

# **Columbia-Snake River Irrigators Association Policy Implementation Memorandum**

DATE: October 14, 2009

TO: Mr. Derek Sandison, Director, Columbia River Office, WADOE  
And Interested Parties

FROM: Ron Reimann, CSRIA President  
Darryll Olsen, Ph.D., CSRIA Board Rep./Principal Consultant

SUBJECT: Conservation O&M Project Implementation 2010-2011

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When the legislature created the 2006 Columbia River Program, a basic tenet was to foster incentives for conservation and water use efficiencies, and to allow water “saved” by conservation practices to be used for new irrigated ground. The Conservation Operation and Maintenance (O&M) Project can meet this objective through current and extended applications of irrigation scheduling and water-weather monitoring technologies.

## Project Objective:

- The Conservation O&M Project will ensure that the conservation provisions of the 2006 Columbia River Water Management Program (RCW 90.90) “work” and are used to develop immediately new irrigated acres, while contributing to instream flows and allowing state funds to be dedicated to other types of instream environmental benefits (conservation actions, water transfers, or targeted environmental improvements).

## Key Project Features:

- The Project relies on existing water rights, where annually implemented conservation measures are used to reduce real-time water withdrawals from the mainstem Columbia-Snake River system.
- The Conservation O&M Project is similar to a reservoir storage action, like that proposed for Lake Roosevelt (and currently being review for the Mid-Columbia Pools), where new operations “reshape water withdrawals” to reduce summer season flow impacts.

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- Employing irrigation scheduling, precision crop duty estimates, and water-weather monitoring technologies, real-time water withdrawals are reduced by about 17% (based on State Conservation District and others technical estimates).
- Half of the Project saved water (8.5%) will be used for new irrigated acres by the respective water right holder (participant); and half of the saved water (8.5%) will remain instream, to avoid any real-time flow reductions.
- Baseline water use estimates (per acre-ft.) used to calibrate conservation savings levels will reflect moderate beneficial use estimates—such as detailed crop water duties and applied irrigation efficiencies already recognized by the Water Conservancy Boards and Ecology.

Project Geographic Scope:

- The Project will include the direct pumpers along the mainstem Columbia-Snake River system (voluntary participation by water right holders).
- Potentially, the Project may include portions of the Columbia Basin Project and the Odessa Sub-Area, (with CBP irrigation district, USBR, and irrigator approvals). The Project may be determined to be applicable for near-term surface water relief needs in some portions of the Odessa Sub-Area, until more permanent water supply/infrastructure needs can be built.

Institutional and Implementation Features:

- The Conservation O&M Project shall be implemented via existing water rights in good standing, relying primarily on RCW 90.03.390 for seasonal water right change/transfer authority. Annual O&M measures are limited to seasonal (temporary) changes and transfers.
- The Project specifically avoids impairment to other water rights relative to “new” water use concerns in the mainstem Columbia-Snake River system.
- The annual Conservation O&M Project savings are not subject to relinquishment under 90.14.140(g), where temporary (seasonal, non-permanent) reductions in water use due to varying weather conditions, precipitation, and temperature are exempt; nor were annual Conservation O&M savings contemplated as being “abandoned” or subject to relinquishment at the time of the initial passage of the current relinquishment statutes.
- The Project can be implemented under a non-substantive amendment to the existing CSRIA-Ecology Voluntary Regional Agreement (VRA).

- The Project implementation period should commence during the 2010-2011 period, with a group of (up to) six irrigated farming operations (it may include some selected portions of the Odessa Sub-Area--with CBP irrigation district, USBR, and irrigator consent—depending on operational limitations).

Economic-Environmental Benefits-Impacts:

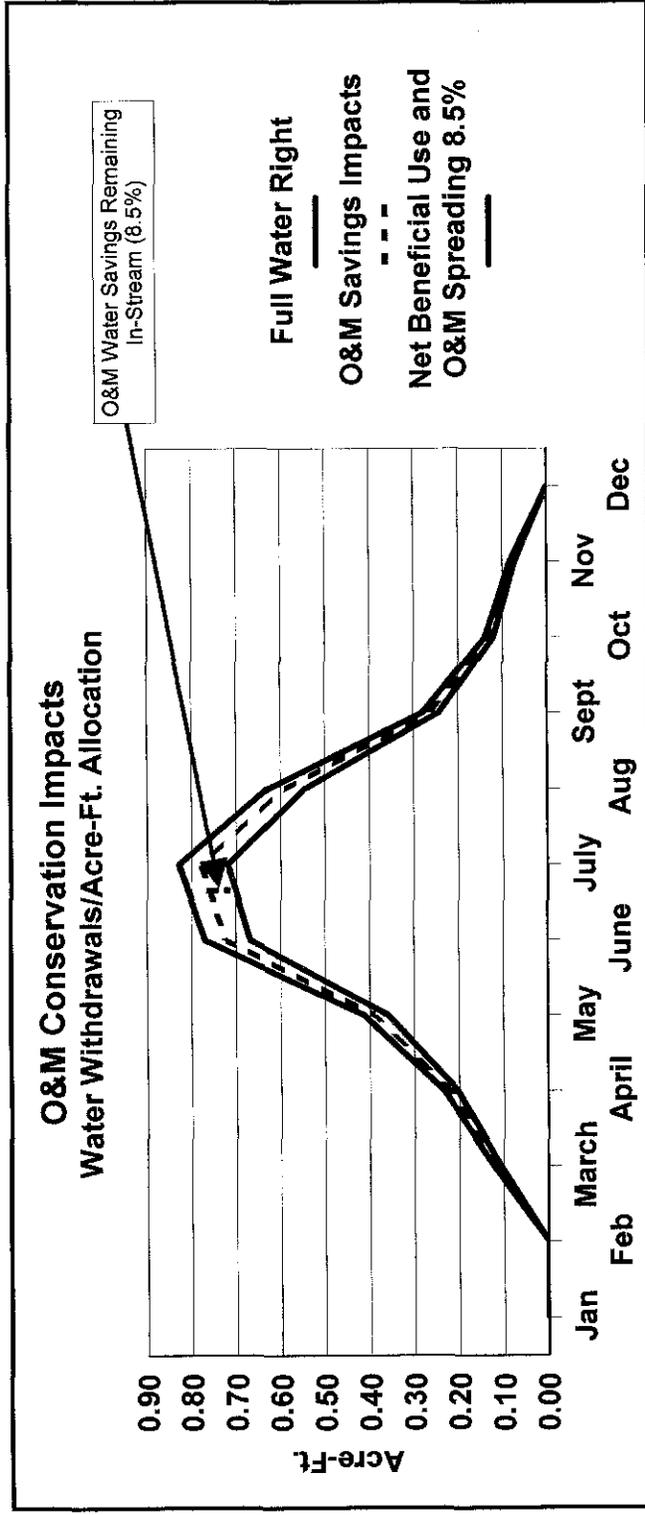
- Water right holders will fund their own Conservation O&M Project measures; no state funding will be used (unless so requested by the state for certain areas, such as potentially portions of the Odessa Sub-Area).
- The long-standing demand for new water rights is reduced, and state funds under RCW 90.90 are committed to other measures--such as targeted, sub-basin instream flow projects, or measures enhancing tributary fish passage.
- Estimated Conservation O&M water use for the full Project (post-2011 period) would be in the 25,000-50,000 acre-ft. range.
- Estimated Project annual state household income impacts are about \$22-60 million (new annual income), under full Project implementation.
- The state is able to move forward with effective water conservation and management practices, while more expensive water supply options are being evaluated and prioritized.

## ***Irrigation Water Management Savings (Conservation O&M)***

<u>Studies &amp; Field Data Collected</u>	<u># Fields</u>	<u>% Water Savings</u>
▪ Scientific Irrigation Schedule, Grower Training	255	12.4%
▪ Royal Consulting Case Study – Grant PUD	165	18.1%
▪ Professional Agriculture Water Applied	4,643	17.7%
▪ Washington State University – NEEA (Growers)	15	15.8%
▪ GWMA IWM Participants in Franklin/Grant/Adams Counties (7000 Fields Collected 2000-2005) - Combined Statistics of Fields Analyzed	1,088	16.7%
<b><u>Average: Weighted Average by # Fields</u></b>		<b><u>17.31%</u></b>
•Compiled by the Columbia Basin Ground Water Management Area (2005)		

**Water Withdrawal Impacts With/Without Conservation O&M and Other Management Measures**

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Water Right Full Allocation (3.5 acre-ft./acre)	0.00	0.00	0.12	0.23	0.41	0.77	0.83	0.63	0.28	0.14	0.08	0.00	3.50
Crop & Efficiency Water Withdrawals-With Cons. O&M at 17.5%	0.00	0.00	0.12	0.22	0.39	0.72	0.78	0.59	0.26	0.13	0.08	0.00	3.29
Crop & Efficiency Water Withdrawals-With Cons. O&M at 8.5%	0.00	0.00	0.11	0.20	0.36	0.67	0.72	0.55	0.24	0.12	0.07	0.00	<b>3.04</b>
O&M Savings Used for Spreading	0.000	0.000	0.008	0.016	0.028	0.052	0.056	0.043	0.019	0.010	0.006	0.000	0.000
Potential O&M Cons. Remaining In-River	0.000	0.000	0.009	0.017	0.030	0.055	0.060	0.045	0.020	0.010	0.006	0.000	0.252
Maximum "Risk" Impact (Critical Period "Return Flows")	0.000	0.000	0.000	0.001	0.002	0.003	0.003	0.003	0.001	0.001	0.000	0.000	<b>0.014</b>
													<b>0.0%</b>



\* Risk impact assumes "instantaneous" return flow relationship--not a realistic or accepted assumption.

NOTE: State Conservation Districts and Other Private Sector Consultants Estimate O&M Water Conservation Savings at 17% (reduced water application on field).

## Murphy & Buchal

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### MEMORANDUM

#### **Privileged and Confidential: Attorney-Client Privilege**

To: Dr. Darryll Olsen, Columbia-Snake River Irrigators Association  
From: James L. Buchal  
Date: July 7, 2009  
Re: Conservation O&M Program Operations under Current Water Code Provisions

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You have asked me to offer an opinion concerning whether a Water Conservancy Board or the Department of Ecology, may approve a seasonal or temporary change in the place of use of water saved through conservation operation and maintenance savings, particularly in a context where those seeking the transfers offer to leave half of the savings in-river for instream uses. You have informed me that such conservation operation and maintenance (conservation O&M) savings are typically achieved by such means as using soil moisture probes, localized and up-to-date weather forecast data, and water delivery and scheduling technology. I conclude that there exists substantial support for the application of the proposed conservation O&M program under the existing water code.

Ecology has properly interpreted the seasonal and temporary transfer statute to provide independent authority for transfers. See WAC 173-153-030 (definitions of "application" and transfer). It appears from the plain language of RCW 90.03.390 that the statute was crafted to avoid any limitations of RCW 90.03.380: "RCW 90.03.380 shall not be construed to prevent water users from making a seasonal or temporary change of the point of diversion or place of use of water when such change can be made without detriment to existing rights . . .".

However, the existing statutory scheme is not entirely consistent with the plain language of RCW 90.03.390. For example, RCW 90.80.070, in addressing how Water Conservancy Boards should process applications, appears to import the notice requirement in RCW 90.03.380 into transfers under RCW 90.03.390. There does not appear to be any judicial or PCHB authority as to whether or not *additional* requirements of RCW 90.03.380 are imported into RCW 90.03.390. The more problematic requirements of RCW 90.03.380 are those that reduce the quantity of the water in the transfer process, whether by relinquishment or the requirement of "no increase in the annual consumptive quantity of water used" through an ACQ analysis.

Relinquishment does not appear to be a problem, even if Ecology were required to conduct an ACQ/ beneficial use (or relinquishment) analysis in the transfer process as in the case of RCW 90.03.380 transfers. *E.g., Okanogan Wilderness League, Inc. v. Town of Twisp*, 133 Wash.3d 769, 778 (1997) (quantification and questions of relinquishment must be addressed in the context of transfers pursuant to RCW 90.03.380). That is because reductions

in use from conservation operation and maintenance savings are protected from relinquishment by statute. Specifically, RCW 90.14.140(g) protects from relinquishment

“Temporarily reduced water need for irrigation use where such reduction is due to varying weather conditions, including but not limited to precipitation and temperature, that warranted the reduction in water use, so long as the water user's diversion and delivery facilities are maintained in good operating condition consistent with beneficial use of the full amount of the water right . . .

The conservation O&M measures are directly tied to reductions in water use stemming from a close (scientific) monitoring of weather conditions, such as precipitation and temperature, and other factors. So long as water rights holders maintain diversion and delivery facilities that can deliver the full amount of the water rights, they are free to use technology to reduce water usage in accordance with varying temperature and precipitation conditions, for periods extending beyond the five-year relinquishment period established under RCW 90.14.160 *et seq.*

As to the ACQ analysis, again, the plain language of RCW 90.03.390 appears crafted to free seasonal or temporary transfers from the substantive requirements of RCW 90.03.380. Moreover, any ACQ analysis will take account of the effects of any available statutory exemptions, which should include the exemption set forth in RCW 90.14.140(g).

Ecology's regulations shed little light on the question. Ecology's regulation concerning seasonal transfers consists of a single sentence: “Seasonal permits for change of point of diversion, purpose and/or place of use of water, shall be in writing and signed by the director of the department of ecology or a duly authorized representative”. WAC 508-12-210. This is consistent with the plain reading of RCW 90.03.390 as establishing minimal requirements for seasonal transfers.

By contrast, Ecology has adopted more detailed regulations governing “temporary transfers of water rights,” which it characterizes as “emergency water right changes”. WAC 173-166-080(1). Ecology purports to limit its approvals to “the purpose of alleviating drought conditions” (WAC 173-166-080(3)(c)), and, more problematically, even to require that transfers from outside drought areas into drought areas also comply with 90.03.380 and 90.44.100 (WAC 173-166(3)(e)). This latter limitation would seem at odds with the statutory language crafted to avoid the limitations of RCW 90.03.380. Given this regulatory background, transfers of conservation operation and maintenance savings are best characterized as “seasonal” transfers.

Another general objection may be that the transfer of conservation O&M savings would be injurious to instream flows, and thus run afoul of the RCW 90.03.390 requirement that such transfers be made “without detriment to existing rights”. One may argue that instream flows are not “rights” within the meaning of the statute, but that argument is particularly difficult in the context of seasonal or temporary changes or transfers approved by a Water Conservancy Board, because RCW 90.80.070(4) requires the boards to “consider

among other things whether the proposed transfer can be made without detriment or injury to existing water rights, including rights established for instream flows”.

Transferring half the conservation O&M savings to instream flows should mitigate instream flow objections consistent with RCW 90.90. First, it was the intent of RCW 90.90 and its principal authors to use conservation and new water management approaches to meet new water supply demands. The conservation O&M measures you propose are consistent with this overall purpose of RCW Chapter 90.90 and the general direction conveyed by the current CSRIA and Ecology Voluntary Regional Agreement (VRA). Using conservation for new water use is, indeed, the prime objective of RCW 90.90 and the VRA.

Secondly, you have informed me that it is readily apparent, and understood by Ecology and Conservation District staff, that conservation O&M measures provide real-time reductions to stream-flow diversions during the low water period, and that the question of secondary impacts to return flows is not a substantial issue for mainstem Lower Snake and Columbia River pumpers, if such impacts exist at all. Offers to return half of the conservation O&M savings under a program of seasonal transfers should effectively moot objections to potential instream flow effects.

# Columbia-Snake River Irrigators Association

To: Gov. Christine Gregoire, House Speaker Frank Chopp,  
Sen. Majority Leader Lisa Brown, and Ag. Dir. Dan Newhouse,

"Our Water Conservation Proposal Can Serve New Ag. Lands,  
Reduce Growing Water Demands, and Offer Environmental Benefits"

Already known as some of the West's most technologically advanced irrigators, the Columbia-Snake River Irrigators Association (CSRIA) has introduced a proposal to use annual "O&M" irrigation efficiencies to irrigate new lands, reduce the increasing pressure for new water rights, and contribute to river system environmental benefits.

For water right holders that pump directly from the Lower Snake and mainstem Columbia Rivers, the CSRIA is endorsing a Conservation Operations and Maintenance (O&M) package that:

Will ensure that the Conservation provisions of the 2006 Columbia River Water Management Program (RCW 90.90) work and are used to immediately develop new irrigated acres, while contributing to instream flows and allowing Program funds to be used for other instream environmental benefits.

Will achieve annual O&M water savings acquired through irrigation scheduling and water management actions relying on soil moisture and weather monitoring, and real-time crop water usage.

Will be based on proven technical measures and analyses, where the State Conservation Districts and CSRIA water managers estimate that O&M Conservation savings can reduce real-time water withdrawals by about 17%.

Will take half (8.5%) of the water savings and be applied to new on-farm use; and will allocate half (8.5%) of the water savings to be left in the river.

Will not negatively affect other water rights, existing junior water right holders, or existing state in-stream flow rules.

Will generate about \$50-100 million annually new statewide income, within the next three years, without requiring any new state expenditures.

What is needed to move forward with this much needed proposal is leadership—specifically state leadership from Olympia. For pragmatic and fair-minded people, it is difficult to find fault with the Irrigators' water proposal, and the proposal is being applauded by county commissioners, legislators, several water resources managers, business and labor leaders, and even some hard-to-please environmental groups. The state leadership should work with the CSRIA to make this proposal reality.



*Columbia/Snake River Irrigators Association • CSRIA.org*