use of all diverted water and permit none to be wasted."<sup>n132</sup>

A decade later, the Oregon Department of Fish and Wildlife's leading expert on the minimum streamflow program offered yet another perspective on the program's flaws. Rollie Rousseau wrote in 1976 that the program was [\*1148] too complex to enforce effectively. In his opinion, it was so complicated that "many MSF [minimum streamflows] have been generally ineffective in preventing flow depletions and overappropriations."<sup>n133</sup> And all along, junior water rights had been issued at a rapid rate, increasing the enforcement burden even as watermaster staffing was reduced.

Looking back from the vantage point of the 1955 act's fiftieth anniversary, Oregon's flowing streams are still in jeopardy, despite the fact that the state eventually set more than 550 minimum streamflows by administrative rule.<sup>n134</sup> Implementation problems, political compromises, and a deck stacked in favor of consumptive water uses contributed to the failure of Oregon's much-heralded code changes to fulfill their promise of putting fish and other instream water uses on an equal basis with diversionary, consumptive uses. But additional experiments were yet to come.

#### IV. Further Experimentation with Instream Flow Protection

The 1955 Water Code overhaul, though revolutionary for its time, did not fulfill its promise to Oregon's rivers. Nor did

it prove to be the easily replicable statutory experiment sought by other western states to address overappropriation and low flow problems. Fortunately, however, Oregon's great notions did not stop there. Thanks in part to vigilant efforts by citizens concerned about the state of Oregon's rivers, the state has continued to experiment with instream flow protection. Every decade or so, Oregonians have tried other devices to keep the water flowing, including state scenic river legislation and legislation creating official instream water rights to replace the flawed minimum streamflow program.

#### A. Designated Scenic Waterways

Oregon's scenic waterway system stemmed from a citizen initiative passed in 1970. The original initiative established protection for about 496 river miles. Additional designations were made by the Governor and the legislature, and in 1988 a second initiative nearly doubled the reach of scenic waterway protections to more than 1100 river miles.<sup>n135</sup> The Scenic Waterways Act prohibits development of new dams, reservoirs, or other water impoundment facilities on designated stream segments, and the Water Resources Department cannot authorize a new water use upstream of a scenic waterway unless that diversion is consistent with the free-flowing character of the streams and protective of recreation, fish, and wildlife.<sup>n136</sup> The Water Resources Department has quantified flows necessary to achieve those objectives and manages new applications for diversion accordingly, [\*1149] and the Oregon Court of Appeals recently affirmed the principle that those flows must be maintained.<sup>n137</sup> Thus, for a limited number of designated stream segments, the Scenic Waterways Act stepped in to provide more effective streamflow protection than the 1955 act. However, citizen activism and constant vigilance have been crucial to assuring compliance with the Scenic Waterways law.<sup>n138</sup>

#### B. Further Yet: Official Instream Water Rights

Active and vigilant citizens concerned about Oregon rivers played a leading role in the latest chapter of Oregon's instream flow story as well. Largely due to the work of Audrey and Tom Simmons, the founders of WaterWatch of Oregon,<sup>n139</sup> the 1987 Oregon legislature adopted the Instream Water Rights Act.<sup>n140</sup> The Instream Water Rights Act authorized the state's fish and wildlife, environmental quality, and parks and recreation agencies to apply for instream water right certificates to support habitat, pollution abatement, and scenic and recreational values, respectively.<sup>n141</sup> These rights are held in trust by the Water Resources Department but are also required to be regulated and enforced as any other water right.<sup>n142</sup> Of course, any new instream water rights approved under this law carry post-1987 priority dates. All existing minimum flows that had been established [\*1150] under the 1955 act were converted to instream rights after an administrative process,<sup>n143</sup> and those rights carry priority dates between 1955 and 1987.

What was the notion behind this most recent experiment in streamflow protection? The basic impetus for the 1987 legislation was the same as for the 1955 legislation: inadequate streamflows and insufficient legal protection for instream water uses and values.<sup>n144</sup> In other words, by adopting the 1987 law, the legislature was admitting that the 1955 act had not succeeded at keeping the rivers flowing. But what did the new law really offer besides a name change from "minimum streamflows" to "instream water rights"?

The new law made it absolutely clear that water rights could be issued for instream purposes without any diversion, thus solving the problem of the attorney general and state engineer's restrictive interpretation of the 1955 statute.<sup>n145</sup> The 1987 amendments also significantly improved on the methods for restoring low flows and assuring legal protection for the restored flows in two additional ways. One was by allowing transfer of existing diversionary or consumptive water rights to instream water rights by sale, lease, or donation.<sup>n146</sup> The new instream right carries the priority date of the original water right, thus allowing creation of enforceable senior rights to keep water instream.<sup>n147</sup> The second method is provided by the Conserved Water Program,<sup>n148</sup> adopted as a companion to the Instream Water Rights Act.<sup>n149</sup> Any water users who improve the efficiency of their water use, thereby conserving water, are allowed to keep a portion of the saved water for their own use or to convey to others for other purposes, including instream uses.<sup>n150</sup> Furthermore, a portion of the conserved water also goes back to the stream to support streamflows.<sup>n151</sup> These rights created through conservation also carry the original priority date and are thus another way to create instream rights with

some enforceable seniority. <sup>n152</sup>

Once the 1987 law opened the door to the transfer of water rights for instream purposes, a market began to develop with buyers interested in acquiring water rights for transfer. Buyers interested in restoring streamflows include a spectrum of diverse parties: non-profit entities such as the Oregon Water Trust, the Deschutes River Conservancy, and regional land trusts; governmental agencies such as the Bonneville Power Administration, the Bureau of Reclamation, and state agencies; and private [\*1151] companies such as electric utilities, irrigation districts, and other large water users. As the market began to emerge, the buyers and sellers began to design transactions that went beyond the basic conveyances described in the statute and that suited their particular needs or the particular stream system.

Since 1994, the Oregon Water Trust's water portfolio has increased from two leases totaling 1.4 cubic feet per second (cfs) to a portfolio of eighty-four projects with 117 cfs protected instream. <sup>n153</sup> Looking statewide, 303 cfs were restored instream in 2005 by the combined efforts of all the different agencies and groups working on flow restoration. <sup>n154</sup> Many of these transactions are leases rather than permanent acquisitions, but even short term leases have provided critical habitat during drought. Leasing also offers a trial period to assess the impacts of a transaction before doing a permanent transfer.

The single most important feature of the transactions completed under the 1987 act's transfer provision is the seniority, and, thus, the true protectability of the flows. The minimum flows set under the 1955 Act and the junior instream water rights issued to the three state agencies pursuant to the 1987 law were, in many cases, simply inadequate for many rivers. After all, both of those laws were drafted in response to crises of inadequate flows. <sup>n155</sup> Yet both of the statutes were primarily forward-looking, <sup>n156</sup> and neither really offered any tools for directly tackling the problem of over-appropriation. The crucial contribution of the 1987 law was its provision allowing senior diversionary water rights to be converted to full-fledged instream water rights with a senior call position on the river in times of low flow. <sup>n157</sup> The Oregon Water Trust has brokered conversion of some of the oldest water rights in the state to instream rights.

The 1987 amendments, and the ensuing efforts by all parties promoting flow restoration, created a "culture" of flow restoration. <sup>n158</sup> The [\*1152] statute erected the framework of a market for instream flows. Buyers, such as the Oregon Water Trust, appeared with cash in hand. Water rights holders realized they had a valuable asset that could provide income whether the water was left instream or whether it was diverted into an irrigation ditch. Deals were done, dry streams flowed again, and the notion caught on. <sup>n159</sup> Once the market started to operate, both buyers and sellers started to innovate, designing experimental transactions that went beyond the specific acquisitions anticipated by the statute. They began tailoring individual deals to achieve their own unique goals and to align with particular conditions of hydrology and local water use. <sup>n160</sup>

The federal government embraced and strengthened these developing innovations by creating the Columbia Basin Water Transactions Program in 2002. <sup>n161</sup> The program was designed to implement mitigation measures to address the impact of the Federal Columbia River Power System on troubled fisheries. <sup>n162</sup> Specifically, the Water Transactions Program was created to "experiment" with innovative techniques and transactional strategies for increasing tributary flows to help fish. <sup>n163</sup> The federal government invited "state agencies, Indian tribes, water trusts, water districts, watershed councils, irrigation districts, and other interested parties" to apply for recognition as qualified local entities to receive money from the program for flow restoration projects of all sorts. <sup>n164</sup> Then, the federal government put some power behind the experiment by providing funding of over twenty million dollars spread over five years. <sup>n165</sup>

Once again, Oregon and its Pacific Northwest neighbors are blazing trails and experimenting with new devices to address the problem of inadequate streamflow. The new federal program has put significant cash into the hands of numerous water buyers throughout Oregon, Washington, Idaho, and Montana, thereby giving the fledgling instream flow market a big boost. Just as a rising tide floats all boats, by creating the Water Transactions Program, and committing both federal policy and dollars to the culture of flow restoration, the federal government lifted flows in the entire region. The executive director of the Oregon Water Trust became [\*1153] the first executive director of the Water Transactions Program, bringing significant on-the-ground experience to the new program. In 2005, the Water

Transactions Program reported funding forty-two transactions, which restored nearly 66,000 acre feet of water in 873 miles of streams throughout the vast Columbia River Basin. <sup>n166</sup>

In addition to the simple "ramping-up" impact of its scope and budget, the Water Transactions Program generally awards its funds based on priority watersheds in order to focus efforts on flow-limited streams where restoration will have the most significant impacts on fish habitat. <sup>n167</sup> With this basin-wide, prioritized perspective, the Water Transactions Program can, to some degree, sidestep the political horse trading that stymied the Oregon Water Board's effort to implement an "integrated, coordinated program" statewide under the 1955 state statute.

Oregon, Washington, and Montana all have nonprofit water trusts qualified to receive the federal program's funds. <sup>n168</sup> In Idaho, the state Water Resources Department is a qualified entity, and the department works with nonprofit entities, including the Nature Conservancy and Trout Unlimited, to design restoration deals. Even outside the zone of influence of the Columbia River endangered fish problems and the Water Transactions Program, Texas, New Mexico, Colorado, and the Great Basin have incubated water trusts as well. <sup>n169</sup> A number of state and federal agencies, tribes, conservation groups, and even water users are actively involved in streamflow restoration, further contributing to the culture of valuing flowing waters.

The various experiments and innovations over many years seem to be finally producing success. But instream flow advocates are not the only ones being creative and innovative. Opponents of instream flows have also been experimenting, using creative arguments in administrative, legislative, and judicial settings to block instream flows. <sup>n170</sup> However, these arguments are mostly failing. <sup>n171</sup>

Sometimes even the state agencies reviewing instream rights applications seem to go out of their way to create special challenges and barriers to instream water rights. <sup>n172</sup> So perhaps it is an overstatement to **[\*1154]** say that "brooding darkness" has exploded into "Day-Glo delight" as far as instream flow protection is concerned. On balance, however, the story seems headed toward a brighter ending.

#### V. Conclusion: "Finally ... the Actual River" <sup>n173</sup>

Nearly one hundred years ago, in 1909, Oregon adopted its first comprehensive Water Code and asserted control over the state's water resources. The world was a different place then. Henry Ford had just introduced the Model T the previous year. <sup>n174</sup> By 1913, Ford was producing his automobiles on a continuously moving assembly line to make them widely available and affordable. <sup>n175</sup> That same year, Oregon had the foresight and wisdom to protect the beautiful waterfalls in the Columbia Gorge, just in time to welcome all the tourists driving their new Model Ts on the Columbia River Scenic Highway. <sup>n176</sup> Those waterfalls are still flowing, thrilling tourists who might now arrive by gas-electric hybrid vehicles. But somewhere along the way, Oregon's "production process" for instream flow protective devices broke down and flow restoration in the state's rivers became a continuously moving and elusive target. Although the 1955 code changes again put the state in the forefront of instream flow protection laws, that experiment did not readily produce the desired results. Yet the state's citizens did not give up on their rivers, an important part of what makes Oregon, Oregon. Citizen-sponsored scenic waterways legislation now protects over one thousand river miles in the state from incompatible land and water use, providing significant recreational and esthetic opportunities for Oregon residents and visitors.

Even that was not enough to redress historic over-appropriation and keep all the rivers flowing, however, and further political pressure resulted in statutory authorization of instream water rights. With the potential for some of those water rights to have enforceable senior priority dates, the prospects for real flow restoration became much brighter in Oregon and elsewhere. The efforts have spread throughout the Pacific Northwest and beyond. A culture of flow restoration is taking hold, using market transactions and many other innovative devices for getting water back into rivers.

Like a river picking up speed and volume as it tumbles down a mountain, the effort that originated with Oregon's

simple notion of waterfall protection laws almost a century ago has grown as well. The [\*1155] instream flow movement is gathering strength, from the "first little washes flashing" of an individual rancher entering into a split-season lease to the "branches, crashing into creeks, into streams" of the Columbia Basin Water Transaction Program's four-state effort. One of these days, finally, it will be an actual river. With apologies to Ledbetter and Lomax, I propose a variation on the old song:

Sometimes I travel by paddling,

Sometimes I travel by boat,

Sometimes I get a great notion ...

To jump into the river and float.

#### **Legal Topics:**

For related research and practice materials, see the following legal topics:

Environmental Law Natural Resources & Public Lands General Overview Governments State & Territorial Governments Water Rights Real Property Law Water Rights Nonconsumptive Uses Fishing

#### **FOOTNOTES:**

n1. Ken Kesey, *Sometimes a Great Notion* (Penguin Books 1977) (1964). The novel's title page quotes the song *Good Night, Irene*: "Sometimes I live in the country, Sometimes I live in the town; Sometimes I get a great notion to jump into the river ... an' drown." Huddie Ledbetter, *Good Night Irene*, on *Midnight Special* (Ludlow Music, Inc. 1935).

n2. Kesey, *supra* note 1, at 1.

n3.

In 1987, the Tourism Commission ... of the Oregon Economic and Community Development Department engaged the Portland-based advertising agency Wieden & Kennedy to launch a revitalized marketing campaign with the tagline, "Oregon. Things Look Different Here." The campaign was designed ... under the umbrella message that Oregon has a unique lifestyle, natural environment, and sense of place.

Oregon Business Plan White Paper: Branding and Marketing Oregon 1 (Jan. 2003), available at <http://www.oregonbusinessplan.org/pdf/12-Brand%20Oregon%20WP%2001-15-03.pdf>; see also Jeff Kroft, Senior Policy Specialist, Or. Dep't of State Lands, Presentation at the 18th Annual Submerged Lands Management Conference: Fiber Optic Cables: The Oregon Experience or "Things Look Different Here" (Oct. 16, 1999), available at <http://www.ortcc.org/PDF/FiberOpticCableSpeechOctober1999.pdf> (last visited Nov. 12, 2006) (providing a summary of Kroft's presentation).

Ever Since Oregon was a territory, it has had a reputation for being independent, for doing things in what is sometimes termed "the Oregon way." The territorial motto, "She Flies With Her Own Wings" expressed as early as the 1850s the state's desire to determine its own destiny, to not be simply a follower. More recently, the Oregon Department of Tourism capitalized on this quality by adopting the phrase "Oregon, Things Look Different Here" as the unofficial state motto.

Id. at 1.

n4. " Long ago, Oregonians figured out what a precious commodity we have in our mountains, beaches, deserts, rivers and lakes." Paradise Found, Travel Or. Mag., Spring-Summer 2005, available at <http://www.traveloregon.com/Travel-Oregon-Magazine/Spring-Summer-2005/Paradise-Found.aspx>.

n5. Kesey, supra note 1.

n6. The Pranksters's adventures were chronicled by Tom Wolfe. Tom Wolfe, *The Electric Kool-Aid Acid Test* (1968). "Furthur" was displayed on the destination sign on the front of the bus; the back said "Caution: Weird Load." Id. at 75.

n7. Kesey, supra note 1.

n8. Ken Kesey, *One Flew Over the Cuckoo's Nest* (1962).

n9. See Joshua Fried, *What A Trip: Ken Kesey's Visions of a Different World Set the Sixties in Motion*, Stan. Mag. (Stan. Alumni Ass'n, Stanford, Cal.), Jan.-Feb. 2002, available at <http://www.stanfordalumni.org/news/magazine/2002/janfeb/departments/examinedlife.html> (noting *One Flew Over the Cuckoo's Nest* launched Kesey into "overnight stardom" and *Sometimes a Great Notion* was "lauded by many critics as a masterpiece").

n10. Ken's brother Chuck and Chuck's wife Sue are the founders and owners of Springfield Creamery, the makers of Nancy's Yogurt. Nancy's Yogurt, The Creamery History - Family Owned Since 1960, [http://www.nancysyogurt.com/our creamery/history.php](http://www.nancysyogurt.com/our%20creamery/history.php) (last visited Nov. 12, 2006) [hereinafter Creamery History]. Nancy's Yogurt is named after the company's longtime bookkeeper, Nancy Hamren, who first came to Oregon after meeting Ken Kesey in California in 1969, and who helped develop the yogurt recipe. Nancy's Yogurt, Where Did Nancy's Yogurt Get Its Name?, [http://www.nancysyogurt.com/our creamery/who is nancy.php](http://www.nancysyogurt.com/our%20creamery/who%20is%20nancy.php) (last visited Nov. 12, 2006). The company credits some of its success to Ken's notoriety. Creamery History, *supra*. When the business was just getting started, the Kesseys shipped truckloads of yogurt to the San Francisco Bay area, where it was delivered to natural food stores along with underground comic books. The product took off in part because customers connected Nancy's Yogurt with Ken Kesey. *Id.* Chuck Kesey also made good use of his brother's connections to the Grateful Dead, who became friends of Ken's in California. In 1972, a difficult year financially for the creamery, Chuck Kesey convinced the band to come to Oregon and perform a benefit concert for the business. *Id.* According to the company's website:

It was an epic event. More than 20,000 people attended. The tickets were printed on Nancy's Yogurt labels, and a movie was made of the concert entitled "Sunshine Daydream." Grateful Dead Concerts became a tradition after that, with 10 more concerts in the following years. "It always seemed like we had more awareness after those concerts," Nancy says. "Not that we ever put up banners saying "brought to you by Nancy's Yogurt," but concertgoers knew we were part of these events and we were part of this alternative culture that was music, natural foods and natural living."

Creamery History, *supra*.

n11. Kesey's so-called "youthful indiscretions" and flamboyant escapades were not without legal consequences. He was arrested and tried for illegal drug possession on more than one occasion, and was sentenced to do time on a county work farm, pay fines, and serve probation. Matthew Rick, Tarnished Galahad: The Prose and Pranks of Ken Kesey, <http://www.ulster.net/shady/thesis.html> (last visited Nov. 12, 2006).

n12. Bob Welch, Kesey, Oregon Are Inseparable, *The Register-Guard* (Eugene, Or.), Nov. 15, 2001.

n13. *Id.*

n14. Kesey, *supra* note 1, at 100.

n15. See Or. Rev. Stat. §197 (2005) (creating one of the first statewide land use planning systems); Or. Rev. Stat. §§459A.700-459A.740 (2005) (Oregon's "Bottle Bill", one of the nation's first reusable bottle deposit laws); Or. Rev. Stat. §390.610 (2005) (providing public access to the beach along Oregon's coast); Or. Rev. Stat. §§196.105-196.125 (2005) (providing for the protection of the Columbia River Gorge); Or. Rev. Stat. §§390.805-390.925 (2005) (providing for the creation and protection of scenic rivers); see also Or. Rev. Stat. §§127.800-127.890, 127.895, 127.897 (2005) (Oregon's "death with dignity" act, allowing assisted suicide).

n16. Or. Rev. Stat. §196.105-196.125 (2005).

n17. Act of July 20, 1987, ch 1987, ch. 859, 1987 Or. Laws 1757, 1757-59.

n18. Act of Mar. 26, 1955, ch. 707, §10(g), 1955 Or. Laws 924, 927-28.

n19. Regarding the main character in *Sometimes a Great Notion*, Kesey wrote:

You can tell my good friends and neighbors Hank Stamper is heartless as a stone if you want... .

... .

I got to thinking about the bobcats I found in the berry vines, is what; I got to remembering them bobcats... .

... .

... He doesn't want to cry; he hasn't allowed himself to cry in years. And to stop that old scalding memory mounting in his nose and throat he forces himself to imagine exactly what it must have been like ... the three cats thrown from their warm bed and submerged in struggling icy death, caged and unable to swim to the surface.

Kesey, *supra* note 1, at 101, 108, 363.

n20. See, e.g., U.S. Bureau of Land Mgmt., *Oregon Water Rights Fact Sheet 4* (Aug. 15, 2001), available at <http://www.blm.gov/nstc/WaterLaws/oregon.html>.

n21. In the riparian legal scheme, the owner of land adjacent to a natural watercourse had a riparian claim to use of water for ordinary domestic purposes and to make reasonable use of the flow of that stream for irrigation of the riparian land or for manufacturing. See generally Wells A. Hutchins, *The Common-Law Riparian Doctrine in Oregon: Legislative and Judicial Modification*, 36 Or. L. Rev. 193, 194 (1957) (noting that the riparian doctrine common-law rule includes a well-established limitation of use for domestic and stock watering purposes plus, when surplus allows, reasonable use for irrigation purposes).

n22. As elsewhere in the West, an appropriative right was established with a priority from the date when the developer initiated or established intent to divert, so long as the diversion from the natural channel was timely completed and the water put to beneficial use. *Hutchinson v. Stricklin*, 28 P.2d 225, 229 (Or. 1933).

n23. Louis S. Bonney, Oregon's Coordinated Integrated Water Resources Policy, 3 Willamette L.J. 295, 295 (1965) (quoting Bulletins of the State Engineer of Oregon Nos. 1-7, Inclusive 1907-1924). State Engineer John Lewis agreed that water "is not inexhaustible like the air we breathe, but ... can be monopolized by the few to the detriment of the many, unless guarded by proper legislation." *Id.*

n24. Act of Feb. 24, 1909, ch. 221, 1909 Or. Laws 370, 370-71; Act of Feb. 24, 1909, ch. 216, 1909 Or. Laws 319, 332.

n25. See 1909 Or. Laws at 319 (providing a system for distribution of the right to use water, including provisions protecting prior vested rights to water).

n26. *Id.* at 332.

n27. *Id.* at 333.

n28. Water Res. Comm., Report to the Forty-Eighth Leg. Assembly 79 (Or. 1955) [hereinafter Water Res. Comm.]. As of 1999, the number of permits had grown to 80,000. Or. Water Res. Dep't, Overview of Mission and Programs 8 (Jan. 1999), available at <http://www1.wrd.state.or.us/pdfs/overview99.pdf>.

n29. See, e.g., 1909 Or. Laws at 319 (withdrawing the waters of Bull Run Creek for the City of Portland).

n30. Act of Feb. 9, 1915, ch. 36, 1915 Or. Laws 49, 49-50 (entitled "An Act: To preserve the scenic beauty of certain waterfalls and streams

in view of, or near the Columbia River Highway"). In 1986, the Columbia Gorge was designated as a national scenic area. Columbia River Gorge National Scenic Area Act, Pub. L. No. 99-663, 100 Stat. 4274, 4276 (1986) (codified at 16 U.S.C. §§544-544p (2000)).

n31. Act of Apr. 1, 1953, ch. 222, 1953 Or. Laws 344-45 (withdrawing several rivers which "shall not be diverted or interrupted for any purpose, except for protecting fish life therein by the fish commission or the game commission"); Act of Mar. 2, 1929, ch. 279, 1929 Or. Laws 301, 301 (withdrawing waters of Tumalo Creek to maintain the recreational and scenic resources of the state); Or. Rev. Stat. §§538.010-538.450 (2005) (a current list of legislative withdrawals).

n32. Although statutory withdrawals prevent further appropriation, full protection of the instream flows in withdrawn sources requires monitoring for illegal appropriations or unlawful use under previously-issued permits. See Water Res. Comm., *supra* note 28, at 79. This sort of monitoring is often lacking, however. See generally Janet C. Neuman, Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use, 28 Env'tl. L. 919, 919 (1998).

n33. Act of Feb. 21, 1913, ch. 87, 1913 Or. Laws 141, 142.

n34. State Water Res. Bd., Second Biennial Report 9 (1959) [hereinafter Second Biennial Report].

n35. Water Res. Comm., *supra* note 28, at 29.

n36. *Id.*

n37. President's Water Res. Policy Comm'n, A Water Policy for the American People (1950), available at <http://content.lib.utah.edu/cdm4/document.php?CISOROOT=/wwdldoc&CISOPTR=2200&REC=15>.

n38. See generally Western Water Policy Review Advisory Comm'n, Water in the West: Challenge for the Next Century 4-21 to 4-25 (1998) (describing the history of federal water policy commissions from the 1808 Gallatin Commission's call for a nationwide network of canals and navigation improvements through the 1998 Western Water Policy Review Advisory Commission's work addressing the federal role in western water management in the 21st century).

n39. *Id.* at 4-21.

n40. *Id.* at 4-21 to 4-22.

n41. *Id.* at 4-25.

n42. See generally U.S. Dep't of Interior, Bureau of Reclamation, *The Columbia River: A Comprehensive Departmental Report on the Development of the Water Resources of the Columbia River Basin for Review Prior to Submission to Cong.* (1947) [hereinafter BOR, *The Columbia River*] (proposing a broad plan for the development of water resources of the Columbia Basin). The Corps of Engineers completed a section 308 report on the Columbia River in 1949. See also Marc Reisner, *Cadillac Desert* 210-16 (1986) (detailing competition between the Bureau and Corps of Engineers in Oregon and elsewhere). Congress had originally authorized a Corps feasibility study for multiple use development of the Columbia River in 1927. Act of Jan. 21, 1927, ch. 47, §4, 44 Stat. 1010, 1016, 1021 (1927). See generally Michael C. Blumm, *Sacrificing the Salmon: A Legal and Policy History of the Decline of Columbia Basin Salmon* 90-99 (2002).

n43. See, e.g., BOR, *The Columbia River*, supra note 42, at 21-23 (describing urgent needs for dams, reservoirs, hydroelectric power facilities, and navigation improvements, and outlining a development plan for constructing 238 projects); *id.* at 349-57 (noting the importance and value of fish and wildlife resources and acknowledging the tremendous detrimental impact of past and proposed water development). The Bureau specifically identified the critical problem of maintaining adequate streamflows, and in a classic understatement said, "the maintenance of the runs of salmon and steelhead will depend upon the successful solution of a number of difficult problems." *Id.* at 347, 357.

n44. President's Water Res. Policy Comm'n, *Ten Rivers in America's Future* 268 (1950), available at <http://content.lib.utah.edu/cdm4/document.php?CISOROOT=/wwdldoc&CISOPTR=10120&CISOSHOW=9276&REC=20>.

n45. *Id.* at 24.

n46. *Id.* at XVII.

n47. *Id.* at XVII, 385 (1950).

n48. The project was originally proposed by the Northwest Power Supply Company, whose interest was taken over by PGE in 1950. Joshua Binus, *Proposed Pelton Dam Site, The Or. Hist. Project* (2005), <http://www.ohs.org/education/oregonhistory/historicalrecords/dspDocument.cfm?docID=886E82C5-ECC0-98BC-F8569B2233D64B07> (last visited Nov. 12, 2006). The State of Oregon denied state permits for the project and fought the federal decision in the courts, all the way to the United States Supreme Court, and in Congress, without success. The state's position was not unified initially, however. The state Hydro-electric Commission had permitting authority, but the Fish Commission insisted that it effectively had veto authority. The attorney general settled the question in favor of the Fish Commission, saying that the Hydro Commission had to include permit conditions satisfactory to the Fish Commission. Bonney, *supra* note 23, at 300-01 (citing 24 Or. Att'y Gen. Bien. Rep. & Op. 252 (1948-1950)) (discussing the Pelton Dam controversy and the power struggles between the two commissions). The 1947 BOR Report had highlighted the tremendous power potential of 15 sites in the Deschutes Basin. BOR, *The Columbia River*, *supra* note 42, at 280.

n49. See Or. Rev. Stat. §538.110 (2005) (withdrawing waters of Deschutes tributary Tumalo Creek "for the purpose of maintaining and perpetuating the recreational and scenic resources of Oregon").

n50. *Federal-State Water Rights: Hearing Before the S. Comm. on Interior and Insular Affairs, 87th Cong. 62* (1961) (statement of Lewis A. Stanley, State Engineer, State of Oregon).

n51. Or. Dep't of Env't Quality, *About DEQ* (2006), <http://www.deq.state.or.us/about/index.htm> (last visited Nov. 12, 2006); see *The President's Water Res. Policy Comm'n, 1 A Water Policy for the American People 185-92* (1950).

n52. Or. Dep't of Env'tl. Quality, *supra* note 51.

n53. *Water Res. Comm.*, *supra* note 28, at 55.

n54. *Id.* at 56.

n55. *Id.* at 56, 76.

n56. Water Res. Comm., *supra* note 28, at 61-62, 72, 76-77.

n57. *Id.* at 31-32, 42-46, 71-72 (noting that commercial and sport fishing contributed over \$ 100 million annually to the state's economy, that the \$ 250 million tourism and recreation business was the third largest industry, and that many millions more dollars were invested in enterprises related to in situ water values).

n58. *Id.*

n59. *Id.* at 29.

n60. Oregon's legislature meets for approximately six months only in odd years. Thus, the legislature often makes use of specially appointed committees and task forces to examine issues during the interim year between sessions.

n61. Act of May 12, 1953, ch. 658, 1953 Or. Laws 1207, 1207-08.

n62. *Id.*

n63. *Id.* The rest of the list included traditional consumptive and diversionary uses of water, such as domestic and municipal use, irrigation, fire protection, and power development.

n64. Minutes, transcripts and other materials from the work of this committee can be accessed through the Oregon State Archives, in Salem, Oregon. Oregon State Archives, Index, <http://www.sos.state.or.us/archives/state/water/series/watcomm.htm> (last visited Nov. 12, 2006) (listing the available Water Resources Committee Records).

n65. The Governor's interagency coordinating committee on natural resources also participated. Comm. on Natural Res., Minutes of Meeting 7-8 (June 16, 1954) [hereinafter Interagency Coordinating Comm.] (on file with author).

n66. Id. at 9.

n67. Id. at 10.

n68. Id. at 8, 11.

n69. Id. at 10.

n70. Id. at 11-13.

n71. Id. at 13.

n72. Id. at 14-15.

n73. Water Res. Comm., supra note 28, at 82-83, 87-89. The committee also noted that at the public hearings "people in all sections of the state presented the same basic suggestion with regard to achieving a state-wide coordinated system of water resources development. It was agreed that a central state agency should be created ... ." Id. at 58. Specifically, the committee proposed a seven member Water Resources Board appointed by the Governor to oversee a new agency staffed by the former state engineer's office. Id. at 88-90. The board became the Water Resources Commission in 1985. Act of July 13, 1985, 1985, ch. 673, 1985 Or. Laws 1416, 1416.

n74. Water Res. Comm., supra note 28, at 83-84.

n75. Id. at 62, 78-80.

n76. Id. at 80-81.

n77. Id. at 78.

n78. Id. at 71-73.

n79. Id. at 32.

n80. Id. at 44-47.

n81. Id. at 71, 72-73.

n82. Id. at 61.

n83. Id. at 61-62.

n84. Id. at 87-97.

n85. Id. at 93-94.

n86. Id. at 186.

n87. Act of May 26, 1955, ch. 707, 1955 Or. Laws 924, 924.

n88. Id. at 928. The legislature later modified this section to include maintenance of recreational values as an additional purpose of minimum streamflows.

n89. New State Water Policy, *The Oregonian*, Apr. 30, 1955, at 2-23.

n90. Id.

n91. In 1959, the state reported to the United States Senate: "Oregon's is a model water law, particularly among Western states. For the first time, all beneficial uses of water are given equal status in determining priorities of use, with only human consumption and livestock use as dominant in the event of irreconcilable conflicts." Or. Comm. on Natural Res., Report of the State of Oregon to the United States Senate Select Committee on National Water Resources 1 (Nov. 1959) [hereinafter Report to the U.S. Senate].

n92. See, e.g., Corinne C. Sherton, Preserving Instream Flows in Oregon's Rivers and Streams, 11 Env'tl. L. 379, 396-98, 400 (1981) (noting 15-18 year wait, or more, before minimum flows were established). In 1983, the legislature directed that minimum flows be considered expeditiously for a bundle of high priority streams, though "expeditiously" hardly seems like the right word to use nearly 30 years after the law's adoption. Act of Aug. 8, 1983, ch. 796, 1983 Or. Laws 1534, 1534 (codified in part at Or. Rev. Stat. §536.235 (2005)). Indeed, just a few years earlier, the legislature had intervened to slow the process of setting minimum streamflows. Early in 1979, the Department of Fish and Wildlife submitted 73 flows to the Water Resources Board for streams in urgent need of protection. Sherton, *supra*, at 397 n.128 (citing interview with Oregon Department of Fish & Wildlife staff biologist Lou Fredd). The department identified 300 needed flows, but reduced the list to a number they thought the board would be willing to consider. *Id.* The legislature then adopted additional procedural requirements for establishing minimum streamflows, and over a year later, the board had acted on only one of the 73 "urgent" requests. *Id.* at 397-98 (discussing Or. Rev. Stat. §§536.220, 536.300(1), 536.310(1), 536.325 (1979)).

n93. The first Basin Report was published in 1958. See Or. Water Res. Dep't, September, 1999-Bibliography of Publications 1 (Sept. 1999), available at <http://www1.wrd.state.or.us/pdfs/pubbib99.pdf> (listing all basin reports published by the Oregon Water Resources Department). Several were issued during the 1960s, but others were not completed until the 1980s and 90s. *Id.* Meanwhile, applications for new consumptive rights averaged about 2000 per year. Sherton, *supra* note 92, at 380.

n94. Louis H. Foote, Are Oregon's Institutions Adequate?, in Water Law, Politics and Economics 73, 78 (Or. State U. Water Res. Research Inst. ed., 1965), available at <http://ir.library.oregonstate.edu/dspace/bitstream/1957/606/1/SEMN WR-3 ocr.pdf>. Mr. Foote was a member of the Water Resources Board at that time. See also State Water Res. Bd., First Biennial Report 15-41 (1957) [hereinafter First Biennial Report] (discussing the board's basin planning process).

n95. See, e.g., Sherton, *supra* note 92, at 394-95 (discussing the "most restrictive" subbasins of the upper McKenzie and lower Deschutes, which classified water for domestic use, livestock, non-commercial irrigation up to one-half acre, fish, wildlife, recreation, and, in Deschutes only, power development).

n96. First Biennial Report, *supra* note 94, at 42-54. This bias was not surprising since physical control of water was the dominant theme of the decade. See *supra* notes 36-39 and accompanying text. It may also be worth noting that Fred Merryfield, who contributed the "M" to the name of the engineering firm, CH2MHill, was one of the initial members of the Water Resources Board.

n97. First Biennial Report, *supra* note 94, at 28-30.

Only by management of the resource can the State augment the flow during periods of maximum demand and minimum supply, and only by management can the damage caused by floods be controlled. In order to effectuate such control, a program must be set forth whose basic premise is the maximum regulation of a stream consistent with the beneficial uses of the resource.

*Id.* at 30.

n98. *Id.* at 33.

n99. See Or. Admin. R. 690-076-0005 to 690-076-0035 (2006).

n100. Or. Dep't of Fish & Wildlife, *Instream Water Rights 2* (1997), available at <http://www.dfw.state.or.us/ODFWhtml/InfoCntrFish/PDFs/BKGWaterRights.pdf>.

n101. Report to the U.S. Senate, *supra* note 91, at 7 (characterizing the base perennial flows as "in effect, making a withdrawal of water").

n102. Second Biennial Report, *supra* note 34, at 34.

n103. First Biennial Report, *supra* note 94, at 39.

n104. *Id.* at 2, 36.

n105. Initial flows were expressed as "flat rates" - one flow measurement that applied year-round, but was aimed at the lowest flow period. See Sherton, *supra* note 92, at 397 (discussing pre-1970 flat flow rates).

n106. Report to the U.S. Senate, *supra* note 91, at 18.

n107. R. F. Rousseau, *The Oregon Experience with a Minimum Streamflow Law*, in 2 Proceedings of the Symposium and Specialty Conference on Instream Flow Needs of the American Fisheries Society and the American Society of Civil Engineers, 79-80 (Sept. 1976) (Rollie Rousseau, now a United States alternate commissioner to the Pacific Salmon Commission, was then a biologist at the Oregon Dep't of Fish and Wildlife Department).

n108. Report to the U.S. Senate, *supra* note 91, at 9.

n109. First Biennial Report, *supra* note 94, at 34.

n110. See *supra* notes 56, 64-65, 77 and accompanying text.

n111. See *supra* note 82 and accompanying text.

n112. 27 Op. Att'y Gen. 210-12 (1956).

n113. *Masterson v. Pac. Live Stock Co.*, 24 P.2d 1046, 1050 (Or. 1933).

n114. By contrast, in at least one instance, the State of Washington issued a private right for use of water instream for fish propagation. Bevan, PCHB No. 48, 4-5 (Wash. Pollution Control Hearings Bd. June 11, 1972), available at <http://www.eho.wa.gov/Archive/PCHB/PCHB1971-08.pdf>.

n115. First Biennial Report, *supra* note 94, at 41.

n116. *Id.* at 22.

n117. Public pressure began to shift this approach in 1979. For instance, the Water Resources Department newsletter for March 1979 reported that at its February 16, 1979, meeting the Water Policy Review Board heard extensive concerns that "by the time minimum flows would be established, there would be so many appropriations that the minimum flows would be ineffective. A few individuals supported the staff recommendation" to consider minimum flows as part of basin updates where the studies were already underway, and to proceed on a stream-by-stream basis in other regions. Board Acts on Minimum Flows, Water Works (Water Res. Dep't, Salem, Or.), Mar. 1979, at 1. This would still require about four years, but the majority urged speedier action. "After much discussion, the board voted to hold public hearings on the proposed minimum flows ... ." *Id.* The board's attempt to expedite the process was hampered to some degree by the legislature itself, however, presumably responding to countervailing public pressures. See *supra* note 92 (discussing procedural amendments by the 1979 legislature that slowed the board's process and progress).

n118. Interagency Coordinating Comm., *supra* note 65, at 10.

n119. See Sherton, *supra* note 92, at 395-96, 400-01 (noting that junior rights holders became a "powerful faction lobbying the Board to suspend or waive minimum flow requirements").

n120. See *supra* note 82 and accompanying text (regarding the 1955 Act's explicit protection of minimum streamflows).

n121. Act of May 26, 1955, ch. 707, 1955 Or. Laws 924, 928-29.

n122. Sherton, *supra* note 92, at 400.

n123. The 1955 law created the Water Resources Board and directed it to proceed as rapidly as possible "to study the state's water resources" and to formulate a coordinated water resources program for the state. Act of May 26, 1955, ch. 707, §10(1), 1955 Or. Laws 924, 927. Three main mechanisms provided the motive power for carrying out this program. The board was authorized: to classify the state's waters for various preferential uses; to provide copies of the program and policy statements to all state agencies who were then to conform their conduct accordingly; and to withdraw water to assure compliance with its plans and programs. §§3, 10, 11, 16, 1955 Or. Laws 924, 925-30, 932.

n124. See Sherton, *supra* note 92, at 393-94 (discussing only three withdrawals prior to 1981, and noting that according to Water Resources Department staff, some board members believed the withdrawal mechanism to be a temporary tool only).

n125. Or. Admin. R. 690-080-0010(2)(a), (2)(e) (2006) (listing the Dutchy and Church lakes as withdrawn from further appropriation).

n126. Or. Admin. R. 690-513-0060(2)(l) (2006).

n127. Or. Admin. R. 690-080-0010(2)(a), (3) (2006).

n128. Foote, *supra* note 94, at 82.

n129. Bonney, *supra* note 23, at 314.

n130. In 1989 two amendments to Or. Rev. Stat. §390.835(1) were proposed, but defeated. Nancy B. Murray, Note, Protecting Oregon's Scenic Waterways: *Diack v. City of Portland*, 21 Env'tl. L. 133, 161-62 (1991) (discussing amendments providing for higher priority for human and livestock uses over scenic waterway uses and allowing the Water Resources Commission to issue permits on a conditional basis prior to determining the flows necessary for scenic waterways). In the 90s and beyond, consumptive user and instream interests have tangled frequently in the legislature. See Janet C. Neuman, *The Good, the Bad, and the Ugly: The First Ten Years of the Oregon Water Trust*, 83 Neb. L. Rev. 432, 476-79 (2004) (discussing legislative attacks on Oregon's Instream Water Rights law during the 1990s and beyond).

n131. Foote, *supra* note 94, at 81-82.

n132. Report to the U.S. Senate, *supra* note 91, at 19. Requiring measurement of water use is still strongly resisted by water rights holders, even when they recognize its importance. Pam Wiley, Report and Process Recommendations, *Water Use Efficiency Study* 16-17, 23 (Northwest Water Law & Policy Project Policy Paper, Paper No. PO98-7, 1998), available at <http://www.lclark.edu/dept/water/publications.html>.

n133. Rousseau, *supra* note 107, at 80.

n134. The minimum streamflows that had been set were later converted to actual instream water rights under the 1987 instream water rights law with priority dates corresponding to their dates of adoption as minimum streamflows. Or. Rev. Stat. §537.346(2) (2005).

n135. Murray, *supra* note 130, at 134 n.4.

n136. Or. Rev. Stat. §390.835 (2005).

n137. *WaterWatch of Or. v. Water Res. Comm'n*, 112 P.3d 443, 448-49 (Or. App. 2005) (invalidating the commission's administrative rules adopted to implement a mitigation program for new groundwater permits in the Deschutes Basin because the rules did not adequately protect the scenic waterway flow in the river, which is hydrologically connected to the basin's groundwater).

n138. *Id.* *WaterWatch* is a membership organization whose mission is to restore and protect streamflows in Oregon streams and rivers; the group participates in Water Resources Department proceedings, in the legislature, and in litigation. See also *Diack v. City of Portland*, 759 P.2d 1070 (Or. 1988) (suit started by citizen Arch Diack to prevent water diversion that would affect flows in scenic waterway).

n139. See *WaterWatch of Oregon*, <http://www.waterwatch.org> (last visited Nov. 11, 2006) (providing information about *WaterWatch*).

n140. Or. Rev. Stat. §§537.332-537.360 (2005). The same year, however, the Oregon legislature also established a program whereby agencies may "reserve" unappropriated water for future economic use, trumping in priority any instream rights established after the date of reservation. See Or. Rev. Stat. §537.356 (2005) (detailing who may request that the Water Resources Commission reserve unappropriated water and the procedure for doing so). The implementing regulation, Or. Admin. R. 690-079-0030 (2006), states:

Any state agency may request that the Commission establish a reservation of unappropriated water for future economic development. A reservation shall be established by order. The reservation shall set aside a quantity of water for specified uses which shall, when developed, have priority over all other water rights, including instream water rights, from the same source that are filed subsequent to the date the

request for reservation is filed with the Department.

Such reservations are effective for a maximum of 20 years. Or. Admin. R. 690-079-0050 (2006).

n141. Or. Rev. Stat. §537.336 (2005); Janet C. Neuman, *Wading into the Water Market: The First Five Years of the Oregon Water Trust*, 14 *J. Env'tl. L. & Litig.* 135, 138 (1999) (describing the statute).

n142. Or. Rev. Stat. §§537.332-537.349 (2005).

n143. *Id.* §537.346(1).

n144. Neuman, *supra* note 141, at 137.

n145. Or. Rev. Stat. §537.332 (2005).

n146. *Id.* §537.348(1).

n147. *Id.*

n148. Act of June 10, 1987, ch. 264, 1987 Or. Laws 411-13.

n149. Or. Rev. Stat. §§537.348(2), 537.455-537.500 (2005).

n150. Id. §537.470(3). See generally Or. Water Trust, Solutions, <http://www.owt.org/solutions.html> (last visited Nov. 12, 2006) (describing the Conserved Water Program's purpose).

n151. Or. Rev. Stat. §537.348 (2005).

n152. Id. §537.485(1)

n153. Or. Water Trust, Projects: History, <http://www.owt.org/projects.html> (last visited Nov. 12, 2006).

n154. Columbia Basin Water Transactions Program, FY05 Annual Report Summary 3 (2005), available at [http://cbwtp.org/jsp/cbwtp/library/documents/CBWTP\\_2005Annual.pdf](http://cbwtp.org/jsp/cbwtp/library/documents/CBWTP_2005Annual.pdf).

n155. See also WaterWatch, Rivers Without Water: Oregon's Unnatural Disaster 4 (2001) (describing low flows before and after 1987 instream water rights law's adoption). See generally Scott B. Yates, A Case for the Extension of the Public Trust Doctrine in Oregon, 27 Env'tl. L. 663, 663-64 (1997) (explaining that a 1955 Water Resources Committee report stated water in Oregon streams was being over appropriated).

n156. The 1955 statute provided that minimum perennial streamflows would be "fostered and encouraged if existing rights and priorities ... will permit." Act of May 26, 1955, ch. 707, § 10(g), 1955 Or. Laws 924, 928. The main provisions of the 1987 law concerned new instream rights that would have post-1987 priority dates. See An Act Relating to Water Rights, 1987, ch. 859, §3(2), 1987 Or. Laws 1757, 1757 (declaring that recognition of rights under the 1987 Act would not diminish prior vested rights).

n157. " Any person may purchase or lease all or a portion of an existing water right or accept a gift of all or a portion of an existing water right for conversion to an in-stream water right." Or. Rev. Stat. §537.348(1) (2005).

n158. See Or. Water Trust, *supra* note 153 (explaining the Oregon Water Trust's water portfolio).

n159. See *id.* (explaining that the Oregon Water Trust's water portfolio expanded from 1.4 cfs in 1994 to the current "portfolio" of eighty-four projects with 117 cfs "protected instream").

n160. See *id.* (explaining "innovative" deals the Oregon Water Trust conducted in 2004).

n161. See Columbia Basin Water Transactions Program, Historical Context, <http://www.cbwtp.org/jsp/cbwtp/program.jsp> (last visited Nov. 12, 2006) (explaining that the Bonneville Power Administration "selected the National Fish and Wildlife Foundation to serve as the regional entity for the Columbia Basin Water Transactions Program").

n162. See Columbia Basin Water Transactions Program, Supporting Landowners & Communities, <http://www.cbwtp.org/jsp/cbwtp/index.jsp> (last visited Nov. 12, 2006) (explaining that the program was started to "improve flows to streams and rivers in the Columbia Basin," and that the program's philosophy includes "improving fish and wildlife habitat").

n163. *Id.*

n164. See Columbia Basin Water Transactions Program, Program Partners, <http://www.cbwtp.org/jsp/cbwtp/partners/partners.jsp> (last visited Nov. 12, 2006) (providing a list of 2002 Qualified Local Entities).

n165. Bonneville Power Admin., Env't, Fish & Wildlife Program, Request for Qualifications for Water Program Solicitation 2 (Dec. 7, 2001).

n166. Columbia Basin Water Transactions Program, *supra* note 154, at 3.

n167. See *id.* at 12.

n168. The Oregon Water Trust, Washington Water Trust, Montana Water Trust, and seven other entities have been approved for participation in the program. Columbia Basin Water Transactions Program, *supra* note 164.

n169. Tex. Water Dev. Bd., Texas Water Trust, <http://www.twdb.state.tx.us/assistance/WaterBank/wtrust.asp> (last visited Nov. 12, 2006); Introducing the Colorado Water Trust, <http://www.coloradowatertrust.org/> (last visited Nov. 12, 2006); N.M. Office of the State Eng'r, Water Trust Board, [http://www.ose.state.nm.us/more info water trust board.html](http://www.ose.state.nm.us/more%20info%20water%20trust%20board.html) (last visited Nov. 12, 2006).

n170. See generally Neuman, *supra* note 130, at 458-62, 470-72, 475-84 (describing a wide variety of creative administrative, legislative, and judicial maneuvers employed by instream flow opponents to block transfers).

n171. *Id.* (discussing rejection by legislators, administrative law judges, and courts of water rights holders' arguments against instream flow transfers).

n172. See generally David Pilz, *At the Confluence: Oregon's Instream Water Rights Law in Theory and Practice*, 36 *Envtl. L.* 1383 (2006) (describing Oregon Water Resources Department's restrictive interpretations of administrative rules and other agency policies disfavoring instream water rights).

n173. Kesey, *supra* note 1, at 1.

n174. Russ Barham, *The Ford Century* 34 (2002).

n175. *Id.* at 37.

n176. By 1918, half of all cars in the United States were Model Ts. Press Release, Ford Motor Co., Ford Rouge Center Illustrates 20th Century Progress (Nov. 3, 2000), [http://media.ford.com/article\\_display.cfm?article\\_id=6486](http://media.ford.com/article_display.cfm?article_id=6486) (last visited Nov. 12, 2006).