Columbia River Diversion as a Public Revenue Source

White Paper

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Overview

Water is Oregon’s oil. The state government needs a new and reliable foundation for revenue. Governments that leverage their natural resources tend to be the most financially sound. Never in American history has a renewable natural resource been more valuable than western water is today. The combined factors of population growth and climate change will drive the demand for western water even higher in the coming years. Oregon can ease its revenue woes considerably by redirecting an inconsequential fraction of the Columbia River’s excess flow to other western states.
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Part 1: Oregon Needs Money

The persistently cash-strapped United States Marines like to say that, “We have been doing so much with so little for so long that by now we can do almost anything with practically nothing.” Despite being a relatively low budget operation the Marines have racked up a long record of success by identifying their most valuable resource – their people – and reinforcing it by investing their funds accordingly.

Like the Marines, the Oregon state government is relentlessly impecunious. In the 1990s voters passed a flurry of ballot measures bearing significant fiscal consequences. Foremost among them was Measure 5 which moved education into the state general fund. While the immediate effect of Measure 5 was to limit property taxes, it ultimately shifted the growing expense for education right along to income tax-payers who were already financing most state services. Additionally, education suddenly assumed leading status within the general fund and legislators were highly reluctant to make cuts in that area.

Unfortunately the economy is not always robust and general fund revenue directly follows the larger fiscal trends. Income tax can – and should – only go so high which means that during economic downturns the legislature has had to cut valuable and vital state services. Even education, despite its default premier ranking, has been subjected to long-term fiscal degradation because the legislature has simply run out of money. The enactment of Measure 5, along with the crime Measures 9 & 11, the expansion of the Oregon Health Plan and the attached Medicaid costs, and even the redirection of lottery dollars by Measure 66 mixed with the untimely demise of the timber industry to create a perfect revenue storm from which Oregon has never fully emerged.

A prohibitive level of popular resistance continues to block a formal sales tax. Therefore the legislature’s only remaining revenue option, aside from upping so-called “fees” for various state services, is to increase surcharges on consumer products like tobacco and petroleum. Increasing surcharges has become such a default solution that the question every session is virtually never whether? to expand surcharges but always by how much? Yet raising taxes does not solve the legislature’s fundamental lack of a reliable revenue source.

The last time Oregon enjoyed a positive fiscal situation was when it capitalized on an abundant renewable natural resource – timber. Since the end of the timber era Oregon’s public revenue has been inconsistent and generally insufficient. The best way for Oregon to emerge from its fiscal funk is to once again identify and reinforce a renewable natural resource as a foundation for revenue. Fortunately Oregon has an overabundance of something even more valuable than timber to the contemporary world: Columbia River Water.
Part 2: Using Natural Resources To Fund Public Services

Virtually all states generate revenue by exporting their natural resources. The most popular method is through a severance tax. Oregon raises money for the Common School Fund by taxing the export of timber, oil and gas under Chapter 15 of its Internal Revenue Title. But Oregon’s resource revenue is a relative pittance compared to Wyoming which raised an admirable 45.4% of its total revenue in 2004 through similar severance taxes. Yet the grand champion of the severance tax world is Alaska, which raised 50.2% of its total tax collections in 2004 by taxing oil exports. Alaska has no sales tax or income tax, and it maintains a $38 Billion Permanent Fund from which the state actually makes annual payments to its citizens. Such a system is reminiscent of Middle Eastern governments who have no form of taxation and generate all of their massive revenue by selling oil directly on the international market.

Governments everywhere, however, typically refrain from taxing water due to the stigma attached to restricting such a crucial commodity. Municipalities and public utilities in the United States and elsewhere charge usage fees for water but such fees are heavily regulated and the proceeds are not diverted toward unrelated purposes. Virtually no governments sell their water as an export though many governments around the globe enter the market as purchasers. The imbalance flows from the distressing reality that one-fifth of the world’s population has inadequate access to clean drinking water.¹

Under the McCarran Amendment² the Federal Government cannot own or control American water. Water allocation is – legally if not politically – entirely determined by the individual states. Oregon adopted the Prior Appropriation doctrine in 1909 which prohibits the ownership of water by individuals or the government. The state government holds water in trust for the people and administers usage rights through an application process. While a water right application involves a one-time administrative processing fee, the fee is relatively low³, is not forwarded to the state General Fund, and is not a significant source of state revenue.

Aside from the application fee, the State of Oregon does not tax water and it should not attempt to do so. But direct taxation is not the only – or even the best – way to generate revenue from certain natural resources. Timber revenue is funneled to the state government through various means such as the severance tax, the corporate tax, income tax paid by workers and best of all, direct sales of timber from state land.⁴ All sources require minimal state overhead in exchange for a maximum return to the public coffers.

Taxation allows the government to generate revenue from the exchange of goods and services that it does not control. The government can also generate revenue through direct participation in a free market by providing goods and services from its own inventory of assets. When done with great care and only under special circumstances, the government’s direct participation in the free market can lead to a sizable and reliable public profit.

¹ Newsweek, June 4, 2007, p. 52.
³ Or. Admin. Rule Chapter 690, Division 310.
⁴ In fact, Oregon currently sells more timber from state owned property then ever before and the top timber producing counties receive the smallest per-capita education allotment from the general fund. Thus the more timber that a county sells, the less per-student education money it requires from the state.
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Economies of any scale can grow only by importing money across their boundaries. The word for such cross-boundary importation is “income.” Taking a fraction of its citizen’s income is Oregon’s preferred manner of generating public revenue. But as timber selling counties and oil selling states and nations have amply demonstrated, the more income of its own that a government can generate the less income it then requires from its citizens.
Part 3: The Water-to-Salmon Ratio

The Columbia River is the second largest river in the United States. It deposits 198 million acre-feet\(^5\) of water into the Pacific Ocean every year. That accounts for 93% of the river’s total annual flow at the mouth. In comparison the average annual flow of the Colorado River, which is the primary surface water source for six basin states\(^6\) and part of Mexico, is 12-13 million acre-feet, virtually none of which actually drains into the ocean. In other words, the Columbia River returns to the ocean 15 times more water than the entire Colorado River contains.

Oregon diverts 0.3% of the Columbia River’s total annual flow for inland use. Idaho diverts 4% of the total and Washington diverts 3%. Part of the reason Oregon diverts relatively little is that it lacks substantial storage facilities to accumulate winter runoff for agricultural use during the summer growing months. Despite the counterintuitive fact that the Columbia River’s highest natural flow by far comes during the summer months when the snow pack melts, Oregon – unlike Washington and Idaho – prohibits an increase in overall extractions between April 15 and September 30.\(^7\) Only Oregon imposes a mitigation policy during those months\(^8\) requiring that the aggregate amount of water that users can withdraw during that period is essentially frozen at the 1994 level.\(^9\)

Oregon limits Columbia River extractions during the months of greatest flow mostly due to concerns about the health of migrating anadromous fish. After the National Marine Fisheries Service added Snake River Salmon to the Endangered Species Act (ESA) in 1991 & 1992 the Columbia River Basin states scrambled to create withdrawal laws that would accommodate the fish above all other interests. The flow requirements that the states used for guidance were based on contemporary beliefs about the best way to protect salmon. Those beliefs originated from a 1991 study published by the National Marine Fisheries Service.\(^10\)

Yet the scientific inquiry into exactly how much water the salmon need has never been closed. After Washington State settled a lawsuit with four of its growing municipalities in 2002 it commissioned the National Academy of Sciences (NAS)\(^11\) to again study the effect upon salmon of increased extractions from the Columbia River. The NAS returned its findings in 2004 with two overriding conclusions:

1) The question of how much water the salmon require has been studied in great depth by various scientific entities over many years and there are still no reliable conclusions at this point, and

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\(^5\) Approx. 64.5 trillion gallons.
\(^6\) Arizona, California, Colorado, Nevada, New Mexico, Utah
\(^7\) Or. Admin. Rule 690-033-0120(a).
\(^8\) Washington mitigates during July and August under RCW 90.90.030.
\(^9\) The Division 33 rules were created by the Oregon Water Resources Director (Martha Pagal) in 1994 and have never been ruled on in a published court opinion.
\(^10\) 26 Envtl. L. 299.
\(^11\) The NAS was established in 1863 by Abraham Lincoln to advise the nation on science, engineering, and medicine. It is composed of leading American scientists who work pro bono and is so venerable that it supposedly denied membership to Carl Sagan because it deemed him too controversial.
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2) Reasonably increasing extractions from the Columbia River will probably not adversely affect salmon, except during July.

Washington State accepted the NAS findings and reduced its mitigation requirements from all summer down to just July and August. In that sense Washington State decided which science it would accept and thereupon based its approach to diversion. Oregon has not conducted a similar scientific study on which to base its diversion policy, but whatever the rule’s foundation Oregon seems to generally assume that salmon require as much water during the summer months as humans can possibly liberate.

The question of Oregon’s approach to summer diversion is better left for another day as it is not material to this proposal. Governor Kulongoski has declared that nearly 11 million acre-feet of winter water can be diverted from the Columbia River without adversely affecting fish.12 In the most likely scenario of diverting Columbia River water to the Colorado River Basin through a pipeline, existing storage facilities would be able to accommodate far more winter water than Oregon is even able to divert.13 Depending on the requisite engineering – how much water can be moved and how fast – summer diversion to the Colorado River Basin will probably be unnecessary and the Division 33 mitigation rules would remain in place.

To be explicit: credible science says that diverting some winter water from the Columbia River will not deprive salmon of their essential flow, whatever that flow may be. The salmon are irrelevant to this entire endeavor provided the pipeline is shut off during the period of critical flow and the mechanics of it do not physically interfere with their migration. A pipeline for winter water would not require a change to Oregon’s current water laws or general water policy.

Moreover, diverting water from the Columbia River to the Colorado River Basin could be an enormous benefit to conservation efforts on that body.

12 “Governor Kulongoski’s Strategies for Meeting Water Needs in the Columbia Basin.”
13 Lake Powell currently holds 24 million acre-feet with capacity for 51 million acre-feet, though the lake’s purpose is not to supply municipal or agricultural end users.
Part 4: The Federal Government’s role

That the ESA prescribes state water policy is a commonly held misperception. The ESA only holds jurisdiction over how Federal Agencies use the Columbia River. States are legally free to create their own policy. In reality most states craft their water policy around the ESA listings for understandable political reasons.

Water appropriation is entirely the domain of individual states. In 1952 Congress passed the McCarran Amendment which waives federal authority over water rights. Generally the question of federal sovereignty only comes to a head during water disputes involving tribes. Beyond tribal issues the federal government has a significant interest in the Columbia River as a driver of public power generators. To protect the public interests of power and the environment against capricious state actions the federal government and the states have fashioned a set of limited interstate compacts such as one creating the Northwest Power Planning Council.

Despite arduous attempts dating back to the 1920’s the states of the Columbia River basin have never formed an overall compact for the coordinated governance of the water. In 1999 the Oregon Legislature ratified the Columbia River Natural Resources Management Compact in reaction to the federal government’s ESA findings. The compact’s very general sounding purpose is “to promote better management and coordination of natural resources management issues and other issues pertaining to the governance and use of the Columbia River.” Essentially the compact, which has not been ratified by all the states or Congress, would create a state-funded commission comprised of representatives from the member states and the federal government. The compact would then empower the commission to return recommendations to its members regarding governance of the Columbia River.

The fact that the commission fills merely an advisory role instead of being a governing body with power to enforce its decisions reveals the enormous reluctance of states to sacrifice any autonomy regarding allocation of the Columbia River. That reluctance is unlikely to change. Fortunately a binding compact between the basin states and the federal government is not legally necessary for a southern diversion scheme. Politically, however, Oregon would need to obtain assent from the other Columbia River Basin states and the federal government because the river is a shared natural resource. Conveniently, the commission envisioned by the Columbia River Natural Resources Management Compact would be an excellent place to navigate around the complex political obstacles that selling water would encounter. But this proposal does not require ratification of that or any other compact.

Oregon will need to not only assuage the concerns of its fellow Columbia River Basin states but it will also need to discourse with its potential customers. No compact exists between Oregon and the states of the Colorado River Basin and for legal purposes none would be necessary. However, someone will have to invest a lot of money to build the pipeline and that’s not likely to happen in the absence of something that is reassuringly binding. An interstate contract, which unlike a compact does not require Congressional action but would still be

16 A compact is a binding agreement among states that is ratified and enforced by the federal government. Undoing or modifying a compact thus requires Congressional action.
enforceable in federal court, would probably form an adequate basis on which to proceed comfortably with pipeline construction.

The federal government will need to take the lead when dealing with foreign nations. The Columbia River Basin extends into Canada and though geography suggests that the Canadians should not care about America’s downstream activity, the political reality tilts otherwise. The Columbia River Treaty\textsuperscript{18} (1964) governs the allocation of water between Canada and the United States. Though diverting America’s water out of the basin would not legally violate any provisions of the treaty, the Canadians might feel that diversion for profit violates the spirit in which the treaty was formed and render a political protest.

Likewise, America should consult Mexico as part of any scheme to increase the amount of water in the Colorado River. The Mexican Treaty (1945) provides Mexico with 1.5M acre-feet annually to be increased to 1.7M in years of surplus. America’s relationship with Mexico is extremely complex and such matters are rightfully the exclusive province of the federal government.

The federal government’s biggest function is to build the pipeline through the Corps of Engineers or the Bureau of Reclamation. Moving that political mountain will be no effortless feat, but depending on the amount of money involved the prospect is not as far-fetched as it may initially seem.\textsuperscript{19} Having the federal government build a pipeline between the Columbia River and the American Southwest is hardly a new idea. In fact the discussion once became so earnest that in 1968 Congress, upon prompting by Senator Hatfield, imposed a ten year moratorium on all federal agencies against even studying the prospect and then renewed the ban for ten more years in 1978.\textsuperscript{20}

Now that the moratorium has been lifted the Corps’ rules indicate that it can build a pipeline as an expansion of an existing reservoir. The Corps would then lease a water right from Oregon and after transferring the water sell access to it out of the destination reservoir under the “Municipal and Industrial uses” provision\textsuperscript{21} of its mandate. Most of the Colorado Basin reservoirs, however, are operated by the Bureau of Reclamation so the project could instead fall to that agency or could even be a collaborative effort between the two agencies. Such a large project would require congressional authorization regardless and could involve a capital reimbursement requirement whereby the non-federal project sponsors (the states) would reimburse the federal government over a 30-year amortization period.\textsuperscript{22}

At some point in the impending future someone will have to either spend a massive amount of money to address the coming western water crisis or lose an even larger amount of money by failing to act. The stakes will eventually get high enough that when diverting Columbia River water to other western states becomes the most economically viable option, Oregonians can expect it to happen with or without their prior consent.

\textsuperscript{18} The treaty is scheduled to expire in 2024.
\textsuperscript{19} The specific details of this process are outlined in Part 6: Implementation.
\textsuperscript{20} 43 U.S.C. § 1511.
\textsuperscript{21} The Corps’ other purposes are: Flood Control, Hydropower, Irrigation, Ecosystem Restoration, and Recreation.
\textsuperscript{22} Alternately, and preferably, the federal government would issue bonds to pay for the project. In a more cumbersome, though more tax advantageous, method the states or municipalities could themselves issue 30-year bonds with appropriate revenue authorization provisions and repay the federal government from those proceeds.
Oregon law prohibits diverting water away from its basin of origin. Oregon adopted the Basin Transfer Law in the early 1980’s to prevent out of state users from taking its water. Though the law has never been challenged according to published court opinions, the United States Supreme Court has struck down several similar laws as a violation of the Dormant Commerce Clause of the United States Constitution. The only law review article written specifically about Oregon’s Basin Transfer Law concluded that it is probably unconstitutional.

The implications of doing nothing and hiding behind the Basin Transfer Law are as follows: the 4 states of the Columbia River Basin comprise 4% of the U.S. population, whereas the states of the Colorado River Basin comprise 18%. Most water is provided to consumers below its theoretical market value through a well-established system of public subsidies. The remaining water comes from underground aquifers that are rapidly depleting. Once the groundwater runs out, state and local governments will need to put virtually everyone on a municipal or public type of system in order to provide current groundwater users with heavily subsidized surface water.

If the southwestern states fail to act then their exponentially increasing populations will vote with their feet and move to places like Oregon that have plenty of cheap surface water. If the states do manage to accommodate their sprawling populations with sufficient public water coverage, then the demand for their limited supply of surface water is going to skyrocket along with the subsidized price.

At some point the public subsidies will be so overbearing that those dry states will demand relief from the federal government – which is already the biggest water subsidizer of all. The federal government, which has long advocated for open water markets, will look at a map, do the math on the Columbia River, and apply for a water permit from the State of Oregon. Oregon will deny the permit under its Basin Transfer Law. The federal government will sue on behalf of the populous dry states, thus allowing removal of the lawsuit from Oregon state courts into the federal court system. Whoever loses at the District level will appeal to the 9th Circuit, which will probably rule for the environmentalists and is the most overturned court in the nation. Ultimately the United States Supreme Court will hear the case, overturn Oregon’s law as a violation of the Dormant Commerce Clause, and the federal government will build the pipeline across its own land and the only revenue that Oregon will generate is the permit fee minus the expense of litigation.

Oregon can either engage the federal government now on its own terms and divert water under amicable and highly profitable circumstances, or it can run the risk of fighting off a water grab by its much more powerful neighbors using a constitutionally suspect law. The federal government will facilitate either way, but ultimately diversion from the Columbia River will probably happen.

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26 In 1988 the Bureau of Reclamation declared itself a, “Water market facilitator.”
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Part 5: The Revenue impact for Oregon

Two words justify diverting some Columbia River water: school funding. Oregon's schools need money and the current tax and fee arrangements are not paying the bill. Higher education is particularly locked in a permanent downward spiral. If Oregon fails to act now it is destined to become the Appalachia of the West.