

APPENDIX A

Stakeholder Comments

LIST OF TABLES

Table A-1	Stakeholder Comments Received
Table A-2	Stakeholder Comments Addressed in this Report

TABLES

Table A-1. Stakeholder Comments Received

Entity	Date Received	Format
<ul style="list-style-type: none"> • American Rivers • Washington Environmental Council • Washington Rivers Conservancy 	11/8/06	e-mail
BPA, U.S. Department of Energy – Bonneville Power Administration, Portland OR	11/8/06	fax
Bureau of Reclamation, U.S. Department of Interior, Bureau of Reclamation, Ephrata Office	11/8/06	fax
Center for Environmental Law & Policy <i>Note: Includes comments on draft EIS too.</i>	11/6/06	hard copy
Columbia River Inter-Tribal Fish Commission	11/8/06	e-mail
<ul style="list-style-type: none"> • Columbia Riverkeeper • Citizens for a Clean Columbia 	11/8/06 and 11/9/06	mail and e-mail
Kennewick Irrigation District	11/8/06	hard copy
WRIA 32 Walla Walla Watershed	11/8/06	e-mail and mail
Yakama Nation <i>Note: Staff comments, not the policy or legal positions of the Yakama Nation.</i>	11/8/06	e-mail

Table A-2. Stakeholder Comments Addressed in this Report

Entity	Comment	Response
<p>American Rivers, Washington Environmental Council, and Washington Rivers Conservancy</p>	<p>First, the Draft Report does not accurately describe the legislature’s charge to Ecology embodied in ESSHB 2860. Specifically, on the first page of the Executive Summary it states: “Ecology’s mission to aggressively develop new water supplies for both instream and out-of-stream uses is intended to be accomplished through funding conservation projects and building additional storage facilities.” (ES-1) This is inaccurate. Section 1 of the Act plainly states that storage and conservation should be included as tools to obtain new supplies, but it does not limit the means to obtain new supplies to those tools. Moreover, the term storage encompasses various actions beyond “building additional storage facilities”, including reoperating dams to optimize the use of existing storage facilities and purchasing water from Canada.</p>	<p>Revised</p>
<p>American Rivers, Washington Environmental Council, and Washington Rivers Conservancy</p>	<p>This mischaracterization of the Act’s mandate surfaces in several places in the Draft Report. On page three of the Executive Summary it states: ‘It is through conservation and storage that Ecology has been directed to meet future demand.’ (ES-3) Toward the end of the Executive Summary it states: “...actual future demands for water can be accommodated in large part through the Management Program’s current strategy of conservation and storage.” (ES-14) And in the section on water supply and demand forecasts it states: “Over the long-term, it appears that the current strategy of accommodating growth in water demand through conservation and storage improvements will be successful...”</p>	<p>Revised p. ES-3, ES-14, and in the supply and demand forecast section</p>
<p>American Rivers, Washington Environmental Council, and Washington Rivers Conservancy</p>	<p>Second, Section 5-4 contains a conclusion that is not supported by the information presented in the body of the report. Specifically, the report states: “However, it is also likely that the demand for water currently expressed in existing water right applications is representative of demand for water in the future.” (5-11, 12) There is no rationale provided for this assumption, and, as explained in other sections of the report, there is a discrepancy between existing water right applications and initial estimates of projected demand. (5-10). The reality is, as admitted elsewhere in the report (e.g., “...no definite conclusions could be made regarding the need for additional water based solely on this report” (5-8)), there is insufficient information to draw this conclusion and the final report should accurately reflect the current state of knowledge.</p>	<p>Revised</p>

Entity	Comment	Response
BPA, U.S. Department of Energy – Bonneville Power Administration, Portland OR (BPA)	Page 3-4 middle of first complete paragraph second sentence current language doesn't fully describe the current variation in flows. ...However, the Columbia River still has very large seasonal and annual variations in stream flows.... (delete “does still exhibit some natural variability in flow.”)	Replaced with suggested language.
BPA	Page 3-4 second paragraph The Bonneville Power Administration (BPA) is unaware of the MMS system.	Changed from BPA to Bureau of Reclamation.
BPA	Page 3-4 second paragraph The idea that BPA only run 50 year studies is not true. Some studies use 50 years for various reason, others run 70 years from 1928 to 1998. Other studies have looked at 1878 to 2006 flows at The Dalles. The 50 and 70 year flow data are modified flows, adjusted to remove reservoir regulation at projects we simulate and modified to the same level of irrigation depletion and reservoir evaporation.	Deleted the following sentence: Data later than 1978 has not yet been run through the BPA Hyd-Sim model.
BPA	Page 3-4 second paragraph HYDSIM does not optimize power generation or provide or determine resource adequacy. It simulates coordinated system reservoir operation on a monthly basis given a reservoir operating capacity. HYDSIM is an effective tool for analyzing the reservoir system operation under a range of project inflows and a given operating policy.	Removed the first sentence from the second paragraph and added a sentence to the end of the first paragraph.
BPA	Page 3-11 Section 3.4 Bullet about ESA Last sentence should read, “Biological Opinions (BIOP) have been prepared for the Federal Columbia River Power System (FCRPS) that provide requirements for the federal agencies to operate the river to comply with the Endangered Species Act (ESA)...”	Added the sentence.
BPA	Page 3-11 Section 3.4.2 ...especially the large water storage reservoirs. The federally owned power generation and transmission system in the Northwest is the Federal Columbia River Power System (FCRPS). The three most active federal agencies involved in the Columbia River, BPA, The Bureau of Reclamation and the Corps of Army Engineers are the agencies that operate and maintain the FCRPS. The federal agencies are subject to a varietyDelete the language that starts with...The three most active federal agencies through the end of that sentence. These three agencies are not the FCRPS.	Deleted the suggested sentence.

Entity	Comment	Response
BPA	<p>Page 3-11 Section 3.4.2 Number 3 BPA</p> <p>The BPA markets wholesale electrical power generated from the 31 federal hydro projects in the Columbia basin and one non-federal nuclear power plant and owns, operates and markets transmission services in the Pacific Northwest from its high voltage transmission system. BPA is a self financed agency which pays for its costs through power and transmission sales.</p> <p>The Northwest Power Planning and Conservation Act directs BPA to fund and implement measures to protect mitigate and enhance fish and wildlife affected by the development and operation of any federal hydroelectric project on the Columbia River and its tributaries.</p>	Replaced on p. 3-13.
BPA	<p>Page 3-13 Please include additional language about the BIOP in third paragraph</p> <p>Operation of the FCRPS is also subject to many operational requirements which are set by the BIOP and other agreements. Hydro operations for the protection of endangered and threatened species include the following:</p> <ul style="list-style-type: none"> • Minimum Operating Pool (MOP) <p>The Minimum Operating Pool (MOP) is the minimum elevation that a reservoir behind a dam can be at and still be able to operate for navigation. The purpose of the MOP operation is to reduce juvenile salmonid travel time through the reservoirs. The lower Snake River Dams – Lower Granite, Ice Harbor, Lower Goose and Lower Monumental – operate at MOP from approximately April 3 through the end of August.</p> <p>In addition, the John Day Reservoir is operated at the Minimum Irrigation Pool (MIP) from April 10 to September 30. MIP is the lowest pool elevation at which it is still possible for irrigators to reach the reservoir. Operating at MIP reduces juvenile salmonid travel time through the reservoir.</p> <ul style="list-style-type: none"> • Bonneville Tailwater Flows to Protect Chum <p>From approximately the beginning of November to the middle of April Bonneville is operated with a minimum tailwater elevation of 11.3 feet. Between 7 AM and 9 PM the tailwater elevation fluctuates only between 11.3 feet and 11.7’ feet. By operating Bonneville to these tailwater elevations, the chum habitat is kept watered during spawning and the redds are kept underwater.</p> <ul style="list-style-type: none"> • Flow Augmentation <p>Storage from Grande Coulee, Hungry Horse, Libby, and Dworshak, and other storage projects are used to augment flows for migrating salmonids during the spring and summer.</p> <p>Include flow targets here that are already in the report on page 3-14</p> <ul style="list-style-type: none"> • Spill <p>All of the federal projects with fish passage on the Snake and Columbia Rivers</p>	Added text and Excel table that was provided as Table 3-11.

Table A-2

Entity	Comment	Response
<p><i>Comment Continued:</i> BPA</p>	<p><i>Comment Continued:</i> spill water to provide passage for out migrating juvenile salmonids. Water that is spilled over the dam is not used to generate electricity. The level and duration of spill varies at each project.</p> <ul style="list-style-type: none"> • 1% Efficiency: During the salmonid outmigration Bonneville, The Dalles, John Day, McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite operate their turbines within 1% of peak efficiency. When the dams are operated at 1% of peak efficiency a smooth flow is created through the turbines. This benefits fish that pass the dams through the power house. Often this is also beneficial for power because the generators are being operated at their near optimal level of efficiency. However, it occasionally restricts a more preferable operation that allows a higher volume of water to pass through the turbines to generate more electricity (albeit at a lower level of efficiency). • Other Operations: The federal agencies also perform reservoir operations to benefit many other species such as: sturgeon, bull trout, kokanee and other ESA-listed and non-ESA-listed fish and wildlife. <p>BPA, the Washington Department of Fish and Wildlife, and the Mid-Columbia utilities as part of the Hanford Agreement manage flow levels below Priest Rapids Dam to ensure that Fall Chinook salmon spawn at an elevation which allows the redds to remain underwater during fluctuations in flow.</p> <p>Currently, a new BIOP is being developed by the Federal action agencies, the Columbia River Tribes, and the States.</p> <p>See the excel table for more detail on FCRPS operations for fish. We are providing this table which we think will be helpful.</p>	
BPA	<p>Page 3-15 Please include the additional language the treaty does not terminate in 2024....The treaty was signed in 1961 and approved by Canada in 1964. The Treaty has no termination date. The Treaty allows either Canada or the U.S. the option to terminate the Treaty in 2024 with a 10 years advance notice. If neither party chooses the option the Treaty can continue into perpetuity without any changes. The Treaty (delete 60 year duration) provided for the construction of four upper.....</p>	Replaced with suggested language.
BPA	<p>Page 3-15 Section 3.4.3.2 Second Paragraph include additional language clarifying what Canada did agree to do. ...“Canada pledged in the Treaty not to divert water in such a way that the flow crossing the boundary is altered. This does not include consumptive uses or the option for Canada to divert the Kootenay into the Columbia. Canada did promise not to divert the Columbia water out of the basin i.e. into the Fraser River or to eastern provinces.</p>	Added suggested language.

Entity	Comment	Response
BPA	Table 3-11 Columbia River Treaty does not have an expiration date. 2024 should be removed. Perhaps include the word option in the expiration column with a foot note at the bottom explaining that either country can exercise the option to terminate with a 10-year notice.	Added footnote.
BPA	Page 4- Section 4.5.1 Section 4.5.1 discusses large new storage facilities and their pre-appraisal costs are discussed in table 4-11. From the language in the document it sounds like you have used pre-appraisal when it meant to say the appraise level evaluation will include a more detailed assessment that may include a more detailed assessment of the impacts and benefits to the environment and in-stream and out of stream users. Any appraisal should include the potential power and transmission implications of lifting large quantities of water to fill off stream storage sites.	Clarified
BPA	Table 4-11 It is unclear what costs are included in either the cost estimate or the cost per acre foot column. The details should be included in the footnotes.	Added details of the costs included in the cost estimates in the footnotes.
BPA	Tables 4-9 and 4-10 These tables list federal and non-federal storage by county and purpose, but the tables are not referenced in the document and there is no discussion of how these rights are accounted for in the tabulation of water rights in table 4-14.	Tables 4-9 and 4-10 are referenced on page 4-11. Information in table is the storage capacity of the infrastructure, not the water right.
Bureau of Reclamation, U.S. Department of Interior, Bureau of Reclamation, Ephrata Office (Bureau of Reclamation)	See attached letter for all comments.	Added supply and current out-of-stream and instream demand comparison to Chapter 3. Added supply and future demand comparison to Chapter 5.
Bureau of Reclamation Center for Environmental Law & Policy (CELP)	p. 4-12 editorial changes This Initial Report is a good starting point, but is so deficient in basic information (water rights, water supply, conservation, etc.) that it is unsuitable to be used to support effective water resource planning and management.	Made suggested editorial changes. Page ES-15: Additional work to improve completeness and accuracy of future reports described.

Entity	Comment	Response
<p>CELP</p>	<p>B. There are no appropriate, consistent definitions for “conserved water” and “water use efficiency”.</p> <p>The report makes sweeping generalizations about the amounts of water potentially to be “conserved”, but the report provides no definition for the term “conservation” and, in CELP’s view, an erroneous definition of “efficiency”. (<i>Increasing the output with the same amount of input.</i>” p. viii) We believe that efficiency, as it relates to water conservation, must be defined as yielding the same amount of output with decreased input. Reconciling these differing views of “efficiency” and defining “conservation” is necessary before meaningful calculations can take place as to potential in-stream impacts from water conservation activities.</p>	<p>Glossary: definition for conservation included and definition for efficiency augmented.</p>
<p>CELP</p>	<p>B. Lack of definitions and sufficient data regarding conservation prohibit the use of the Initial Report for implementation of the CSRIA VRA.</p> <p>The CSRIA VRA is seeking new water rights and to change existing interruptible water rights to non-interruptible rights. The VRA plans to acquire more water through water conservation practices implemented under the new law. Clearly, however, the initial report proves there is insufficient information to make any determinations on water conservation now or in the near future. In fact, specific conservation measures, where conserved water can be used, the definitions of “conserved water” and “water use efficiency”, and even how to calculate the amount of conserved water are undefined and unknown. In spite of this, the Draft Environmental Impact Statement is analyzing the VRA and the CSRIA is expecting it to be approved next year. As of this moment, the CSRIA is conducting the required sixty-day consultation period with local authorities, Department of Fish and Wildlife, affected tribes, and federal agencies. Given the deficiencies of this report, on what basis can these entities be expected to provide informed, thoughtful, responsible comparisons and comments? How can the public be expected to do so? Approval of the CSRIA VRA based on information in this Initial Report would be arbitrary and capricious and clearly contrary to the public interest. Ecology’s approval of the CSRIA VRA, or any other VRA, should (among other things) await the preparation of an updated Inventory & Report that contains more meaningful baseline information.</p>	<p>Page ES-17: Additional information on the role of the Technical Advisory Group included relative to screening and ranking of conservation projects. Decisions on implementation of the CSRIA VRA will be made following consultation with affected government agencies and the public as required by statute. Additionally, funding criteria will be established in the Final EIS with input from external stakeholders and the Columbia River Policy Advisory Group.</p>

Entity	Comment	Response
<p>CELP</p>	<p>C. The Report’s “Conclusions” are devoid of factual support In spite of its many disclaimers as to accuracy or usefulness of information, the report inexplicably concludes that “actual future demands for water can be accommodated in large part through the Management Program’s current strategy of conservation and storage.” (p. 5-10) And, without contacting any of the individuals who have submitted water right applications over the last fifteen years to see whether they are still interested in securing new water rights, and despite reports suggesting that the amount of irrigated acreage has substantially declined since 1997, the report nonetheless concludes that water demand expressed in the applications is “likely representative of the demand for water in the future...” Finally, without any preceding factual basis, appears the conclusion that the conservation and storage strategies in the Columbia River bill are “likely to improve water supplies for all beneficial uses, including streamflows...” and “the current strategy of accommodating growth in water demand through conservation and storage improvements will be successful....” (p. 5-12) For a report to conclude with these statements while at the same time the report itself acknowledges it does not and cannot quantify demand, conservation, storage, or water supply, severely compromises the report’s objectivity and usefulness as a tool for further decision-making.</p>	<p>Page ES-10: The likelihood that the Tier 1 forecasts overestimate demand in pending applications is acknowledged.</p>
<p>Columbia Riverkeeper and Citizens for a Clean Columbia</p>	<p>Ecology cannot issue new water rights based on speculative future conservation.</p>	<p>Pages ES-3, ES-15. Specific conservation projects will be vetted through transparent funding protocols and the technical merit of specific proposals will be evaluated by the Technical Advisory Group. Conservation projects will be monitored for actual “in the river” savings in Ecology’s trust water program. New permits will be issued based on actual conservation savings, not projections.</p>
<p>Columbia River Inter-Tribal Fish Commission (CRITFC)</p>	<p>Section 2.6 Federal Government The Bureau of Land Management should be included in the list of federal agencies as they have a role in water management on federal lands under their jurisdiction.</p>	<p>The Bureau of Land Management is in the list.</p>

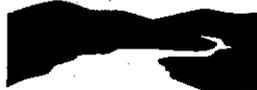
Table A-2

Entity	Comment	Response
CRITFC	Section 3.2.1 (Climate): The Draft fails to mention the specific impacts of observed climate change of the 20th Century on weather or hydrologic patterns. Draft fails to consider the negative impacts from future climate change, which is expected to accelerate in coming years: warming winter temperatures, less snow accumulation, and increased variability of the snowmelt patterns. The Pacific Northwest climate change impacts on streamflow— past and future – have been well documented by the University of Washington’s Climate Impacts Group (Mantua 2006, Mote 2006). Dittmer (2005) shows that during the last 100 years, the sub-basins of Washington have seen the median of the seasonal runoff shift earlier in time by 2 to 17 days and an 8% to 26% shift of spring-summer seasonal flows to autumn-winter. Any baseline assessment needs to take into account observed climate change impacts.	Added more specific information on climate change.
CRITFC	Section 3.4 Other Institutional Factors Ecology grants Section 401 CWA certifications for FERC-licensed hydro projects. These certifications affect water quantity and quality and should be included as other institutional and legal factors. There is no mention of the Fish and Wildlife Coordination Act in this Section that was established to mitigate the impacts of FCRPS dams on Fish and Wildlife.	Added mention of the Section 401 CWA regulations and Fish and Wildlife Coordination Act.
CRITFC	Section 3.5.3.2 (NWRFC – Northwest River Forecast Center): The NWRFC no longer uses the SSARR model. NWSRFS is their sole river forecast tool.	Deleted mention of the SSARR model.
WRIA 32 Walla Walla Watershed	The United States Army Corps of Engineers/Confederated Tribes of the Umatilla Indian Reservation Feasibility Study was awarded \$400,000 from the Department of Ecology under the The Columbia River Basin Water Management Act (House Bill 2860) in June, 2006. This is not mentioned in the document, nor is the major water storage project that it is studying mentioned either. The USACE/CTUIR Study is only mentioned indirectly in table D-7 where one of the project alternatives under consideration, storage on Pine Creek, is found. More information on the project should be included in the final draft as \$400,000 of Columbia River Water Management Funding has already been granted toward its development. Information can be acquired from Rick George, CTUIR at (541)276-3165 or from Chris Hyland, USACOE at (509)527-7264.	Added the information to Section 1.2.1.
Yakama Nation <i>Note: All Yakama Nation comments represent Staff comments, not the policy or legal positions of the Yakama Nation.</i>	ES-4 It is not correct that the Yakima Storage Study is “under the auspices of the (Columbia river) Management Program”. The Yakima Storage study, which was supported by the Yakama Nation, began years before the Columbia River Bill passed and is proceeding under entirely different statutory authority. It is not clear what the authors mean by the “Yakima Pump Exchange Study”, but if the reference is to the Kennewick Pump Exchange study, that is being performed under the auspices of the federal Yakima River Basin Water Enhancement Project.	Removed the Yakima storage study and Yakima Pump exchange study from the list.

Entity	Comment	Response
Yakama Nation	ES-6 The report discusses the Yakima Storage Study alternatives interchangeably with the Columbia River four storage options. The report should clarify that the purposes being contemplated in the Yakima Basin Storage Study are improving instream flow and out of stream supply in the Yakima Basin, not the Columbia.	Added discussion on pg ES-6.
Yakama Nation	ES-9 The discussion on river management neglects the role of the Treaty Reserved water rights held by the Columbia River Treaty Tribes necessary for the continued exercise of their Treaty fishing rights. These rights have a Time Immemorial priority date and, therefore, are the senior water rights on the river and must be satisfied before any existing or possible future water rights.	Added additional text to page ES-9.
Yakama Nation	ES-10 A water right application is not a “demand”, it is a request, and is subject to a number of tests including water availability, impairment, and public interest. The existence of an application does not convey a water right or create an obligation to issue a water right.	Page ES-10: The likelihood that the Tier 1 forecasts overestimate demand in pending applications is acknowledged.
Yakama Nation	ES-12 Presumably “reclaimed water” would come from return flows from treatment plants or other discharges of non-consumptively used water that are already in the river. The report needs to explain how such reclaimed water could be used for new consumptive use “without new demands on the river”.	Page 4-8. Additional discussion on reclaimed water included.
Yakama Nation	xii Permit-exempt well. The definition offered is based on an opinion by the AG’s office and is contrary to long-standing Ecology interpretation, is disagreed with by many entities, and has not been tested in court.	Added: “According to the Attorney General's Office” in the definition
Yakama Nation	3.3.1 The mainstem Snake is not under adjudication in Washington, but in Idaho. Clarify.	Added “in Idaho” to the sentence.
Yakama Nation	3.3.3.2 This section should clarify that only a portion of the Odessa Subarea is within the CBP. The section misleads the reader to believe that the entire Subarea was opened to groundwater pumping in anticipation of CBP water bailing the area out before the aquifers were mined out. Leaving aside the question of whether those within the CBP had a reasonable expectation, those outside did not. The report should clarify the limits on the proposed actions to bring water to Odessa. In addition, faulty well drilling has been known to be a problem in the Odessa for decades. Cascading multi-aquifer wells exacerbate the problems and are illegal under Washington law. Any legitimate assessment of the problems in Odessa should address this.	Clarified
Yakama Nation	Table 3.6 Should clarify that the Snake River is not under adjudication in Washington.	The column heading now says: “Snake River is under Adjudication in Idaho”.

Entity	Comment	Response
Yakama Nation	4.2.6 Should clarify that a switch from a treatment plant that discharges to a river to a reclaimed water plant does not actually create “new water” that is available for new uses.	Page 4-8. Additional discussion on reclaimed water included.
Yakama Nation	Table 4.9 The storage for Kittitas County appears to be too high, unless it includes Columbia River mainstem storage.	It does not include any Columbia River mainstem storage. It includes the following dams: Cle Elum, Kachess, Kachess Dike, Keechelus, Roza Diversion, and Easton Diversion.
Yakama Nation	5.5.1 This section reads like self-promotion, both for the Program and consultant. It seems to have nothing to do with the Columbia River Bill and should, perhaps, be deleted.	Chapter 5: Section deleted.
Yakama Nation	5.2.7 The section omits a crucial consideration. Conservation opportunities within tributary watersheds are being compared to “demands’ in the Columbia River. Where these “savings” are non-consumptive in nature, the conservation would not be expected to provide any water to the Columbia, a fact the report attempts to make. However, even with consumptive savings, there is a high likelihood that saved water would be committed to other uses in the watershed rather than credited to the Columbia River. This may be particularly true, where the conservation is within a federal Reclamation project, like the Yakima Project, where saved water would likely be used to stabilize irrigation supply for proratable irrigators and augment inadequate instream flows, or retained in storage for these purposes. The report should be revised to correct this deficiency.	Added another consideration.

STAKEHOLDER COMMENTS



American Rivers

November 8, 2006

Dan Haller
Washington State Department of Ecology
Central Regional Office
15 W. Yakima Ave., Suite 200
Yakima, WA 98902-3452

Dear Dan:

American Rivers, Washington Environmental Council, and Washington Rivers Conservancy (the Conservation Groups) appreciate the opportunity to comment on the Department of Ecology's Draft Columbia River Legislative Report – Columbia River Water Supply Inventory and Long-Term Water Supply and Demand Forecast (Draft Report). We are sure that it was difficult to produce such a report in the short period of time allotted, and we commend Ecology staff and the contractors for their efforts.

We agree with the statement in the Draft Report that “the future balance between water supply and water demand in the Columbia River is not well defined.” (5-11) This is a key finding because it points to the need for more information and more robust analysis prior to making large financial commitments to develop new water supplies along the Columbia. The Draft Report is replete with references to the fact that the information used is incomplete and that the analyses were simplistic and based on assumptions that may or may not be correct. This is not a fault of the Ecology and the contractors who wrote the report; rather, it reflects a lack of information and insufficient time to make more thorough analyses.

Nonetheless, the Draft Report does, for the first time, gather extant information on water use, demand and supply in the Management Zone covered by the Columbia River Water Management Program established pursuant to ESSHB 2860 (the Act). In addition to identifying significant gaps in information and analysis, the Draft Report does reveal some interesting preliminary findings relevant to early implementation of the program. For example, it shows that there is substantial conservation potential both in the agricultural and municipal sectors that could go a long way toward helping meet future demand, and that projected consumptive use needs in the Basin could potentially be met without the construction of any large new surface storage facilities. Again, we understand that the estimates of future demand and conservation potential are preliminary and that there are complicating factors, but this is important information that Ecology, legislators and the Policy Advisory Group should bear in mind as implementation of the program begins.

The report contains a lot of information that we are pleased to see, including the effort to develop a decision support system to enable Ecology to effectively use data and modeling in managing Columbia River water. However, given the short comment period, our comments focus on a few significant flaws in the Draft Report that need to be rectified.

First, the Draft Report does not accurately describe the legislature's charge to Ecology embodied in ESSHB 2860. Specifically, on the first page of the Executive Summary it states: "Ecology's mission to aggressively develop new water supplies for both instream and out-of-stream uses is intended to be accomplished through funding conservation projects and building additional storage facilities." (ES-1) This is inaccurate. Section 1 of the Act plainly states that storage and conservation should be included as tools to obtain new supplies, but it does not limit the means to obtain new supplies to those tools. Moreover, the term storage encompasses various actions beyond "building additional storage facilities", including reoperating dams to optimize the use of existing storage facilities and purchasing water from Canada.

This mischaracterization of the Act's mandate surfaces in several places in the Draft Report. On page three of the Executive Summary it states: "It is through conservation and storage that Ecology has been directed to meet future demand." (ES-3) Toward the end of the Executive Summary it states: "... actual future demands for water can be accommodated in large part through the Management Program's current strategy of conservation and storage." (ES-14) And in the section on water supply and demand forecasts it states: "Over the long-term, it appears that the current strategy of accommodating growth in water demand through conservation and storage improvements will be successful..."

Again, these statements inaccurately describe the legislature's direction to Ecology. In addition to the clear language in Section 1 cited above, Section 2(2)(a) of the Act states that funds to implement the Act can be spent on, in addition to conservation and storage, "any other actions designed to provide access to new water supplies ..." Thus, Ecology's mandate is broader than using just conservation and storage supply tools and Ecology should revise the final report to accurately state its mandate.

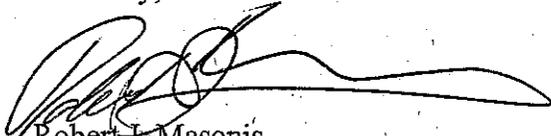
Second, Section 5-4 contains a conclusion that is not supported by the information presented in the body of the report. Specifically, the report states: "However, it is also likely that the demand for water currently expressed in existing water right applications is representative of the demand for water in the future." (5-11, 12) There is no rationale provided for this assumption, and, as explained in other sections of the report, there is a discrepancy between existing water right applications and initial estimates of projected demand. (5-10). The reality is, as admitted elsewhere in the report (e.g., "...no definite conclusions could be made regarding the need for additional water based solely on this report" (5-8)), there is insufficient information to draw this conclusion and the final report should accurately reflect the current state of knowledge.

In closing, we wish to emphasize the importance of properly framing the issues for implementation of the Columbia Water Management Program. There are diverse views

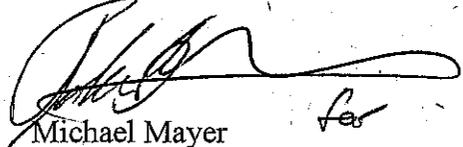
among both legislators and stakeholders regarding how the program should be implemented to ensure that the twin goals of the Act – providing water for consumptive use needs and environmental protection – are achieved. It is important that Ecology help to narrow this gap by accurately presenting the projected water need and water supply; as well as and the tools at its disposal to increase water supply. By doing so, the agency will increase the likelihood that the promising collaboration underway through the Policy Advisory Group will succeed.

Thank you for your consideration, and we look forward to seeing the final report.

Sincerely,



Robert J. Masonis
Senior Director
American Rivers



Michael Mayer *for*
Legal Director
Washington Environmental Council



Lisa Pelly *for*
Executive Director
Washington Rivers Conservancy



**Department of Energy**

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

POWER SERVICES

November 8, 2006

In reply refer to: PGP-5

Mr. Dan Haller
Washington State Department of Ecology
Central Regional Office
15 W. Yakima Ave., Suite 200
Yakima, WA 98902-3452

Dear Mr. Haller:

Thanks for the opportunity to comment on the Water Inventory Report. We appreciated having the additional week to work on our comments.

Your report does an excellent job of providing the kind of information Washington will need to consider as it looks at finding water to meet the growing needs of eastern Washington. Having a clear understanding of the existing uses of and constraints on the Columbia River system is extremely important.

We have made a few suggestions that we believe will strengthen the information you have compiled in the report. If you have any questions or need additional information please feel free to contact me or our representative on the Policy Action Group, Cindy Custer at (360) 570-0756 or Rick Pendergrass, Power Operations and Planning at (503) 230-7666.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard Pendergrass".

Richard Pendergrass
Manager, Power and Operation Planning

cc:

Mr. Jim Barton, Corps of Engineers
Mr. Pat McGrane, Bureau of Reclamation
Mr. Bill Gray, Bureau of Reclamation

Federal Hydro System Operations for Fish

Location	Project	Action	Affected ESU	Timing	BiOp	Project Type
Lower Columbia Basin	Bonneville BON	Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Mar 15-Oct 31	Yes	Run of River
		If water conditions indicate that minimum flows of 125 kcfs below BON can likely be maintained: implement mainstem chum flows.	Columbia River Chum	November 1-April	Yes	
	The Dalles TDA	If not, provide flows below BON to enable access to spawning areas.	Spring Creek Hatchery Fish Release	March	No	No
		Special operations for hatchery release may include: powerhouse 2 priority operation, operation of bypass system, screens installed, spill.				
	John Day JDA	Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Mar 15-Oct 31	Yes	Run of River
		Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Mar 15-Oct 31	Yes	
	McNary MCN	Operate within 1.5 feet of MOP to reduce juvenile travel time.	Spring Salmon/Steelhead	Apr 10-Sep 30	Yes	Run of River
		Operate within 1.5 feet of level that will allow irrigation to reduce juvenile travel time.	Summer Salmon/Steelhead	Mar 15-Oct 31	Yes	
	BON, TDA, JDA, MCN	Flow objective of 220-260 kcfs.	Spring Salmon/Steelhead	April 10-June 30	Yes	Run of River
		Flow objective of 200 kcfs.	Summer Salmon/Steelhead	July 1-August 31	Yes	
Priest Rapids* PRD	Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Mar 15-Oct 31	Yes	Run of River	
	Spring Spill.	Spring Salmon/Steelhead	Approx. April 10-June 30	Yes		
Mid Columbia Basin	BON, TDA, JDA	Summer Spill.	Summer Salmon/Steelhead	Approx. July 1-August 31	Yes	Run of River
	Priest Rapids* PRD	Flow objective of 135 kcfs.	Spring Salmon/Steelhead	Approx. April 10-June 30	Yes	Run of River
Priest Rapids* PRD	Hanford Reach protection flows. Grant County PUD limits outflow to minimize juvenile fish stranding.	Vernita Bar protection flows. Flow management from Priest Rapids Dam to ensure that fall chinook salmon spawn at an elevation which allows the redds to remain under water. Flow fluctuations are limited from the time of fry emergence.	Salmon/Steelhead	Routinely	No	Run of River
	Priest Rapids* PRD		Upper Columbia River Fall Chinook Salmon	Approx. October-June	No	Run of River

Federal Hydro System Operations for Fish

Location	Project	Action	Affected ESU	Timing	BiOp	Project Type
Upper Columbia Basin	Chief Joseph CHJ	No Special Operations.				Run of River
		Draft for summer flow augmentation, not to exceed reservoir draft limit.	Summer Salmon/Steelhead	July-August	Yes	
	Grand Coulee GCL	Operate Banks Lake 5 feet less than full to provide water for summer flow augmentation.	Summer Salmon/Steelhead	July-August	Yes	
		Consider opportunities for flood control shift with Brownlee and Dworshak for Lower Snake flow augmentation.	Summer Salmon/Steelhead	Routinely	Yes	Storage
		Storage may be used to support chum flows.	Columbia River Chum	Fall-Winter	Yes	
	Libby LIB	Fill to 1,283 ft. by Oct. 1 and maintain elevation of 1,283 to 1,285 or greater through October.	Kokanee	Fall-Winter	No	
		Provide pulsed flows for sturgeon.	Kootenai White Sturgeon	October	Yes	
		Operate to minimum flows and project ramp rates to minimize adverse affects to flow fluctuations.	Bull Trout	Year round	Yes	
		Storage may be used to support chum flows.	Columbia River Chum	Fall-Winter	Yes	Storage
		Operate to meet flow objectives and June 30 refill.	Spring Salmon/Steelhead	Spring	Yes	
	Albeni Falls ALF	Maintain low flows (considered annually).	Burbot	December-February	No	
		Maintain elevation of 2,055 feet until Kokanee fry emergence to provide Bull trout forage.	Bull Trout	Fall-Winter	Yes	Storage
		Storage may be used to support chum flows.	Columbia River Chum	Fall-Winter	Yes	
	Hungry Horse HGH	Operate to minimum flows and project ramp rates to minimize adverse affects to flow fluctuations.	Bull Trout	Year round	Yes	
		Draft for summer flow augmentation, not to exceed reservoir draft limit.	Summer Salmon/Steelhead	July-August	Yes	Storage
Storage may be used to support chum flows.		Columbia River Chum	Fall-Winter	Yes		

Federal Hydro System Operations for Fish

Location	Project	Action	Affected ESU	Timing	BiOp	Project Type	
Lower Snake Basin	Ice Harbor IHR	Operate within 1 foot of MOP to reduce juvenile travel time.	Spring & Summer Salmon/Steelhead	Approx. April 3 - late August	Yes	Run of River	
		Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Mar 15-Nov 30	Yes		
	Lower Monumental LMN	Operate within 1 foot of MOP to reduce juvenile travel time.	Spring & Summer Salmon/Steelhead	Approx. April 3 - late August	Yes	Run of River	
		Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Mar 15-Nov 30	Yes		
	Little Goose LGS	Operate within 1 foot of MOP to reduce juvenile travel time.	Spring & Summer Salmon/Steelhead	Approx. April 3 - late August	Yes	Run of River	
		Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Mar 15-Nov 30	Yes		
	Lower Granite LWG	Flow objective of 85-100 kcfs.	Spring Salmon/Steelhead	Spring Salmon/Steelhead	April 3-June 20	Yes	Run of River
		Operate within 1 foot of MOP to reduce juvenile travel time.	Spring & Summer Salmon/Steelhead	Spring & Summer Salmon/Steelhead	Approx. April 3 - late August	Yes	
	Dworshak DWR	Operate within 1% of peak turbine efficiency to create smooth, efficient flow over the blades.	Spring & Summer Salmon/Steelhead	Spring & Summer Salmon/Steelhead	Mar 15-Nov 30	Yes	Run of River
		Flow objective of 50-55 kcfs.	Summer Salmon/Steelhead	Summer Salmon/Steelhead	June 21-August 31	Yes	
	IHR, LMN, LGS, LWG	Draft for summer flow augmentation and water temperature reduction, not to exceed reservoir draft limit.	Summer Salmon/Steelhead	Summer Salmon/Steelhead	Summer	Yes	Storage
		Storage may be used to support chum flows.	Columbia River Chum	Columbia River Chum	Fall-Winter	Yes	
IHR	Spring Spill, no voluntary spill at the Snake River collector projects (LMN, LGS, LWG) when seasonal average flows are forecast to be less than 85 kcfs.	Snake River Spring Salmon/Steelhead	Snake River Spring Salmon/Steelhead	Approx. April 3 - June 20	Yes	Storage, one diversion project	
	Summer Spill.	Snake River Summer Salmon/Steelhead	Snake River Summer Salmon/Steelhead	Approx. June 21- August 31	Yes		
Upper Snake Basin	Black Canyon Boise Diversion Anderson Ranch Minidoka Palisades	Relaxation will attempt to provide 427 kaf from Upper Snake projects for flow augmentation.	Snake River Spring & Summer Salmon/Steelhead	Spring & Summer	Yes		

* Non-Federal Project

Federal Hydro System Operations for Fish

Location	Project	Action	Affected ESU	Timing	BiOp	Project Type
Threatened and Endangered Columbia Basin ESUs						
Anadromous Fish Populations						
Chinook: Snake River spring/summer and fall; Upper Columbia River spring; Upper Willamette River; Lower Columbia River						
Steelhead: Snake River; Upper, Mid-, and Lower Columbia River; Upper Willamette River						
Chum: Columbia River						
Sockeye: Snake River						
Resident Fish Populations						
Bull Trout; Kootenai River White Sturgeon						

Comments on the Columbia River Water Supply Inventory and Long Term Water Supply and Demand Forecast

Page 3-4 middle of first complete paragraph second sentence current language doesn't fully describe the current variation in flows.

...However, the Columbia River still has very large seasonal and annual variations in stream flows.... (delete "does still exhibit some natural variability in flow.")

Page 3-4 second paragraph

The Bonneville Power Administration (BPA) is unaware of the MMS system.

Page 3-4 second paragraph

The idea that BPA only run 50 year studies is not true. Some studies use 50 years for various reason, others run 70 years from 1928 to 1998. Other studies have looked at 1878 to 2006 flows at The Dalles. The 50 and 70 year flow data are modified flows, adjusted to remove reservoir regulation at projects we simulate and modified to the same level of irrigation depletion and reservoir evaporation.

Page 3-4 second paragraph

HYDSIM does not optimize power generation or provide or determine resource adequacy. It simulates coordinated system reservoir operation on a monthly basis given a reservoir operating capacity. HYDSIM is an effective tool for analyzing the reservoir system operation under a range of project inflows and a given operating policy.

Page 3-11 Section 3.4 Bullet about ESA

Last sentence should read, "Biological Opinions (BIOP) have been prepared for the Federal Columbia River Power System (FCRPS) that provide requirements for the federal agencies to operate the river to comply with the Endangered Species Act (ESA)..."

Page 3-11 Section 3.4.2

...especially the large water storage reservoirs. The federally owned power generation and transmission system in the Northwest is the Federal Columbia River Power System (FCRPS). The three most active federal agencies involved in the Columbia River, BPA, The Bureau of Reclamation and the Corps of Army Engineers are the agencies that operate and maintain the FCRPS. The federal agencies are subject to a variety

Delete the language that starts with... The three most active federal agencies through the end of that sentence.

These three agencies are not the FCRPS.

Page 3-11 Section 3.4.2 Number 3 BPA

The BPA markets wholesale electrical power generated from the 31 federal hydro projects in the Columbia basin and one non-federal nuclear power plant and owns, operates and markets transmission services in the Pacific Northwest from its high voltage transmission

system. BPA is a self financed agency which pays for its costs through power and transmission sales.

The Northwest Power Planning and Conservation Act directs BPA to fund and implement measures to protect mitigate and enhance fish and wildlife affected by the development and operation of any federal hydroelectric project on the Columbia River and its tributaries.

Page 3-13 Please include additional language about the BIOP in third paragraph

Operation of the FCRPS is also subject to many operational requirements which are set by the BIOP and other agreements. Hydro operations for the protection of endangered and threatened species include the following:

- **Minimum Operating Pool (MOP)**

The Minimum Operating Pool (MOP) is the minimum elevation that a reservoir behind a dam can be at and still be able to operate for navigation. The purpose of the MOP operation is to reduce juvenile salmonid travel time through the reservoirs. The lower Snake River Dams – Lower Granite, Ice Harbor, Lower Goose and Lower Monumental – operate at MOP from approximately April 3 through the end of August.

In addition, the John Day Reservoir is operated at the Minimum Irrigation Pool (MIP) from April 10 to September 30. MIP is the lowest pool elevation at which it is still possible for irrigators to reach the reservoir. Operating at MIP reduces juvenile salmonid travel time through the reservoir.

- **Bonneville Tailwater Flows to Protect Chum**

From approximately the beginning of November to the middle of April Bonneville is operated with a minimum tailwater elevation of 11.3 feet. Between 7 AM and 9 PM the tailwater elevation fluctuates only between 11.3 feet and 11.7' feet. By operating Bonneville to these tailwater elevations, the chum habitat is kept watered during spawning and the redds are kept underwater.

- **Flow Augmentation**

Storage from Grande Coulee, Hungry Horse, Libby, and Dworshak, and other storage projects are used to augment flows for migrating salmonids during the spring and summer.

Include flow targets here that are already in the report on page 3-14

- **Spill**

All of the federal projects with fish passage on the Snake and Columbia Rivers spill water to provide passage for out migrating juvenile salmonids. Water that is spilled over the dam is not used to generate electricity. The level and duration of spill varies at each project.

- **1% Efficiency**

During the salmonid outmigration Bonneville, The Dalles, John Day, McNary, Ice Harbor, Lower Monumental, Little Goose, and Lower Granite operate their turbines within 1% of peak efficiency. When the dams are operated at 1% of peak efficiency a smooth flow is created through the turbines. This benefits fish that pass the dams through the power house. Often this is also beneficial for power because the generators are being operated at their near optimal level of efficiency. However, it occasionally restricts a more preferable operation that allows a higher volume of water to pass through the turbines to generate more electricity (albeit at a lower level of efficiency).

- **Other Operations**

The federal agencies also perform reservoir operations to benefit many other species such as: sturgeon, bull trout, kokanee and other ESA-listed and non-ESA-listed fish and wildlife.

BPA, the Washington Department of Fish and Wildlife, and the Mid-Columbia utilities as part of the Hanford Agreement manage flow levels below Priest Rapids Dam to ensure that Fall Chinook salmon spawn at an elevation which allows the redds to remain underwater during fluctuations in flow.

Currently, a new BIOP is being developed by the Federal action agencies, the Columbia River Tribes, and the States.

See the excel table for more detail on FCRPS operations for fish. We are providing this table which we think will be helpful.

Page 3-15 Please include the additional language the treaty does not terminate in 2024.

...The treaty was signed in 1961 and approved by Canada in 1964. The Treaty has no termination date. The Treaty allows either Canada or the U.S. the option to terminate the Treaty in 2024 with a 10 years advance notice. If neither party chooses the option the Treaty can continue into perpetuity without any changes. The Treaty (delete 60 year duration) provided for the construction of four upper.....

Page 3-15 Section 3.4.3.2 Second Paragraph include additional language clarifying what Canada did agree to do.

...“Canada pledged in the Treaty not to divert water in such a way that the flow crossing the boundary is altered. This does not include consumptive uses or the option for Canada to divert the Kootenay into the Columbia. Canada did promise not to divert the Columbia water out of the basin i.e. into the Frasier River or to eastern provinces.

Table 3-11

Columbia River Treaty does not have an expiration date. 2024 should be removed. Perhaps include the word option in the expiration column with a foot note at the bottom explaining that either country can exercise the option to terminate with a 10-year notice.

Page 4- Section 4.5.1

Section 4.5.1 discusses large new storage facilities and their pre-appraisal costs are discussed in table 4-11. From the language in the document it sounds like you have used pre-appraisal when it meant to say the appraise level evaluation will include a more detailed assessment that may include a more detailed assessment of the impacts and benefits to the environment and in-stream and out of stream users. Any appraisal should include the potential power and transmission implications of lifting large quantities of water to fill off stream storage sites.

Table 4-11

It is unclear what costs are included in either the cost estimate or the cost per acre foot column. The details should be included in the footnotes.

Page 4-16 Section 4.7.1 Water rights for Power

Both the Mid-Columbia projects owned and operated by local utilities and the Grand Coulee Project operated by the Bureau of Reclamation have water rights for power generation and may have water rights for storage as well. While federal projects operated by the Corps do not have not state water rights, rights are established in their authorizing legislation. We believe that the state should tabulate the water rights coded for power and reservoir water. While the power rights may not be consumptive, consumptive uses upstream may have impacts to holders of these rights and they may have senior rights that could have a negative impact on these rights. To have a complete picture of the current uses of the Columbia River water these rights need to be tabulated in the water rights analysis.

Page 4-20 Section 4.9.1.

The analysis does not tabulate water rights for thermal electric plants. The Columbia Generating Station is a large consumptive user of Columbia River water It has an existing water right for 41,200 acre feet per year. This water right should be tabulated in the water rights inventory along with any other thermoelectric water rights.

Tables 4-9 and 4-10

These tables list federal and non-federal storage by county and purpose, but the tables are not referenced in the document and there is no discussion of how these rights are accounted for in the tabulation of water rights in table 4-14.

RECLAMATION

Managing Water in the West

U.S. Department of the Interior
Bureau of Reclamation
Ephrata Field Office

P.O. Box 815
Ephrata, WA 98823

Main Phone: (509) 754-0200

Fax Cover

Date: Nov 8, 2006

Deputy Area Manager

Pages including this cover: 4

Fax: (509) 754-0220

To: Dan Haller
WA St DOE

From: Connie Nicolai for Bill Gray
Ephrata Field Office

Code:

E-mail:

Fax:

Phone: 509-754-0214

Message: "as discussed last night in Wenatchee"

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Not built
 the Feeder Canal, Banks Lake, the Main, West, ~~East High~~, and East Low Canals, O'Sullivan Dam, Potholes Reservoir and Potholes Canal. There are over 300 miles of main canals, about 2,000 miles of laterals, and 3,500 miles of drains and wasteways on the project (Bureau of Reclamation, 2006a). The project ~~irrigation facilities were planned~~ ^{B authorized} to deliver a full water supply to 1,029,000 acres of land previously used only for dry farming or grazing. About ~~621,000~~ ^{671,000} acres are currently ~~authorized to be~~ irrigated and further development is on hold.

Irrigation water is pumped from Franklin D. Roosevelt Lake by the Grand Coulee Pump-Generating Plant, adjacent to the reservoir at the left abutment of the dam. The Bureau of Reclamation holds water rights that authorize the storage and ~~delivery~~ ^{use} of ~~3.18~~ ^{6.4} million acre-foot ~~with~~ development of the CBP. The current average annual diversion for the CBP is ~~2.6~~ ^{2.6} million acre-feet.

All basic irrigation facilities applicable to the three Columbia Basin Irrigation Districts (Quincy-Columbia Basin Irrigation District, East Columbia Basin Irrigation District, and South Columbia Basin Irrigation District) are operated by the irrigation districts. Irrigation facilities operated as reserved works by the Bureau of Reclamation include Dry Falls Dam, Main Canal through the bifurcation works including Pinto Dam and Billy Clapp Lake, and O'Sullivan Dam, Potholes Reservoir, and Potholes Canal headworks. Grand Coulee Dam, Powerplant, and Pumping Plant, and Banks Lake also are operated by the Bureau of Reclamation as reserved works.

4.5 Water Storage Inventory Results

The water storage inventory was compiled to fulfill part of Section 5 of ESSHB 2860 using storage assessments prepared under watershed planning, the Bureau of Reclamation studies, and the BPA's (2005) loads and resources study. Storage options were split into categories consistent with the Draft EIS for the Management Program: new large storage facilities (> 1 million acre-feet), new small storage facilities (< 1 million acre-feet), modification of existing storage facilities, and aquifer storage and recovery (ASR) (Ecology, 2006b). The entire data inventory is provided in Appendix D.

4.5.1 Large Storage Opportunities

A variety of new large storage facilities with a capacity of 1 million acre-feet or more are being considered in the Columbia Basin (Table 4-11). A Pre-Appraisal Report on off-stream storage facilities, prepared for Ecology and the Bureau of Reclamation identified eight potential projects larger than 1 million acre-feet. Four of those sites—Hawk Creek, Foster Creek, Sand Hollow, and Crab Creek—will undergo an appraisal level evaluation by the Bureau of Reclamation (Ecology and Reclamation, 2005). The Pre-Appraisal level reports typically include a more detailed environmental assessment that may include benefits to fish and other instream uses, benefits to out-of-stream uses, and environmental and cultural impacts. In addition, the Bureau of Reclamation is in the process of completing the appraisal level evaluation of Black Rock Reservoir, a 1.3 million acre-foot off-stream reservoir in the Yakima Basin as part

This report does not provide clear understanding of the supply available from the Columbia River annually or seasonally as compared to the current or future instream and out-of-stream demands. While this report does provide an estimate of current and future out-of-stream uses from an annual and monthly volume view point these volumes are not compared to any Columbia River volumes. It should be noted that the reported agricultural volumes for current use seem low by 10 to 20%. The Columbia River flows at three points are presented as minimum daily flow rates for two years (2001 and 2003) and are compared with flow objectives. It is not clear how much water is available after meeting the flow objectives. There is no comparison of out-of-stream use flows with Columbia River flows.

The supply for this report should be the Columbia River and its tributaries. No estimates are given for the annual volume of flows in the Columbia River or other rivers which would provide a comparison to the demands. Estimates from the BPA Hyd-sim model for volume are as follows:

	Annual Average (af)	Annual Minimum (af)
Priest Rapids	86,100,000	60,467,000
Bonneville	135,355,000	90,518,000

By using the mainstem Columbia River at Priest Rapids volumes shown above and an out-of-stream current use estimate of 3,500,000 af (which excludes the Yakima Basin) and future estimate of 1,600,000 af and available flow volume estimates from BPA Hyd-sim model of 22,084,000 af average and 1,777,000 af minimum which account for flow objectives a picture can be painted as follows:

- 1) current out-of-stream demands use about 4% to 6% of the Columbia River supply
- 2) instream demands use between 74% (ave) to 97% (dry) of the Columbia River supply
- 3) future out-of-stream demands would use 2% to 3% of the Columbia River supply

Further, current unused active storage within FDR and Banks Lake has the potential to meet future out-of-stream demands.

BPA's Hyd-Sim model currently simulates the Columbia River. It seems prudent to review the current demands and supplies used in this model to compare those with numbers in this report.

11/7/2006

Draft Report Water Supply Inventory and Long-Term Water Supply and Demand Forecast
By Golder Associates

Summary of Report annual volumes:

Demand:

	Current (af)	Future (af)	w/ Odessa (af)	w/ Full CBP
Agriculture Use	4,060,000	250,000	550,000	990,000
M & I Use	550,000	150,000		
Total Use	4,610,000	400,000		

Flow Objectives NA NA

Supply:

River Supply NA NA
Ag Conservation 970,000(or some part of)

Total Ag Storage 14,280,000 >6,000,000
 Active Storage NA NA
 Storage Used NA NA

Water Rights 8,200,000 NA

The volumes presented for agriculture use seem low, Yakima Basin and CBP alone use about 4,600,000 af annually (2,000,000 Yakima + 2,600,000 CBP).

The current use and storage volumes above include the Yakima Basin. These volumes are approximately 2,000,000 af for use and 1,500,000 af for storage. The future use volumes for the CBP future development seems low, a better estimate is 1,600,000 af. The future use for the Odessa Subarea converting to Columbia River water, seems appropriate as we have estimated 520,000 af. The future use volumes do not take into account the proposed use of Columbia River water to replace Yakima River water.

No estimates are given for the annual volume of water required by the flow objectives.

The gross conservation number does not take into account that the majority of this water returns back as supply. Much discussion is made about the 970,000 af number being high but it is not clear what the report feels is reasonable from a supply point of view. A reasonable estimate would assume 20% or less of this water could be supply for the future.

It appears the reported storage is total volume and not active storage.



CLEAN, FLOWING WATERS FOR WASHINGTON

The Center for
Environmental Law & Policy



November 1, 2006

Dan Haller
Washington Department of Ecology
Central Regional Office
15 W. Yakima Ave., Suite 200
Yakima, WA 98902-3452

Re: Initial Report on Columbia River Water Supply Inventory & Long-Term Water Supply and Demand Forecast, and the related draft EIS

Mr. Haller:

The Center for Environmental Law & Policy ("CELPA") is a non-profit membership organization working to defend and develop ecologically and socially responsible water laws and policies. CELPA believes that informed, responsible water management is the only way to ensure a legacy of clean, flowing waters for Washington. CELPA has been involved with the Columbia River Management Plan since its inception and our research into and involvement with Columbia River issues dates back even further. CELPA is the only environmental organization that has appealed Columbia River water right permitting decisions, and is currently a party to a continuing settlement agreement governing future allocations of river water to the Quad Cities of Kennewick, Richland, West Richland, and Pasco. (PCHB 02-216)

The State of Washington is at a crossroad in terms of water management. Faced with climate change and population increases it is crucial that the state engage in deliberate, informed, and thoughtful water management planning now in order to prevent water conflicts and disastrous impacts later. The situation does call for urgency, but policy decisions based on incomplete or erroneous information will place Washington's waters in further jeopardy and shift the burden to the next generation.

This is the first of several sets of comments CELPA is preparing regarding the implementation of the Columbia River Bill (ESSHB 2860; aka Columbia River Law) and its accompanying Draft Environmental Impact Statement. Our comments today focus on the newly released 2006 Water Supply Inventory and Long-Term Water Supply and Demand Report ("Report") and its relationship to implementation of Voluntary Regional Agreements in general ("VRAs") and the Columbia Snake River Irrigators Association's ("CSRIA") Voluntary Regional Agreement in particular.

I. THE INITIAL REPORT ILLUSTRATES THAT INSUFFICIENT INFORMATION CURRENTLY EXISTS TO SUPPORT THE ISSUANCE OF NEW COLUMBIA RIVER WATER RIGHTS FOR OUT OF STREAM USES.

A. The Initial Report is flawed and incomplete

CELPA is very concerned with the overall quality of this initial report and how it will be used to inform decision-making. The report itself makes it very clear that it contains huge gaps in even basic information on water supply, demand, and conservation. As a result, there are fundamental

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problems with using this Initial Report to implement SEPA decisions or water management strategies.

There has never been a proper accounting of the water budget for the Columbia River, and the Initial Report makes this deficiency very clear. We are attaching several pages of direct quotes from the Initial Report illustrating some of its disclaimers,¹ such as: *"It is not possible to develop a sophisticated analysis of growth and validate potential growth in agriculture water use... Factors related to conservation, agriculture and economics, and climate factors are not incorporated in this projection of water demand."*²

This Initial Report is a good starting point, but is so deficient in basic information (water rights, water supply, conservation, etc.) that it is unsuitable to be used to support effective water resource planning and management.

B. There are no appropriate, consistent definitions for "conserved water" and "water use efficiency".

The report makes sweeping generalizations about the amounts of water potentially to be "conserved", but the report provides no definition for the term "conservation" and, in CELP's view, an erroneous definition of "efficiency". (*"Increasing the output with the same amount of input."* p. viii) We believe that efficiency, as it relates to water conservation, must be defined as yielding the same amount of output with decreased input. Reconciling these differing views of "efficiency" and defining "conservation" is necessary before meaningful calculations can take place as to potential in-stream impacts from water conservation activities.

II. DEFICIENCIES IN THE INITIAL REPORT MUST BE REMEDIED BEFORE IT CAN BE REASONABLY USED IN DECISION-MAKING RELATED TO THE IMPLEMENTATION OF THE COLUMBIA RIVER BILL AND TO RCW 90.90.030 AND THE CSRIA VRA.

A. The Initial Report contains no baseline information and therefore cannot be reasonably used for the purposes Ecology intends.

Ecology intends to use the Initial Report to "form the foundation for implementing the Columbia River Bill RCW 90.90.030 [VRAs] and [the Initial Report] will help state officials determine the extent of the need for water supplies that will rely upon the Columbia River."³ CELP vigorously objects to the Initial Report being used for these purposes. The new law took effect on July 1, 2006; and it mandated the preparation of a report by November 15, 2006, that listed, among other things, 1) a supply/demand forecast in order to determine the need for water supplies from the Columbia River and 2) conservation projects that have been implemented under the new law and the amount of water conserved as a result. However, the substantial lack of reliable information regarding future supply/demand makes the Initial Report incapable of meeting the first requirement. As mentioned above and found in the attached memo, the Initial Report repeatedly states it lacks information sufficient to make forecast determinations.⁴ Using the supply/demand forecast to "form

¹ See attached memo, titled "Selected Quotes Demonstrating that Data Regarding Water Use, Water Supplies, and Potential Conservation Measures is Incomplete, and is Insufficient to Support Meaningful Analyses and Decision-Making for the Columbia River Management Program and EIS" prepared by CELP, October 31, 2006 from Water Supply Inventory and Long Term Water Supply and Demand Forecast Report, issued October 16, 2006.

² Initial Report at 5.8.

³ Department of Ecology, Columbia River Management website, http://www.ecy.wa.gov/programs/wr/cwp/draft_wsi_ltsdf.html (last visited October 24, 2006).

⁴ For example, *"The approach used for the forecast is not analytically sophisticated and, ultimately, additional work at both the inventory level and the forecasting level is needed."* 5.1 Introduction to Water Supply and Demand Forecast (pg. 5-1).

the foundation” of determining “the extent of the need for water supplies that will rely upon the Columbia River” would be arbitrary and capricious.

Because the law has not yet been implemented, and therefore no conservation projects created, the answer to this second requirement is simply “zero”. Instead, Ecology and its contractors attempted to provide “an inventory of potential conservation projects and potential storage projects.”⁵ This “inventory” of conservation projects is admittedly very “preliminary” and “should be used only to screen or compare projects within the inventory.”⁶ However, using it for even this limited purpose is inadequate because the inventory itself is so incomplete. The report lists twelve potential agricultural water conservation activities.⁷ Yet, only a few of these activities were analyzed for their true conservation ability and cost to implement, making it impossible to effectively “compare projects”. This is particularly troubling, as the CSRIA is charging forward for approval of its VRA under RCW 90.90.030, based on water conservation projects found in the initial report.⁸ This report and its inventory are unreliable and unhelpful in making conservation decisions regarding the CSRIA VRA.

B. Lack of definitions and sufficient data regarding conservation prohibit the use of the Initial Report for implementation of the CSRIA VRA.

The CSRIA VRA is seeking new water rights and to change existing interruptible water rights to non-interruptible rights. The VRA plans to acquire more water through water conservation practices implemented under the new law. Clearly, however, the initial report proves there is insufficient information to make any determinations on water conservation now or in the near future. In fact, specific conservation measures, where conserved water can be used, the definitions of “conserved water” and “water use efficiency”, and even how to calculate the amount of conserved water are undefined and unknown. In spite of this, the Draft Environmental Impact Statement is analyzing the VRA and the CSRIA is expecting it to be approved next year. As of this moment, the CSRIA is conducting the required sixty-day consultation period with local authorities, Department of Fish and Wildlife, affected tribes, and federal agencies. Given the deficiencies of this report, on what basis can these entities be expected to provide informed, thoughtful, responsible comparisons and comments? How can the public be expected to do so? Approval of the CSRIA VRA based on information in this Initial Report would be arbitrary and capricious and clearly contrary to the public interest. Ecology’s approval of the CSRIA VRA, or any other VRA, should (among other things) await the preparation of an updated Inventory & Report that contains more meaningful baseline information.

C. The Report’s “Conclusions” are devoid of factual support

In spite of its many disclaimers as to accuracy or usefulness of information, the report inexplicably concludes that “actual future demands for water can be accommodated in large part through the Management Program’s current strategy of conservation and storage.”⁹ And, without contacting any of the individuals who have submitted water right applications over the last fifteen years to see whether they are still interested in securing new water rights, and despite reports suggesting that the amount of irrigated acreage has substantially declined since 1997, the report

⁵ Initial Report at 4-1.

⁶ Id. at 4-10.

⁷ Lining/Piping, On-Farm Efficiency, Management, Fallowing Corners, Acquisition, Tail Water Reuse, Re-regulating/Storage Reservoirs, Permanent Crop Change, Split-Season Acquisition, Land Conservation Program, Power Buyback, and Surface to Ground Water Conversion.

⁸ Draft Voluntary Regional Agreement between CSRIA and Ecology, available at http://www.ecy.wa.gov/programs/wr/cwp/images/pdf/ecy_csria_drft_vra.pdf (last visited October 24, 2006).

⁹ Initial Report at 5-10.

nonetheless concludes that water demand expressed in the applications is “likely representative of the demand for water in the future...” Finally, without any preceding factual basis, appears the conclusion that the conservation and storage strategies in the Columbia River bill are “likely to improve water supplies for all beneficial uses, including streamflows...” and “the current strategy of accommodating growth in water demand through conservation and storage improvements will be successful...”¹⁰ For a report to conclude with these statements while at the same time the report itself acknowledges it does not and cannot quantify demand, conservation, storage, or water supply, severely compromises the report’s objectivity and usefulness as a tool for further decision-making.

III. CONCLUSION & RECOMMENDATIONS

The SEPA process is the proper venue for examining the potential alternatives for implementing the Columbia River legislation. The incomplete, inaccurate, self-serving and conclusory statements in the initial inventory report would be laughable if not for the serious implications that flow from them.

- ✓ We urge Ecology to delay further SEPA action including the development of a final EIS until definitions of crucial terms are agreed-upon and sufficient data can be gathered to form a proper foundation for implementing the Columbia River law.
- ✓ Further, as we addressed in our SEPA scoping comments, CELP urges Ecology to immediately engage in rule-making designed to establish operative definitions for terms such as “conservation” and “water use efficiency”, and to set minimum guidelines for consideration of Voluntary Regional Agreements.
- ✓ Finally, we urge Ecology to spend no more taxpayer money on developing storage projects, negotiating or implementing voluntary regional agreements, or issuing water rights for new out of stream uses until such time as Ecology can fill in the many glaring data gaps and deficiencies in this initial report, and can compile the basic information necessary for effective water resource planning and management.

Thank you for considering CELP’s first set of comments. We continue to stand ready to work directly with Ecology or its contractors to offer our organization’s input and expertise on Columbia River and water resource issues.

Sincerely,


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enclosures

¹⁰ Id. at 5-12.

**Selected Quotes Demonstrating that the Data/Research Regarding Water Use,
Water Supplies, and Potential Conservation Measures is Incomplete, and
Insufficient to Support Meaningful Analyses and Decision-Making for the
Columbia River Water Management Program**

1) Water Supply Inventory Quotes

- “[T]he short-time frame in which this report was prepared limited the ability to conduct a comprehensive survey of water rights and water use. Existing data on water rights and water use from agency databases was compiled and is presented here with minimal confirmation and no field verification. Conclusions based on this information should be made carefully.” 4.4.1 Overview and Components of the Inventory (pg. 4-1 to 4-2).
- “It is expected that future inventory reports to the Legislature will include more comprehensive estimates of water conservation savings.” 4.3 Water Conservation Inventory Results (pg. 4-8).
- “However, many of the projects had cost estimates prepared 5-10 years ago which means the costs are probably underestimated. They were not updated for this study as more detailed engineering analyses would be needed to accurately estimate costs for the projects. These total estimated costs and water savings should be viewed as being very preliminary and should be used only to screen or compare projects within the inventory. More detailed evaluation of the costs and water savings will be needed before determining the benefits of individual projects.” 4.3.2 Irrigation District Conservation Inventory (pg. 4-9 to 4-10). Quote in regards to the projected average cost per acre-foot for district irrigation conservation projects.
- “Water system plans for the seven largest municipalities in the Columbia Basin were reviewed for current and future water use, demand, and conservation information, including water reuse. Few of these plans provided quantitative information regarding the current conservation and reuse.” 4.3.3 Municipal/County Conservation Inventory (pg. 4-10).
- “Some of the water rights available for review in the WRTS database are incomplete, and duplicate rights listed in the database may overestimate allocated water. The WRTS database may not capture federal or Tribal water rights” 4.6.1 Water Rights (pg. 4-15). Quote referring to the records for water rights within Ecology’s database.
- “The WRTS database contains a significant number of records with no associated Q_a , the annual quantity, and may include duplicative records. In cases where no annual quantity is reported in the database, the quantity is calculated based on continuous use of the, Q_i , the instantaneous quantity. This likely over-predicts the maximum allowable annual water use associated with these water rights.” 4.7.1 Washington Water Rights (pg. 4-16) *Note: The appendix to this section, Appendix D, explains that the formula for calculating annual quantity assumed that the instantaneous quantity would be pumped at the highest instantaneous rate for 24 hours per day, 365 days a year.*

- “Additional work is necessary to confirm the water rights analysis...[t]he unusually large value associated with Environmental and Wildlife GUD also needs to be investigated further by additional analysis of the information provided from the Oregon water rights database.” 4.7.2 Oregon Water Rights (pg. 4-18).
- “Ecology has been tracking the number of permit-exempt wells in the Washington State Notice of Intent Database since 1993. The database does not contain entries before 1993 and may contain duplicate entries in the case where wells have been deepened or reconditioned. Furthermore, well drillers were not required to file well logs before 1971; therefore, the existing data sources are incomplete. A further recommendation for Ecology is to improve existing databases or use County building permit records to identify permit-exempt wells.” 4.7.4 Washington Permit-Exempt Water Rights (pg. 4-19).
- “This level of detail is not feasible for the initial forecasting effort, so a surrogate distribution of CIR was developed to translate annual water volumes to monthly water volumes.” 4.8 Water Use Overview (pg. 4-19 to 4-20). Quote regarding Ecology’s inability to calculate the actual monthly water use from different crops.
- “Future updates should be able to address data gaps and accuracy issues by utilizing additional sources, resulting in more robust estimates of water use, especially if metering data are available.” 4.9 Water use Inventory Results (pg. 4-20).
- “The most current basin-wide estimates of water use were published in 2004 by the USGS...and are based on data from the year 2000...” 4.9.1 USGS Water Use Estimates (pg. 4-20).
- “The USGS has no control over the quality and accuracy of the data it receives. At present, the accuracy and confidence limits of the estimates are not quantified. The estimates are aggregated at a County level, and it is not possible to estimate water use within the Management Zone from the USGS reports.” 4.9.1 USGS Water Use Estimates (pg. 4-21).
- “Only seventeen of the thirty-five WRIsAs in the Columbia Basin study area have plans containing estimates of current and/or future water use. All seventeen have information on current and/or future water use and ten have information on future water use...However, there is no standardized reporting of water use. Some WRIsAs do not report water use for all categories used in the USGS report, while some combine categories. This lack of complete information makes it difficult to compare discrete categories with the USGS estimates or to compare between WRIsAs.” 4.9.2 Watershed Plan Water Use Estimates (pg. 4-21).
- “Comprehensive plans for many counties were not available in the short turn around time.” 4.9.3 County Comprehensive Plan Estimates (pg. 4-21).
- “Except for generalized statements regarding water use, comprehensive plans are not useful for the inventory.” 4.9.3 County Comprehensive Plan Estimates (pg. 4-21 to 4-22).
- “The approach used for the forecast is not analytically sophisticated and, ultimately, additional work at both the inventory level and the forecasting level is needed.” 5.1 Introduction to Water Supply and Demand Forecast (pg. 5-1)

- “Both the first tier and second tier forecasts have limitations in their approach that will require future refinement to improve and quantify their accuracy. These limitations could not be eliminated in the short time available to produce the report.” 5.1 Introduction (pg. 5-1).
- “The accuracy of the 242 cfs Q_i reported in the applications is not known.” 5.2.2 Domestic (pg. 5-2). Quote regarding the amount of water calculated to be in use for the 214 domestic water right applications in the Management Zone of the Columbia Basin.
- “Peaking factors for commercial and industrial use could be lower since the water is often used on a more continuous basis, so the total annual demand associated with 230 cfs of commercial/industrial Q_i may be underestimated.” 5.2.3 Commercial/Industrial (pg. 5-3). Quote regarding the accuracy of the peaking demand figure for commercial/industrial use.
- “[T]he proportion of conserved water that would accrue to the Columbia River cannot be determined accurately with available data...the proportion of accrual could be in the range of 5 to 20% on an aggregate basis.” 5.2.7 Comparison to Conservation Potential; 5.2.7.1 Agriculture; Consideration 1. (pg. 5-4).
- “Similar to irrigation conservation, the appropriate factors and methodology for assigning appropriate conservation to potential new population and/or new water right needs is not well defined.” 5.2.7.2 Comparison to Conservation Potential; Residential. (pg. 5-5).
- “There is insufficient detail at this time to compare projected storage volumes for smaller water storage projects identified through watershed planning efforts or other local planning documents.” 5.2.8 Comparison to Storage Potential (pg. 5-5).
- “The factors used to project future water use are very generalized aggregate estimates, and have not been “built” from an analysis of the many potentially underlying variables that affect the demand for water. More sophisticated methods of incorporating multiple factors into an aggregate estimate exist, but could not be developed in the short time frame for this project.” 5.3 Second Tier Water Demand Forecast (pg. 5-5 to 5-6).
- “However, because the forecast relies solely on historical data, any factors that affect crop production that have not occurred in the sample period would not be included in the forecast. New technologies or market changes that significantly change crop production compared to the sample period cannot be predicted by this forecast method.” 5.3.1.2 Economic Forecasting Results (pg. 5-7).
- “...[N]o definite conclusions could be made regarding the need for additional water based solely on this report.” 5.3.1.3 Conclusions about Future Water Demand in the Agriculture Sector (pg. 5-8).
- “It is not possible to develop a sophisticated analysis of growth and validate potential growth in agriculture water use.” 5.3.2 Agriculture Sector-USGS Water Use (pg. 5-8).
- “Factors related to conservation, agriculture and economics, and climate factors are not incorporated in this projection of water demand.” 5.3.2 Agriculture Sector-USGS Water Use (pg. 5-8).

- “A more detailed evaluation of individual water right requests and more sophisticated demand projection methodology is necessary to address individual situations and to factor in issues such as the CBP.” 5.3.4 Comparison of First Tier and Second Tier Demand Projections; Consideration 1. (pg. 5-10).
- “In effect, there is currently not an accurate picture of legal entitlements to water from the Columbia River and there will likely not be in the immediate future.” 5.3.5 Comparisons to Exiting Water Rights and Existing Storage (pg. 5-11).
- “Based on the available information, the most important conclusion is that the future balance between water supply and water demand in the Columbia River is not well defined...[a]dditional work at both the inventory and forecasting level is necessary to refine the analysis presented in this report.” 5.4 Conclusions (pg. 5-11).
- “What remains elusive is:
 1. A clear understanding of the detailed connections between various management decisions that are currently applied to water management on the Columbia River, and the relative contributions each have on flow in the Columbia River and its tributaries; and
 2. The degree to which a response to changes in future conditions can be anticipated, in light of current management capabilities, environmental conditions and socioeconomic values in the region.”
 5.5 Future Considerations for Columbia River Water Forecasting (pg. 5-12).

2. Draft Programmatic EIS for the Columbia River Water Management Program **Quotes**

- “A major area of uncertainty in the Columbia River Basin is the relationship between environmental variables and the survivability of anadromous fish...[i]n particular, the relationship between flow levels in the Columbia River and salmon survival is not clear.” S.5 Areas of Uncertainty and Controversy (pg.S-10).
- “Several potential storage sites have been proposed in the project area. The technical and economic feasibility of these sites is not yet known. Reclamation and Ecology will continue to evaluate the feasibility through appraisal and feasibility studies.” S.5 Areas of Uncertainty and Controversy (pg. S-10).
- “It is uncertain how much additional water can be made available through storage, conservation, and other water management projects. The socioeconomic impacts of the Management Program are also uncertain.” S.5 Areas of Uncertainty and Controversy (pg. S-10).
- **The Goal of the Inventory and Demand forecast as stated in the EIS:** “The goal of the project is to develop a comprehensive database of all known conservation project opportunities in the Columbia River Basin in eastern Washington...[t]he data and recommendations will form the foundation for implementing the Management Program and will help state officials determine the need for water supplies in the Columbia River Basin.” 2.1.2.4 Inventory and Demand Forecasting Component (pg. 2-13 to 2-14).

- “Further analysis using water quality models of specific drawdown scenarios would be required to quantify the magnitude of potential impacts.” 5.1.1.3 Impacts at Lake Roosevelt for Non-Drought and Drought Year Withdrawals; Surface Water; Short-term impacts; Water Quality (pg. 5-4).
- “The location and timing of Trust Program water discharge has not been defined to date, making assessment of the adverse or beneficial influences to aquatic resources difficult.” 5.1.2.6 Impacts at Lake Roosevelt for Non-Drought and Drought Year Withdrawals; Fish Wildlife, and Plants; Long-term impacts; Fish (pg. 5-19).



COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

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November 8, 2006

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RE: Columbia River Legislative Report Comments

Dear Mr. Haller:

The Columbia River Inter-Tribal Fish Commission (CRITFC)¹ appreciates the opportunity to provide comments to Ecology on the Legislative Report. While we understand the deadline for the report to be filed is mandated for November 15, 2006, we found it very difficult to adequately comment on a 900 page document in three short weeks. We have, however, striven to craft some preliminary comments that we hope you find helpful as you compose your first report.

Attached to this letter are some of our comments on the Water Supply Inventory and the Long-Term Water Supply and Demand Forecast Report.

We thank you for the opportunity to submit these comments and to participate in this process. If you have any questions about our comments, we would be happy to set up a meeting with you to discuss them. Please feel free to contact Julie Carter or Robert Heinith at 503-238-0667.

Sincerely,

Olney Patt, Jr.
Executive Director
Columbia River Inter-Tribal Fish Commission

¹ In 1977, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Nez Perce Tribe, and the Yakama Nation created the Columbia River Inter-Tribal Fish Commission (CRITFC or "Commission"). These four tribes have 1855 treaty rights to take fish that pass their usual and accustomed fishing places. Consequently, it is of critical importance to the tribes to protect and conserve the habitat and life cycle of the fisheries. The Commission functions to protect, promote, and enhance the Columbia River Basin's anadromous fish resources consistent with the treaty-secured interests of its member tribes by formulating a broad, general fisheries program, and providing technical and legal support.

SPECIFIC COMMENTS: COLUMBIA RIVER LEGISLATIVE REPORT
By the Columbia River Inter-Tribal Fish Commission

Executive Summary

We suggest that the Columbia River long-term water supply and demand forecast be updated annually instead of every five years. We also suggest that both the water supply and long term water supply inventories be due on July 1, since the new water year begins on August 1. Ecology should allow a minimum of 30 days for the tribes to comment on each plan each year.

While we applaud and support the concept of conservation to meet future out-of-river water needs, our member tribes have had serious questions about development of basin storage project. As we commented in the CRI process and formally before the National Academy of Sciences for the CRI, there is already 30 million acre feet of active storage in the Columbia River system of large reservoirs (Arrow Lakes, Mica, Libby, Grand Coulee) and as the this report notes a total of 46 MAF basin wide in available storage. This is in excess of a third of average basin runoff. What needs to be changed is how this storage is managed. Flexibility for flood control needs through improved forecasting methods is key to better management. Some of these issues are being addressed in the current remand process for the Federal Columbia River Power System Biological Opinion. It is important that the water supply inventory process consider BiOp remand issues that will directly affect in and out-of-river needs.

The Interior Columbia Technical Recovery Team (TRT) assembled to scientifically determine the existing status of ESA- listed salmon stocks and the magnitude of survival recovery necessary for stock recovery. The Interior (TRT) filed an Interim Gaps Report on May 17, 2006. They described the abundance and productivity “gaps” for listed ESUs. They also described viable salmon population parameters beside abundance and productivity which include spatial structure and diversity. The TRT estimated that the change in survival projected required to achieve a 95% chance and a 99% of meeting recovery goals of 2000, naturally producing upper Columbia Spring Chinook adults was between 58-90% and 178-233% respectively (ICTRT 2006). The TRT estimated that the change in survival projected required to achieve a 95% chance and a 99% of meeting recovery goals of 2000, naturally producing upper Columbia Steelhead adults was between 333-769% and 413-944% respectively (ICTRT 2006). To fill these very large gaps may require additional flows over the current BiOp flow targets. The final water inventory report should include this information with the important comment that more flows than currently provided for ESA listed fish may be necessary during the March- September time period.

Chapter 1

This chapter fails to discuss the history of the tribes and their stewardship of the basin’s natural resources for thousands of years. This chapter also fails to include ESA unlisted salmon, sturgeon and lamprey stocks and provide stock status for each.

Section 1.2.2 (Columbia River Water Management Program Components):

New storage dams will shift water from one period to the other and may come with two major undesired environmental consequences: (1) Further degradation of the basin hydrology necessary to support fish populations and (2) Mounting evidence suggests that the decomposing vegetation trapped at the bottom of a reservoir generates more greenhouse gas to be emitted into an already

warming atmosphere (IRN 2002). Other demands, such as recreation, may make new storage use problematic for other uses for which they were originally intended.

Section 1.2.3.1 (Lake Roosevelt Drawdown):

The proposed draft of 132.5 KaF from Lake Roosevelt, of which only one third is assigned for fish flows, is a very small amount of water. CRITFC and others in the BiOp remand process are examining Lake Roosevelt drawdowns of 2-8 feet (260-900 Kaf) for listed and unlisted salmon and steelhead and Pacific lamprey flows. Additional summer flow augmentation is needed because the McNary summer flow targets have only been met or exceeded three times during 1995-2006.

Chapter 2

An important part of outreach is allowing stakeholders an adequate amount of time to provide meaningful review and comment on proposed actions. Allowing only 3 weeks to comment on this 900 page report does not meet this objective.

Section 2.6 Federal Government

The Bureau of Land Management should be included in the list of federal agencies as they have a role in water management on federal lands under their jurisdiction.

Section 2.8 (Tribal Government):

The Confederated Tribes of the Warm Springs Reservation of Oregon is a tribe that has treaty rights to fish and should be listed and contacted as a separate tribal entity that has an important stake in Washington State water management. Is Ecology or the Washington State Governor's office going to conduct formal government-to-government consultation with the tribes? If so, it should be stated in this Section.

Section 3.2.1 (Climate):

The Draft fails to mention the specific impacts of observed climate change of the 20th Century on weather or hydrologic patterns. Draft fails to consider the negative impacts from future climate change, which is expected to accelerate in coming years: warming winter temperatures, less snow accumulation, and increased variability of the snowmelt patterns.

The Pacific Northwest climate change impacts on streamflow— past and future – have been well documented by the University of Washington's Climate Impacts Group (Mantua 2006, Mote 2006). Dittmer (2005) shows that during the last 100 years, the sub-basins of Washington have seen the median of the seasonal runoff shift earlier in time by 2 to 17 days and an 8% to 26% shift of spring-summer seasonal flows to autumn-winter. Any baseline assessment needs to take into account observed climate change impacts.

Section 3.2.2 (Reservoirs and Hydropower):

The observed flow record – with many upriver diversions – can give a false picture. It is desirable to compare the observed flow record with a modified-adjusted streamflow record that takes upriver storage regulation changes, irrigation withdrawals, and evapotranspiration into account. Such data has existed for years, maintained by Bonneville Power Administration and recently updated (BPA

2004). Draft fails to consider the BPA modified-adjusted streamflow record, so the cumulative effects on the Columbia River cannot be properly assessed.

New flow forecast tools are now available to improve water management that Washington DOE may not be using (Hamlet et.al. 2003; Wood 2006). Even changes to flood control operations must be considered to mitigate for the regional impacts of global warming (Lee et.al. 2006).

The Draft fails to recognize that BPA's Hydro-Sim hydro-regulation model is outdated. It is desirable to use a standardized, more modern, regional hydro-regulation model, like GENESYS (NPPC 2006), which is a more advanced version of BPA's HYDSIM. GENESYS could help outside users can better understand the proposed operational changes and cumulative impacts.

Section 3.3.3.1 Water Metering

Until there is a reasonable quantification of water use via implementation of a comprehensive metering system for all irrigation and municipal water withdrawals from the mainstem Snake and Columbia Rivers, additional water rights and withdrawals from the rivers should not be considered. The report should indicate how such a system will be funded (should be the responsibility of the entity that is withdrawing the water) and when it will be in place.

Section 3.3.3.2 Odessa Subbasin

Ecology should not have allowed pumping of the aquifer before a decision was made to expand the Columbia Basin Irrigation Project. BOR declared a moratorium on the Project expansion in the early 1990's due to the ESA listing of salmon stocks. Since that time, more listings have occurred and non-listed stocks, such as Pacific lamprey are in very serious decline. In the face of these serious obstacles, there should be no consideration of expanding the Project. If Ecology and the irrigation community insist on depleting the aquifer for short term uses, there will be long term, likely irreversible impacts to the aquifer.

Section 3.4 Other Institutional Factors

This section notes that the BiOp target flows are not generally met. Those flow objectives were established in the 1995 and succeeding BiOps as "... a low estimate of the flow that is likely to avoid high mortality." (NMFS 1995 Basis for flow objectives for Operation of the Federal Columbia River Power System). These flow objectives are in place from April 10- August 31 in the Snake and Columbia Rivers. The July-August "critical" timeframe for anadromous fish flows in the Washington State Legislation is not consistent with the BiOps.

Ecology grants Section 401 CWA certifications for FERC-licensed hydroprojects. These certifications affect water quantity and quality and should be included as other institutional and legal factors.

There is no mention of the Fish and Wildlife Coordination Act in this Section that was established to mitigate the impacts of FCRPS dams on Fish and Wildlife.

Section 3.5.3 Forecasting

Improved forecasting is vital to retaining more storage for fish and other uses and better manage flood control in the Columbia Basin. The NRCS has developed statistical methods to provide

forecasting in daily time steps at several Columbia River basin subbasin index sites. The methods can be found at: ftp://ftp.wcc.nrcs.usda.gov/data/water/wcs/daily_forecast/

This system needs to be expanded to provide daily forecasts for all major basin index points. In addition to our ongoing monitoring and forecasting of current conditions, the NRCS is implementing improvements in resource data monitoring and assessment capabilities by:

- Further automating of manual snow courses to SNOTEL sites where real-time information is needed to provide water supply forecasts.
- Expansion of SCAN to provide governments, water managers, agricultural producers, businesses and researchers improved information about soil moisture conditions and potential droughts.
- Improving models and computational capacity to provide more frequent and accurate water supply forecasts and assessments of soil moisture.

Section 3.5.3.2 (NWRFC – Northwest River Forecast Center):

The NWRFC no longer uses the SSARR model. NWSRFS is their sole river forecast tool.

Chapter 4 Water Inventory

We appreciate the amount of work over a short time period that was accomplished in generating this overview of river water use in Central Washington. However, there needs to be much more careful and extensive quantification of water use than presented in this Chapter in the final water inventory. This is very important because the foundation of consideration of any more water withdrawals must be premised on the actual, quantifiable, existing use.

4.2.3 Return Flows

It is not mentioned as to how much of the return flows are surface return flows or water table return flows. Further, the water quality characteristics of the return flows are not specified. Return flows that are polluted with agricultural chemicals impact fish.

4.4.1.1. Reservoir Operations

It is not mentioned in this Section but reservoirs are operated to maintain ESA listed lower Columbia River chum flows of about an 11.5 foot tailwater at Bonneville Dam (about 125 kcfs depending on ambient flows, bank storage and tides). While it is mentioned in another report section, reservoirs are also operated to maintain Hanford Reach spawning and redds from November through early May. Thus, fall and winter fish flows are also important. Reservoir elevations are determined by flood control rule curves and also power rule curves. If elevations are below flood control rule curves, power rule curves determine reservoir management.

The amount and timing of water use, including return flows, water lost to evapo-transpiration, changes in consumptive use, unaccounted water and conservation need to be quantified before

consideration of additional river withdrawals. The methodologies to calculate water use are explained in the following footnote:

¹ Calculate the actual water use from water meter data, power meter, or run-time data. In the absence of such data, the TIR (total irrigation requirement) - CIR / EA, where CIR is the crop irrigation requirement from the WIG (Appendix B) and Ea is the case-specific application efficiency above. Reference: Washington State Department of Ecology (Ecology). 2005. Determining Irrigation Efficiency and Consumptive Use. Water Resources Program Guidance. Guide 1210.

There are no error bounds given for any of these metrics. In particular, the method used when actual water use cannot be calculated (TIR –CIR/EA) does not have any qualifiers as to how accurate this method is to actual usage.

4.5.3 Modification of Existing Storage Facilities

As mentioned above in these comments, over 30 MAF of existing storage exists in large reservoirs in the Columbia Basin. Better management of this storage would allow for more water for fish and other uses at a fraction of the cost of building new basin storage facilities. The final inventory report should explore the potential of this concept.

Section 5.1 (Water Supply and Demand Forecast):

The Draft fails to consider new planning tools by the Climate Impacts Group (Hamlet 2006) that takes climate change into account for future water plans. Recent conferences (C-CIARN 2005) stress the need for future management systems to adapt to more timely and flexible strategies to mitigate for rapidly changing environmental conditions. Future water management needs to be much more flexible if multiple needs are to be met (Cohen et.al. 2000). Environment Canada (Brugman 2002) research suggests that the glaciers of the Upper Columbia will entirely melt in 20 to 200 years. The Columbia's summer baseflow could drop 30% to 95%. The draft makes no substantial mention of the impacts of climate change and variability – a major shortcoming.

There is no mention of returning the FCRPS to a natural-normative system, as part of a holistic basin-wide ecosystem approach to species recovery. Technical staffs repeatedly recommend a holistic ecosystem and natural river regime approach to managing water and salmon resources in degraded basins (C-CIARN Conference 2005; Transboundary Conference 2002, Bunn and Arthington 2002, Williams et.al. 2000).

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November 8, 2006

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RE: Columbia River Legislative Report Comments

Comments on the Draft Columbia River Water Supply Inventory and Long-Term Water Supply and Demand Forecast Report

Mr. Haller:

I write on behalf of Columbia Riverkeeper and Citizens for a Clean Columbia. Columbia Riverkeeper, which is based in Hood River, Oregon and White Salmon, Washington, is a non-profit organization with a mission to restore and protect the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. Citizens for a Clean Columbia is a non-profit citizens' group based in Wenatchee, Washington who advocate for clean water and a healthy Columbia River system for humans, fish, and wildlife. Both organizations have members that use and enjoy the Columbia River for recreational, scientific, aesthetic, and economic purposes. Those interests may be harmed by components of the Department of Ecology's ("Ecology") actions in the Columbia River Water Management Program.

Columbia Riverkeeper and Citizens for a Clean Columbia (hereafter, "Riverkeeper") fully support the extensive water conservation practices described in this the Draft Columbia River Water Supply Inventory and Long-Term Water Supply and Demand Forecast Report ("Report"). Riverkeeper believes this analysis is much-needed and long overdue. These comments express Riverkeepers' concerns about the Report.

Ecology cannot issue new water rights based on speculative future conservation.

The Report indicates that future water demand is going to exceed water supply. Therefore, the Report assesses the potential to "create" more water by conservation and storage. This section focuses on the water saved by conservation, which is estimated at over a half million acre feet ("AF") for agriculture alone. Ecology must carefully assess the amount of water actually conserved prior to issuing or expanding water rights on the Columbia River

Ecology must prove increased flows before increasing use.

The report should make clear that Ecology cannot issue additional water rights based on speculative conservation savings. The Report suggests this, but is not explicit. The Report states, "it is very possible that individual conservation projects and water right

applications could be matched such that conservation savings could become a basis for processing certain water rights." The Report should explicitly state that no water rights will be processed until the conservation projects have successfully increased flows in the river. Otherwise, the Report gives the false impression that conservation can cover all the demand.

Demonstrating that conserved water has increased the flow in the Columbia River will be a challenging and time-consuming task. The issuance of water rights must be delayed until the conservation projects have proved successful. The Report correctly recognizes that many of the conservation projects will not cause additional water to accrue in the Columbia River. The Report estimates that the water that will accrue to the Columbia River is 5 – 20% of the water conserved. In addition, the Report correctly recognizes that there is little if any quantitative data behind the estimates of potential water conservation. Therefore, while water conservation holds great promise and should be aggressively pursued and funded, it is imperative that Ecology have quantitative data on the success of conservation prior to issuing more water rights.

In addition, the Report should estimate time-frames for the implementation of conservation projects and provide criteria by which Ecology will demonstrate successful conservation. As it stands, the conservation is quite speculative and should not be used as a definite source to promise future water rights.

New water rights must be conditioned on meeting minimum instream flow

All new water rights, whether based on conservation or storage, must comply with the instream rights established by WAC 173-563. New rights should be subject to the instream flow regulations and, therefore, must be interruptible. However, the Report states that an objective of the Management Program is to convert interruptible water rights to non-interruptible water rights through mitigation using conserved or stored water. It is unclear how Ecology will obtain this objective. First, all new rights are junior to the instream flows established in 1980 by WAC 173-563. In addition, whether a new water right is based on conserved water has no basis of whether the river's flow is too low enough to harm fish. All new water rights must be subject to the same conditions of WAC 173-563, which curtail water rights when there is very low flow. If flows are under the established limited, this is an indication that the water conservation is not working.

Ecology should make conservation agreements binding

The Report justifiably focuses a lot of energy on potential water conservation projects by agricultural, municipal, and industrial users. If Ecology relies on the conservation projects, it should establish binding agreements with the water conservers. The water rights that Ecology issues are binding agreements. Without binding agreements on the conservation side, Ecology is setting itself up for trouble. Perhaps Ecology could condition the water rights upon the performance of the conservation agreements.

Ecology must protect fish with minimum flows

The Report should more clearly explain Ecology's legal duties to protect endangered salmonids. Ecology cannot allow additional withdrawals from the Columbia River unless

minimum instream flows are maintained. Currently, the State is not meeting the minimum flows required by the Biological Opinion ("BiOp"). The Report notes that the flow targets for the Priest Rapids, McNary, and Bonneville dams are not met. The Report does not explain how the new water management program will comply with the BiOp. The inventory and demand section should make clear that the BiOp flows are a top priority before issuing any additional water rights to an already over-allocated river. Ecology should continue to review water rights permits on a case by case basis and only approve if sufficient instream flows for fish and wildlife are maintained.

Conservation Projects

Riverkeeper commends Ecology for its effort to identify conservation projects. The Report's conservation data, however, are so speculative as to be of little use. For example, surveying conservation districts for conservation projects is a good first step, but the legitimacy of the project and the potential costs must be verified. The Report should not rely on these numbers. Likewise, the conservation data from municipalities is highly spotty due to the lack of response. The Report suffers because it presents the number of projects, AF conserved, and cost per AF as precise numbers, even though the values are wild estimates at best. The Report states that the cost and water savings "should be viewed as preliminary and used only to screen or compare projects within the inventory." Even with this caveat, the casual observer will be confused by the seemingly precise values. In addition, it is questionable whether the cost and water saving data are accurate enough to even screen or compare projects.

The conservation projects for agriculture range widely from less than one hundred dollars per AF to over six thousand dollars per AF. The Report should have at least confirmed the possibility of the projects in general and the costs involved. Overall, survey respondents may have overestimated the cost of conservation projects. In addition, perhaps Ecology could offer an incentive or a requirement to encourage broad participation in the studies.

Storage Projects

Riverkeeper opposes new dams in the Columbia River Basin. The Report did not discuss the major environmental and cultural degradation caused by dams. There are 55 major dams on the Columbia today. We are in an era of dam removal, not construction. The Report should clearly assess the long-term and cumulative impact of constructing or enlarging a dam.

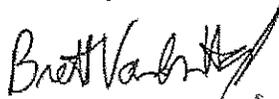
The Report should also include the environmental costs in the cost estimate of dam storage. The Report estimated cost of storage at \$640 to \$5000 per AF, with Black Rock dam being the most expensive. The Report does not explain the potential economic impacts of the dam on the commercial and recreational fishing and tourism industries. The cost estimates of storage are likely significantly greater when the true costs are considered.

The Report Likely Overestimates Demand

Despite a great effort, Ecology just does not have the data to accurately predict water demand. Therefore, this Report had to rely on speculative data. For example, regarding the USGS survey of water users, the Report states: The USGS has no control over the quality and accuracy of the data it receives. At present, the accuracy and confidence limits of the estimates are not quantified." The demand is likely overestimated because the water users are likely to overestimate their use and their need in order to error on the safe side. Further, the Report's reliance on unverified water right applications suffers from the same problem: namely, water users are overestimating their need. Therefore, the Report should recognize the likely overestimation and make clear that the need for immediate storage projects may not be great. For example, the greatest water user by far, agriculture, is not expected to grow, according to a study by Washington State University.

In addition, the Report should not assume that growth must occur. The underlying assumption throughout the Report is that the State must find more water to allow agricultural, municipal, and industrial growth. Unfortunately, the reality is that water availability may have to limit growth. The Report's partial recognition that most of the water for growth will need to come from conservation or reuse is encouraging.

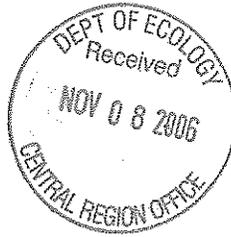
Sincerely,



Brett VandenHeuvel
on behalf of:

Brent Foster
Columbia Riverkeeper
724 Oak Street
Hood River, OR 97301

Susan Evans
Citizens for a Clean Columbia
Wenatchee, WA



November 8, 2006

COLUMBIA RIVER WATER MANAGEMENT BRIEFING/CONSULTATION

Mr. Gerry O'Keefe, Columbia River Water Management Coordinator
Mr. Derek Sandison, WADOE Central Regional Office Manager
Mr. Tom Tebb, WADOE, CRO, Water Resources Program Manager
Mr. Dan Haller, Technical Lead, Columbia River Water Management Program

Subjects: KID Comments on the Proposed Voluntary Regional Agreement, Programmatic EIS, and Funding Request for New Water Right Engineering; and Project Development per the Columbia River Account

Gentlemen:

As part of Ecology's consultation process, the KID offers formal comments on the Columbia-Snake River Irrigators Association (CSRIA) and Ecology Voluntary Regional Agreement (VRA) for the development of new water rights under the Columbia River Water Management Program.

Our comments reflect the KID's needs and objectives to provide irrigation service to over 20,000 agricultural, residential, and commercial customers, and to meet the apparent demand needs of a growing Quad-Cities area. Irrigation water is an important asset supporting our economy and lifestyle, and it is our intent to sustain and enhance this asset through careful water resources management, and through the acquisition of a new Columbia River water right.

CSRIA-Ecology Voluntary Regional Agreement (VRA) and Related Actions:

The KID firmly supports the implementation of the CSRIA-Ecology VRA; this Agreement is an important implementation "tool" that brings into being the 2006 Columbia River Water management legislation. The Columbia River legislation directs the state and water users to embrace collaboratively new water efficiency and management approaches, and to protect current water users and secure new supplies for our communities.

The KID also offers the following recommendations:

- Ecology should move expediently forward with the consultation process for the VRA. The VRA should be signed by CSRIA and Ecology, as soon as statutory and procedural time lines allow.

Columbia River Water Management Briefing/Consultation

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- The pending KID water right should be one of the initial water rights granted under the new VRA. The proposed water right is highly consistent with the VRA approach and the application of a new water management approach taking advantage of conservation and efficiency improvements, water transfers, and improvements to in-stream flows where measurable impacts can be obtained.
- Via the guidance offered by the draft VRA, Ecology and KID staff should pursue regular consultations throughout the next few months to evaluate technical, legal, and policy components surrounding the issuance of a new Columbia River water right for the KID.
- With the completion of the VRA consultation period, Ecology staff and KID representatives should review how the VRA may be used to accommodate some of the key features of the new KID water right, including:
 - Respect for the existing KID Conditional Final Order (CFO) under the current Yakima River Basin water adjudication; and providing pragmatic and workable efficiency standards for the diverse needs of the District.
 - An ability of KID to improve water efficiency objectives and provide “no negative impacts” to main stem Columbia River flows through internal recalibration of the District’s existing water right—and used in conjunction with a new Columbia River water right.
 - An optimization of the water resources transfer under the new water right, exchanging Yakima River flows for Columbia River water.
 - Mitigation options for the new KID water right.
- With the completion of the VRA consultation period, Ecology and KID staff should jointly prepare a report of examination and record of decision for the issuance of the new KID water right permit.

The Ecology Programmatic EIS:

The KID generally supports the proposed action/proposal contained in the Programmatic EIS for implementing the new Columbia River Water Management legislation (and the preferred alternatives/proposed actions therein).

More specifically, we note the following:

- The KID supports the proposal/proposed action for implementing the Columbia River Water Management Program and the early implementation actions, including a Lake Roosevelt drawdown (re-regulation), a supplemental feed route for the Potholes Reservoir, and the Ecology-CSRIA Voluntary Regional Agreement (VRA).

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- The KID supports most directly the VRA and its application for the issuance of a new Columbia River water right for the KID.
- The EIS offers a satisfactory level of information to assess adequately the significant or non-significant impacts affecting the proposed actions. The technical information within the EIS is adequate to proceed with the VRA.
- The coverage of the irrigated agriculture impacts within the EIS is more realistically served by the UW review—as it relates to incremental additions of irrigated acreage—than the American Rivers commentary. The UW work also was conducted with a technical review committee, while the American Rivers' work is simply advocacy politics. It would seem to be very self-serving for a group from Texas A&M to downplay new irrigated agriculture in Washington State, while their own state is a market competitor with Washington agricultural products. The real-world conditions in Columbia River agriculture—and within our service area—do not conform to that suggested by American Rivers.
- We are pleased to see that the observations and recommendations of the NAS report are not overstated, as the report contains serious gaps in adequately evaluating available empirical data/studies pertinent to impacts related to new Columbia River water right withdrawals.

Funding Request Under the New Columbia River Basin Water Supply Development Account:

As previously conveyed to you, the KID would like to apply for Ecology/state co-funding, for its proposed Columbia River water right review, under the Columbia River Basin Water Supply Development Account. We believe that this work is eligible for co-funding under Section 7(2) of the 2006 Columbia River Water Management legislation, encouraging projects for water exchanges in the Yakima River.

The new (KID) Columbia River water right would allow for:

- Water transfers (change in withdrawal points, water exchanges, and some additional water withdrawals) from the Yakima River to the Columbia River.
- A significant amount of the existing KID service territory, currently served by Yakima River water, to be serviced by Columbia River water, and additional lands in the Red Mt.-W. Richland and South Ridge areas to be serviced with Yakima River water.
- New pump stations placed at Kiona (Yakima River) and at Edison St. (Columbia River); the overall approach is more, smaller withdrawals along the river corridors to service KID.

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- Significantly increase flow within the Prosser to mouth of Yakima River Reach (ranging from about 400 to 130 cfs), with a very small decrease to mainstem Columbia River flows (57 cfs as currently envisioned).

Specifically, co-funding is initially requested for:

- Appraisal and preconstruction engineering/economics and water right evaluation work for the Edison St. portion (direct water transfer between Yakima and Columbia Rivers) of the proposed project (Columbia River pump station and mainline).

With completion of the project review and the issuance of a new Columbia River water right, co-funding is requested for:

- The construction engineering and capital construction for the Edison St. portion of the proposed project (Columbia River pump station and mainline).

Per our recent discussions, we know that you are in the process of some internal clarification of what types of projects can be funded, and we are aware that the construction engineering and capital funding needs for the KID water right project would not be eligible for state funding until issuance of a water right. However, the project appraisal work now being conducted by the KID appears to be eligible for co-funding.

Please let us know how you wish to proceed with this funding request, and what types of information you require, in addition to the technical reports and information previously provided to you.

The KID management and staff are very pleased with our current interaction and consultations with the Ecology staff, and we are looking forward to soon acquiring a new Columbia River water right to better serve our customers and community.

With my appreciation for your efforts and consideration,



Victor V. Johnson
District Manager

VVJ/mh

cc: WA State Sens. Erik Poulsen, Mike Hewitt, Jerome Delvin, and Jim Honeyford
WA State Reps. Kelli Linville, Bruce Chandler, and Dan Newhouse
Mr. Jay Manning, Director, WADOE
Mr. Tom Mackay and Dr. Darryll Olsen, CSRIA

WALLA WALLA COUNTY WATERSHED PLANNING

310 W. Poplar -Suite 201 -Walla Walla, WA 99362-2865

Telephone (509) 524-2648 • FAX (509) 524-2630

November 8, 2006

Dan Haller
Washington State Department of Ecology
Central Regional Office
15 W. Yakima Ave., Suite 200
Yakima, WA 98902-3452

Subject: Columbia River Legislative Report Comments for WRIA 32 (Walla Walla)

Dear Mr. Haller:

Thank You for the opportunity to comment on the *Water Supply Inventory and Long-Term Water Supply and Demand Forecast*. Please consider the following comments from our review in WRIA 32 (Walla Walla Watershed):

1. Table 3-3 does not provide information for Walla Walla County. Information on Walla Walla County land use/comprehensive planning can be obtained from Walla Walla County Community Development department. Contact Steve Donovan at (509)524-2623 or by email at sdonovan@co.walla-walla.wa.us.
2. Pg 4-13 Section 4.5.4 entitled Aquifer Storage and Recovery (ASR) acknowledges that the City of Walla Walla and the WRIA 32 Watershed Plan have identified ASR as a storage opportunity, but the document does not discuss the fact that the City of Walla Walla is currently using this storage method. The discussion on this promising storage method is inadequate, additional information concerning its use and future opportunities should be incorporated. The City of Walla Walla can provide specific information, Hal Thomas Public Works Director can be reached at (509)527-4463.
3. The WRIA 32 Watershed Plan was completed for the WRIA 32 Planning Area, that is all land that flows into the Columbia River via the Walla Walla River. Department of Ecology's WRIA 32 includes all areas discharging into the east-side of the Columbia River downstream of its confluence of the Snake River until the Columbia becomes the Washington-Oregon border. This is clarified in the watershed plan available at www.wallawallawatershed.org/wplan.

4. The United States Army Corps of Engineers/Confederated Tribes of the Umatilla Indian Reservation Feasibility Study was awarded \$400,000 from the Department of Ecology under the The Columbia River Basin Water Management Act (House Bill 2860) in June, 2006. This is not mentioned in the document, nor is the major water storage project that it is studying mentioned either. The USACE/CTUIR Study is only mentioned indirectly in table D-7 where one of the project alternatives under consideration, storage on Pine Creek is found. More information on the project should be included in the final draft as \$400,000 of Columbia River Water Management Funding has already been granted toward its development. Information can be acquired from Rick George, CTUIR at (541)276-3165 or from Chris Hyland, USACOE at (509)527-7264.

Our detailed comments on the accuracy of data included in the report has been foregone as the report discloses the “illustrative” nature of the data, and that the data is only supposed to provide “glimpses” of what better data or forecasting could provide. Acknowledging the time constraints that this significant project work was accomplished under, our specific notation of potential inaccuracies concerning WRIA 32 and Walla Walla County, beyond those mentioned here, would be problematic should the intent be to take action at a local scale based on this report.

I appreciate this opportunity to comment on this document. If you have any questions regarding these comments please contact me at (509)524-2648 or via email at cschaeffer@co.walla-walla.wa.us. Thank you very much.

Cathy Schaeffer
Watershed Planning Director
Walla Walla County

Attachments:

Yakama Nation Comments on Inventory Report.doc



Yakama Nation
Comments on Inve..

-----Original Message-----

From: Tom Ring [mailto:ringt@yakama.com]
Sent: Thursday, November 09, 2006 1:12 AM
To: Haller, Daniel R. (ECY)
Subject: Columbia River Legislative Report Comments

Dear Mr. Haller,

The attached are staff-level comments on the Inventory.
They do not represent the policy or legal positions of the Yakama Nation.

Philip Rigdon
Deputy Director, Natural Resources
Yakama Nation

This mail sent through IMP: <http://horde.org/imp/>

Yakama Nation Comments on Water Supply Inventory and Long term Water Supply and Demand Forecast

We note at the outset that we were afforded a two-week review period (extended to three) for this 918 page document, a period that is running concurrently with the review period for the CRWMP DPEIS (387 pages), and the consultation period for the CSRIA VRA. This failure to properly stage these documents causes an undue burden on the interested public and the Yakama Nation. Unlike Ecology, which has been able to add many new staff and hire consultants to produce this work, affected Tribes must review this work with existing resources. Therefore, we wish to make it clear that these comments are an initial attempt to fill in blanks and correct errors in the draft report. Failure to comment on a particular assertion in the report does not constitute concurrence, assent, or acquiescence with that assertion. The Yakama Nation reserves all options and recourse available to it to protect and enhance its rights, resources, and interests.

There is much discussion in the report of interpretations of law by the report writers. We do not agree with a number of these assertions. For instance, Section 4.2.5.1 states that the Municipal Bill clarifies certain things. We believe that the bill changed, rather than clarified existing law. These comments do not address all of these issues, do not constitute a legal position of the Yakama Nation, and we specifically reserve our right to comment and dispute these points as appropriate later.

The report repeatedly makes the point that the Legislature did not allow enough time for a thorough, rigorous, and credible analysis of many aspects of the inventory to be completed. We agree. As of the date of this inventory, we see no proposals either for storage or conservation that are sufficiently well quantified and certain of outcome to allow for new water use out of the Columbia River.

Executive Summary

ES-4 It is not correct that the Yakima Storage Study is "under the auspices of the (Columbia river) Management Program". The Yakima Storage study, which was supported by the Yakama Nation, began years before the Columbia River Bill passed and is proceeding under entirely different statutory authority. It is not clear what the authors mean by the "Yakima Pump Exchange Study", but if the reference is to the Kennewick Pump Exchange study, that is being performed under the auspices of the federal Yakima River Basin Water Enhancement Project.

ES-6 The report discusses the Yakima Storage Study alternatives interchangeably with the Columbia River four storage options. The report should clarify that the purposes being contemplated in the Yakima Basin Storage Study are improving instream flow and out of stream supply in the Yakima Basin, not the Columbia.

ES-9 The discussion on river management neglects the role of the Treaty Reserved water rights held by the Columbia River Treaty Tribes necessary for the continued exercise of their Treaty fishing rights. These rights have a Time Immemorial priority date and, therefore, are the senior water rights on the river and must be satisfied before any existing or possible future water rights.

ES-10 A water right application is not a "demand", it is a request, and is subject to a number of tests including water availability, impairment, and public interest. The existence of an application does not convey a water right or create an obligation to issue a water right.

ES-10 The Executive Summary does not make it clear where the conservation possibilities are located. This has a great bearing on whether any conserved water would be available to mitigate for new Columbia River water rights. For example, water conserved under the Yakima River Basin Water Enhancement Project is used to stabilize irrigation supply and increase instream flow in the Yakima basin, where existing water rights are not always met and must take priority over issuance of new water rights elsewhere.

In addition, water conserved through irrigation system improvements reduces return flows that may be already in use by downstream users, instream and out. Conservation in this case would not likely create any usable supply for Columbia River applicants.

Until the threshold questions of consumptive versus non-consumptive conservation and within-tributary-basin commitments are answered, the assertion that large amounts of new water will be made available for Columbia River applicants appears to be based on blind faith.

ES-12 Presumably "reclaimed water" would come from return flows from treatment plants or other discharges of non-consumptively used water that are already in the river. The report needs to explain how such reclaimed water could be used for new consumptive use "without new demands on the river".

ES-13 The forecasts do not account for the conversion of agricultural land to residential or for the amount of domestic demand accommodated by this conversion. Such conversion is occurring in a large way and accounts for much of the residential growth in parts of the Columbia Basin.

ES-15 Those senior right holders who were excluded from the drafting of the Columbia River Bill (and they all were) might be surprised to find out that the "spirit of the legislation" includes collaboration.

ES-16 The reference to "tribal fisheries partners" shortchanges Indian people. Indian Tribes have the same range of economic and health and welfare interests as non-Indian governments in addition to holding Treaty Rights for a fishery-based economy. How would a reference to "our non-Indian potato partners" go over?

ES-17 The reference to geology within the one-mile corridor implies that only aquifer storage projects within one mile of the river would be eligible. This is probably a mis-interpretation of the legislation, but it is hard to know.

ix Def of interruptible. Doesn't the law require curtailment. The definition makes it sound discretionary. Same problem in 3.3.1.

xi Standard definition of non-consumptive is not consumptive, i.e. use does not result in loss of water to atmosphere through evapotranspiration.

xii Permit-exempt well. The definition offered is based on an opinion by the AG's office and is contrary to long-standing Ecology interpretation, is disagreed with by many entities, and has not been tested in court.

xii Priority date definition omits federally reserved and treaty rights. The priority date for treaty rights is either the date of creation of the reservation (date of Treaty) or Time Immemorial for traditional uses such as instream flow to support Tribal fisheries.

xiv What is the authority for stating that additional water for the CBP is un-interruptible. Is it a pre-1980 water right? If so, why the separate category in the definition?

1-1 It is telling that the report's rendition of history begins with Lewis and Clark and makes no mention whatsoever of the people, cultures and Columbia River based economy that existed in the region for several hundred generations before Lewis and Clark dined on salmon as their guests.

1-1 Fish and Wildlife Habitat shrank disastrously as a result of dam building. Entire runs were eliminated. Access to much of the best habitat in the Columbia River basin is still blocked by dams. The only mainstem habitat remaining productive is the Hanford Reach, which was spared by the dam builders only because it had nuclear reactors on its banks. The investments described in this section barely scratch the surface of what can and should be done to repair the damage. This is a very slanted piece of writing. It is certainly not an honest "inventory".

1.1.4 Def of interruptible. Doesn't the law require curtailment. The definition makes it sound discretionary.

Blaming the consultation rule for the backlog of water right applications is revisionist history.

1.2.1 Fish are an economic need of people. The legislative language is discriminatory in favoring non-Indian out of stream economies while ignoring Tribal economies.

1.2.2.2 Is the Trust Water Program intended as a water bank for future irrigation entitlements?

Only a portion of the Odessa subarea is in the CBP. The document should clarify that using CBP saved water on Odessa lands outside the CBP would be a violation of federal law.

Figure 2-1 The map appears to omit the area in the southwestern corner of the Yakama Reservation known as Tract D. After being erroneously left off reservation maps for some decades, Tract D was formally restored to the reservation by Executive Order of the President of the United States in the 1970's. Ecology should update its maps.

3.3.1 The mainstem Snake is not under adjudication in Washington, but in Idaho. Clarify.

3.3.3.2 This section should clarify that only a portion of the Odessa Subarea is within the CBP. The section misleads the reader to believe that the entire Subarea was opened to groundwater pumping in anticipation of CBP water bailing the area out before the aquifers were mined out. Leaving aside the question of whether those within the CBP had a reasonable expectation, those outside did not. The report should clarify the limits on the proposed actions to bring water to Odessa. In addition, faulty well drilling has been known to be a problem in the Odessa for decades. Cascading multi-aquifer wells exacerbate the problems and are illegal under Washington law. Any legitimate assessment of the problems in Odessa should address this.

3.4 This section should be more clear. The Tribes ceded lands to the United States and that which was not ceded was retained by the Tribes. Specifically the Tribes retained hunting and fishing rights on the ceded lands. The U.S. Supreme Court has recognized the great importance that the Tribes placed on these reserved rights during Treaty negotiations.

3.4.1 This section is misleading. The last paragraph on 3-12 should be broken into two after the word fisheries. The next paragraph should explain that these reserved rights on ceded land pertain to off-reservation lands, as opposed to on-reservation rights with the priority date of the establishment of the reservation. Particularly deceptive is the last sentence stating that "Tribes believe" that their fishing rights equal water rights. To be fair, the document must point out that the Yakima basin adjudication court and the Washington State Supreme Court also "believe" that such water rights exist and have assigned them a priority date of Time Immemorial (not the date of establishment of the reservation), making them the senior water right in any watershed where they occur.

3.4.2.1 Last paragraph. Explain which court confirmed that fish and wildlife was a project purpose.

Table 3.6 Should clarify that the Snake River is not under adjudication in Washington.

4.2.6 Should clarify that a switch from a treatment plant that discharges to a river to a reclaimed water plant does not actually create “new water” that is available for new uses.

4.7.4 There is an internal contradiction here. Echoing the AG’s opinion, the description states that there is no limit on exempt stock water use, which seems to suggest that a single cow could fully appropriate the Columbia River, and there is more than one cow in the basin. Likewise the opinion is offered that there is no gallons per day limit on exempt irrigation. Later in the section the statement is made for calculation purposes that exempt wells are limited to 5000 gpd. It cannot be both ways.

4.5.2 Most or all of the storage discussed in WRIA plans was intended to provide water supply for the tributary basin in which the planning was done, not to provide water for new Columbia River water rights. Citing these storage concepts in a “Columbia River inventory” is misleading.

Table 4.9 The storage for Kittitas County appears to be too high, unless it includes Columbia River mainstem storage.

Figure 4-8 If this figure purports to include all water use including surface water irrigation applications, then the figure for Kittitas County is hugely understated.

5.2.7 The section omits a crucial consideration. Conservation opportunities within tributary watersheds are being compared to “demands” in the Columbia River. Where these “savings” are non-consumptive in nature, the conservation would not be expected to provide any water to the Columbia, a fact the report attempts to make. However, even with consumptive savings, there is a high likelihood that saved water would be committed to other uses in the watershed rather than credited to the Columbia River. This may be particularly true, where the conservation is within a federal Reclamation project, like the Yakima Project, where saved water would likely be used to stabilize irrigation supply for proratable irrigators and augment inadequate instream flows, or retained in storage for these purposes. The report should be revised to correct this deficiency.

5.2.8 This section makes the same critical omission as the previous. New storage contemplated in a tributary may make no water whatsoever available for new Columbia River permits if it is intended to resolve supply issues in the tributary. Comparing aggregate storage opportunities in the tributaries to water right applications in the mainstem Columbia is a fatal flaw in the report’s reasoning.

5.3.4 Consideration 2. This section also carries forward the problem mentioned above by considering that future demand for Columbia River water can be met by conservation in the tributaries. The report really should separate out tributary basin conservation potential from the potential to conserve water from Columbia River mainstem diversions.

5.5.1 This section reads like self-promotion, both for the Program and consultant. It seems to have nothing to do with the Columbia River Bill and should, perhaps, be deleted.

There are Yakama Nation Trust Lands that are entitled to, but are not yet receiving water from the Columbia River. These waters should be included in any demand inventory.