

The Center for Environmental Law & Policy's

Columbia River Vision

Strong and Sustainable Management of Washington's Waters

November 2000





The Water Withdrawal & Diversion Dilemma

The Washington State Department of Ecology (Ecology) just came perilously close to permitting a large water diversion that would have allowed the Cities of Kennewick, Pasco, Richland, and West Richland (the "Quad Cities") the right to take 178 cubic feet per second (cfs), or 115 million gallons of water per day (mgd), out of the mainstem of the Columbia River. The river is already over-appropriated for consumptive water use, and not enough water remains instream to meet fish-critical needs. While federal agencies, the State of Idaho, and individual family farmers and water users have been working to augment flows, the State of Washington sits ready to permit further water use—another 100+ applications for new water from the Columbia are pending before Ecology right now.

With commitments made to salmon restoration in this state, Washington needs to reconsider its position on allowing further consumptive diversions and withdrawals from the Columbia River, and close the Columbia to further appropriation. The State should be working collaboratively with other entities in assessing the flow needs of listed salmon species, and in trying to augment flows to ensure that these needs are met. This state can ensure water for both people and fish if it works more creatively around commitments to restore and preserve the resources under its stewardship.

CELP's Concern¹

Many of Washington's streams, rivers, and aquifers are currently over-appropriated and lack sufficient flows to meet the needs of fish. The Columbia River represents just one of these over-appropriated river systems. The Center for Environmental Law & Policy (CELP) became concerned with the potential for decreased Columbia River flows in 1997, when the Washington State legislature lifted a permitting moratorium and paved the way for the State to permit further water use from the Columbia.

CELP is particularly concerned with the precedent the State will be setting by proceeding with water permitting on the Columbia. At a time when the federal government, tribes, scientists,

¹CELP questioned Ecology's authority to permit additional withdrawals from the Columbia in relation to the Quad Cities application. Along with pointing out concerns over the cumulative effects of water withdrawals and diversions, CELP also pointed out that the application itself was technically invalid. Ecology had actually cancelled the application years earlier when the Quad Cities failed to live up to the terms of their preliminary permit. Despite the fact that numerous substantive reasons existed for Ecology to deny this application, the agency hung its hat on this

environmentalists and others agree that salmon recovery must include increased flows for fish, the State of Washington sits ready to unilaterally spawn a significant snag in coordinated Columbia River salmon recovery efforts. In doing so, the State will be ignoring its responsibilities as a steward of a public resource, as well as a governmental entity that must ensure its actions do not further the decline of threatened and endangered species.

CELP believes the State can be a "better actor" by halting any further Columbia diversions and withdrawals, and implementing more creative solutions to find water for both people and fish. CELP's Columbia River Vision: Strong and Sustainable Management of Washington's Waters, including an overview of the state of the Columbia River and the State's water permitting role, follows:

The Columbia River's Decline

All Columbia River Basin salmon stocks are in a state of perilous decline, especially Upper Columbia spring chinook and steelhead throughout its range. Without substantial intervention, there is a greater than 50:50 chance that most of these stocks will be extinct by the next century.²

The Flow Dilemma

The development and operation of the numerous dams on the Columbia and Snake Rivers historically has greatly impacted salmon survival:

Storage dams have eliminated spawning and rearing habitat and have altered the natural hydrograph of the Snake and Columbia rivers, decreasing spring and summer flows and increasing fall and winter flows. Power operations cause fluctuation in flow levels and river elevations, affecting fish movement through reservoirs and riparian ecology and stranding fish in shallow areas. The eight dams in the migration corridor of the Snake and Columbia rivers alter smolt and adult migrations. Smolts experience a high level of mortality passing through the dams. The dams also have converted the once-swift river into a series of slow-moving reservoirs, slowing the smolt's journey to the ocean and creating habitat for predators. Water velocities throughout the migration corridor are now far more dependent on volume runoff than before the development of the mainstem reservoirs.³

technicality and announced formally in June of this year it lacked authority to act on it. The Quad Cities subsequently filed suit against Ecology over this decision. At nearly the same time, the Columbia-Snake Irrigators' Association, a consortium of agri-business interests, sent Ecology a Notice of Intent to Sue, insisting that Ecology begin processing water permit applications on the John Day and McNary pools within 60 days. Certainly, this issue is a hotbed of competing political views. This White Paper advocates for sound management and legal principles to win out over such political pressures, to ensure strong and sustainable management of the State's waters.

²Conservation of Columbia Basin Fish: Draft Basin-Wide Salmon Recovery Strategy, vol. 1 at pg. 15 (Federal Caucus, 2000) (hereinafter "Federal Conservation Strategy").

³Draft Biological Opinion on Operation of the Federal Columbia River Power System at § 5.3.1 (NMFS, 2000) (hereinafter "2000 BiOP").

It seems the federal government is unwilling to commit to dam removal at this time, opting instead for improvements in dam operations with the aim of achieving a more normative river flow. Whether the dams are ultimately removed or remain in place, successful salmon recovery depends upon a sufficient quantity of water being available to flow down the Columbia and Snake Rivers. Water quantity problems affect water temperatures, smolt travel time, and sedimentation rates—key parameters that greatly impact salmon survival and recovery.⁴

As the agency responsible for salmon recovery in the Columbia and Snake Basins, the National Marine Fisheries Service (NMFS) released a Biological Opinion in 1995 on operation of the federal hydropower system.⁵ In its ’95 BiOP, NMFS concluded that proposed operation of the federal hydropower system was likely to jeopardize the continued existence of listed salmon, and identified immediate, intermediate, and long-term actions to avoid jeopardy.⁶ The first immediate action involved increasing flows in the Columbia and Snake Rivers, with the goal of meeting target flows that NMFS developed.⁷ The target flows that apply for the Snake and Columbia Rivers are as follows:⁸

	Lower Granite Dam (Snake River)	McNary Dam (Columbia River)
SPRING	85,000-100,000 cfs	220,000-260,000 cfs
SUMMER	50,000-55,000 cfs	200,000 cfs

Flow augmentation is already occurring—the U.S. Bureau of Reclamation (BOR) in conjunction with the State of Idaho and individual water users in Idaho have augmented flows by 427,000 acre-feet per year every year since 1993.⁹ However, despite efforts to meet targeted levels, the above salmon flow objectives have not been met over significant periods of time. In fact, under current river operating conditions "sufficient flows cannot generally be maintained to protect migrating juvenile salmon."¹⁰ Even in record-breaking water years, flows have continued to fall far short of targeted levels: Despite record high snowfall and resulting runoff volumes in 1997, for example, weekly flow objectives were not achieved in either the Snake or Columbia Rivers during most or all of August.¹¹

⁴Id. at § 5.3.2.

⁵Biological Opinion on Operation of the Federal Columbia River Hydropower System and Juvenile Transportation System in 1995 and Future Years (NMFS, 1995) (hereinafter "'95 BiOP").

⁶Id.

⁷Id. at 95-104.

⁸Id. at 104.

⁹2000 BiOP at § 3.2.2.6.

¹⁰See Letter from Howard Shaller, Project Leader, U.S. Fish and Wildlife Service, to David McDonald, City Planner, City of Pasco, Feb. 1, 2000.

¹¹See 1997 Fish Passage Center Annual Report at x.

Measured flows failed to meet summer flow objectives at Lower Granite Dam:¹²

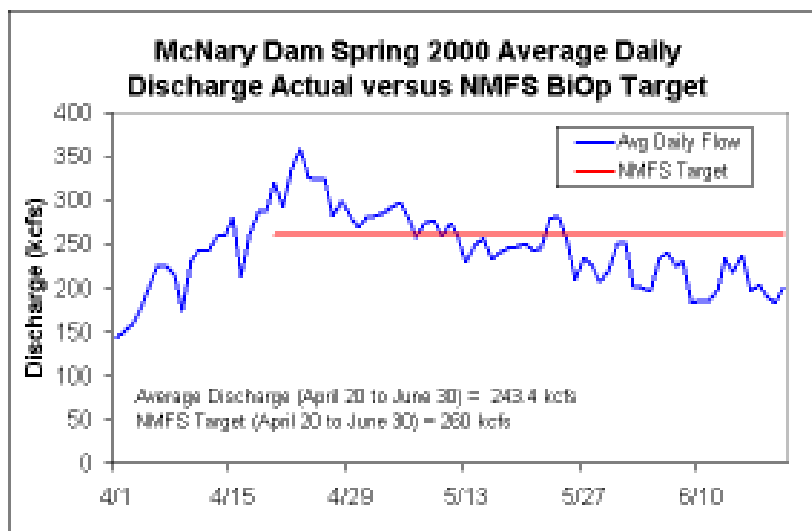
- Over 2/3rds of the time in 1999
- Nearly 1/2 of the time in 1998
- Over 1/3rd of the time in 1997
- Over 2/3rds of the time in 1996

At McNary Dam, measured summer flows fell short of target levels:

- Nearly 1/4th of the time in 1999
- Over 3/4ths of the time in 1998
- Over 1/4th of the time in 1997
- 2/5ths of the time in 1996

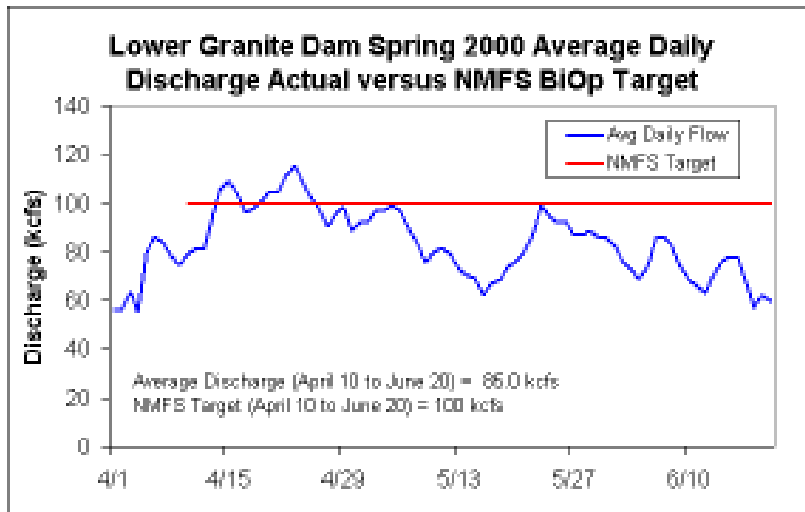
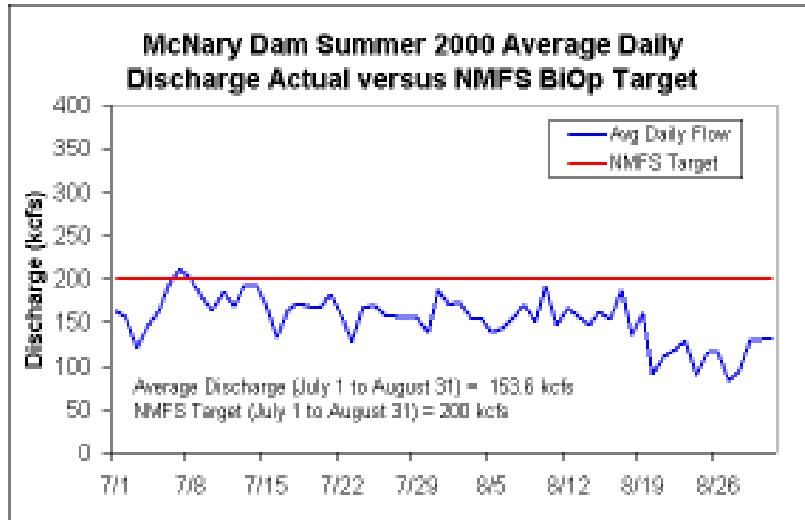
Target flows were not met on average at either McNary or Lower Granite Dams for both the spring and summer seasons of this year as well, as shown below.

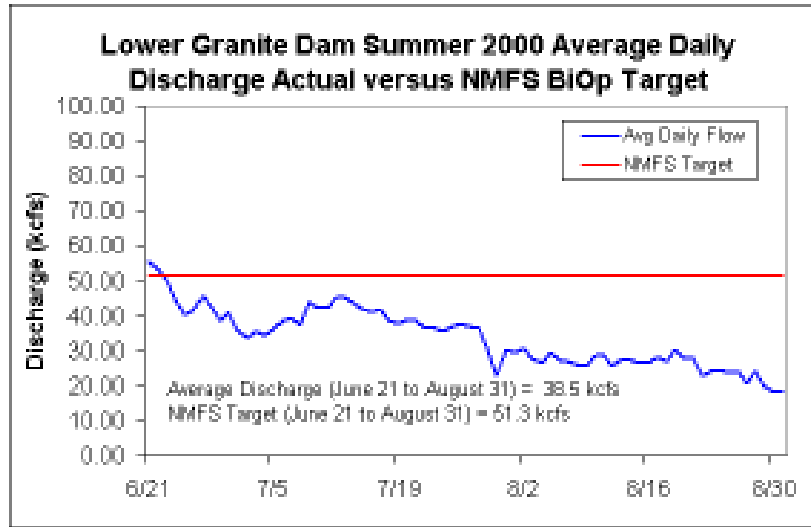
*Graphs below reflect low flow conditions
in the Columbia and Snake Rivers for the Year 2000.
As is evident, target flows were not met on average
for both spring and summer.¹³*



¹²See Memorandum in Support of Plaintiff's Motion for a Preliminary Injunction, or in the Alternative for Summary Judgment and a Permanent Injunction at 7 (May 18, 2000), *Trout Unlimited et al. v. NMFS et al.*, U.S. District Court (Or.), Civ. No. 00-262 MA.

¹³Graphs are courtesy of the Fish Passage Center, *see infra* note 16.





The federal government’s Year 2000 update to its plan for recovering salmon in the Columbia and Snake Rivers continues to place great importance on augmenting river flows to meet target levels.¹⁴ Under NMFS’ directive, state, federal, and private players have already spent millions of dollars in efforts to augment flows. Yet these efforts are still falling far short from achieving salmon flow objectives. The federal government states that, in order to achieve a more normative river, "significant amounts of additional water targeted to enhance flows during fish migration are needed."¹⁵ As well, the Fish Passage Center¹⁶ estimates that additional augmentation flows beyond quantities currently provided are necessary to meet spring and summer target flows—on the order of another 1 to 1.5 million acre-feet per year.¹⁷

Current Water Rights: “That’s a Lot of Water....”

As things stand today, state-permitted water use significantly reduces flows in the Columbia, affecting fish habitat and reducing fish production. A staggering amount of water is currently tied up in water right certificates and claims—mostly for irrigation which depletes river flows in months when water levels are already at their lowest. Alarming, the river’s current flows also do not present an accurate baseline—a number of water permits have been granted by the State and flows will continue to decrease as permittees gradually use the full amount of their water rights. Granting any further withdrawals will just serve to exacerbate an already precarious situation.

¹⁴See 2000 BiOp.

¹⁵Federal Conservation Strategy, vol. 1 at pg. 79.

¹⁶The Fish Passage Center (FPC) is an entity created to provide fish passage management recommendations regarding spill, flow and fish facilities operations to the federal Fish and Wildlife Managers. See the FPC web site at www.fpc.org/Index.htm.

¹⁷See Memo from Dusica Jevremovic, Fish Passage Center, to Michelle DeHart (Jan. 18, 2000).

As mentioned previously, water quantity problems greatly affect water quality—by affecting water temperatures, pollutant concentrations, and sedimentation rates.¹⁸ While much of the water used for irrigation is eventually returned to the river, still: (1) crops consume a large proportion of water used; (2) diversions and withdrawals remove water from the river and streams from May to September, and return flow is not only delayed but difficult to measure, and (3) return water carries with it pesticides and higher nutrient levels.¹⁹

The Bureau of Reclamation recently calculated the total amount of irrigation water rights²⁰ claimed or granted by the State to date.²¹ The figures are surprising to say the least: Over 200,000 cfs (or nearly 8 million acre-feet per year during the season from April to October) for both surface and groundwater irrigation rights have been granted above McNary Dam; and over 110,000 cfs (or roughly 4 million acre-feet per year during the season from April to October) for both surface and groundwater irrigation rights have been granted above Lower Granite Dam.²²

These water extractions collectively account for nearly 40% of the average natural Columbia River flow in low flow years at McNary Dam during the irrigation season.²³ Consequently, a staggering portion of the river is already being used under these certificated and claimed water rights. Perhaps most alarming—Ecology has also permitted roughly 150 water rights that are not reflected in these figures and remain partially "inchoate"—meaning that Ecology granted a water user the right to take a specified amount of water, but the user has yet to fully use or "perfect" the full amount of water granted. Some of these permits date back to the 1960's and a few of the permittees have failed to even begin the construction allowing them to appropriate their requested diversions. These permits collectively authorize extraction of over 1600 cfs from the Columbia, or roughly another 330,000 acre-feet per year on top of the amount already being used under the water rights discussed above.²⁴

The existence of these inchoate rights mean that the current flows in the Columbia, which are already below established flow targets for much of the fish-critical season, are a false baseline:

- **Current flows in the Columbia River fail to reflect the large portion of water already permitted, but not fully put to use; and**
- **Columbia River flows will continue to decrease—even without the State permitting further water use.**

¹⁸2000 BiOp at § 5.3.2.

¹⁹Id.

²⁰Claims and certificates.

²¹See Cumulative Hydrologic Impacts of Water Resource Development in the Columbia River Basin, Final Report Prepared by U.S. Bureau of Reclamation Pacific Northwest Region for National Marine Fisheries Service at Appendix B ("Summation of Water Rights and Withdrawals Above Lower Granite and Above McNary Dam") (June 1999) (hereinafter referred to as "the BOR Cumulative Effects Report"). The BOR used 1994 data on state water rights to do these calculations. The calculations represent the amounts granted on certificates, and the amounts stated on water right claims.

²²Id.

²³See Biological Opinion on Inland Land, Inc. at ii (NMFS, 1997) (hereinafter "NMFS Inland Land Opinion"), summarizing findings from the BOR Cumulative Effects Report.

²⁴See Appendix A. This figure includes consumptive uses only. Permits under which a permittee has already filed a proof of appropriation were excluded. Consequently, this figure represents the total amount of water that has been permitted for consumptive use, but not yet fully perfected.

Moreover, the total amount of water requested in applications currently pending before Ecology represents another 900 cfs.²⁵ Many of these applications were filed during the permitting moratorium: Were Ecology to begin approving applications for new water, many more applications would very likely be filed. Each individual diversion request may seem like a drop in the bucket when compared to the great flow of the Columbia. Yet considering the unbelievably large portion of the river that has already been appropriated one diversion at a time, coupled with the inability of the river to meet flows necessary for fish—it becomes painstakingly obvious that the river is already over-appropriated.

Too much of the natural flow of the Snake and Columbia Rivers is already tied up in state-certificated water rights, permits and claims. Allowing subsequent diversions will only hinder the State's ability to meet flow objectives in the future. As discussed below, the State is governed by an obligation to ensure that management of public waters serves to protect river, stream, and aquifers at levels necessary for the health of fish and wildlife: Ecology should be working to meet flow objectives, not hinder others' efforts along these lines while simultaneously increasing the difficulty of meeting flow objectives in the future.

Common Sense and The Law

Ecology's position in planning to permit further Columbia withdrawals is inconsistent with the State's commitment to help restore salmon, and thwarts the numerous and ongoing efforts underway to augment flows. The State has both responsibilities under the Water Code and under commitments made to the public and other jurisdictions to promote salmon recovery.

Common Sense

Ecology really must work collaboratively with other state and federal entities to protect Washington's waters. The Snake and Columbia Rivers traverse both state and international boundaries, and provide habitat for numerous ESA-listed species.²⁶ Collaborative efforts do not entail federal supremacy or an abdication of state authority, but instead a recognition that the waters of the state must be sustainably managed, coupled with a commitment to do so.

Unfortunately, permitting further water use from the Columbia River will counter numerous ongoing salmon recovery efforts. Specifically, permitting further diversions and withdrawals in Washington will directly counter the following salmon recovery efforts:²⁷

Federal, State, Tribal and Individual Water Users' Efforts to Augment Flows:

- The BOR has been providing, and proposes to continue providing, 427,000 acre-feet of water per year from the Upper Snake River Basin to benefit flow conditions during

²⁵See Appendix B. This figure represents all consumptive uses that would impact flows.

²⁶Endangered Species Act, 16 U.S.C. § 1531 et seq.

²⁷These actions are examples of major initiatives that will be counteracted by further Washington State permitting activities on the Columbia and Snake Rivers. The lists are not exhaustive.

the salmon migration season from April through August (termed "flow augmentation").²⁸

- “To provide this water, the BOR has reacquired some 60,000 acre-feet of reservoir storage space in its Upper Snake River basin reservoirs and has assigned about 100,000 acre-feet of previously unassigned space to flow augmentation. The BOR has also leased 38,000 acre-feet of storage space in Palisades Reservoir as part of a 5-year agreement with the Shoshone Bannock Tribes of the Fort Hall Indian Reservation and has acquired 17,650 acre-feet of natural flow rights in Oregon for flow augmentation. The BOR proposes to acquire any remaining water needed to meet the 427 kaf goal from willing lessors in Idaho’s water banks. Using this strategy, the BOR has successfully provided about 427 kaf annually from upper Snake River basin reservoirs and natural flow rights since 1993.”²⁹
- The State of Idaho enacted legislation specifically designed to grant the BOR access to Idaho’s water banks.³⁰ This means that Idaho irrigators—individual family farmers, ranchers and water users—are choosing to sell or lease their rights to improve flow conditions downstream.
- The Idaho State Department of Water Resources instituted a moratorium against further consumptive withdrawals from the Snake River Basin.³¹
- The BOR is also purchasing water rights from individual farmers, ranchers, and water users in the Yakima Basin in order to enhance flows for fish in the Yakima River—a major tributary to the Columbia.

International Agreement(s) to Augment Flows:

- Under the Columbia River Treaty and Non Treaty Storage Agreements, Canada (B.C. Hydro) stores and releases 1 million acre-feet of water per year to improve the likelihood of achieving salmon flow objectives in the mainstem Columbia.³²

The State’s Own Salmon Recovery Initiatives:

- The Washington State Legislature set up the Governor’s Salmon Recovery Office in 1998, to support Governor Locke’s Joint Natural Resources Cabinet in shaping a statewide strategy to recover salmon.³³

²⁸See 2000 BiOP at § 3.2.2.6.

²⁹Id.

³⁰See Idaho Code § 42-1763B

³¹This moratorium basically applies to the Snake River Basin from the Eastern boundary of the Snake River to the King Hill gauging station, and from the King Hill station to the Western border. Information gained from Pam Scaggs, Idaho Department of Water Resources, Oct. 20, 2000.

³²See 2000 BiOP at § 3.2.2.7.

³³See The Salmon Recovery Home Page at www.governor.wa.gov/esa/index.htm.

- The Joint Natural Resources Cabinet subsequently released a Statewide Strategy to Recover Salmon in 1999.³⁴ This Statewide Strategy recognizes that:

*Lack of stream flow to sustain healthy production levels is a key factor contributing to the poor status of wild fish stocks. Streams and rivers in several basins used by salmon are over-appropriated, meaning more water is being withdrawn for uses such as irrigation, when flows are naturally low and when fish need water.*³⁵

To address these flow problems, the State plans to focus on restoring flows and putting water back instream for fish. The State plans to do this by:

- Halting the issuance of any new water rights until instream flows can be set for priority watersheds;
- Making flow restoration the primary objective in watersheds where existing uses diminish flows for fish; and
- Aggressively pursuing opportunities to use public funds to lease or purchase senior water rights to put water back instream for fish.³⁶

Permitting further withdrawals will also run directly counter to the State's obligations under the State Water Code, Chapter 90.03 RCW, and other applicable law:

State Water Law

Ecology is governed by many different directives in managing water use in the state. It is the stated policy of the State, for example, to promote use of water while at the same time ensuring that enough water is retained instream to protect natural rights and values.³⁷ Under a separate legislatively-declared fundamental, Ecology must protect the quality of the natural environment and work to enhance it, by ensuring adequate stream flows for fish, wildlife and other environmental values, and by ensuring high water quality.³⁸ Further mandates require Ecology to consider public interest concerns more specifically: Ecology must, for example, reject a water right if it proves detrimental to the public interest.³⁹ This "public interest" language obligates Ecology to protect the natural environment, and to consider the needs of threatened and endangered species.

³⁴Extinction Is Not An Option: Statewide Strategy to Recover Salmon, Washington State Joint Natural Resources Cabinet (1999) (The State's stated objective is to "[r]estore salmon, steelhead, and trout populations to healthy and harvestable levels and improve the habitats on which fish rely." The Strategy was designed as a long-term vision or guide for salmon recovery in Washington.)

³⁵*Id.*

³⁶*Id.*

³⁷RCW 90.03.005.

³⁸RCW 90.54.020 ("Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish.....and other environmental values"; "Waters of the state shall be of high quality.").

³⁹RCW 90.03.290.

Consequently, in granting any water rights request, Ecology must ensure that (1) the requested use of water is for a beneficial purpose; (2) there is water available to satisfy the request; (3) the available water will not impair existing rights; and (4) granting the permit will not be detrimental to the public interest.⁴⁰

Ecology cannot meet these mandates if it permits further water use from the Columbia River, however. Flows are already insufficient to ensure salmon survival and recovery. Considering the fact that federal, state, and private entities are working to augment flows to meet flow objectives, the obvious conclusion is:

Water is simply not available for further appropriation. Allowing further extractions based on the concept that each by itself has an immeasurable effect is also against the public interest. Ecology lacks the vital information on water use and the cumulative impact of current and future diversions and withdrawals to permit any further water extraction from the Columbia River.

Lack of Vital Information on Water Use and Cumulative Effects

Ecology is required under a 1993 law to meter all water use from rivers with depressed salmon stocks.⁴¹ This includes both new and previously existing water rights and claims.⁴² Drafted as part of a larger salmon recovery package, the statute logically recognizes that the first step in water management is to know how much water is being used and by whom.

Without this basic information, it is difficult or even impossible to assess the cumulative impacts of water use on river flows, and to gauge whether further extractions would exacerbate flow problems. Ecology must consider cumulative impacts in light of all planned or reasonably foreseeable future actions, prior to granting any new water rights.⁴³ Consequently, Ecology must understand and consider not only the cumulative effects of current water use, but the likely cumulative effects of future water demand on the quality and quantity of flows in the Columbia and Snake Rivers as well.

⁴⁰Id.

⁴¹RCW 90.03.360.

⁴²Id.

⁴³Okanogan Highlands Alliance et al. v. Department of Ecology, PCHB Nos. 97-146, 97-182, 97-183, 97-186, 99-019, Finding of Fact #24, 2000 WL 46743 (Jan. 19, 2000). See also Fleming et al. v. Department of Ecology, PCHB Nos. 93-320, 94-7, 94-11, 1994 WL 905610 at *5 (1994) ("The public interest includes an examination of the net benefits from diversionary uses and retention of waters within streams. In this regard consideration should be given to the cumulative impact of similar requests that might be made in the future.")

Ecology failed to implement required metering under this 1993 law, however, and currently does not meaningfully monitor (meter) water use under existing water rights in the Columbia Basin.⁴⁴ Ecology also has not completed any studies to assess the cumulative impacts from either current water extraction or foreseeable future water extraction in the Columbia and Snake Basins. Consequently, Ecology does not know the extent of actual water use impacting the Columbia and Snake Rivers, and cannot sufficiently assess the cumulative impacts of state-permitted water diversions and withdrawals on river flows.

While the Quad Cities pointed out that the impact of their diversion would only reduce the river by less than one inch over a 30 year period, and decrease smolt survival by only .0002 to .003 percent⁴⁵—this application was just one of more than 100 applications pending before Ecology for Columbia River water. Were Ecology to justify approving any of the 100+ requests based on an assertion that each water extraction in itself will have only a small effect on river flow, water use could be permitted right to the point where the river runs dry. As Ecology staff outlined in an internal e-mail, "[t]he concept of 'measurable' effects is a red herring...because under the shield of that argument we could permit an infinite number of 'unmeasurable' depletions to dry up the river, having never had a 'measurable' effect on the (consequently extinct) fish."⁴⁶ Also, NMFS points out that "[a]s the interior Columbia Basin grows and develops it is foreseeable that demand for water will continue to grow as well....to allow additional future withdrawals to proceed, on the logic that each one by itself has a small impact, would undermine one of the major improvements in habitat conditions and further degrade the environmental baseline."⁴⁷

State law provides that the waters of the state are owned by the people of the state, and managed for the people by the state.⁴⁸ As mentioned above, Ecology, as the agency entrusted with managing the state's water resources, must protect the quality of the natural environment and, where possible, work to enhance it by ensuring adequate stream flows and water quality for fish and wildlife.⁴⁹ With little-to-no information gathered as to the extent of state-permitted

⁴⁴Indeed – state-wide. Ecology's failure to implement this statute was recently challenged by CELP and other groups: Thurston County Superior Court Judge Richard Hicks, in a February ruling of this year, stated that metering "is a necessary step to bring us out of the dark and into the light" as the state deals with managing "this most precious resource." Judge Hicks denied a motion by the Department of Ecology to dismiss claims by CELP and other groups that Ecology failed to properly implement the metering statute, and found that Ecology violated the statute by failing to require the metering of new and existing surface water rights. Judge Hicks also granted partial summary judgment in favor of the environmental groups ruling that existing groundwater rights must be metered where salmon are at risk, and scheduled a fact finding hearing to determine whether Ecology must give priority to water metering work. American Rivers et al. v. Department of Ecology, Thurston County Superior Court No. 99-2-00480-6.

⁴⁵See Supplemental Final Environmental Impact Statement, Diversion of Water from the Columbia River by the Cities of Kennewick, Pasco, Richland, and West Richland (June 2000).

⁴⁶See E-mail from Ken Slattery, Department of Ecology, to Keith Phillips, Water Resources Program Manager, Department of Ecology, Sept. 8, 1999.

⁴⁷NMFS Inland Land BiOP at 13.

⁴⁸RCW 90.03.010.

⁴⁹RCW 90.03.005; RCW 90.54.020.

water use, and consequently no meaningful understanding of the cumulative impacts of water use on river flows, Ecology possesses insufficient information to continue to permit further water extraction from the Columbia River—a river with poor flows that harbors numerous ESA-listed species.

As well, permitting further water use would be inconsistent with Ecology's own internal policies and legislative funding directives:

Ecology's Inconsistent Positioning

Ecology recently presented a "Vision" outlining the agency's plans for future management of the state's waters.⁵⁰ As one integral part of this Vision, Ecology intends to assess the needs of the natural resource base, including flows necessary for fish and wildlife, and ensure that these needs are satisfied. Notwithstanding this common sense approach, Ecology is about to quash its own Vision by permitting more water use from a river system unable to meet flows necessary to protect fish and wildlife.

Ecology's internal policies illustrate the agency's management inconsistencies: Under one particular policy, Ecology is funded for and initiating a pilot program to buy "Water for Fish."⁵¹ The legislature provided Ecology with \$1 million in the 1999 legislative session to fund a program to purchase or lease water rights—specifically so that Ecology could preserve and enhance flows in areas where not enough water exists to satisfy the needs of fish.⁵² Ecology instituted a policy the year before this, however, detailing a plan to assist people applying for a water right *in finding water*.⁵³ Ecology is also developing a plan *right now*, specific to the Columbia Basin, in which Ecology plans to aid applicants seeking Columbia River water in finding marketable and senior water rights that can be transferred for mitigation purposes ancillary to extracting more water from the river.⁵⁴

Since the Columbia is currently not meeting target flows at critical times of the year, the resource base is certainly not being "satisfied." Also, this lack of satisfaction is expounded by the fact that a portion of the current flow of the river will continue to decrease as permit holders perfect their water rights. The Columbia River, consequently, is already over-appropriated. To achieve its vision of "satisfying the natural resource base" and responsibly managing the river, Ecology should be trying to obtain water rights for transfer to instream use, with the goal of meeting flows for fish. Conceivably, however, an applicant seeking water from the Columbia could actively pursue, and with Ecology's aid, find marketable water rights

⁵⁰This vision statement was presented to CELP by Keith Phillips, Water Resources Program Manager, Department of Ecology, in 1999. See also Ecology's website at www.ecy.wa.gov/programs/wr/plan/vis-stat.html.

⁵¹See Focus: Buying Water for Fish – Pilot Program, on Ecology's website at www.ecy.wa.gov/biblio/0011003.html

⁵²Id.

⁵³See Department of Ecology Water Resources Program Policy 1010 (POL-1010) (1998).

⁵⁴Information gained from a meeting with Tom Fitzsimmons, Director, Department of Ecology, August 28, 2000.

for use as mitigation that would allow the applicant to pull more water from the river. Ecology's aid would be as facilitator—funneling senior, valid water rights *towards* applicants seeking new water, and *away from* opportunities to increase flows to achieve target levels. The following bullet points clearly and succinctly lay out Ecology's management inconsistencies:

- Ecology plans to start processing applications for new water from the Columbia. The agency plans to allow applicants to take more water out of the mainstem even when the river is running too low to meet target flows set for fish.⁵⁵
- Ecology plans to help applicant's find marketable water rights to buy and use as mitigation water to offset impacts from new diversions.⁵⁶ While we applaud efforts to mitigate such impacts, Ecology should be ensuring flows are met prior to becoming a water broker for private interests.
- Ecology is actually funded by the Legislature (\$1 million) to find salable water rights in fish critical basins and put the water back instream. Yet, as noted above, they are now planning on funnelling these same rights to water users to allow for more water extraction.

So this all begs the question:

Is Ecology, and indeed the State of Washington, committed to its stated Vision of satisfying flows for fish? Will Ecology responsibly manage the State's waters so that permitted use of rivers is sensible and sustainable? Or will Ecology help promote further water use at a time when information is lacking and flows are already too low to even sustain current salmon populations, let alone healthy populations?

WHAT NEEDS TO BE DONE:

Closing the Columbia to further diversions and withdrawals is a necessary first step toward ensuring the State does not further exacerbate an already-precarious situation.

The Columbia River is already over-appropriated. The State needs to stop, assess the situation and the needs of the resource, and then figure out sustainable and innovative ways to find water for people while saving enough water for fish.

⁵⁵Id.

⁵⁶Id.

How to Find More Water for People and Still Save Enough Water for Fish

Roughly 3 million people live in the Columbia Basin, and by the year 2040 this figure is projected to double to 6 million.⁵⁷ This burgeoning population growth clearly presents a daunting challenge to municipalities and others that must plan ahead to ensure adequate supplies of potable water and resources will be available for twice as many people as exist today. We understand the concerns of those planning for such immense growth in their jurisdictions. But we also feel that the traditional approaches of planning for growth have not been good enough to find water for people while simultaneously saving enough water for fish. Growth cannot continue to occur unchecked, and we need to carefully plan our communities and the impacts from those communities well into the future, keeping an open mind to new solutions that can preserve the resources we depend upon. Changes in fundamental concepts relating to water use and water supply can provide innovative solutions to finding water for both people and fish.

Stepping Outside of the Box:

The cost of water will begin to reflect its scarcity. Once we decide what limits exist to increasing water extraction from the Columbia Basin, we may not only realize we are unable to find more water to divert and withdraw—but that we need to backpedal in order to protect the Basin's water budget at levels which protect the resource overall. Water use in the state has been a free enterprise up until recently: The only fee involved for gaining a water right has been a filing fee paid to the Department of Ecology. As we are realizing the natural limitations of water basins to provide water for people while simultaneously maintaining functionality for fish and other wildlife, we are starting to see rising costs associated with increased water use. Applicants for new water in water-limited basins must now spend money seeking out and paying for existing water rights—to fulfill their needs either by transferring the rights to cover their intended uses, or to serve as mitigation water for proposals to appropriate new water from a given source. These salable rights are becoming, or are soon to become, a hot commodity—and the price of such senior, valid water rights will begin to increase with scarcity. What will be the price of the last salable right, after all other salable rights that fit demand/supply conditions are sold? How much will it be worth to find new water fifty years from now, when people have paid increasingly large sums of money to find salable rights right up until the point where the price of the next salable right is not worth the contemplated exchange for a new use?

While promoting the sale and transfer of existing rights over the granting of new water rights presents one solution, this solution cannot solve all water supply problems and thus cannot exist in a vacuum. We need to create innovative efforts in water conservation and water management that can directionally change our concepts of water use into this next millennium.

⁵⁷7 [Big River News](#) at 3 (Natural Resources Law Institute, Fall 2000).

The Conservation Potential

Great potential for water conservation and innovative water management exists in the Columbia and Snake Basins—indeed, statewide. This potential exists across the board, for all major water users including irrigators, municipalities, and industry alike. By assessing and implementing current cost-effective conservation, and by shifting to technologically feasible and innovative conservation in the future, we can create new sources of supply and avoid placing further reliance on our over-appropriated streams, rivers and aquifers.

To provide just a few examples of cost-effective conservation techniques: (1) irrigators could use best irrigation practices to realize greater irrigation efficiencies—switching to drip irrigation, for example; (2) industries could start reusing water; and (3) municipalities could find greater efficiencies by updating their systems to reduce lost-or-unaccounted-for water. To begin the process of shifting towards conservation, for example, municipalities would need to complete comprehensive conservation potential assessments, with the goal of using conserved water as a new source of supply.

The City of Seattle completed a Conservation Potential Assessment in 1998, noting that, historically, “water supply planning and development has followed a predictable path of tapping a single large water source every 30-50 years to meet growth in regional water demand. Today reliance on any single option to meet future demand is an increasingly high-risk gamble due to environmental, political, and demographic uncertainties.”⁵⁸ The results of Seattle’s conservation assessment were encouraging: cost-effective conservation can realize savings of “up to 31 million gallons per day (mgd) or 16% of water use in the peak season...over the next 20 years with no reduction in customer’s ability to use water nor in their satisfaction with water services.”⁵⁹ Implementing technologically feasible conservation nets an additional savings of 12 mgd—for a total of 43 mgd saved over the next 20 years.⁶⁰

Into the Future

This leap away from further water extraction and towards fundamental changes in supply and demand management advances a vital idealistic shift in managing water use overall. Current water law and management in Washington is witness to the continued allocation of water to people, without preservation of a resource base for fish and wildlife. If we ensure satisfaction of the natural resource base *first*, we can then implement more innovative ways of managing and using water, allowing for a high quality of life while simultaneously preserving the natural environment fundamental to our identity.

Nature envelops mankind, and even stating that water must be reserved for “people and fish” separates one entity into incomprehensible parts. CELP believes that by satisfying the needs of nature, we satisfy our own needs. A balance exists to everything in this world, and we have been given both the intelligence and the ability to preserve this balance.

Let’s do just that.

⁵⁸Water Conservation Potential Assessment: Final Report (Seattle Public Utilities, 1998).

⁵⁹*Id.* at 1, 4.

⁶⁰*Id.*

APPENDIX A

The following list includes all permits listed as “Columbia River permits” in Ecology’s water rights tracking system. Permits with proofs of appropriation filed were not included. Consequently, the permits included in the list below are those for which the permittee has yet to fully perfect their water right.

It is important to note that some of the permittees listed below have yet to even begun or complete the construction necessary to fully perfect. As is evident, some of these rights were also granted nearly 40 years ago and many are well beyond their expected completion date.

Columbia River Permits⁶¹

CONTROL #	APPLICANT	CFS	AFY	priority	expected
21138(F)	Cox	12.80	3264	1973	1999
21138(H)	Wyatt	0.48	121	1973	2001
21138(J)	Smith	1.01	255	1973	1999
21138(N)	Northwest Farm Credit	0.66	170	1973	1999
21138(T)	Perkins	0.42	106.3	1973	1994
21138(U)	Smith	0.25	63.8	1973	1999
21138(Z)	Orozco	0.08	21.3	1973	1999
21138(ZA)	West	0.25	63.8	1973	1999
21139(A)	Johns Farm Ltd.	12.01	3098.3	1973	1996
21139(B)	Gopher Broke Orchard	0.57	144.5	1973	1996
21139(G)	Wells	3.03	773.5	1973	1993
21139(L)	Fugachee Orchards	0.83	212.5	1973	1999
21139(N)	Orozco	0.73	187	1973	1999
13134	WA DNR & K 2 H Farms	27.00	4540	1962	1995
14583	Stimson Lane Ltd	66.80	13200	1966	2000
15042(A)	Stimson Lane Ltd	85.90	17180	1967	2000
15855	WA DNR & K 2 H Farms	3.00	1010	1968	1995
16312(A)	WA DNR & K 2 H Farms	242.00	46475	1970	1995
16571(A)	WA DNR & K 2 H Farms	587.76	112052.8	1971	1995
16571(D)	Watts	20.88	3982	1971	1994
16638(A)	WA DNR & K 2 H Farms	12.81	2743.3	1966	1995
25639(A)	WA DNR Laukers	112.58	27110.5	1977	1996
25639(B)	Watts Brothers Farm	19.05	4589	1977	1999
25639(C)	Winemakers LLC	7.89	1899	1977	1998
25639(D)	Watts	32.86	7912	1977	1999
25639(E)	Watts	32.86	7912	1977	1999
25639(F)	Winemakers LLC	9.15	2204	1977	1998

⁶¹Permit information gained from Ecology.

25639(G)	Nichols	27.87	6709.1	1977	1997
25639(H)	Beightol	9.36	2254.9	1977	1998
25639(I)	Mercer	30.89	7437.3	1977	2001
25639(N)	Columbia Ridge Orchard	7.89	1899	1977	1998
25639(P)	Mercer	18.41	4432	1977	1998
25639(S)	Mercer Ranches Inc	7.89	1899	1977	1996
25639(Z)	Mt. Adams Orchard	1.96	474.7	1977	2001
27335	Poirier	2.67	48	1981	1994
27518	Kennewick Port	10.00	3600	1981	1999
27890(A)	Chapman	0.53	96	1982	1995
27890(B)	R I F Dev. Co.	1.25	224	1982	1995
28168	Giles	1.30	260	1983	2000
28169	Giles	1.30	260	1983	2000
28500(A)	Gebbers Farms Inc	0.86	152	1984	1994
28683(A)	Homeland Fruit Co.	0.02	10	1985	1994
28881(B)	USARMY COE/Maryhill	0.44	24	1980	1995
28998(A)	John Hancock Mutual	3.50	942.4	1986	2003
28998(B)	Desert Hills Fruits	3.20	868	1986	2003
29870	Gebbers Farms Inc	3.78	800	1988	1999
29876	W N Orchards Nickell	7.80	1621.9	1988	1998
29942	Drinkwater	2.00	356	1989	1999
29971	Orozco	0.20	44	1989	1996
30053(A)	Mercer Ranches Inc	27.59	4943.4	1989	2000
30053(B)	McBride Hereford Ranch	1.96	320	1989	1996
30053(G)	Rocha	0.12	29.4	1989	1999
30053(I)	McBride	0.25	40	1989	1999
30053(J)	Meek	0.12	20	1989	1999
30053(N)	Mercer	0.25	58.9	1989	1999
30053(O)	Columbia Ridge Orchard	0.91	217.9	1989	1999
30053(P)	John Hancock Mutual	8.70	1424.8	1989	2000
30070	WA PARKS Chief Joseph	2.58	576	1989	1998
30124	Canoe Ridge Vineyard	2.20	742.5	1989	1996
30151	Wick	4.53	1200	1990	1998
30199	Stemilt Irrigation Dist.	6.70	1250	1990	1996
30205	Pariseau	11.10	2088	1990	2000
30217	Curry	0.23	40	1990	1997
30289	Stimson Lane Ltd	5.00	1540	1980	2003
30322	P & G Orchards	0.60	112.8	1990	1997
30388	Gebbers Farms Inc	5.70	1245.2	1990	1994
30389	Wick	5.70	1245.2	1990	1995
30391	Wick	3.40	900	1990	1996
30486	Zimmerman	0.09	14.8	1990	1996
30487	Zimmerman	0.17	25.4	1990	1997
30488	Zimmerman	0.09	14.3	1990	1996
30489	Zimmerman	0.23	39.2	1990	1996

30490	Zimmerman	0.07	10.2	1990	1996
30491	Zimmerman	0.11	18.7	1990	1996
30492	Zimmerman	0.12	21.4	1990	1996
30493	Zimmerman	0.06	9.1	1990	1996
30494	Zimmerman	0.13	21.2	1990	1996
30589	Hansen	1.82	361	1991	1994
30634	Sandpiper Farms Inc.	34.00	4500	1991	1996
30728	Badger Mountain Irr.	25.00	5160	1991	2002
30738	Richerson	0.15	26.6	1991	1995
30791	Kopak Jr.	0.02	1	1991	1995
30834	Berg	13.37	2850	1991	1997
30847	Gebbers Farms Inc	1.99	495.8	1991	1997
30952	Pariseau	15.28	2617	1991	1997
30983	Gebbers Farms Inc	0.71	161	1991	1997
30997	Naumes Inc. Hunter	11.14	1385	1991	2000
30998	WA DNR & P & G Orchard	0.86	172	1991	1997

**TOTAL: 1630 cubic feet per second (cfs)
331,601 acre-feet per year (afy)**

APPENDIX B

The following list includes surface water applications from the Columbia River and ground water applications determined to be in significant hydraulic continuity with the river. This list does not include the Snake River. Also, the list may not be complete. The Columbia River moratorium was lifted in 1997 and recent applications may not have been designated in the same fashion after the moratorium was lifted. Even when the moratorium was in place, it is possible that not all groundwater applications in significant hydraulic continuity with the river were identified as such and designated in the proper database – a gap exists in priority dates of groundwater applications from 1995 to 1999, for example.

Pending Columbia River Applications⁶²

SURFACE APP # (S4-#)	APPLICANT	AMOUNT REQUESTED (CFS)
26814	Chelan Cty PUD	16
29956	Lower Stemilt Irrig.	2.45
30052	Mercer Ranches Inc.	0.02
30185	Richland City Myers	12.6
30465	Kennewick Irrig.	82
30584	Kennewick Public Hospital	49.5
30976	Quad Cities	178
31083	Lower Stemilt Irrig.	4.66
31106	Scheib	1.78
31110	Roper	0.07
31117	Metropolitan Life Ins.	1
31133	Douglas County PUD 1	0.07
31134	Douglas County PUD 1	0.33
31137	McBride Hereford Ranch	17.11
31148	Mercer Ranches Inc.	0.45
31174	Cooper	0.1
31175	Cooper	0.12
31197	Rains	0.16
31249	Shaw	0.06
31262	Moody	0.11
31263	Kessenich	0.11
31291	Ford	0.02
31319	Creveling	19.2
31365	Schlunegar Brothers	53.57
31366	Schlunegar Brothers	17.86
31424	Sinclair	0.16

⁶²Application information gained from Ecology. Please note that these lists may not be complete due to Ecology's tracking methods. Figures thus represent the minimum of water requested.

31460	Pariseau	15.6
31462	Magnussen	0.02
31481	Kennewick Irrig.	18
31536	Pariseau	2.67
31623	Kopak Jr.	0.5
31711	WA DNR & Clyde Bybee	8.89
31712	WA DNR Laukers	2.33
31714	Crane	3.56
31789	Crane	3.56
31806	Munn	2.33
31815	R I F Dev. Co.	0.41
31848	McBride Hereford Ranch	14.67
31867	Apple Mngt Co.	0.5
31870	West	11.5
31905	Harris Farms Inc.	12.3
31936	Nelson	0.28
32074	Reeves Brothers Orchard	1.5
32190	Miller	2.23
32336	Douglas County PUD 1	0.11
32367	Wenatchee Heights Re.	11.5
32392	Crane	4.46
32393	Crane	3.56
32394	Crane	4.45
32398	Crane	4.46
32399	Crane	2.67
32400	Crane	4.01
32401	Crane	3.56
32420	Douglas County PUD 1	0.11
32421	Douglas County PUD 1	0.09
32548	Crane	0.44
32577	WA DNR Laukers	3.9
32622	WA DNR Buchholtz	10.7
32678	Mercer	24.5
32682	McLean	3.79
32744	Newman	0.08
32774	Munn	131
32803	Columbia Gas Storage	0.89
32804	Mercer Ranches Inc.	1.5
32838	Priest Co. Inc. Priest	29.6
32900	Gebbers Farms, Inc.	7.13
32917	Columbia Gas Storage	8.9
32927	Bybee	8.35
32928	Hartley	4.9

TOTAL AMOUNT OF SURFACE WATER REQUESTED = 833.02 cfs or 373,884 gpm

<u>GROUND APP #</u> (G4-#)	<u>APPLICANT</u>	<u>AMOUNT (GPM)</u>
31089	Gunkel	600
31098	Shore Properties Inc.	5650
31138	McBride Hereford Ranch	7680
31186	Auvil Fruit Co. Inc.	3000
31210	Hale	89
31247	Chelan County PUD	600
31269	Boesel Construction	30
31374	Troutman Ranches	2000
31375	Troutman Ranches	800
31399	Nickell Orchards	200
31412	Davis	600
31516	Stansfield	150
31517	Sinclair	20
31518	Sinclair	25
31524	Orondo Orchards Inc.	690
31526	Benson	175
31574	Ross	290
31583	Malaga Water Dist.	1500
31621	Goodman	171
31690	Kain	80
31715	Davis	200
31721	Davis	250
31725	Brewster City	650
31742	Sundale Orchards Inc.	750
31753	Madden	100
31763	WA Parks Maryhill St.	900
31764	WA Parks Maryhill St.	100
31776	K B Alloys Inc.	75
31793	Auvil Fruit Co. Inc.	3850
31813	H P Montgomery Trust	2000
31832	Pateros City Parks	500
31858	Tiedeman	10
31859	Miller	315
31871	West	3500
31882	Knowles	30
32097	R I F Dev. Co.	920
32098	R I F Dev. Co.	20
32099	R I F Dev. Co.	50
32100	R I F Dev. Co.	330
32391	Crane & Crane Inc.	25
32839	Priest Co. Inc. Priest	455
32841	Priest Co. Inc. Priest	3653

TOTAL AMOUNT OF GROUNDWATER REQUESTED = 95.89 cfs or 43,033 gpm

TOTAL AMOUNT OF WATER REQUESTED (surface and ground) = 928.9 cfs or 416,917 gpm
