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ENVIRONMENTAL ATTORNEYS

MEMORANDUM

To: **Franklin Conservation District** **File No.: 60406(1)**

From: **Tom McDonald and Mary McCrea**

Date: **November 22, 2010**

Subject: **Irrigation Water Management Project**

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I. INTRODUCTION

Cascadia Law Group ("CLG") has been retained by Franklin Conservation District ("FCD") to provide legal services for an Irrigation Water Management Feasibility Study. The scope of the contract includes investigating and evaluating the legal positions of the Department of Ecology, U.S. Bureau of Reclamation ("USBR"), and the three Columbia Basin Project ("CBP" or "Project") irrigation districts regarding potential barriers for using saved water created through Irrigation Water Management ("IWM"). FCD has posed four specific questions to be answered.

1. Whether the net water savings from IWM projects can be enrolled in the Trust Water Rights Program for lands outside the Columbia Basin Project as required in Chapter 90.90 RCW.[1]

2. Whether net water savings from IWM on lands within the CBP can be transferred to Odessa Sub-area lands to replace groundwater pumping as required in chapter 90.90 RCW.

3. Whether contractual issues will prevent net water savings from being recognized within the Columbia Basin Project.

4. Whether statutory or legal barriers exist that would hinder IWM program implementation.

From our research, and meetings and conversations with Ecology and USBR it has become apparent that the legal and institutional issues differ depending upon whether (1) the saved water is created on lands within the Columbia Basin Project ("CBP") for transfer to other lands within the project, (2) the saved water and receiving lands are located outside the CBP and covered by a Voluntary Regional Agreement ("VRA"), or (3) the saved water and receiving lands are located outside the CBP and are not covered by a VRA.[2] Not all of the questions asked are relevant to all of the scenarios. We address the scenarios in separate sections of the report and address the relevant questions for each scenario.

[1] The term "net water savings" is used in Chapter 90.90 RCW but not defined. The term is defined in the Trust Water statute, Chapter 90.42 RCW as follows:

> "Net water savings" means the amount of water that is determined to be conserved and usable within a specified stream reach or reaches for other purposes without impairment or detriment to water rights existing at the time that a water conservation project is undertaken, reducing the ability to deliver water, or reducing the supply of water that otherwise would have been available to other existing water uses.

RCW 90.42.020(3).

[2] We made several attempts to meet with the irrigation districts and/or their legal counsel without success. Staff from the USBR were very helpful in articulating what they consider to be the issues of the districts regarding IWM.

II. SUMMARY OF FINDINGS AND BRIEF ANSWERS

A. Summary of Findings

IWM on lands within the CBP is primarily subject to federal Reclamation Law and contracts between USBR and the irrigation districts. State water law, including the Columbia River Management Act, Chapter 90.90 RCW, and irrigation district laws are also important factors to be considered. A process for transferring saved water from lands within the CBP to other lands within the CBP was established in the 2004 transfer of conserved water from East Columbia Basin Irrigation District ("ECBID") to groundwater users in the Odessa. The process was a cooperative effort between USBR, Ecology, ECBID and farmers in the Odessa within ECBID's boundaries. Given the state and federal emphasis on finding new water supplies for groundwater users in Odessa, continued support from Ecology and USBR can be expected.

IWM on lands outside the CBP is primarily subject to the Columbia River Management Act and other state water laws. IWM is a pilot project under the 2008 VRA between Ecology and the Columbia Snake River Irrigators Association ("CSRIA"), which is authorized under Chapter 90.90 RCW. The VRA calls for water saved through conservation, including IWM, to be transferred to the Trust Water Rights Program for use as mitigation water for new water rights for CSRIA members and other water right applicants. Consultation by Ecology with state and local agencies and Indian tribes was conducted for the VRA as a whole. Therefore, applications for water rights under the VRA are not subject to case-by-case consultation. The standard for impairment has also been narrowed to the impact on Columbia and Snake River flows during critical flow months. The pre-consultation and fixed impairment standard are intended to decrease the time required for Ecology to act on a change application. Additionally, Ecology has proposed changes to the administrative rule governing the processing of water right applications, Chapter 173-152 WAC ("Hillis Rule"). A specific section of the rule for the Office of the Columbia River ("OCR") is also intended to allow earlier processing of water right applications on the Columbia and Snake rivers under the Columbia River Management Program.

For IWM outside the CBP, not under the VRA and not funded by the state, saved water could be transferred directly to other land or used to expand irrigated acres on the farm where IWM is used. Ecology would conduct its standard review under RCW 90.03.380, including case-by-case consultation and an impairment analysis that considers the potential for impact on any and all existing water rights. If the saved water is to be used to increase irrigated acres, Ecology would also conduct an Annual Consumptive Quantity ("ACQ") analysis. Applications could be filed with a county Conservancy Board to reduce processing time.

Temporary or seasonal changes are authorized under RCW 90.03.390, which provides that the water right change cannot impair other water rights, which includes instream flow. Ecology's position is that the full requirements of RCW 90.03.380, including ACQ analysis, apply equally to seasonal or temporary changes. We believe this position is incorrect but legislative changes may be required to resolve the issue.

A recurring concern expressed by Ecology and USBR and discussed in this Report is that water savings under IWM will be temporary and uncertain. Past saved water projects, including the

East Columbia Basin Irrigation District saved water pilot project, have involved fixed permanent improvements to infrastructure that increase efficiency and result in less water diverted. This has allowed for better estimates of the quantity of saved water and the knowledge the saved water will be permanently available, or at least for a sufficient length of time to justify a contract to deliver the water.

Under IWM the water savings are not from structural but rather are behavioral actions of the farmer and are therefore considered temporary not permanent. The temporary nature of the water savings can create problems. It becomes difficult to create a program that is economical and financially feasible for a farmer who would receive saved water and would need to invest in pumps and pipes to make use of the water. It also potentially creates problems in accounting for how much water is saved and transferred to a new user. Ecology and USBR are concerned that if IWM measures are agreed to in a temporary contract with a farmer there is no assurance the saved water will remain available for the period of time necessary for the return on the required investments.

An additional issue has been raised by CSRIA: whether water saved through past conservation projects and not used out-of-stream for over 5 years can be used on new acres or as mitigation for new rights. Ecology contends the saved water has been relinquished due to non-use. However, in ECBID's transfer of saved water to Odessa, credit was given for water saved through conservation projects done over the last 20 years because the water is part of the USBR water right and not subject to relinquishment. The question is whether a different standard should apply to an irrigation district outside the CBP. We believe relinquishment of water saved through conservation practices is counter to effective water management and inconsistent with the purposes of the relinquishment law.

While there are statutory and contractual hurdles and institutional hindrances to implementing IWM, we conclude that the temporary and uncertain nature of saved water under IWM presents the most significant obstacle to the IWM program.

B. Summary and Answers to Specific Questions

1. Saved Water Created on Lands Within the Columbia Basin Project

a. Whether the net water savings within the CBP can be enrolled in the Trust Water Rights Program for lands outside the Columbia Basin Project as required in Chapter 90.90 RCW.

As a matter of state law, net water savings can be enrolled in the state Trust Water Rights Program for lands outside the CBP. RCW 90.90.010(4) requires that net water savings funded by the state be transferred to the Trust Water Rights Program in proportion to the state funding provided for the conservation project.

RCW 90.90.010(5) exempts from this requirement saved water from conservation projects funded by the state within the boundaries of the Columbia Basin Project that is transferred to the Odessa Subarea. The statute does not distinguish between

lands in the Odessa that are within the CBP and those that are outside the CBP. It simply refers to saved water developed within the CBP and "directed to Odessa[.]" RCW 90.90.010(5). The complete answer to the question posed above depends upon contractual issues between the USBR and the districts, which restrict the use of saved water developed within the CBP to use on other lands that are also within the CBP.

b. Whether net water savings from lands within the CBP can be transferred to Odessa Sub-area lands to replace groundwater pumping as required in chapter 90.90 RCW.

From the state's perspective net water savings can be transferred to Odessa to replace the use of groundwater and such transfers are encouraged. From the federal perspective, such transfers are not easily accomplished, both for practical reasons and because of existing process requirements. The transfer may occur as long as the USBR and the irrigation district where saved water is created and the lands receiving saved water are located enter into a Supplemental Water Service Contract for the saved water, and the lands in Odessa are within the boundaries of the CBP. The 2004 transfer of water from East Columbia Basin Irrigation District saved through District infrastructure conservation measures provides a template for transfer of IWM saved water as long as the saved water can be provided with certainty for an acceptable number of years.

c. Whether contractual issues will prevent net water savings from being recognized within the Columbia Basin Project.

While contractual issues are not insurmountable, they do hinder the opportunities to deliver saved water to new acres within the CBP. For example, the Supplemental Water Service Contract between USBR and ECBID requires that such water delivery may not have a significant detrimental impact on Existing Acres, which includes reducing the water supply to the South Columbia Basin Irrigation District. Additionally these actions cannot jeopardize the repayment of Project costs.

d. Whether statutory or legal barriers exist that would hinder program implementation.

Although there are no statutory or other legal barriers that would prevent program implementation there are requirements and processes that will delay implementation of the program.

The transfer of water to Odessa groundwater users is one of the goals of the Columbia River Management Act, Chapter 90.90 RCW. The legislature adopted statutes to coordinate Ecology's work with the USBR when water is transferred to farmers irrigating with groundwater within the Odessa. RCW 90.44.510 authorizes Ecology to issue superseding groundwater certificates to farmers

receiving Project water. Additionally, according to Ecology, the transfer of non-consumptive use water to a new consumptive use is allowed within CBP because it is project water and return flows can be captured and used again as part of project irrigation water supply.

While not a statutory or legal barrier, factors that could be significant barriers to implementation include the ability to quantify saved water from IWM and the uncertainty of the supply of saved water over a term of years.

2. Saved Water Created on Lands Located Outside the CBP and Covered by a Voluntary Regional Agreement

a. Whether the net water savings, or the consumptive portion of the reduction in water use, can be enrolled in the Trust Water Rights Program for lands outside the Columbia Basin Project as required in Chapter 90.90 RCW.

Net water savings must be enrolled in the Trust Water Rights Program to the extent they are the result of conservation projects funded by the state**.** RCW 90.90.010(4).

b. Whether statutory or legal barriers exist that would hinder program implementation.

Ecology's statutory requirements for processing changes of water rights are a potential hindrance to program implementation. For water rights covered by a VRA, the process is intended to be more efficient. The IWM Feasibility Study is a pilot project under the 2008 VRA between Ecology and the Columbia-Snake River Irrigators Association. The 2008 VRA reduces consultation requirements and includes the assumption that if there is no impact on flows in the river during critical periods the water right change is adequately mitigated. Ecology has also proposed amendments to the "Hillis" Rule intended to make the work of the Columbia River Office more efficient in processing water right applications.

3. Saved Water Created and Receiving Lands Located Outside the CBP Not Covered by a Voluntary Regional Agreement

a. Whether the net water savings can be enrolled in the Trust Water Rights Program for lands outside the Columbia Basin Project as required in Chapter 90.90 RCW.

If state funding is used for the IWM, the answer would be the same as for saved water covered by a VRA. RCW 90.90 requires the saved water be transferred to the Trust Water Rights Program in proportion to the amount of state funding used in the conservation project. If no state funding is used for the IWM there is no requirement that the saved water be transferred to trust. However, Ecology's position is that saved water left instream and not transferred to trust is subject to relinquishment.

b. Whether statutory or legal barriers exist that would hinder program implementation.

The water saved in this scenario would be transferred either to another person and place or would be used to irrigate additional acres on the farm where IWM is used. Seasonal and temporary changes authorized under RCW 90.03.390 cannot cause impairment, but may not, and we believe should not, require the ACQ analysis in RCW 90.03.380. If seasonal/temporary transfers are subject to RCW 90.03.380, Ecology would apply the case-by-case consultation requirements in WAC 173-563-020(4) to determine whether there would be impairment. If the saved water is to be used to irrigate additional acres on the same farm, Ecology would also conduct an Annual Consumptive Quantity analysis (ACQ) under RCW 90.03.380. Ecology's review process is lengthy and would delay the transfer of saved water. The initial review of the change application could be conducted by a county Water Conservancy Board, which would speed up the processing time.

III. OVERVIEW OF IRRIGATION WATER MANAGEMENT

A. General Description of IWM

Irrigation Water Management includes practices to prevent/reduce overwatering. IWM reduces the transport of contaminants to groundwater and decreases the amount of water necessary for irrigation. The Columbia Basin Groundwater Management Area ("GWMA") is a multi-partner effort to improve and protect groundwater quality in Grant, Adams, Franklin and Lincoln Counties. The GWMA was created in February 1998 under the authority of chapter 173-100 WAC based on findings of nitrate levels in excess of the EPA maximum contaminant level for drinking water.

Soils in the GWMA contain coarse textured soils with low water holding capacities. This allows rapid movement of excess water through the soil and results in the leaching of contaminants into groundwater. A primary concern is the level of nitrates in the groundwater. One approach to reducing contaminant leaching is to manage irrigation to reduce overwatering. Such management includes monitoring soil moisture to schedule irrigation to prevent overwatering. "GWMA endorses and adopts Scientific Irrigation Scheduling (SIS) or Irrigation Water Management (IWM) as a best management practice (BMP) to prevent or reduce leaching of nitrates through the soil profile and from reaching groundwater." *Impact Evaluation of Columbia Basin Pilot Project Irrigation Water Management Project,* prepared by Quantec for Bonneville Power Administration, January 23, 2007. A summary of the Quantec study is included as Appendix A to this Report.

In addition to reducing transport of contaminants to groundwater, IWM can reduce the amount of water that needs to be diverted and delivered to the farm units. It is estimated that implementing IWM in Adams, Franklin, Grant and Lincoln Counties may reduce demand by 394,400 acre-feet

of water. (This quantity is derived from a 17% water reduction over ~928,000 irrigated acres within the four Groundwater Management Area counties.)

The majority of the saved water would come from a reduction in the amount of leachate (return flow) from over-irrigation. Return flow is considered to be non-consumptive water by Ecology in its water rights transfer process. *Columbia River Water Management Program Grant Application: Irrigation Water Management* by Franklin/Grant Conservation District.[3] This IWM Feasibility Study focuses on the saved water created by IWM and the consumptive use of that water for irrigation.

B. Temporary Nature of IWM

Past saved water projects have involved fixed permanent improvements to infrastructure such as lining canals or piping open ditches. These measures increase efficiency and result in less water diverted. Infrastructure improvements allow for better estimates of the quantity of saved water and the knowledge that the saved water will be permanently available. In contrast, IWM is an irrigation management practice which is behavioral in nature and therefore the amount of the reduced demand for water may vary annually. The IWM program does not provide the certainty that is obtained with fixed conservation measures.

Ecology and USBR expressed serious concerns about the fact that water savings under IWM will be temporary and uncertain year to year. To the extent reduction in water use from the IWM measures is considered temporary, it becomes difficult to create a program that would require a farmer who would receive the saved water to invest significant money and time in pumps and pipes to make use of the water. It also potentially creates problems in accounting for how much water is saved and transferred on an annual basis to a new user. Ecology and USBR raise these issues as a problem for even a temporary contract with a farmer when there is no assurance the saved water will remain available for the period of time necessary for the return on the required investments.

Because the IWM program relies upon continuous year to year activities by the farmer and because the amount of saved water may vary from year to year, a focus of the discussion with Ecology and USBR will be how to implement the program to obtain a level of reliability and certainty of saved water that will result in a reasonable return of the investment by both the farmer implementing the program and the farmer receiving the saved water. The greater the number of farmers that use IWM the more reliable the supply of saved water would be. The possible ways to achieve increased certainty are different for IWM within the CBP and IWM outside the CBP. We discuss this issue in more detail in the sections devoted to CBP and lands outside the CBP.

[3] As part of the grant application submitted by FCD, Task 1 included estimating the quantity of saved water; estimating the quantities of consumptive and non-consumptive saved water; and identifying whether the savings occur within or outside of the CBP. Task 2 was to analyze the timing and fate of leachate water captured via sub-surface drains and in sub-basins without sub-surface drains. Using information from Task 1 the fate and timing of return flow were also to be quantified. According to FCD, the results of these tasks will not be available before this report is final. The details of how the saved water would be physically delivered to receiving lands have also not been determined.

IV. GENERAL LAW ON WATER RIGHT CHANGES

The success of the IWM project depends in significant part on the ability to transfer the saved water for use on other land. In general, water right transfers are subject to the provisions of the water code, Chapter 90.03 RCW, and Ecology's administration of the code. There are some exceptions that apply to irrigation districts and to transfers within the CBP, which are discussed below.

Water rights may be transferred or changed. Generally, a water right is transferred when ownership of the right is transferred from one person to another. A water right is changed when certain elements of a right are changed, such as the point of diversion or the purpose or place of use of the right. A change to a water right must be approved by Ecology. RCW 90.03.380; 90.44.100. An application to change is filed with Ecology and the agency reviews the application under the standards discussed below. Ecology will either deny or grant the change[4]. Ecology has developed several procedures and policies in regard to water right transfers and changes. While these policies are not laws or regulations, they are Ecology's interpretation of the laws. *See* Procedures PRO 1000, PRO 1210; Policies POL 1200, 1210[5].

The courts have relied on two important principles of "Western water law" in determining whether a water right can be changed: continued beneficial use and impairment. *Okanogan Wilderness League, Inc.*, 133 Wn.2d 769, 777-78 (1997).

A. Beneficial Use and Loss of Water Rights

With very limited exceptions, the water code authorizes a water right to be changed only if the water right "has been applied to beneficial use." RCW 90.03.380.[6] When Ecology reviews a water right change application it enforces this requirement of beneficial use by conducting an analysis of the extent to which the water has been applied continually to actual beneficial use within the terms and conditions of the water right. The critical element in determining the validity of a right is quantifying the amount of water that has been applied historically to beneficial use and has not otherwise been lost under statutory forfeiture (relinquishment) and abandonment laws.

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[4] There are a few exceptions to obtaining the approval for a water right change from Ecology. *See* RCW 90.44.100 (Replacement wells within the same authorized point of diversion).

[5] Copies of these Procedures and Policies are attached, Appendix B.

[6] For ground water rights there is an exception to the rule that a water right cannot be changed before it is applied to beneficial use. Under RCW 90.44.100, Ecology may authorize an amendment to a permit for a change of a well location (point of withdrawal) or a change in the manner or place of use. By allowing an amendment to a permit, the Supreme Court held that the water code provides for a change to a groundwater right that has not been applied to beneficial use—an unperfected or inchoate right. *R.D. Merrill Co. v. Pollution Control Hearings Board*, 137 Wn.2d 118, 969 P.2d 458 (1999). This change does not allow for a change of purpose of use. *Id.* Changing the purpose of an inchoate or unperfected water right would allow for an opportunity to speculate with water that one has never used or created any rights to; changing only the means of withdrawing and applying the water (manner of use) does not invite such speculation.

1. Common Law Abandonment

Common law abandonment occurs when there is intentional nonuse of the water or voluntary relinquishment of a water right. *Okanogan Wilderness League, Inc. v. Town of Twisp*, 133 Wn.2d 769, 784-85 (1997). Courts historically have required both intent and an act of voluntary relinquishment, which makes it difficult to prove abandonment. *Public Utility District No. 1 of Pend Oreille County v. Department of Ecology*, 146 Wn.2d 778 (2002). While the period of time of the nonuse of the water is not an element of abandonment, a lengthy period of time creates a presumption of the intent to abandon the right. *Id.* Because of the difficulty in proving intent, and the reliance on specific and unique facts in each case, we focus our discussion on statutory forfeiture. How the forfeiture statute is applied to saved water from IWM practices is important, both in determining whether the nonuse of saved water is a voluntary failure to use water subject to relinquishment, and in determining whether the nonuse falls within an exception to the relinquishment law.

2. Forfeiture of a Water Right Because of Nonuse

Forfeiture is a statutory provision that provides for relinquishment of a water right if the water authorized in the right is not used continuously. Relinquishment applies to use of water under a water right that has been perfected by actual beneficial use. This should not be confused with the unused or inchoate portions of a water right under a permit that must be developed with due diligence or risk being cancelled. *See Theodoratus v. Ecology* 135 Wn.2d 582 (1998).

In Washington, statutory forfeiture relinquishes a water right for the voluntary failure to continuously use water for five or more consecutive years unless sufficient cause is shown. RCW 90.14.160-.180. Relinquishment of a water right occurs only if the person "abandons or voluntarily fails without sufficient cause" to use the water. RCW 90.14.160-.180.

How the forfeiture statute is applied to reduced water use under IWM practices is important, both in determining whether the nonuse of water, and thus the resulting saved water, is subject to relinquishment or whether the nonuse falls within an exception to the relinquishment law. The loss of water rights is recognized as a harsh remedy under the law. *See Jensen v. Ecology,* 102 Wn.2d 109, 115 (1984). Therefore, it should be applied consistent with the spirit and intent of the law, which is to promote "effective management and efficient use of the state's water resources." RCW 90.14.010. It is important to recognize this policy and broadly interpret the statutory language that the nonuse of water must be the result of one who "abandons" the right to use the water, or one who "voluntarily" fails without sufficient cause to "beneficially use" the water. RCW 90.14.160-.180.

In using IWM measures, the farmer is not one who "abandons" the right. Nor should the farmer be considered to have voluntarily failed to beneficially use the saved water. The Court of Appeals has, however, narrowly construed the term "voluntary" to be almost superfluous, stating that it is essentially "the failure to use a known water right, unless this failure is excused under a statutory recognized exception." *See Pacific Land Partners v. Ecology*, 150 Wn. App. 740 (2009).

While the statutory exceptions to the relinquishment laws of Chapter 90.14 RCW are to be narrowly construed, the elements required for relinquishment of a water right should be broadly interpreted to effectuate the intent of the law. In this regard, it is important how one defines "beneficial use" when considering whether a water right is lost. Notwithstanding *Pacific Land Partners*, reduced water use under IWM may not necessarily be the "voluntary" failure to "beneficially use" the saved water when the IWM is clearly within the intent of the law to promote "effective management and efficient use" of the water. In other words, the saved water resulting from irrigation management and application of water based on weather conditions under an IWM project promotes the policy of the relinquishment laws, and therefore should arguably be considered within the intent and definition of the "beneficial use" as used in Chapter 90.14 RCW.

While a *water right* is defined by a specific maximum quantity of water that may be applied to actual beneficial use, the *beneficial use* of water is defined by the reasonable quantity of water that can be efficiently applied to use in a non-wasteful manner. *See Ecology v. Grimes,* 121 Wn.2d 459 (1993). The court made some important findings:

> [B]eneficial use determines the measure of a water right. The owner of a water right is entitled to the amount of water necessary for the purpose to which it has been put, provided that purpose constitutes a beneficial use. *[footnote omitted.]* To determine the amount of water necessary for a beneficial use, courts have developed the principle of "reasonable use". Reasonable use of water is determined by analysis of the factors of water duty and waste.
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> ….
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> "[Water duty] that measure of water, which, by careful management and use, without wastage, is reasonably required to be applied to any given tract of land for such period of time as may be adequate to produce therefrom a maximum amount of such crops as ordinarily are grown thereon. <u>It is not a hard and fast unit of measurement</u>, but is variable according to conditions." Quoting Report of Referee. (Emphasis added.)

121 Wn.2d at 469.[7]

Therefore, in determining what is the "beneficial use" of the water, there should recognition that water use is dynamic; that it is not necessarily defined by a specific metered quantity in any given year, or even over five years. Rather, beneficial use of a water right is the use of a reasonable quantity of water within the parameters of an accepted water duty. It is arguable that placing an absolute quantification on the "beneficial use" of water based on a farmer's recent use of that water is so rigid as to cause relinquishment of a portion of the right that was beneficially and reasonably used and will be again with the varying conditions year to year.

[7] In *Ecology v. Acquavella,* 131 Wn.2d 746 (1997), the Supreme Court stated: "Part of the reasonable use analysis requires the court to determine how much water is being used per acre of land, after which the court determines whether the amount applied per acre is useful (beneficial) or wasteful."

The use of a varying quantity of water within the parameters of an accepted water duty is not the "voluntary failure" to use the water. The legislature has said as much in recognizing that nonuse is "deemed to be **involuntary** due to a drought or low flow period" if the reduction in use is due to conservation measures in irrigation and/or water use effectiveness. RCW 90.44.520 (emphasis added). While this statute is specific to the Odessa, see page 37 herein, it reflects legislative intent to recognize that a farmer does not "voluntarily fail" to use water by implementing conservation practices.

We therefore believe it is within Ecology's authority to interpret the beneficial use of a water right as a use within a reasonable water duty, which may vary according to conditions and farming practices. If the maximum quantity under the right is not used by a farmer who is promoting effective management and efficient uses of the water through conservation practices, the right is not subject to relinquishment. Nor in such a situation does the farmer voluntarily fail to use the water thereby subjecting the right to relinquishment. We believe techniques that essentially define the reasonable use of water as an absolute number from specific years of data should not determine the beneficial use of the water right. This approach provides little incentive to implement IWM projects.

3. Exceptions to Relinquishment

The term "sufficient cause" for nonuse of water (i.e., an exception to relinquishment) is specifically defined in the code, which essentially provides an exclusive list of affirmative defenses a water right holder can raise to excuse five or more years of nonuse of water. RCW 90.14.140. Nonuse of water due to drought, active service in the armed forces, and legal proceedings, among others, are deemed defenses or "sufficient cause" to prevent the relinquishment of a vested water right. RCW 90.14.140. In addition to this list of "sufficient causes" for nonuse of the water, the code also lists several reasons for the failure to use the water that are simply not subject to the relinquishment law. These include water rights for power development purposes, for standby or reserve water supply for use in times of drought, for claims of a future determined development, and for claims for municipal water supply purposes. Only a few of these exemptions have been interpreted by the courts.

To the extent the saved water from IWM program is not considered within a water duty that defines the reasonable beneficial of water as discussed above, one of the "sufficient causes" for the nonuse of water could play a significant role for the use of water resulting from IWM projects. Under RCW 90.14.140(1)(g) the nonuse of water is excused if it results from temporary reduction due to varying weather conditions:

> 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[.]

There is an argument that IWM measures fall within this sufficient cause. The IWM provides a tool for an individual farmer to apply water for irrigation based on the weather conditions. It is

consistent with the policy to promote "effective management and use of the state's water resources." RCW 90.14.010. As discussed above, the IWM is not a permanent conservation measure, because it is dependent upon yearly action by the farmers, which is different from the permanent measures such as lining a canal or investing in different irrigation equipment.

It is important to note that the Pollution Control Hearings Board and the courts have not interpreted this exception. The question is whether the term "the reduction [for irrigation use] … due to varying weather conditions" can be interpreted to include employing irrigation practices that rely on weather conditions to save water. Legislative history may be helpful if a court believes there is ambiguity in the language of the statute.

The original bill proposed in 2001, Senate Bill 5910, included the following language at the end of RCW 90.14.140(1)(g): "The burden is on the water user to prove that the weather conditions are significantly different from average conditions such that they resulted in the reduction of water use." This sentence may have been the reason the bill reports included language such as: "*The reduction must be caused by varying weather conditions or the presence of water from a source not within the control of the water user."* Substitute House Bill Analysis. March 1, 2001. The last sentence in SB 5910 was stricken in a substitute bill, SSB 5910, before it was passed and signed by the Governor. Deletion of the sentence from the proposed exception to relinquishment may have been a concern over stating that the burden rests on the water user or the language that weather conditions must be "significantly different from average conditions." Regardless, the Final Bill Report, summarized the bill as enacted as follows:

> **Summary:** Sufficient cause for nonuse of water includes temporarily reduced need for irrigation due to weather conditions, including precipitation and temperature, so long as facilities are maintained for use of the full amount of the water right. *Weather conditions must warrant reduction in water use.* (Emphasis added.)

Based on the language in the Bill Analysis and Final Bill Report, the legislature may have intended that this exception apply to the non use of water only because of weather conditions assuming existing water use practices, and not based on more efficient water management practices that save water based on weather conditions.

Until further clarification is provided by the courts or legislature regarding the applicability of relinquishment law to saved water from IWM, the general position by the state is that the saved water would be subject to relinquishment after 5 years of nonuse unless: 1) the nonuse falls under a "sufficient cause"; 2) the saved water is used for irrigation; or 3) the saved water is transferred to the state Trust Water Rights Program. Otherwise, water saved from historical conservation practices and not used in the last 5 years would be relinquished.

B. Impairment

In analyzing a proposed change, the law requires that Ecology consider whether a change will cause impairment or injury to other existing water rights, which include rights junior or senior to

the right being changed as well as instream flows set by rule. RCW 90.03.380(1); 90.03.390. Impairment of other rights may result from either detrimental impacts to quantity or quality, impacts to the resource, or direct interference with the ability of one to exercise an existing right. *See* RCW 90.03.005, .380; RCW 90.44.100.

An impairment analysis depends in large part on a determination of the quantity of water that would be diverted and actually consumed if the change occurred as compared to the quantity of water that was historically diverted, which includes the portion that returned to a water source through seepage, spillage, leakage, or otherwise and was relied upon by others. For IWM, the reduction in water demand that would be used for new irrigation would also be the water that is historically diverted, less water flow that returns to the source.

To implement the IWM, a change of a water right will result in adding acres of irrigation under a water right. The water code has specifically addressed a change that will expand the number of authorized acres. RCW 90.03.380(1). Except as may be allowed for seasonal changes, there can be no increase in the annual consumptive quantity of water used (ACQ) when changing a water right to add irrigated acres. The ACQ is the estimated or actual amount of water diverted under the water right, reduced by the estimated annual amount of return flows, averaged over the two years of the greatest use within the most recent five year period of continuous beneficial use of the water right. *See* Ecology's policies and procedures POL-1201, PRO 1210. The information necessary for this determination is based on available data sources such as flow meter, power meter, Washington Irrigation Guide and calculations from the Public Agricultural Weather System.

We interpret the application of the ACQ to be the tool the legislature has adopted to guide Ecology in assuring that any expansion of acres will not impair other existing water rights. However, its application has become an independent element of Ecology's analysis of the water right, resulting in relinquishment of a portion of the water right without a specific finding that the change would actually cause impairment. It is undisputed that Ecology may not approve a change to a water right if the change would result in an impairment to any existing right.

C. Seasonal or Temporary Changes

The IWM also contemplates seasonal water right changes and temporary water right changes for a limited period of time. Ecology defines a seasonal change as a temporary change or transfer of the place of use or point of diversion/withdrawal for a specified part of the year. Ecology defines a temporary change as a similar change "for a limited period of time or until a specified circumstance is met." Ecology Policy POL-1200. In this analysis, we use the term "temporary" change to include both seasonal and temporary changes.

Temporary changes are authorized under RCW 90.03.390. Under Ecology's policy, a temporary change requires the same investigations and considerations as permanent changes under RCW 90.03.380, including determination of the extent and validity of the water right, impairment, and an ACQ analysis where additional acres would be irrigated under a water right. However, this policy is under review with regard to the Columbia-Snake River Irrigators Association's current

proposal to amend its Voluntary Regional Agreement (VRA) with Ecology. *See* Section X.B.3.below.

RCW 90.03.390 provides:

> RCW 90.03.380 shall not be construed to prevent water users from making a seasonal or temporary change of point of diversion or place of use of water when such change can be made without detriment to existing rights, but in no case shall such change be made without the permission of the water master of the district in which such proposed change is located, or of the department. Nor shall RCW 90.03.380 be construed to prevent construction of emergency interties between public water systems to permit exchange of water during short-term emergency situations, or rotation in the use of water for bringing about a more economical use of the available supply, provided however, that the department of health in consultation with the department of ecology shall adopt rules or develop written guidelines setting forth standards for determining when a short-term emergency exists and the circumstances in which emergency interties are permitted. The rules or guidelines shall be consistent with the procedures established in RCW 43.83B.400 through 43.83B.420. Water users owning lands to which water rights are attached may rotate in the use of water to which they are collectively entitled, or an individual water user having lands to which are attached water rights of a different priority, may in like manner rotate in use when such rotation can be made without detriment to other existing water rights, and has the approval of the water master or department.

The issue is whether the language in RCW 90.03.380 also places requirements on the temporary changes under RCW 90.03.390, other than the requirement that the change cannot be detrimental to existing water rights. The plain reading of the statute could lead one to conclude that temporary changes are reviewed solely under one simple standard of non-impairment. This conclusion depends upon a finding that RCW 90.03.380 is not applicable to temporary changes. If this is correct, the requirement to consider the annual consumptive quantity for additional irrigated acreage may not apply.

This interpretation of the statute could also mean that temporary changes do not require the water right to be applied to beneficial use before it can be changed. That requirement is found in the first sentence of RCW 90.03.380: "The right to the use of water which has been applied to a beneficial use" may be transferred or changed. RCW 90.03.380(1). The interpretation that RCW 90.03.380 does not apply to temporary changes would be consistent with the sentence in RCW 90.03.390 that states that RCW 90.03.380 is not to be construed to prevent interties. The intertie law, RCW 90.03.383, contemplates the right to change the place of use of water that has not been already applied to beneficial use. Ecology's scope of review in regard to approval of the exchange of water through an intertie is whether the water use is within the authorized quantities under the water right, and whether such use will adversely affect other rights. Attorney General Opinion 1996, No. 19.

In *PUD No. 1 of Oreille County v. Ecology*, 146 Wn.2d 778 (2002), the court refused to recognize Ecology's review of the "public interest" under RCW 90.03.380, despite the many other water resource statutes that require Ecology's review of the public interest in regard to water management. Under this analysis, we believe a court would not place requirements in RCW 90.03.390 that are not specifically provided in that section.

It is our opinion that the full requirements of RCW 90.03.380 do not apply to seasonal or temporary changes to water rights and would not apply to such transfers of saved water from IWM.

D. Processing Changes

The application process for changes and transfers can take a significant amount of time, depending on staff availability, number of pending applications, Ecology's work schedule, and the complexity of the water right and the proposed change. The general rule is that the application with the earliest filing date is processed first. However, the legislature authorized "two-track" processing under RCW 90.03.380(5)(b): applications relating to existing surface or ground water rights (changes) may be processed and decisions on them rendered independently of processing and rendering decisions on pending applications for new water rights within the same source of supply without regard to the date of filing of the pending applications for new water rights.

There are a few ways to expedite the processing of changes.

1. If the county in which the change will occur has approved a water conservancy board, an application for change can more quickly be approved through these boards.[8] Under RCW 90.82.070, a conservancy board receives and processes the applications as Ecology would otherwise be required, including publication, consideration of protests, and determining the extent and validity of the water right and whether the change will impair other existing water rights. The board's decision is then provided to Ecology and Ecology has 45 days to approve, deny or modify the decision. Ecology may extend this period of review an additional 30 days. RCW 90.82.080. Ecology's scope of review is stated as: "*The director shall review each record of decision made by a board for compliance with applicable state water law."* RCW 90.80.080(2) (emphasis added). The conservancy board process is a form of expediting applications to change water rights primarily because they have the ability to commence review of the application well before Ecology could, and Ecology is then limited in its review time.

2. Ecology adopted an administrative rule (the "Hillis Rule", Chapter 173-152 WAC) to allow for priority processing of certain applications for new water rights

[8] Conservancy Boards within the area proposed for IWM include the following counties: Adams, Benton, Franklin, Grant, Lincoln and Yakima.

and applications for change.[9] The Hillis Rule confirms that applications for new water rights may be separated by water source and those from the same source of water must be processed in the order they were filed with Ecology. WAC 173-152-030.

However, the rule also provides that later-filed applications may be processed ahead of other applications from the same source of water under certain conditions. Relevant to the IWM, the rule states in Section (3): *"An application for change or transfer to an existing water right may be processed prior to competing applications provided . . . . [t]he change or transfer if approved would substantially enhance the quality of the natural environment."* (Emphasis added.) If all or a portion of the water being changed is transferred to the Trust Water Rights Program for instream flow this provision should apply.

The Hillis Rule and the pending amendments to the rule, including amendments specific to the Office of the Columbia River are discussed in more detail in Section X, B.6.b, below.

E. Transfers and Changes in Irrigation Districts

Usually a change in the place of use of a water right requires approval from Ecology under RCW 90.03.380. As discussed above, as part of the review process, Ecology conducts an analysis of the extent and validity of the water right being changed and an ACQ analysis if additional acres will be irrigated under the water right. Ecology approval is not required, however, in the case of transfers between individuals within a single irrigation district, which only involve a change in the place of use of the water. RCW 90.03.380(3); *Ecology v. Acquavella,* 131 Wn.2d 746, 761 (1997) ("In an irrigation district, however, a water right can be transferred and applied to any land within the district *without DOE oversight*" (emphasis in original)). IWM saved water can, therefore, be transferred to other lands within an irrigation district without Ecology approval. No ACQ analysis should be required even if additional acres are irrigated with the saved water if the total irrigated land is within the described land the district is authorized to serve

Likewise, entities within a Board of Joint Control ("BJC") can transfer water between and among the entities involving only a change in the place of use without Ecology's review and approval. RCW 90.03.380(3). A BJC is authorized under Chapter 87.80 RCW. A purpose of forming a BJC is to increase the flexibility of the use of water rights for irrigation within the boundaries of the BJC. The law authorizes two or more irrigation entities to form a BJC. An "'irrigation entity' means an irrigation district[.]" RCW 87.80.005. Additionally, when there is at least one irrigation district that would become part of the BJC, an irrigation entity may also include "a water company, a water users' association, a municipality, a water right owner and user of irrigation water, or any other entity that provides irrigation water as a primary purpose[.]" *Id.*

[9] The Hillis rule is named after the case *Hillis v. Dept. of Ecology,* 131 Wn.2d 373 (1997), which involved a challenge to Ecology's processing of water right applications.

Formation of a BJC also offers additional flexibility in the use of conserved water. A BJC is "authorized and encouraged to pursue conservation and system efficiency improvements[.]" RCW 87.80.130(2)(a). The BJC may then either redistribute that saved water within its area of jurisdiction or transfer some or all of the saved water to others. *Id.* A BJC is required to consult with Ecology prior to undertaking a conservation or system efficiency project to ensure the project will not impair the water rights of others, but once the project is approved, the BJC may transfer resulting saved water within the area of jurisdiction without Ecology's review and approval. Changes in place of use can be made within the board's "area of jurisdiction" simply by notifying Ecology and any Indian tribe requesting such notice. RCW 87.80.130(2)(c), (d).[10]

The change in place of use of a water right within an irrigation district or a BJC, including saved water from IWM, is much more easily accomplished than such a change by an individual farmer or entity outside of a district or BJC.

F. Application of Laws to Bureau of Reclamation

The IWM project within the Columbia Basin Project will necessarily involve the USBR's water right for the Project. USBR holds a state based water right that is acquired and perfected pursuant to state law.

> An application filed by . . . the United States Bureau of Reclamation, for a permit to appropriate waters of the Columbia River under chapter 90.03 RCW, for the development of the Grand Coulee project shall be perfected in the same manner and to the same extent as though such appropriation had been made by a private person, corporation or association, but no fees, as provided for in RCW90.03.470, shall be required.

RCW 90.40.090. Use of the right is subject to both state and federal law. Under state law, the water right must be applied to beneficial use and the right is subject to relinquishment for 5 or more continuous years of non-use. RCW 90.14.160.[11] However, the state has granted special privileges to the CBP under chapters 89.12, 90.40 and 90.90 RCW.

V. IRRIGATION DISTRICT LAWS

In addition to the statutory provisions in the water code regarding the change or transfer of water within an irrigation district, aspects of other statutes that address the formation and operation of irrigation districts, including those within a federal reclamation project, are important for the IWM project.

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[10] A board's "area of jurisdiction" includes "all lands within the exterior boundary of the composite area served by the irrigation entities that comprise the board of joint control as the boundary is represented under RCW 87.80.030." RCW 87.80.010(1).

[11] Relinquishment applies to "any person entitled to divert or withdraw waters of the state." RCW 90.14.160. "Person" includes the United States when claiming water rights under state law. RCW 90.14.031(1).

State law under RCW 87.03.115 provides that a district board has a duty to "establish equitable bylaws, rules and regulations for the government and management of the district, and for the equitable distribution of water to the lands within the district[.]" The statute specifically discusses irrigation district contracts with the United States. RCW 87.03.115 requires that water acquired under contract with the United States "shall be distributed and apportioned by the district in accordance with the acts of congress, and rules and regulations of the secretary of the interior until full reimbursement has been made to the United States, and in accordance with the provisions of said contract in relation thereto." Where a district has a contract with the state or the United States, the district may not change its boundaries without the approval of Secretary of the Interior or Ecology. RCW 87.03.555.

When an irrigation district enters or intends to enter into a contract with the United States for the delivery of water, RCW 89.12.040 authorizes the Secretary of the Interior to segregate the lands into units or legal subdivisions for purposes of determining the boundaries of the lands and the methods of irrigating the lands. Federal reclamation law limits the number of acres of land owned and/or farmed by an individual or entity that is eligible to receive Project water. Reclamation Reform Act of 1982 (42 U.S.C. 390aa to zz-1). The statute provides that "Lands in excess of the acreage in the amount specified by applicable federal law as not being excess lands held by any one landowner shall be deemed excess land." RCW 89.12.040. The statute prohibits the district from delivering water to excess lands: "The district will not deliver water by means of the project works provided by the United States to or for excess lands not eligible therefor under applicable federal law." RCW 89.12.050(1)(a).[12] *See* discussion of excess lands under USBR contracts at page 25.

RCW 87.03.780 through .805 provide for judicial confirmation of district proceedings. In particular "any contract made or entered into, or to be made or entered into, for the payment of moneys to the United States or the state of Washington in connection with which bonds be not deposited with the United States or the state of Washington as provided in RCW 87.03.140, may be judicially examined, approved and confirmed." RCW 87.03.780.

Because irrigation districts have broad powers to manage water for irrigation, they would be key organizations in the implementation of the IWM program. Additionally, an irrigation district is authorized to assist its members in acquiring equipment for conservation of water and

[12] RCW 89.12.050 further provides:

(b) As a condition to receiving water by means of the project works, each excess landowner in the district, unless his excess lands are otherwise eligible to receive water under applicable federal law, shall be required to execute a recordable contract covering all of his excess lands within the district.

(c) All excess lands within the district not eligible to receive water by means of the project works shall be subject to assessment in the same manner and to the same extent as lands eligible to receive water, subject to such provisions as the secretary may prescribe for postponement in payment of all or part of the assessment but not beyond a date five years from the time water would have become available for such lands had they been eligible therefor.

(d) The secretary is authorized to amend any existing contract, deed, or other document to conform to the provisions of applicable federal law as it now exists. Any such amendment may be filed for record under RCW 89.12.080.

improvement of the quality of water delivered in the district and discharged from the district facilities.

> Any irrigation district organized under this chapter may, for compensation, reimbursement, or otherwise, within limits established by the state Constitution, assist the owners of land receiving water distributed by the irrigation district or discharging, with the district's approval, water from the land into irrigation district-maintained facilities to finance, acquire, install, lease, and use equipment, fixtures, programs, and systems to conserve, improve, preserve, and efficiently use the land, water delivered by the irrigation district, or water discharged from the land into irrigation district-maintained facilities. Assistance may include, but is not limited to, grants, loans, and financing to purchase, lease, install, and use approved conservation, improvement, and preservation equipment, fixtures, programs, and systems. The equipment, fixtures, programs, and systems may be leased, purchased, or installed by a private business, the owner of the land, or the irrigation district. "Conserve," "improve," and "preserve" as used in this section, include enhancing the quality of water delivered by the irrigation district or discharged from the land into irrigation district-maintained facilities.

RCW 87.03.0175(1).

Significantly, irrigation districts are specifically authorized to participate in cooperative watershed management partnerships and agreements.

> In addition to the authority provided throughout this title, an irrigation district, reclamation district, and similar districts organized pursuant to the authority of this title may participate in and expend revenue on cooperative watershed management actions, including watershed management partnerships under RCW 39.34.210 and other intergovernmental agreements, for purposes of water supply, water quality, and water resource and habitat protection and management.

RCW 87.03.019.

Irrigation districts have more flexibility to change the place of use and transfer water within the district. They also have broad powers to manage water and specific authority and direction regarding contracts with the United States. Finally, they have authority to fund and implement conservation measures. All of these factors combine to make irrigation districts important participants in an IWM project both within the Columbia Basin Project and outside the Project.

VI. COLUMBIA RIVER WATER MANAGEMENT ACT

State actions within the Columbia River Basin are primarily directed by the Columbia River Management Act, Chapter 90.90 RCW (the "Act"), which was enacted by the legislature in 2006. The primary directive of the legislation is for Ecology to "aggressively pursue the development of water supplies to benefit both instream and out-of-stream uses." RCW

90.90.005(2). New water supplies are to include storage and conservation. RCW 90.90.005. Ecology developed a Columbia River Management Program to implement the Act. *Final Programmatic Environmental Impact Statement for the Columbia River Water Management Program Under Chapter 90.90 RCW,* Volume I, February 15, 2007, Washington Sate Department of Ecology Publication # 07-11-009 ("FEIS 2007").

The basic components of the Act include Ecology's administration of the Columbia Basin Water Supply Development Account. The account was created to fund storage, conservation and other projects to provide new water supplies for the Basin. Two-thirds of the funds in the account are to be used to develop new storage facilities; the remaining one-third shall be used for conservation and other purposes in the Act. RCW 90.90.010(2)(b). The statute requires that two-thirds of the active storage from new storage facilities shall be made available for out-of-stream uses and one-third to augment instream flows. RCW 90.90.020(1). The statute does not include such a provision for new water supplies created by conservation.

The Act also authorized Ecology to enter into Voluntary Regional Agreements (VRAs) to provide new water for out-of-stream use, "streamline" the water right application process, and protect instream flows. RCW 90.90.030(1).

Ecology's Columbia River Water Management Program included three early actions under the Act: additional drawdown of Lake Roosevelt, development of a supplemental feed route to the Potholes Reservoir, and a VRA with the Columbia-Snake River Irrigators Association. The additional drawdown of Lake Roosevelt includes 30,000 acre-feet of irrigation water to replace groundwater supplies in the Odessa Subarea. The possible supplemental feed routes would be constructed to convey water from Banks Lake to Potholes Reservoir to supply the South Columbia Basin Irrigation District. Ecology and USBR are working together on this study. Ecology is also a funding partner for the Odessa Subarea Special Study being conducted by USBR.

The analysis of the IWM project necessarily includes Chapter 90.90 RCW. We discuss the specific sections of statute as they pertain to IWM in the discussions to follow.

VII. COLUMBIA BASIN PROJECT[13]

A. Project Overview

In order to analyze implementation of IWM on lands within the CBP it is important to briefly discuss the background of the CBP and provide an overview of Project operation.

Water to irrigate lands within the CBP comes from Lake Roosevelt, which is impounded by Grand Coulee Dam. The dam, which was authorized for hydropower production and irrigation supply, was built in the 1930s. Because of World War II the Project was delayed and the first

[13] The historical information is taken from *Overview of Columbia Basin Project* from Montgomery Water Group, Inc., *Water Use in the Columbia Basin,* Summer 1997.

Project water deliveries were not made until 1952. The Project was authorized for 1,029,000 irrigated acres. Currently it serves 671,000 acres. The acres remaining to be developed and irrigated are referred to as the "Second Half" of the Project. USBR has withdrawn enough water from appropriation to serve the entire Project, 3,158,000 acre-feet per year. The water is withdrawn from appropriation by others until the "project is declared complete or abandoned by the United States." RCW 90.40.100.

Three irrigation districts receive Project water and operate the CBP once water leaves the main canal: Quincy Columbia Basin Irrigation District ("QCBID"), which is headquartered in Quincy and delivers water through the West Canal System; East Columbia Basin Irrigation District ("ECBID"), located in Othello, which delivers water via East Low Canal; and South Columbia Basin Irrigation District ("SCBID"), located in Pasco, which delivers water through the Potholes Canal System.

The West Canal and East Low Canal are supplied water from Lake Roosevelt via a Feeder Canal to Banks Lake and from Banks Lake via the Main Canal to the bifurcation into the West and East Low Canals. These canals provide water to the northern CBP lands, primarily in the QCBID and ECBID.

The Potholes Canal System, which delivers water to the SCBID, is supplied from the Potholes Reservoir. Potholes Reservoir, which is impounded by O'Sullivan Dam south of Moses Lake, is operated to be filled by June 1 and drafted until fall. The Potholes Canal System currently serves ~204,000 acres with up to 990,000 acre-feet per year, primarily within the SCBID. The primary water supply for the reservoir, approximately 640,00 acre-feet, is from operational waste and irrigation return flow from northern CBP lands. The remaining water supply of approximately 350,000 acre-feet is delivered annually to Potholes from Lake Roosevelt through Banks Lake ("feed water"). The SCBID's reliance on the significant return flow to the Potholes Reservoir is an important element in analyzing the IWM opportunities in the CBP. *Appraisal-Level Summary of Findings, USBR, April 1, 2008.* IWM would directly reduce the return flow. This factor must be considered in determining how much IWM saved water would be available to irrigate additional acres.

The ability of the original feed route to meet the needs of the SCBID has decreased over time. The ECBID Supplement No. 1 to the Master Water Service Contract (discussed at page 29below) allowed the district to use more water from the East Low Canal, which reduces the capacity of the East Low Canal to supply the Potholes system. *Potholes Supplemental Feed Route,* http://www.ecy.wa.gov/programs/wr/cwp/cr_potholes.html. Irrigation efficiency improvements in the northern half of the Project have resulted in lower return flows to supply the southern half. As one of the early actions under Ecology's Columbia River Management program under chapter 90.90 RCW, Ecology and the USBR investigated alternatives for a supplemental feed route to the Pothole Reservoir. The USBR identified a preferred alternative for a supplemental feed route through Crab Creek and Frenchman Hills Wasteway for water released from Billy Clapp Lake, an off-stream reservoir located north of Highway 28 in Grant County. This alternative could feed almost 80,000 acre-feet in years when Crab Creek is used only in the spring.

In late 2009 a contract was awarded with funds from the American Recovery and Investment Act to construct modifications to facilities to allow USBR to route water from Billy Clapp Lake to Potholes Reservoir. *Reclamation Announces $629.047 in Recovery Funding for Water Conveyance Improvements near Ephrata, Wash.,* USBR Pacific Northwest Region, Boise, Idaho, December 15, 2009.

The eligibility of lands within the Project boundaries to receive Project water is based upon earlier surveys and land classifications by the USBR. The Project is divided into "irrigation blocks" made up of platted "farm units", which average 160 acres. When the Project was being developed, the USBR established irrigation blocks and classified lands within the blocks. Irrigable lands are classified as Class 1-4, from most to least productive. Lands are assigned a water duty and assessed a per-acre cost for water based on the class assigned to the irrigable land. (E.g., Class 1 lands need the least water per acre but are assessed at the highest rate/acre because they are the most productive lands.) Class 6 lands are non-irrigable either based on soil type or the ability to be irrigated. In the initial land classification, the USBR classified lands based on the ability of the land to be rill irrigated.

Originally under the Reclamation Act of 1902, farmers were allowed to irrigate 160 acres with Project water. That number was subsequently increased to 320 acres and is currently limited to 960 acres. Any land over that amount that is farmed by a single entity, whether the land is owned or leased, is termed Excess Land. Formerly a farmer had to sign a contract agreeing to sell any Excess Land in order to receive Project water. Now a farmer can receive Project water for any number of acres. However, for Excess Land the farmer pays 100% of the prorated Project construction costs, not the subsidized rate of 15% for lands up to 960 acres.

From the beginning of the Project until 1968 USBR operated all aspects of Project infrastructure. Districts paid for Project construction costs, and operation and maintenance ("O&M") costs. At the end of 1968 USBR transferred the responsibility for operation and management of the irrigation and drainage systems to the three districts. The systems are referred to as the "transferred works." However, the USBR still actually owns the infrastructure. Since 1968, USBR has operated only the "reserved works"- the dam and main canal. The districts act as USBR's fiduciary agents and collect Project construction costs from farmers for the USBR. Districts also collect their O&M costs from the farmers in their district. Collection of construction cost assessments and O&M payments would be a strong driving force for the USBR and the districts in considering whether to agree to an IWM project.

B. The Odessa Subarea

The lands within the Odessa Subarea that are currently irrigated with groundwater are a primary target for receiving the saved water created through IWM. Farmers within the Odessa Subarea irrigate with groundwater from aquifers in the area that are declining at a rapid rate. Ecology reports that pumping depths in some areas are 750 feet with well depths as much as 2,100 to 2,400 feet. As a result power costs for farmers are higher, water temperatures of the groundwater withdrawn are higher as is the sodium concentration in the water. *Odessa Subarea Special Study*, Ecology (www.ecy.wa.gov/programs/WR/cwp/cr_odessa.html).

The Odessa Subarea includes lands within the ECBID and a smaller area within the SCBID. (*See* Map, Appendix C.) The Odessa lands within the boundaries of the irrigation districts are in the "second half" of the CBP. When the USBR was developing the Project it conducted a preliminary classification of the lands within the CBP in Odessa based upon soil type and ability to irrigate via rill irrigation. The USBR created a preliminary plat of irrigation blocks for these second-half lands but they have not divided the lands into farm units nor has a plat of the lands been recorded. According to the USBR, before being platted into farm units for recording the lands would probably have to be reclassified, based on the ability to irrigate the lands with center pivot sprinkler irrigation. *Pers. Comm.* with C. Davis-Moore, April 5, 2010.

USBR and Ecology have been investigating continued phased development of the CBP into the area. The study area for the Odessa Subarea Special Study is within the CBP boundary and within the Odessa Groundwater Subarea designated by Ecology. Chapter 173-128A WAC (formerly Chapter 173-128 WAC). (*See* Map from WAC 173-128A-050, Appendix D.) The study area is bounded on the west by the east Low Canal, on the east by the City of Lind, on the north by Wilson Creek and on the south by the Connell area. The goal of the investigation is to identify water supply options and water delivery options as part of the CBP in order to replace the use of groundwater with surface water.

According to the Columbia River Management Program FEIS there are approximately 121,000 acres irrigated with groundwater in the Odessa Subarea that are within the CBP. (This can vary from 103,000 to 140,000 acres in any given year.) The USBR reports there are up to 140,000 acres irrigated with groundwater in the study area that are eligible to receive CBP surface water. *Odessa Subarea Special Study, Columbia Basin Project, Study Update, February 2008,* U.S. Department of Interior, Bureau of Reclamation.[14]

In 1973 Ecology adopted administrative rule Chapter 173-130A WAC, Odessa Groundwater Management Subarea Management Policy. The rule was updated in 1982. The rule sets the maximum allowable rate of decline and maximum depth of the water table for the aquifer. WAC 173-130A-060, -070. It established an irrigation season of February 1 through November 30 for lands in the subarea, although it also acknowledged that in some years it may be necessary to use water in December and January. WAC 173-130A -120. The rule also set a water duty not to exceed 2.5 acre-feet/acre. WAC 173-130A-150. Finally, the rule allows expansion of irrigated acreage only under certain conditions. The expansion must not result in an increase in withdrawal rate (gpm) or annual quantity in acre-feet as compared to water use in the 3 years prior to the request to expand the number of irrigated acres. No new wells may be constructed to expand acreage. The acreage expansion program is to be administered as a temporary change through an annual letter of authorization. No permanent change or amendment of a water right is allowed. WAC 173-130A-200.

RCW 90.90.020 directs Ecology to focus efforts on alternatives to withdrawing groundwater from the Odessa Subarea aquifer for agricultural users. In 2004 the state, USBR and the Columbia Basin Irrigation Districts entered into an MOU to work together to optimize existing water management and explore new storage options for additional water. The provisions of the

[14] There are an additional 230,000 acres of land in the easternmost portion of the Odessa GWMA that are outside the CBP. This number includes 49,000 irrigated acres. FEIS, p. 2-10.

MOU include 30,000 acre-feet from an additional drawdown of Lake Roosevelt as well as a study of options to deliver additional water to Odessa Subarea to replace groundwater use. FEIS 2007, p. 1-5.

The USBR's 1938 withdrawal of state water from appropriation set aside enough water to irrigate the remaining authorized acres in the CBP, including those in the Odessa Subregion.[15] *Appraisal-Level Investigation Summary of Findings,* USBR, April 1, 2008. However, under the constraints of the Endangered Species Act, 16 U.S.C. sections 1531-1599, this quantity of water may not be available for delivery for out-of-stream uses downstream of Lake Roosevelt.

In the December 2009 Study Update, USBR identified two water delivery options and three water supply options for providing Project water to Odessa. The East Low Canal is the avenue for transporting water from Lake Roosevelt to a location where it can be moved out to Odessa. Delivery to Odessa would require new canals and pipes off the East Low Canal. The two water delivery options are to expand the capacity of the East Low Canal and extend the canal by 2.5 miles. This would enable the delivery of CBP surface water to an additional 57,069 acres south of I-90 and east of the East Low Canal. The second option is to construct the East High Canal, which would allow delivery of CBP surface water to 45,545 acres north of I-90 and east of the East Low Canal.

There is currently a water delivery bottleneck in the East Low Canal where it crosses I-90 near Moses Lake. On June 29, 2010 the USBR issued a press release announcing that construction of the Weber Siphon Complex is underway following resolution of a contract dispute over $20 million from the American Recovery and Reinvestment Act. *$20M ARRA Project at Weber Siphon Complex Construction is Underway in the Columbia Basin Project,* Pacific Northwest Region, Boise, Idaho, June 29,2010. The Weber Siphon Complex includes the Weber Branch and Weber Coulee Siphons, which will eliminate the bottleneck. The construction of the siphons will allow delivery of water to approximately 10,000 acres (~30,000 acre-feet) in the Odessa Subarea that are now dependent on deep wells. The water will be provided as part of the additional releases from Lake Roosevelt under the Lake Roosevelt Incremental Storage Release Project.

The 2009 Study Update considered several water supply options: additional drawdown of Banks Lake or Lake Roosevelt, construction of a reservoir in Rocky Coulee, or a combination of all three. Considered as single options, they could provide an additional 126,000 to 715,000 acre-feet of water.

One water supply option the USBR considered but eliminated was water conservation through additional canal system efficiency improvements. Although the USBR and the CBP Irrigation Districts will continue to pursue these activities, according to the USBR they simply could not supply the needed quantity of water. Over the last 18 years the ECBID constructed 49 conveyance system water conservation projects, which yielded enough water to irrigate an additional 2,400 acres. *Appraisal-Level Investigation.* By comparison, at a water duty of 3 af/A,

[15] The CBP is authorized for irrigation of 1,029,000 acres. The Project currently serves 671,000 acres. *Odessa Subarea Special Study, Columbia Basin Project, Study Update, February 2009,* U.S. Department of Interior, Bureau of Reclamation.

the estimated quantity of saved water from IWM, 394,400 afy, would be enough water to irrigate ~131,000 acres.

The ability to irrigate additional acres will depend upon where the IWM saved water is created and whether and how it may be transferred to the Odessa Subarea. The answer to these questions in turn depends upon the willingness of the irrigation districts and USBR to enter into contracts for delivery of the saved water to Odessa. Cooperation of the irrigation districts and the USBR will be determined, at least in part, by the ability to meet their specific concerns regarding the IWM program. We are providing a separate memorandum that discusses recommendations regarding this topic.

C. IWM Program Elements for Odessa

Which lands would create the saved water, which lands would receive the saved water and who would participate in the IWM are unique for lands within the CBP.

Because of their size and location, the irrigation districts within the Columbia Basin Project provide an opportunity for implementation of a significant IWM program. A large portion of the Odessa Subarea is within the Columbia Basin Project. The increased federal and state commitment to provide water to the Odessa area makes farmers who irrigate with groundwater likely recipients of the saved water. The proximity of the ECBID and SCBID to Odessa and the fact each of the districts has land within the Odessa make them the likely participants in the IWM project. QCBID has very little land remaining to be irrigated within its district boundaries, and is not a likely participant in IWM for additional irrigation in its specific district.

An IWM program within an irrigation district requires coordination and compliance with the regulations of the irrigation district. For the districts within the Columbia Basin Project, this includes compliance with federal reclamation laws and contracts with the USBR. These layers of regulations increase the complexity, costs and incentives to implement the IWM program in the CBP. Because the Columbia
Basin Project would be a key part of the success of an IWM program, it is important to analyze this opportunity based on the laws and regulations that govern it.

As discussed above, in order to be effective the program must have a sufficient number of acres of lands committed to IWM for a sufficient number of years to provide a reliable source of saved water for the farmer relying on the saved water. It is our understanding that Ecology prefers that the lands receiving saved water be "guaranteed" that water for a minimum of 5 years. Within the CBP an irrigation district would act as a bank and pool the water saved by individual farmers within the district. As discussed below, the district would contract with USBR and individual farmers in order to distribute the saved water. The farmer receiving saved water would pay the district for the use of saved water and any associated Project costs. It is our understanding that the FCD would prefer that the program be self-sustaining and not require public funding. It may be possible for the district to pay the farmer using IWM a portion of the payment from the farmer receiving the water. The irrigation districts would be key to the success of such an approach.

VIII. LEGAL RELATIONSHIP BETWEEN USBR AND THE COLUMBIA BASIN PROJECT IRRIGATION DISTRICTS

The legal relationship between the USBR and the districts is primarily defined by the various contracts between the two parties as authorized under the Reclamation Law. It is also defined in part by state law.

A. Reclamation Law

The Reclamation Act of 1902 (32 Stat. 388) established the Reclamation Fund to support construction of irrigation projects in the West. The federal water project construction program was intended to be self-sufficient and would require that project costs be repaid by the irrigators. Bureau of Reclamation, Reclamation Law and the Allocation of Construction Costs for Federal Water Projects, GAO/T-RCED-97-150, 1997. Early on it became apparent that costs were much higher than expected and changes were made to the reclamation program.

The Reclamation Project Act of 1939 (53 Stat. 1187) fundamentally changed the program. Under this act projects could be authorized for multiple purposes including irrigation, municipal and industrial supply, hydropower generation, flood control and navigation. Costs were to be shared among the various beneficiaries of the projects, which gave irrigators additional relief in meeting repayment obligations.

A major change came with the Reclamation Reform Act of 1982 (43 U.S.C. 390aa to zz-1). The Act increased the number of acres an individual or entity can irrigate with water from a federal project from 160 acres to 960 acres (owned and/or leased). Irrigators can irrigate lands over that limit (excess lands) but they must pay "full cost"--an annual rate intended to pay their full portion of the Project construction costs with interest.

1. USBR-Irrigation District Contracts

"In implementing reclamation law the Bureau is guided by its implementing regulations, administrative decisions of the Secretary of the Interior, and applicable court cases." (Bureau 1997.) These form the basis for the contracts between the Bureau and the project irrigation districts. State law also authorizes irrigation districts to enter into "repayment and other contracts with the Untied States under the terms of the federal reclamation laws in matters relating to federal reclamation projects[.]" RCW 89.12.050(1).

The contracts between the USBR and the districts are of two basic types: (1) contracts for repayment of project construction costs, and (2) water service contracts. Both types of contracts contain provisions that directly limit a district's ability to deliver IWM saved water outside of the district boundaries. USBR water service contracts with the districts provide that water allocated and delivered to that district will stay within the district. *Personal communication with Jim Blanchard, USBR, Acting Area Manager in Ephrata,* February 9, 2010. The Repayment Contract defines "Lands within the project" to mean "those arable lands . . . which are within the boundaries of the Districts, as these boundaries exist at the date of this contract or as they may be modified subsequently." (Repayment Contract, p. 5.) However, the contract also provides that a

district agrees that it *will deliver* water to lands in another district if there is an agreement with the other district or with the USBR and if it is operating facilities in that district. The district commits to provide service to lands in the other district equally as good as to lands within the originating district. Repayment Contract, Article 29.

In general, water delivered to a district must be used on lands within the district but the Repayment Contract does provide for the specific exception in Article 29.

2. Repayment Contract

The most recent Repayment Contract, the *Amendatory, Supplemental, and Replacement Repayment Contract between the United States of America and the East Columbia Basin Irrigation District* ("Repayment Contract"), was executed in 1968.[16] The contract addresses repayment of construction costs of facilities to provide water supply to an irrigable area in excess of 1 million acres of Project land, and the assumption and care of operation and maintenance of transferred Project works. The contract contains a number of definitions and provisions that potentially bear on the ability to transfer saved water to the Odessa lands being irrigated with groundwater.

Article 10 addresses establishment of irrigation blocks. The contract defines an "irrigation block" as "an area of land within the District as designated by the Secretary for which project works are built or are to be built and to which irrigation water will be made available to all platted units and/or legal subdivisions therein at substantially the same time[.]" Repayment Contract, Article 5. Article 10 provides that "[t]he designation of an irrigation block is evidenced by the Secretary's filing for record in the appropriate county auditor's office a plat of the irrigation block showing [farm] units and/or legal subdivisions thereof for which water will be available." The water supply to land within an irrigation block is a permanent, non-interruptible supply. However, it is a proratable supply along with other permanent water from the Project.

The lands in Odessa Subarea that are within the district boundaries are identified by irrigation block and have been preliminarily classified, but a plat of the irrigation blocks has not been filed for recording. Therefore, under this provision they are not recognized as established irrigation blocks by the USBR and not entitled to construction of Project works or delivery of Project water.

Subarticle 10(b) explains that the construction cost obligation of the District is based upon the sum of the net irrigable acreage of each land class within a block and the project-wide construction charge for each land class. The District's construction cost obligation is a general obligation of the district. The Districts pass that cost on to the farmers, but if a farmer releases all or a portion of their water back to the District, the District pays the construction cost for that water until the water is reallocated within the district.

[16] Contract No. 14-06-100-6419. The original Repayment Contract was executed in 1945. The Quincy and South districts have substantively identical 1968 Repayment Contracts except where noted.

The definition of an irrigation block also states that during Project development lands may be added to the block by the Secretary with district approval. "[A]fter the development period the District may add land to the block in accordance with Subarticle 10(d) hereof." Repayment Contract, Article 5. This subarticle allows substitution of lands acre for acre within an irrigation block when a landowner releases part or all of their water. This usually occurs as a result of land "going wet," i.e., becoming too saturated to run a center pivot sprinkler.

Subarticle 10(d) also allows for the addition of lands to a block. This occurs when a farmer requests a reclassification of land within the boundary of his/her farm unit from Class 6, non-irrigable, to an irrigable class. It is usually a situation where the land was originally classified as Class 6 because it couldn't be irrigated using rill irrigation but can now be irrigated by a center pivot sprinkler.

Subarticle 10(d) allows for the addition of lands to an existing irrigation block by reclassification of lands. The provision does not necessarily provide an avenue for inclusion of land for project water delivery in Odessa that is within the East or South district but is not within an established irrigation block and is not being served water from the Project. Therefore, the USBR is not obligated (or authorized) to construct Project works or deliver Project water to the lands in Odessa unless the Repayment Contract is amended.

Article 24 authorizes the District to use waste, seepage, and return flow waters not needed by the United States for project irrigation supply. The District may supply the water as part of the supply of the district for use on lands within the District. This gives rise to the question whether saved water from IWM, which would otherwise be return flow, could be delivered to lands within the district under this provision.

According to C. Davis-Moore at the USBR the saved water would not be considered return flow for purposes of this provision because the saved water would be coming from the East Low Canal, a primary delivery canal. In order to be considered return flow for purposes of a Waste, Seepage and Return Flow Contract, the water must be coming from a seepage/return flow pond or wasteway. This position appears to be supported by Subarticle 24(a), which refers to the "recapture and/or reuse of waste, seepage, or return flow waters for further utilization by the Districts[.]" The water saved through IWM would not be reused water from within the District but would be water taken directly from a primary delivery canal.

Article 28 of the Repayment Contract authorizes the District to enter into new water service contracts. This provides a potential avenue for delivery of IWM saved water to Odessa. Significantly for the IWM project, the District must certify that (1) there is capacity in the irrigation system to deliver the water and (2) there is "an adequate water supply to serve under the new contract without adversely affecting existing water users." Repayment Contract, Article 28. This article authorizes water service contracts between the district and landowners that are governed by a Master Water Service Contract and Supplements thereto between USBR and the districts.

3. Master Water Service Contract and Supplements

In 1967 the USBR and the Quincy and East districts entered into a Master Water Service Contract ("MWS Contract") for the construction of the Second Bacon Siphon and Tunnel and Main Conveyance Facilities, authorized by Section 28 of the Repayment Contract. These facilities were planned as the first step for further development of 136,000-200,000 acres within the CBP districts ("First Phase Continuation Acres"). The MWS Contract was created because the landowners did not want to reopen the Repayment Contract. South District was not a party because they did not believe there would be any additional benefit to them from the planned construction. Therefore, only ECBID and QCBID have a MWS Contract with the USBR.

The term of the MWS Contract is until the year 2022, 40 years from completion of the Second Bacon Siphon and Tunnel, which occurred in 1982. The District has the right to continued renewal of the contract for up to 40 years at a time. The contract establishes the costs of construction and the repayment requirements for the Second Bacon Siphon and Tunnel. Paragraph 7(d) requires that before the District furnishes "First Phase Continuation Water" the District will enter into a supplement to the contract that sets the terms and conditions of furnishing the water.

The East District entered into the First Supplemental Water Service Contract ("First Supplement") in October 1982 to provide water service to 10,000 First Phase Continuation Acres in the district. In the First Supplement the District stated that an additional 10,000 acres can be served without adversely affecting or having a significant detrimental impact on Existing Acres, fish and wildlife or the environment in general.[17] The contract provides that the water delivery is interruptible when water is needed to fully satisfy the water needs of other Project lands within irrigation blocks. The District was given the discretion to determine which lands would be served, when and by what method. First Supplement, Article 10. Article 21(a) required the District to develop a water conservation program for water delivered under the contract prior to delivery.

Under the authority of the First Supplement, the District entered into a Water Service Contract with District farmers. To qualify to receive water the landowner had to be an owner of irrigable land within the First Phase Continuation Acres and in the "vicinity of" Project facilities. The contract identified the specific turnout from the East Low Canal and the number of acres to be irrigated. The water delivery was interruptible pending inclusion of the lands in an irrigation block or LID service area. The District determines the availability of water and controls delivery. The landowner is responsible for constructing all facilities from the turnout to the farmer's lands.

[17] The term "Existing Acres" was defined in the MWS Contract as "135,000 acres in the District in established irrigation blocks with a full District water supply plus 2,000 acres which are entitled to receive water on an interruptible basis under District water service contracts executed pursuant to Article 10(d) of the Repayment Contract or pursuant to Article 28 of the Repayment Contract[.]" It also includes areas in the District that can be developed with water to be furnished by Project water supply facilities already constructed. MWS Contract, pp. 2-3.

4. Second Supplement to MWS Contract for Conservation Water

The East District entered into a Second Supplemental Water Service Contract ("Second Supplement") in September 2005. This contract authorized the District to deliver water saved through prior conservation projects to lands within the District in the Odessa Subarea. The process leading up to the contract is key to determining the potential for future delivery of saved water from IWM to the Odessa Subarea.

In 2004 the ECBID approached Ecology about moving water ECBID had conserved through infrastructure efficiency projects from 1986 to 2004.[18] The projects to line canals and improve the laterals were funded in part by state Referendum 38 money. Ecology did extensive studies of the geology of each section of pipe, and estimated seepage and water savings created by the efficiency measures. Ecology estimated ~16,000 acre-feet per year of water had been saved through the conservation projects.

The purpose of the Second Supplement to the MWS Contract was to allow the East District to use water conserved by the District through efficiency improvements on District facilities to supply a portion of the groundwater users in Odessa. The Second Supplement recognized that the conserved water came from more efficient measures in using water served under the Repayment Contract and conserved under the District conservation plan. The Second Supplement between the USBR and the East District and resulting water service contracts between East District and Odessa groundwater users were the end result of a cooperative effort including the USBR, Ecology, the East District and Odessa groundwater users.

The quantity of saved water had been determined in Phase I and Phase II and confirmed by Ecology. *Phase I Seepage Analysis Report for East Columbia Basin Irrigation District Water Conservation Projects,* Montgomery Water Group, August 2, 2004. Once it had been determined that approximately 16,000 acre-feet of water had been saved through conservation projects, the USBR, Ecology and ECBID signed a Memorandum of Understanding addressing the following issues.

- 60% was to be used for irrigation to substitute for groundwater use within the portion of the Odessa Subarea that is within ECBID. 20% of the saved water was to be used for on-Project environmental uses within the District or other environmental uses mutually determined by the parties rather than left instream. 20% was to be used for on-Project municipal and industrial use within the District.[19]
- The parties were to develop a prioritization policy if there was more irrigation demand than available water calculated at 3 acre-feet/acre or the water duty in a groundwater permit, whichever is less.

[18] Prior to delivering saved water, ECBID delivered water to irrigate 14,000 acres in the Odessa Subarea. The cost of infrastructure and pumps in the East Low Canal is borne by the farmers.

[19] The fact that the first conserved water from the East District was used for fish and wildlife and municipal and industrial in addition to agriculture was a result of negotiations between the USBR, Ecology, DFW and the East District. *Pers. Comm.* C. Davis-Moore, USBR, April 5, 2010.

- Seepage reports concluded that 16,276 acre-feet per year was a reasonable estimate of total water savings. This figure was adjusted for return flow contributions to the Potholes Reservoir of 5,740 acre-feet per year, which is delivered to South Columbia Basin Irrigation District. The conclusion was that 10,536 acre-feet per year were available for use in the Odessa area.
- USBR developed approved contracts for use of the saved water for irrigation, municipal and industrial, and environmental.
- Ecology provided technical advice to identify groundwater uses best suited to be replaced by Project saved water, issued superseding certificates to those with a groundwater right and receiving saved water, and agreed to monitor for compliance.
- The parties established an Oversight Panel to review and evaluate the implementation of the MOU at least annually.
- The term of the MOU is until October 8, 2022 when the Master Water Service Contract between USBR and ECBID expires.

The term of the Second Supplement between USBR and the East District was also equal to that of the MWS Contract, which is set to expire in October 2022, unless renewed. Article 10(b) of the Second Supplement stated that the District confirmed that 10,536 acre-feet per year of conserved water was available under the contract and that the parties had agreed that 20% of the conserved water would be for on-Project environmental use, 20% for municipal and Industrial within the East District, and 60% to irrigate lands then using groundwater that were within the East District and within the Odessa Groundwater Management Subarea.

Article 10(c) identified that "not less than 2,107 acres and not more than 2,528 acres may be irrigated within designated areas on an interruptible water basis, without a significant adverse impact on existing acres within established irrigation blocks, fish and wildlife interests or other environmental interests."

Article 11(a) provided that the interruptible water supply is subordinate to water for irrigation of farm units and that no adjustment will be made under the Repayment Contract " to the share capacity of the canal system serving such land" until lands served with Conserved Water are included in irrigation blocks.

Dick Erickson, Manager of ECBID, set up a priority scheme for who should receive saved water and requested applications from farmers interested in receiving the water. The District then asked Ecology to determine whether each applicant had a valid groundwater right. The District Board adopted Resolution 2005-09, which established a policy for allocation and delivery of the conserved water for First Phase Continuation/Ground Water Replacement Water Service Contracts. The Board resolved that once USBR and the District agreed to the necessary forms of contracts, Ecology's administrative process for superseding water right certificates was in place, and the USBR had completed the required environmental review and approvals that the District would announce the opening for applications for First Phase Continuation/Ground Water Replacement Water Service contracts.

In order to qualify for such a contract the land had to meet five conditions:

- Be eligible for First Phase Continuation water service contracts pursuant to inclusion, land class and drainage area status.
- Be within the Odessa Ground Water Management Subarea established in Chapter 173-128A WAC.
- Be located within 3 miles of the East Low Canal.
- Be currently irrigated with groundwater under a valid state water right permit or certificate.
- Qualify for a superseding ground water permit or certificate from Ecology.

Resolution 2005-2009.

The District Resolution established higher priority land and lower priority land for purposes of being accepted for a water service contract. It also established a maximum of 320 acres that would be eligible under a single water service contract. The District would accept applications for lands along the entire length of the east Low Canal but no more than 640 acres total for reaches of the canal south of I-90. The District would not accept an application for land that, in combination with already irrigated land, would exceed the number of irrigated acres authorized under the Reclamation Reform Act, i.e., no contracts for excess lands. The District would accept, review and process applications concurrently with Ecology's processing of the superseding ground water permit or certificate. The District would not issue a contract until Ecology had approved and issued the superseding document.

The total number of acres irrigated with conserved water and groundwater combined could not exceed the number of irrigated acres authorized by the state groundwater permit or certificate. The Resolution prohibited seasonal changes under RCW 90.03.390 for the superseding permits and certificates. It also required metering, recording, and reporting under Chapter 173-173 WAC. Further, the Resolution established that conserved water delivered under these water service contracts (390 contracts) are junior to the water delivered under the Repayment Contract (190) (permanent, non-interruptible) and under water service contracts pursuant to the First Supplemental Contract (290).

Following are some key provisions of the 390 water service contract:[20]

- 2(f)(g): Landowner is the holder of irrigable land identified as First Phase Continuation Acres and a state-based ground water permit or certificate, which authorizes irrigation of the same acreage.
- 4(b): The term of the contract is until October 8, 2022. If the MWS Contract and Supplement No. 2 are renewed or extended, the District may consent to renew the 390 contract for 10-year periods that do not extend beyond the new expiration dates of the MWS Contract and Supplement No. 2.
- 5(b): Landowner shall receive water at an existing diversion point from the East Low Canal and is responsible for the costs for taking the water, conveying it and using it.

[20] These provisions are from a sample Interruptible Water Service Contract for Utilizing Conserved Water/Ground Water Replacement sent out by the East District to prospective applicants.

- 5(c): Water supply is interruptible pending landowner's inclusion into an irrigation block.
- 5(c): District determines the availability of water.
- 5(f): If landowner is included in an irrigation block or LID service area, landowner will be assessed on the same basis as other lands in the irrigation block and this contract shall terminate.
- 5(g): If water becomes available as part of an irrigation block, landowner will sell landowner's facilities to the United States.
- 5(h): Landowner may revert to ground water use; if so, the superseding permit or certificate will be canceled and this contract will be terminated.
- 7(b): Neither the USBR nor the District abandon or relinquish any waste, seepage or return flow water resulting from water made available under this contract. All such waters shall be retained as a source of water supply for the Project.

The Board also adopted regulations regarding the contracts, including the maximum rate of diversion (Qi) based upon the number of acres to be irrigated; setting 40 acres as the minimum number of acres to be irrigated under a contract absent written permission from the District; and prohibiting any contracts for irrigation other than sprinkler irrigation absent specific authorization by the Board of Directors.

An October 6, 2006 letter from ECBID reported on the outcome of the transfer of saved water to Odessa. The District segregated the receiving area in Odessa north of I-90 from the area south of I-90. The allocation of saved water for lands south of I-90 was limited to 30% of available water by District policy because the East Low Canal has not yet been constructed to its ultimate capacity. The majority of the applications were for water for lands south of I-90: 27 applications north and 40 applications south of I-90. There were 67 total applications received and water was awarded to 32 applicants. The 32 applications were for lands on 9 separate farms.

This project provides an excellent template for future transfers of IWM saved water to Odessa.

IX. NET WATER SAVINGS CREATED WITHIN THE CBP

In this section we discuss the four questions presented as they pertain to IWM on lands within the CBP. Answers to the questions come from the Columbia River Management Act, Chapter 90.90 RCW, contracts between the USBR and the irrigation districts, the water code and state law regarding irrigation districts.

A. Whether the Net Water Savings Can Be Enrolled in the Trust Water Rights Program for Lands Outside the Columbia Basin Project as Required in Chapter 90.90 RCW

We understand this question to relate to the situation where IWM is implemented on lands within the CBP and the saved water would ultimately be used on lands outside the Project. Approximately 49,000 acres irrigated with groundwater in the Odessa Subarea are outside the

boundaries of the ECBID and the SCBID and would come within this question. *See infra* n. 14 and p. 23.

The requirement in Chapter 90.90 RCW referred to in the question applies when money from the Columbia River Supply Development Account ("Account") is used for conservation projects. In such situations, the "[n]et water savings achieved through conservation measures funded by the account shall be placed in trust in proportion to the state funding provided to implement a project." RCW 90.90.10.(4).[21]

Significantly, the statute makes an exception for net water savings intended to be transferred to the Odessa subarea.

> Net water savings from conservation measures funded by the account developed within the boundaries of the federal Columbia River reclamation project and directed to Odessa are exempt from subsection (4).

RCW 90.90.010(5). Therefore, the net saved water from conservation projects in the CBP funded by the Account need not be transferred to the TWRP, rather all of the saved water may be transferred directly to the Odessa area for out-of-stream use, i.e., irrigation. This is consistent with the statutory direction given to Ecology. The agency is required to focus its efforts to develop water supplies based on identified needs, the first of which is "alternatives to groundwater for agricultural users in the Odessa subarea aquifer." RCW 90.90.020(3)(a).

However, the statute does not distinguish between lands in the Odessa that are within the CBP and those that are outside the CBP. It simply refers to saved water developed within the CBP and "directed to Odessa[.]" RCW 90.90.010(5). The complete answer to this question depends upon contractual issues between the USBR and the districts discussed in answer to questions B and C below. The conclusion from that discussion is that the saved water developed within the CBP may only be used on other lands that are also within the CBP.

B. Whether Net Water Savings from Lands Within the CBP Can Be Transferred to Odessa Sub-area Lands to Replace Groundwater Pumping as Required in Chapter 90.90 RCW

This question must be answered from the positions of the state and that of the federal government. The previous transfer of conserved water from ECBID to Odessa provides the answer and illuminates the factors that are important from the state's perspective and the USBR's perspective regarding future transfers.

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> "Net water savings" means the amount of water that is determined to be conserved and usable within a specified stream reach or reaches for other purposes without impairment or detriment to water rights existing at the time that a water conservation project is undertaken, reducing the ability to deliver water, or reducing the supply of water that otherwise would have been available to other existing water uses.

RCW 90.42.020(3).

1. State Position

From the perspective of the state, this question was directly answered by legislation enacted in 2004 to authorize the previous transfer of East District conserved water to Odessa. RCW 89.12.200 provides:

> It is the intent of the legislature that the department of ecology enter into agreements with the United States and Columbia basin project irrigation districts regarding the allocation of water conserved from within areas currently served by project waters to deep well irrigated lands within the federal Columbia basin project and for other authorized project beneficial uses. The department may provide the irrigation districts data identifying areas with the most serious groundwater depletions. The irrigation districts shall consider and may rely on the department's data and recommendations in making allocation decisions to offset groundwater withdrawals consistent with the operational constraints of the distribution system. (Emphasis added.)

In enacting the statute the legislature made the following findings:

- Conserved water from the developed portions of the federal Columbia basin project can provide an immediate source of surface water to offset a limited portion of groundwater depletions within the undeveloped portions of the federal project.

- Ecology has adopted rules establishing groundwater management subareas within the federal Columbia basin project to manage groundwater depletions that are occurring as a result of the department's decision to allow continued deep well agricultural irrigation.

- Ecology had allowed continued deep well use in anticipation that development of the federal Columbia basin project would continue at its historic pace and that project water would replace groundwater and recharge the depleted aquifer.

- Recent studies have documented water conservation in areas served by project irrigation districts as a result of distribution system lining and piping and use of more efficient conveyance system technology.

RCW 89.12.190.[22] The statute is very specific that the saved water would be transferred to lands in Odessa currently irrigated with groundwater that are within the CBP.

[22] The full text of RCW 89.12.190 follows:

(1) The legislature finds that conserved water from the developed portions of the federal Columbia basin project can provide an immediate source of surface water to offset a limited portion of groundwater depletions within the undeveloped portions of the federal project extending the availability of groundwater for domestic, municipal, industrial, and agricultural uses. The department of ecology has adopted rules establishing groundwater management subareas within the federal Columbia basin project. A primary purpose of some of the rules was to manage groundwater depletions that are occurring as a result of the department's decision to allow continued deep well agricultural irrigation in anticipation that development

Although the findings and intent of this statute directly support the transfer of saved water from CBP lands to Odessa, we must also review other statutory sections to determine if there are any obstacles to carrying out this intent. In particular, the Water Code provisions regarding changes and transfers of water rights must be considered.

For changes of a water right Ecology must determine whether the change would impair any existing water rights. RCW 90.03.380 and 390. However, Ecology did not view the earlier 2004 agreement to deliver conserved water to be a water right transfer under RCW 90.03.380 or 390 because the water moved out to Odessa is part of the USBR's water right. The USBR can deliver water under their right for use anywhere within the place of use of the right, which includes all of the CBP. Such delivery is limited to the number of irrigated acres under the water right. *Pers. Comm*. Keith Stoffel, Ecology, February 3, 2010. With respect to moving CBP water out to Odessa, Ecology's position is the water must go to a farmer who is already irrigating with groundwater and there can be no new irrigated acres. The agency's primary concern is that there be no double dipping, i.e., continuing to use groundwater after receiving CBP surface water. *Pers. Comm. with Keith Stoffel, Ecology.*

As discussed above, in conjunction with the ECBID project Chapter 89.12 RCW was amended to provide for conserved water to replace groundwater in Odessa. Chapter 90.44 RCW was also amended to provide that those farmers holding state groundwater rights would be issued a superseding certificate when they received CBP water. The balance of the original water right was put into stand-by/reserve.[23] The statute also provided that Ecology may provide the irrigation districts with data identifying areas where the most serious groundwater depletions are occurring. The districts may rely on this data in making decisions about how to allocate surface water to offset groundwater withdrawals. There may be no expansion of irrigated acreage. The statute provides:

> The department shall issue a superseding water right permit or certificate for a groundwater right where the source of water is an aquifer for which the department adopts rules establishing a groundwater management subarea and water from the federal Columbia basin project is delivered for use by a person who holds such a groundwater right. The superseding water right permit or certificate shall designate that portion of the groundwater right that is replaced by water from the federal Columbia basin project as a standby or reserve right that may be used when water delivered by the federal project is curtailed or otherwise not available. The period of curtailment or unavailability shall be deemed a low flow period under RCW 90.14.140(2)(b). The total number of acres irrigated by the person under the groundwater right and through the use of water delivered

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of the federal Columbia basin project would continue at its historic pace and that project water would replace groundwater and recharge the depleted aquifer.

(2) The legislature also finds that recent studies have documented water conservation in areas served by project irrigation districts as a result of distribution system lining and piping and use of more efficient conveyance system technology.

[23] A stand-by or reserve water right is protected from relinquishment while not being used "so long as withdrawal or diversion facilities are maintained in good operating condition for the use of such reserve or standby water supply." RCW 90.14.140(2)(b).

> from the federal project must not exceed the quantity of water used and number of acres irrigated under the person's water right permit or certificate for the use of water from the aquifer.

RCW 90.44.510.

Under this authority, Ecology issued superseding certificates to the groundwater users in Odessa and reduced their groundwater right by the annual quantity they would receive from the District.

In 2006 the legislature enacted RCW 90.44.520 to encourage more efficient use of groundwater from the Odessa aquifer by relaxing the application of relinquishment for nonuse. The law will expire on July 7, 2021. Section (4) provides that "[i]f water from the federal Columbia basin project has been delivered to a place of use authorized under a right to withdraw groundwater from the aquifer, the provisions of RCW 90.44.510 apply and supersede the provisions of this section."[24]

Ecology supports and encourages the transfer of saved water to groundwater users in Odessa within the CBP as long as the statutory requirements are met. Significantly, Ecology is not required to do an impairment analysis of the transfer under RCW 90.03.380. As long as the quantity of water saved through IWM can be quantified and provided with some certainty, you should expect Ecology's participation in an IWM program to provide water to Odessa.

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[24] RCW 90.44.520: (1) In order to encourage more efficient use of water, where the source of water is an aquifer within the Odessa groundwater subarea as defined in chapter 173-128A WAC: (a) Any period of nonuse of a right to withdraw groundwater from the aquifer is deemed to be involuntary due to a drought or low flow period under RCW 90.14.140(2)(b); and (b) Such unused water is deemed a standby or reserve water supply that may again be used after the period of nonuse, as long as: (i) Reductions in water use are a result of conservation practices, irrigation or water use efficiencies, long or short-term changes in the types or rotations of crops grown, economic hardship, pumping or system infrastructure costs, unavailability or unsuitability of water, or willing and documented participation in cooperative efforts to reduce aquifer depletion and optimize available water resources; (ii) withdrawal or diversion facilities are maintained in good operating condition; and (iii) the department has not issued a superseding water right permit or certificate to designate a portion of the groundwater right replaced by federal Columbia basin project water as a standby or reserve right under RCW 90.44.510. (2)(a) A water right holder choosing to not exercise a water right in accordance with the provisions of this section must provide notice to the department in writing within one hundred eighty days of such choice. The notice shall include the name of the water right holder and the number of the permit, certificate, or claim. (b) When a water right holder chooses to discontinue nonuse under the provisions of this section, notice of such action must be provided to the department in writing. Notice is not required under this subsection (2)(b) for seasonal fluctuations in use if the right is not fully exercised as reflected in the notice provided under (a) of this subsection. (3) The provisions of this section relating to the nonuse of all or a portion of a water right are in addition to any other provisions relating to such nonuse under existing law. (4) If water from the federal Columbia basin project has been delivered to a place of use authorized under a right to withdraw groundwater from the aquifer, the provisions of RCW 90.44.510 apply and supersede the provisions of this section. (5) Portions of rights protected under this section may not be transferred outside Odessa subarea boundaries as defined in WAC 173-128A-040. Transfers within Odessa subarea boundaries remain subject to the provisions of RCW 90.03.380, 90.03.390, 90.44.100, and WAC 173-130A-200. (6) The department shall submit a report to the legislature as to the status of the aquifer, participation in the nonuse program set forth in this section, and the outcome of the United States bureau of reclamation's study on feasible alternatives to Odessa groundwater use. This report must be submitted six months after completion of the United States bureau of reclamation's study, which is expected to be completed in February 2011. The department's report must also suggest viable solutions and the actions needed by the state to move forward with such solutions.

2. Federal Position

The previous transfer of water conserved by the ECBID to lands in Odessa that were using groundwater is evidence of the approach of the USBR to such transfers. The USBR will require that the quantity of saved water be reliably estimated (including the quantity that previously supplied return flow to the Potholes Reservoir), the USBR and the district enter into a supplement to the Master Water Service Contract, and the district enters into water service contracts with the farmer receiving the saved water. The process and documents to transfer water saved using IWM could be similar to those used previously for the ECBID transfer. The primary and significant differences in the two projects are the certainty of the quantity of saved water from year to year and the term of the water service contract.

3. Project Irrigation Districts' Position

The CBP irrigation districts have practical, legal, and political obstacles to approving the change and transfer of the conserved IWM water from a farm unit to another parcel of land whether that parcel is within the same district as well or another district in the CBP.[25] The landowners of a farm unit cannot act independently of the USBR or the districts in changing any water to land outside the farm units owned by the farmer.

The desire of the irrigation districts to control the delivery and use of the water is based generally on protecting the water rights, meeting the repayment obligations, and maintaining the integrity and function of the complicated irrigation system. While the USBR and the districts do not necessarily control the use of the allotted water once it is delivered to the designated farm unit or units held by the farmer, the farmer's decision to have a portion of the allotment transferred to another property outside of the farmer's farm units becomes complicated. A primary concern is triggering an amendment to the 1945 Repayment Contract, as amended in 1968. The Repayment Contract provides the formula for the allotments granted to the farm units within the authorized irrigation blocks. If a change and transfer of water off a farm unit will require a change to an allotment such that it is inconsistent with the Repayment Contract, the Contract may have to be amended. To change the Repayment Contract a vote may be required, and the entire Contract would become susceptible to revisions. It will be very difficult to obtain agreement from the USBR and the districts to open the Contract for revisions.

As discussed in this memorandum, it is our opinion that transferring saved water from a farm unit on a temporary basis can be accomplished without amending the Repayment Contract. This opinion is based on the purpose and implementation of the IWM program and the delivery options that have been recognized through other agreements including the Master Water Service Contract, as amended. However, the districts will still have concerns and will likely object if the transfer of the saved water from a farm unit will disrupt deliveries throughout the system or place the water right at risk for relinquishment or unauthorized spreading. The concern of unauthorized spreading may arise if the water is to be used on a farm that is not recognized as available irrigation land under the CBP. The CBP water must be applied on land that is in the

[25] Richard Erickson, former Secretary/Manager of ECBID, provided information on the Irrigation District's management. We want to thank Mr. Erickson for his assistance and comments, which were very helpful in understanding the Irrigation Districts' position and drafting this section.

authorized place of use under the USBR water rights and on land that is recognized as "authorized acres", as opposed to simply "planned acres" in the CBP. Therefore, before saved water can be transferred, it may require the designation of authorized acres through the agreement of all parties. It is also likely to require an amendment or supplement to the Master Water Service Contract.

It will also not be easy to maintain absolute control and accounting of the saved water and enforce the use of the water on the other farm land. The districts will want assurances that the management of the program will not allow for any saved water to become subject to the state relinquishment laws. At a minimum, the districts will likely want to have a critical number of farm units involved in the IWM program to make the management effective and efficient.

Based on our analysis, it is our opinion that these concerns with delivering the saved water to another property can be addressed and resolved without opening the Repayment Contract, but it will take cooperation, agreement, and incentive by all the parties involved, notably the districts, the USBR, the farmer, and the state, for the program to be successful.

4. Required Steps to Transfer Saved Water to Odessa Groundwater Users

The steps required to transfer saved water to Odessa depend upon whether the saved water would be created in the Quincy, South or East District. Since none of the lands in the Odessa Groundwater Subarea are within the Quincy District such a transfer would be out-of-district and problematic, if not prohibited. Article 29 of the Repayment Contract allows a district to deliver water "through its facilities to eligible lands located within the boundaries of another District, pursuant to an agreement made with that District, or with the United States, if it is operating facilities in that District[.]" In order to fall under this authority Quincy District would have to deliver water through its facilities to lands within the East District located in Odessa. Quincy District receives and delivers water through the West Canal. The East District receives and delivers water through the East Low Canal. Article 29 appears not to authorize Quincy to deliver water saved in its district to lands in the East District.

The East District and the South District both have lands within their boundaries that are using groundwater in the Odessa Subarea. The steps required to transfer saved water out to Odessa would be similar to those followed in the 2004 conserved water project in the East District.

- Determine the quantity and location of IWM saved water.
- Determine the quantity that would have gone to the Potholes Reservoir as return flow.
- Determine the quantity available for transfer.
- Develop an MOU between the USBR, Ecology and the district.
- USBR and district enter into a Supplemental Water Service Contract.
- District Board adopts a Resolution and Rules and Regulations regarding Water Service Contracts for delivery of saved water.
- Ecology issues superseding state groundwater certificates to those farmers receiving saved water.

- District and individual farmers enter into Water Service Contracts for saved water.

For the South District there would be additional and potentially lengthy steps. Because the South District did not enter into a Master Water Service Contract with the USBR at the time the Second Bacon Siphon was constructed, it would have to do so now. The Master Water Service Contract is the source of the authority for districts to enter into supplemental water service contracts with the USBR and water service contracts with individual farmers.

The steps to develop a Master Water Service Contract are as follows:

- Basis for Negotiation: USBR in Ephrata requests permission from the Secretary of the Interior to negotiate a Master Water Service Contract. Obtaining permission could take up to 2 years or more.[26]
- With permission, USBR negotiates with the District, including public notice and public participation.
- Results in a Master Water Service Contract (or something similar), which would give the District authority to enter into Supplemental Contracts with the USBR and water service contracts with farmers.

Although the mechanics exist to develop the contracts to authorize delivery of IWM saved water from the East District and the South District to their district lands in Odessa, the questions regarding certainty of the IWM saved water supply and the possible term of water delivery contracts remain to be answered.

C. Whether Contractual Issues Will Prevent Net Water Savings from "Being Recognized" Within the Columbia Basin Project

We understand this issue to be whether the USBR and the irrigation districts will consider saved water from conservation practices to be water that can be used as a separate block of water or whether it becomes part of the water supply for the Bureau to deliver to water users under their contracts. The saved water included formerly waste, seepage or return flow. The use of such waters is governed by the Repayment Contract and by the case *Ecology v. USBR,* 118 Wn.2d 761 (1992). Neither the contract nor the court case would prevent the net water savings from being recognized and used as a separate block of water but they do put certain constraints on such use.

In Article 24(a) of the Repayment Contract, the United States expressly states that it "does not abandon or relinquish any of the waste, seepage, or return flow waters attributable to the irrigation of the lands to which water is supplied under this contract." Article 24(b) does allow such waters from any part of the project to be used if they are not needed for use by the United States for project irrigation water supply. Such waters "can be used on lands within the District, [and] the District may supply such water as a part of the supply of the District." (Emphasis added.)

[26] *Pers. Comm.* C. Davis-Moore, USBR, April 5, 2010.

In the 2004 transfer of ECBID saved water to Odessa one key finding was how much of the saved water was needed for "project irrigation water supply" as return flow to the Potholes Reservoir and how much could be transferred to Odessa. In a March 31, 2005 letter from the USBR to ECBID, the Bureau explained how it arrived at the quantity of water available for transfer to Odessa. Studies had estimated the amount of saved water to be 16,276 acre-feet per year. However, of that quantity of saved water 6,924 acre-feet would have formerly flowed into the Potholes Reservoir and contributed to the water supply for the SCBID. After accounting for the amount of return flow to the Potholes that would have been lost to deep percolation and lost to Project use, the USBR determined that 10,536 acre-feet per year were available for transfer to Odessa.

The Districts are authorized to enter into water service contracts for waste, seepage and return flow and do so for lands susceptible to irrigation but not capable of being served from the distribution system of an irrigation block. Significantly neither the USBR nor the district guarantee that such water will be available at times and in amounts required by the purchaser. (Section 2(b) in Irrigation Water Service Contract for Use of Waste, Seepage and Return Flow Waters, ECBID 1999, Appendix E to this Report.) The contract includes the language that the United States does not abandon or relinquish any of the water being made available to purchaser under the contract and reserves such waters to the United States as set forth in the Repayment Contract. Section 5(b). A disclaimer in the contract provides that no provision in the contract or the diversion of the waste, seepage, or return flow under the contract "will be construed to bind the United States or the District to make such water permanently available on a continuing basis of a permanent water right." Section 8.

In sum, the portion of the saved water not needed for project irrigation water supply (including supply to the Potholes Reservoir) may be used for additional irrigation if approved by the USBR. The Supreme Court held that such decisions are indeed within the purview of the USBR. In *Ecology v. USBR,* 118 Wn.2d 761 (1992), the court addressed Ecology's grant of a permit to appropriate water from a stream that ran across a landowner's property within the boundaries of the CBP. At least a portion of the water in the stream was water that was diverted by the CBP from the Columbia River under the U.S. government's water rights. USBR and the three Columbia Basin irrigation districts opposed the permit.

Background facts recounted by the court included the fact that the federal government had acquired appropriation rights in the Columbia River specifically to develop the Columbia Basin project and that CBP recaptures and reuses a portion of the waste/seepage/return flow waters ("WSRF"). Contracts between USBR and the districts expressly reserve these waters for use by the federal project. "All such waters [WSRF] are reserved and intended to be retained for the use and benefit of the United States as a source of supply for the project." 118 Wn.2d at 764.

The court held that the water in the stream was still subject to the government's right of appropriation and had not yet left the boundaries of the irrigation project and could not be re-appropriated to another. The court applied both the "control and possession" test and the geographical test to hold:

> We conclude that an appropriator's rights in particular molecules of water do not end while the water remains within the boundaries of the appropriator's property, and that after water has left those boundaries, the termination of the appropriator's rights depends on the "control and possession" test. Accordingly, once an appropriator has discharged water from his or her own property, then the issue becomes whether the appropriator nevertheless retains an intent to recapture the water, whether downstream on another piece of property or otherwise.

Id. at 770.

Significant factors in the court's decision included a concern over payment of project costs. The court noted the appropriator of the water is a federal project that was formed to provide water to farmers like the landowner, Hanson. If Hanson was allowed to get a state permit to use WSRF water, he would do so without paying his fair share of the system's costs. *Id.* at 771. If Hanson was allowed to do so, others similarly situated would have to be treated the same. Landowners with water service contracts for WSRF water would also be able to avoid the system's true costs. *Id.*

The court also found it "highly significant" that Washington statutes provide that decisions regarding distribution of water within a federal irrigation project belong to the USBR and by contract the irrigation districts, not to the state. *Id.*

Based on this case any transfer of saved water must not jeopardize repayment of project costs and must not impose state decisions on distribution within the project of water appropriated by the USBR. It would be up to the USBR and the irrigation districts to agree to such transfers.

While the USBR-District contracts do not prevent the saved water from being recognized and used as a water supply in the Project, the contracts and case law do provide the USBR with authority to condition and limit that use. The primary concerns of the USBR are that use of the saved water must not reduce the amount of project water available to supply existing uses and that project cost reimbursements must always be considered.

D. Whether Statutory or Legal Barriers Exist That Would "Hinder" Program Implementation

There is no state or federal law or other legal barrier to the general concept of transferring water saved within the CBP to Odessa. Rather such a transfer is encouraged. Ecology does not consider transfers of CBP saved water to Odessa to be a change or transfer of USBR state water right requiring Ecology's approval. *Pers. Comm*. Keith Stoffel, Ecology. Ecology considers this to be a transfer of water within the place of use of the USBR's water right for the CBP. Just as irrigation districts do not need Ecology's approval to transfer water from one place to another within the district, RCW 90.03.380(3), the USBR does not need Ecology's approval to transfer water to a new place of use within the Project. Therefore, statutory requirements for transferring a state water right to a new place of use do not apply.

The legislature adopted statutes to coordinate Ecology's work with the USBR when water is transferred to farmers irrigating with groundwater under state-based water rights within the

Odessa. RCW 90.44.510 authorizes Ecology to issue superseding groundwater certificates to farmers receiving Project water. The superseding certificates identify the groundwater rights as standby or reserve. This action protects the rights from relinquishment should the Project water become unavailable in the future. RCW 90.14.140(2)(b). *See* discussion pages 36-37.

Additionally, according to Ecology, the transfer of non-consumptive use water to a new consumptive use is allowed within CBP. Within the CBP, saved non-consumptive water can be transferred and used again because it is project water and return flows can be captured and used again as part of project irrigation water supply. *Pers. Comm*. D. Sandison, Ecology*; see also USBR v. Ecology.*

While not a statutory or legal barrier, one factor that could be a barrier to implementation is the ability to quantify saved water from IWM. In the March 31, 2005 letter approving the transfer of the saved ECBID water to Odessa, the USBR emphasized that a key element in the project was the need to quantify the amount of water made available from conservation for reallocation to additional uses. The fact that the water was made permanently available because the conservation projects were fixed infrastructure improvements was also an important consideration.[27]

In conclusion, based upon state and federal law and CBP contracts, saved water created by the use of IWM on lands within the CBP can be transferred to lands in Odessa as long as those lands are also within the CBP. The agreement of the USBR, districts and Ecology is essential. The ECBID and SCBID are the districts that could practically be involved in the project. The 2004 transfer of saved water from ECBID to Odessa provides a framework for the process to be followed for future transfers and highlights the concerns of the USBR that will have to be met to allow the IWM project to be implemented. Foremost among the concerns are a reliable estimate of the quantity of saved water, no reduction in water supply to SCBID via the Potholes Reservoir, and a degree of certainty that the saved water will be available for a minimum number of years.

X. IWM ON LANDS OUTSIDE THE COLUMBIA BASIN PROJECT

A. Overview

This section of the report addresses IWM on lands that are outside of the CBP and irrigated with water diverted directly from the Columbia River or Snake River. In this analysis we consider three different scenarios:

(1) IWM implemented under a Voluntary Regional Agreement ("VRA");
(2) IWM conducted outside of a VRA on lands within an irrigation district; and
(3) IWM conducted outside of a VRA on lands outside of an irrigation district.

[27] Although the water savings are permanent, the term of the Water Service Contract for delivery and use of the saved water between ECBID and the farmer is limited to 2022 to match the term of the MWS Contract.

Under the first scenario the transfer of saved water is subject to the Columbia River Management Act, Chapter 90.90 RCW, the Columbia River Management Program of Ecology pursuant to the Act and specific requirements of a VRA. Under the second scenario the transfer would be governed by Chapter 90.90 RCW, but would not be subject to Ecology's approval under RCW 90.03.380. Under the third scenario the transfer would be subject to the usual statutory requirements for transfer of water under RCW 90.03.390. If the transfer was permanent it would also be subject to review under RCW 90.03.380 and WAC 173-531A-060.

One requirement of chapter 90.90 applies equally to all scenarios. If IWM is funded, in whole or in part, by state funding the net water savings must be transferred to trust in proportion to the amount of state funding provided. RCW 90.90.10(4). If no state funding is used, there is no requirement that any of the saved water be transferred to trust.

Additionally, RCW 90.90.010(2)(a) prohibits Ecology from expending money from the Columbia River Account on conservation projects that would result in "water acquisitions or transfers from one water resource inventory area to another without specific legislative authorization." The statute does not define transfer and Ecology thus defined the term for purposes of determining where Account money can be spent. Ecology defined "transfer" to mean "the change of a water right from one place and person to another place and person, or the issuance of a new permit where the consumptive demand associated with the new permit is mitigated by a water right 'acquired' using Account funds and held in the Trust Program." FEIS 2007, p. 6-10. The transfer of saved water to another place or person would be a transfer for purposes of the statute and for projects funded from the Account transfers would be restricted to transfers within a WRIA.

We begin with a short description of the elements of the IWM project outside the CBP. The lands where IWM would be implemented, where the saved water would be used, and who would likely participate in the project, are different from IWM on lands within the CBP.

1. IWM Lands Creating Saved Water

One principle remains the same within or outside of the CBP: the IWM program must have a sufficient number of acres of lands committed to IWM for a sufficient number of years to provide a reliable source of saved water for the farmer relying on using the saved water. It is our understanding that Ecology prefers that the lands receiving saved water be "guaranteed" that water for a minimum of 5 years. Outside of the CBP the long-term source of supply could be accomplished in one of two ways. For lands within an irrigation district, the district could act as a bank and pool the water saved by individual farmers using IWM within the district. The district would then distribute the banked water to other farmers within the district under a contract. This system is similar to that within the CBP except that USBR would not be involved.

For lands outside of an irrigation district, a farmer who owns lands where IWM would be used and the saved water would be created could sign up for a term of years. Under a preferred model an individual farmer would agree to use IWM for a term of 5 consecutive years, and the resulting saved water would be identified for transfer to another specific place of use for that term. This

could be done on a farmer-to-farmer basis or coordinated through an entity such as the Conservation District.

2. Lands Receiving Saved Water

Where the farmer receiving saved water is within an irrigation district he would pay the district directly for delivery of the saved water. Under the individual contract model, a farmer who receives saved water would directly pay the farmer who created the saved water by using IWM on his lands. In the alternative, the farmer receiving saved water would pay whoever administered the pooled saved water. The FCD would prefer that the program be self-sustaining and not require public funding. The approach of pooling water may be the better approach to building a self-sustaining program. Under either approach, an entity such as FCD or an irrigation district would be necessary to facilitate or otherwise administer the contracts.

3. The Participants

The IWM program is an option on land within an irrigation district as well as on land of an individual farmer not affiliated with a district. The irrigation districts could potentially provide an opportunity for implementation of a significant IWM program. An IWM program within an irrigation district requires coordination and compliance with the regulations of the irrigation district.

Transfer of water to a new place of use within an irrigation district is subject to approval by the district, not Ecology. Transfers outside of a district are subject to Ecology's approval. Additionally, the provisions of the Columbia River Act, Chapter 90.90 RCW, must be taken into account.

B. IWM Projects Covered by a VRA

1. Voluntary Regional Agreements Under RCW 90.90.030

Chapter 90.90 RCW authorizes Ecology to enter into VRAs, which Ecology has defined as "contractual agreements between Ecology and a group of water users within a defined geographic area within the Columbia River basin." FEIS, p. 6-2.[28] The VRAs allow water users to enter into agreements with Ecology to exchange a package of conservation projects for new water rights or water rights transfers.[29]

RCW 90.90.030 provides that Ecology may enter into VRAs for the purpose of "providing new water for out-of-stream use, streamlining the application process, and protecting instream flow." RCW 90.90.030(1). New water can be developed through a number of approaches including conservation. The FEIS cites to IWM proposed by the GWMA organization, CSRIA and local

[28] RCW 90.90.020, which authorizes VRAs expires on June 30, 2012. RCW 90.90.020(13).
[29] Ecology interprets the term "new water" as used in connection with VRAs to include water obtained from "a new water right or from the change of an existing right." FEIS, p. 6-15. Saved water from IWM would thus be considered "new water" for purposes of a VRA.

conservation districts as "innovative approaches to conservation" within the Columbia Basin. FEIS 2007, p. 2-12.

The primary effect of a VRA is to change the usual water right processing in two ways. First, under a VRA, protection of the instream flows in the Columbia River and Snake River during critical flow periods is accepted as adequate mitigation for a new water right. VRAs that involve water rights issued from the Columbia River mainstem must ensure "there is no negative impact on Columbia river mainstem instream flows in the months of July and August as a result of the new appropriations issued under the agreement." RCW 90.90.030(2)(a).[30] For the Snake River there must be no negative impact on instream flows from April through August. RCW 90.90.030(2)(b). Ecology has defined "no negative impact" to mean "no reduction in the flow of the mainstem Columbia River on a weekly basis during a period when flows are inadequate to provide for existing water rights or the preservation of wildlife, fish, scenic, aesthetic, or other environmental values, and navigational values." FEIS 2007, p. 6-1.[31]

Second, the consultation requirements for a water right change or transfer are reduced and restructured. FEIS 2007, p. S-7. Rather than requiring consultation on an application-by-application basis, consultation is done for the VRA as a whole before it is finalized. The consultation requirements for applications reviewed outside of a VRA are found at WAC 173-563-020(4). Consultation applies to any application for water from the mainstem Columbia River after July 27, 1997.

> Any water right application considered for approval or denial after that date will be evaluated for possible impacts on fish and existing water rights. The department will consult with appropriate local, state, and federal agencies and Indian tribes in making this evaluation. Any permit which is then approved for the use of such waters will be, if deemed necessary, subjected to instream flow protection or mitigation conditions determined on a case-by-case basis through the evaluation conducted with the agencies and tribes.

WAC 173-563-020(4). The time required for case-by-case consultation can delay processing an application for an extended length of time.

In addition to the general provisions regarding VRAs, the current IWM project is governed by a specific VRA entered into by Ecology and the Columbia Snake River Irrigators Association (CSRIA).

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[30] For purposes of this section of the statute the "Columbia river mainstem" is defined to include "all water in the Columbia river within the ordinary high water mark of the main channel of the Columbia river between the border of the United States and Canada and the Bonneville dam, and all groundwater within one mile of the high water mark." RCW 90.90.030(12)(a).

[31] "There are currently no instream flows setis currently no instream flows set by rule for the lower Snake River. The unappropriated waters of the mainstem Snake River were withdrawn from appropriation by WAC 173-564-040, but it expired on July 1, 1999, and no instream flows have subsequently been set under the instream resources protection program in accordance with Chapter 173-500 WAC." FEIS, p. 4-52. The implication is that the no negative impact is measured against actual stream flows in the river. *Id.*

2. Ecology-CSRIA 2008 Voluntary Regional Agreement

In 2008, CSRIA, participating CSRIA members ("CSRIA VRA Participant"), and Ecology entered into a Voluntary Regional Agreement ("2008 VRA") as authorized under RCW 90.90.030.[32] The intent of the 2008 VRA was to provide for the issuance of drought permits to existing interruptible water right holders and new permanent water rights on the Columbia River and Lower Snake River, if mitigation water is available.[33],[34] VRA, p. 1.

The 2008 VRA is being implemented in two phases. Phase 1 includes full implementation of the VRA except Section E, Terms and Conditions Regarding New Water Rights. Phase 1 addresses issuance of drought permits for interruptible water right holders, if mitigation water is available. CSRIA members were invited to enroll in the VRA.[35] If they chose to do so, they committed to having their water use recalibrated by Ecology in consultation with CSRIA. Ecology will make a tentative determination of the extent and validity of the water right. The difference between the tentative determination of the water right and the quantity of water needed for beneficial use of the right based on "best management practices" is defined as "saved water." VRA, Sections C.11 and C.12. The "[n]et water savings that can be place [sic] in trust will add to the group of water rights available to meet the Columbia River program objectives (benefit for in-stream and out-of-stream uses)." *VRA Interim Report,* pp. 6-7.

The phrase "net water savings that can be placed in trust" is significant. If the recalibration shows that the "saved water" has not been used for the last five years it may not be qualify for a transfer to trust, unless it comes within an exception to relinquishment. RCW 90.42.080(4), (10).

Phase 1 also includes an investigation of the feasibility of issuing new water rights mitigated by new water. This feasibility is to be determined by conducting three pilot water conservation projects. The IWM is one of the three pilot projects. Ecology will use water acquired by conservation and other actions and transferred to the Trust Water Rights Program "to mitigate for

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[32] A CSRIA VRA Participant" is "a CSRIA member who meets the following conditions:

a. The participant is a CSRIA member as of the required enrollment deadline (for the VRA); AND
b. The participant is identified in Appendix A as having agreed to have an application for a drought permit or a new water right processed under this VRA in lieu of the consultation process provided in WAC 173-563-020(4); AND
c. The participant has an "interruptible water right" on the "Columbia Mainstem" or the "lower Snake River Mainstem" and an application for a drought permit associated with that "interruptible water right" is on file with Ecology as of the required enrollment date; OR
d. The participant has a water right application on the "Columbia Mainstem" or the "lower Snake River Mainstem" on file with Ecology when Phase 2 is initiated as specified in Section E."

[33] The VRA defines a "Drought Permit" to mean "a standby/reserve permit authorizing the use of the Columbia River Mainstem or Lower Snake River Mainstem water in a drought year in the same quantities and manner as authorized by an Interruptible Water Right in a non-drought year, subject to available Mitigation Water." Mitigation water is to be acquired by conservation and other measures such as storage.

[34] There are 340 interruptible water rights on the Columbia River and 33 on the Snake River. Not all interruptible rights are owned by CSRIA members. *Voluntary Regional Agreements,* Interim Report to the Legislature, December 2008, Ecology Publication No. 11-041.

[35] CSRIA members who hold interruptible water rights were required to enroll by July 1, 2008. As of that date 8 entities and individuals holding 20 interruptible water rights had enrolled. A second enrollment period was allowed until December 31, 2008, but no additional CSRIA members signed on. *Pers. Comm. with Dan Haller, Ecology,* May 10. 2010.

new water right applications in the order they are/were received (WAC 173-152-030)."[36] According to Ecology's 2008 Report to the Legislature regarding the Columbia River Program, the Franklin County Conservation District IWM feasibility study is a pilot project under the CSRIA VRA "to explore a large amount of conservation potential." Thus, at this time the use of saved water from the IWM project outside of the CBP is governed by the 2008 VRA. The section authorizing VRAs is set to expire June 30, 2012. RCW 90.90.030(13).

The 2008 VRA relies upon the use of mitigation water to ensure that new uses from permits under the VRA would not "reduce or negatively impact streamflows in the Columbia or Snake Rivers during the critical periods established by the legislature." Ecology and CSRIA agreed to pursue new water for mitigation through measures including conservation. Once mitigation water is secured, Ecology is to prepare a VRA Implementation Plan.[37] A VRA Implementation Plan will describe the location and quantities of Mitigation Water available in Ecology's trust water program and which applicants will receive the water.

CSRIA members seeking new water rights are scheduled to file new water right applications once the parties to the VRA agree that Phase 2 will be initiated. New water rights issued under this program will be non-interruptible water rights. *VRA Interim Report,* p. 9. Phase 2 of the VRA will only take place if:

> (1) The types of conservation projects identified by CSRIA appear to be capable of providing water in sufficient quantities to support issuance of the new water rights envisioned in Section E of this VRA; and
>
> (2) An adequate foundation has been established in Phase 1 that will support a long-term working relationship between Ecology and CSRIA.

VRA, Section A, p. 2.

Although CSRIA members are the intended recipients of drought permits and new water created by conservation and other actions, the VRA acknowledges that Ecology may process applications only as allowed under state law and administrative rules under the basic rule of "first in time, first in right." RCW 90.90.030(7) expressly states that nothing in the section authorizing VRAs "may be interpreted or administered in a manner that precludes the processing of water right applications under chapter 90.03 or 90.44 RCW that are not included in a voluntary regional agreement." For those seeking a drought permit, their applications will either be priority processed under the Hillis Rule (Chapter 173-152 WAC) prior to a drought declaration or in a drought year subject to a declaration by the Governor.

Similarly for new water right applications, CSRIA may propose a priority processing under the Hillis Rule, if applicable. Ecology included the following caveat in the VRA: "Ecology will process applications for new water rights in as timely a manner as possible, in accordance with

[36] Footnote 1 in the 2008 VRA notes that Ecology has a backlog of several hundred existing applications for new water rights.

[37] The VRA defines "Mitigation Water" to include water managed in Ecology's trust water program "or otherwise developed by Ecology's efforts to secure water rights through conservation and other actions.

applicable law and the funding and staff provided by the Legislature."[38] Ecology has proposed changes to the Hillis Rule, in large part to address the work of the Columbia River Program. *See* discussion in Section X.C.3.a. below.

In sum, the two major advantages of this VRA are water right processing without case-by-case consultation and a fixed impairment standard. *Pers. Comm.,* Dan Haller, Ecology, May 10, 2010.

3. CSRIA Proposed Conservation O&M Project

CSRIA has proposed implementation of a Conservation Operation and Maintenance Project ("O&M Project"), which appears to be intended to remedy some of the shortfalls for CSRIA in the 2008 VRA. CSRIA proposes that the O&M Project would be an amendment to the 2008 VRA. *CSRIA's Proposed Changes to the VRA,* http://www/ecy/wa/gov/programs/wr/cwp/cr_vra2.html.

The O&M Project would allow water saved by conservation practices to be used immediately by CSRIA members to irrigate new ground rather than first being transferred into the Trust Water Rights Program to be used for mitigation for new rights. The O&M Project would be based upon the use of IWM, which reduces real-time withdrawals by about 17%. Half of the saved water (8.5%) would be used by the water right holder to irrigate new acres on their own land and half of the saved water (8.5%) would be left instream to "avoid any real-time flow reductions." *Columbia-Snake River Irrigators Association Policy Implementation Memorandum*, Ron Reiman, CSRIA President and Darryll Olsen, CSRIA Board Rep./Principal Consultant to Derek Sandison, Director, Columbia River Office and Interested Parties, October 14, 2009. Although the authors do not specify how, they state that "[t]he Project can be implemented under a non-substantive amendment to the existing CSRIA-Ecology Voluntary Regional Agreement (VRA)."

According to CSRIA the O&M Project would rely upon existing water rights and annually implemented conservation measures that would include "*current and extended applications* of irrigation scheduling and water-weather monitoring technologies." (Emphasis added.) This phrase indicates that CSRIA proposes that all saved water be considered as water available for new uses, not just that saved in the last five years and in the future.

The participants would be direct pumpers from the mainstem Columbia-Snake River system. Significantly, CSRIA foresees the Project potentially including portions of the CBP and the Odessa Sub-Area, subject to CBP irrigation district, USBR and irrigator approvals. The water right holders would fund their own IWM measures, which eliminates the requirement that a portion of the saved water be transferred to trust. The only potential state funding the authors foresee may be state-requested use of state funding for portions of the Odessa Sub-Area. CSRIA estimates that use of O&M conserved water for the full O&M Project would be in the 25,000-50,000 acre-foot range post-2011. The Association of Conservation Districts passed a resolution

[38] Under the VRA, CSRIA members also agree to have their water rights recalibrated and permanently transfer and give up any "saved water" not needed for beneficial use when best management practices are employed. CSRIA members who acquire a new water right under the VRA are required to pay a mitigation fee of $10/acre-foot for the total amount of water that will be used for 3 years.

supporting the CSRIA proposal.[39] *Columbia River Policy Advisory Group Meeting Notes* ("CRPAG"), November 12, 2009.

Ecology objects to the CSRIA proposal. According to Ecology, the proposal "would create unmitigated impacts to the Columbia River" and "would retroactively convert decades-old water conservation savings into new acres of irrigation[.]" *CSRIA's Proposed Changes to the VRA,* http://www/ecy/wa/gov/programs/wr/cwp/cr_vra2.html. Ecology cites to CSRIA figures that show the proposal would reduce water in the Columbia River by 44,000 acre-feet in July alone. "The VRA signed by CSRIA in July 2008 looks forward and funds three pilot projects to see if permits can be based on conserved water for new projects. The current proposal looks backward, relying on decades-old water savings."

Ecology offered a counter-proposal patterned after the Yakima Basin Enhancement Program. Ecology supports private funding of IWM but proposes that half of the reduction in water use (8.5%) be "available to the same user for new acres through new 5-year term permits, provided an equal quantity of water had been developed by OCR in an upstream tributary." *Draft Office of Columbia River (OCR) Conservation Program.* The program would be open to permit holders and those with certificates and the amount of water issued in new permits would be "tied to investments in the tributaries" that fund projects to increase instream flow.

Under Ecology's proposal, enrollment in the OCR conservation program would be a relinquishment exception. When asked by CRPAG whether Ecology's proposal includes water older than five years (i.e., saved water that has not been used for over five years), Ecology answered that the relinquishment issue is playing out in court. According to Ecology, OCR's counter-proposal was not accepted by CSRIA.

In a February 16, 2010 letter to Governor Gregoire, three environmental groups, American Rivers, Trout Unlimited, and Washington Environmental Council, voiced their opposition to CSRIA's O&M proposal.[40] The principal problem the groups identify in CSRIA's proposal is that "it would allow water that has not been used for years – in some cases since the 1980s – to be pumped from the Columbia and Snake and applied to new irrigated acreage." The result, they maintain, would be to reduce flows during the irrigation season when target flows for fish are often not met. They also assert that "water spreading" was not one of the goals of the Columbia River program and chapter 90.90 RCW. The groups also take limited exception to Ecology's proposal because it may reduce return flows to the Columbia and Snake at certain times of the year, but they cite to the mitigation through state-funded projects to enhance flows in the tributaries that tempers that impact.

The proposed O&M Project raises three legal issues that have been debated between attorneys advising CSRIA and the Attorney General's Office. First, CSRIA proposes the Project will be

[39] Mark Nielson of the Franklin-Benton Conservation District reported the adoption of the resolution to the Columbia Policy Advisory Group. Mr. Nielsen believes conservation could free up to 300,000 acre-feet of water for the Odessa subbasin.

[40] By way of full disclosure Cascadia Law Group represents Trout Unlimited. The authors of this paper were not consulted regarding the letter to Governor Gregoire and were not aware of the letter until we viewed it on Ecology's website this July.

implemented through seasonal water right changes/transfers while Ecology's proposal calls for 5-year term permits. This difference is significant because seasonal transfers are reviewed under RCW 90.03.390 while longer-term changes and transfers require analysis under RCW 90.03.380. The issue is whether the requirements under RCW 90.03.380 apply to seasonal transfers under RCW 90.03.390.

CSRIA's position is that, with the exception that seasonal transfers must be accomplished "without detriment to existing rights," the other requirements for water right changes and transfers under RCW 90.03.380 do not apply. Their legal counsel advises that if RCW 90.03.390 was not intended to offer a stream-lined process for seasonal and temporary changes it would be unnecessary because RCW 90.30.380 would apply. *Memorandum from James L. Buchal to Dr. Darryll Olsen, CSRIA,* July 7, 2009; *Memorandum from James L. Buchal to Dr. Darryll Olsen, CSRIA,* January 26, 2010; *Memorandum from Joel C. Merkel to Dr. Darryll Olsen, CSRIA,* May 13, 2010. They also cite to Ecology's WAC 508-12-210 that requires only that such seasonal transfers shall be in writing and signed by the Ecology director or an authorized representative.

Ecology's position is that even temporary water right transfers under RCW 90.03.390 must meet the criteria of RCW 90.03.380. The Assistant Attorney General advising Ecology maintains that because water rights are property rights and protected by the Due Process clause of the Constitution, seasonal transfers require public notice. *Memorandum from Alan M. Reichman, AAG to Derek Sandison, Director, Office of the Columbia River,* January 19, 2010. Since there is no public notice requirement in RCW 90.03.390, the requirement from RCW 90.03.380 must be applied. Further, the first sentence of RCW 90.03.390, which states that "RCW 90.03.380 shall not be construed to prevent" seasonal changes in water rights "when such changes can be made without detriment to existing water rights" means that the criteria stated in RCW 90.03.380 must be met to approve a seasonal transfer.

Significantly, Ecology's legal counsel acknowledges that CSRIA's legal position is based on a "plausible argument", but believes Ecology's interpretation would be supported by a court. We are of the opinion that seasonal changes can be authorized solely under the minimum standards of RCW 90.03.390, and would not violate the due process requirements of the Constitution.

The second issue is, if the ACQ analysis under RCW 90.03.380 applies to seasonal transfers, would an exception to relinquishment modify the "most recent five-year period of continuous beneficial use of the water right" for purposes of the analysis. This question is directly answered by a section of the statute adopted in 2009. RCW 90.03.615 provides that in calculating annual consumptive quantity "if, within the most recent five-year period, … the nonuse of water has been excused from relinquishment under RCW 90.14.140," Ecology is to look to the most recent five-year period of continuous use prior to the date nonuse was excused and remained in effect.

The third issue is whether in fact water saved (not used) when annual IWM measures are employed is subject to relinquishment. The portion of the saved water used to irrigate new acres would be beneficially used and not subject to relinquishment. Under the O&M Project the other half of the saved water left instream would not be transferred to the Trust Water Rights Program and thus would be subject to relinquishment if not covered by a statutory exemption.

CSRIA maintains that because the reduction in water use under IWM is due to "varying weather conditions, precipitation, and temperature" the nonuse is exempt from relinquishment in RCW 90.14.140(g). This exemption is discussed in Section IV.A.2. The statute provides that the nonuse of water is exempt from relinquishment due to:

> 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[.]

CSRIA views conservation O&M measures as being "based on varying weather conditions, temperature and precipitation in the year in which the measures are undertaken. Such measures are clearly within the meaning of the specific provisions of subparagraph (g)." *Merkel Memorandum.* CSRIA also states that "annual Conservation O&M savings [were not] contemplated as being 'abandoned' or subject to relinquishment at the time of the initial passage of the current relinquishment statutes." *CSRIA Policy Implementation Memorandum.*

Ecology disagrees and characterizes the nonuse as being from conservation measures not varying weather conditions. The exception was added to the relinquishment statute in 2001 in response to irrigators in the Yakima who believed that the partial relinquishment of their rights because of extended cool periods was unfair. Ecology points to an exemption from relinquishment for conservation but that provision only applies under the Yakima River Basin Water Enhancement Project. RCW 90.14.140(1)(i). Ecology also maintains that even if Subsection (g) does apply to conservation practices, it applies prospectively only[41]. *Reichman Memorandum.* We do not necessarily agree with the Attorney General's Office and provide a different analysis regarding this issue. *See* Section IV.A.

Resolution of this issue is key to determining whether water saved from past conservation practices has been protected from relinquishment and can now be used to irrigate new acres. It is also key to determining whether the portion of the saved water under O&M conservation that will be left instream must be transferred to the Trust Water Rights Program in order to be protected from relinquishment.

C. IWM Projects Not Covered by a VRA

The three scenarios have different levels of review by Ecology. Under all scenarios Ecology must find there would be no adverse impact to existing water rights. As discussed above, under the VRA the standard of "no impact" is satisfied if there would be no negative impact on flows in the Columbia River in July or August and in the Snake River from April through August. There will be no case-specific consultation required to determine whether there would be any "possible impacts on fish and existing water rights." WAC 173-563-020(4).

[41] Ecology states that the enactment of the exemption from relinquishment due to varying weather conditions is prospective. However, the CSRIA's position that it was "curative" legislation and therefore can be retroactively applied.

In contrast, under Scenario (2) if the saved water would be transferred to new lands within the irrigation district, there is no requirement that Ecology approve the change under RCW 90.03.380 or .390. No ACQ analysis would be required. *See* discussion supra pp. 16-17.

Under Scenario (3), Ecology would conduct a review of the change application to determine whether the change would impair existing water rights. The impairment analysis would be done in coordination with "local, state and federal agencies and Indian tribes" under the consultation requirement in WAC 173-563-020(4). In our opinion the review of the change application should be limited to the review of a seasonal or temporary change under RCW 90.03.390. *See* discussion supra pp. 12-13. It is Ecology's position that even seasonal or temporary changes require a full review under RCW 90.03.380 to determine the extent and validity of the right (whether it has been continuously beneficially used) and whether there would be any adverse impact on existing water rights. In the case where additional acres would be irrigated under the water right Ecology would also conduct an ACQ analysis. As we discuss in Section IV, we disagree with the position that the ACQ analysis is required under RCW 90.03.390.

Ecology recognizes that with conservation projects, applicants for water could propose withdrawal of water in one part of the basin based on net water savings from conservation in another part of the basin. Whether there is a negative impact will be based upon the relative location of the net water savings and the point of withdrawal under the new water right. FEIS 2007, p. 6-16. To prevent a negative impact Ecology will authorize new out-of-stream uses within the first mainstem pool that benefits from a trust water right and any downstream pools. FEIS, p. 6-20.[42] It should be anticipated that Ecology will apply the same analysis to the use of saved water not transferred to trust.

We now turn to your specific Questions 1 and 4, which are relevant to IWM on lands outside the CBP.

1. Whether the Net Water Savings Can Be Enrolled in the Trust Water Rights Program for Lands Outside the Columbia Basin Project as Required in Chapter 90.90 RCW

For net water savings created on lands covered by the VRA the short answer is yes. And to the extent funds in the Columbia River Basin Water Supply Development Account are used to acquire the saved water, a portion must be transferred to trust.

As discussed above, the term "net water savings" is defined in the Trust Water statute, Chapter 90.42 RCW as follows:

> "Net water savings" means the amount of water that is determined to be conserved and usable within a specified stream reach or reaches for other purposes without impairment or detriment to water rights existing at the time that

[42] Ecology defines "pool" as a 'reach of the Columbia or Snake River mainstem inundated and under the downstream hydraulic control of one of the US Corps of Engineers, Bureau of Reclamation, or mid-Columbia Public Utility District (PUD) dams." FEIS, p. 6-2.

> a water conservation project is undertaken, reducing the ability to deliver water, or reducing the supply of water that otherwise would have been available to other existing water uses.

RCW 90.42.020(3).[43]

Unlike saved water in the CBP transferred to Odessa, a portion of the net saved water from IWM funded by the state on non-CBP farms must be placed into the Trust Water Rights Program. The quantity required to be placed into trust is proportional to the amount of state funding provided for the conservation project.

> Net water savings achieved through conservation measures funded by the Columbia River Basin Water Supply Development Account shall be placed into trust in proportion to state funding.

RCW 90.90.010(4).

The statute does not specify how the water in the TWRP is to be used but Ecology intends to use net water savings from conservation for both instream and out-of-stream uses. FEIS, pp. 6-5 and 6-6. How the water would be used is also subject to the terms of the 2008 VRA.

2. Whether Statutory or Legal Barriers Exist That Would "Hinder" Program Implementation

There are two possible barriers to implementation of the IWM program outside of the CBP: (1) use of saved water, which is non-consumptive, as consumptive water, and (2) Ecology's processing of water right applications.

3. Use of Saved Water as Consumptive Water

Water saved through IWM was previously return flow and is considered to be non-consumptive water. The new use of the water would be a consumptive use. This fact requires additional analysis by Ecology to determine whether the new use would adversely affect any existing water rights. Ecology will consider the location of the saved water, location of the new use, timing of return flow to the river and critical flow periods for the Columbia River. Again, this is not an issue within the CBP because the USBR has the authority to capture and reuse Project return flows within the CBP.

As discussed above**,** VRAs that involve water rights issued from the Columbia River mainstem must ensure "there is no negative impact on Columbia river mainstem instream flows in the months of July and August as a result of the new appropriations issued under the agreement." RCW 90.90.030(2)(a). Those from the Lower Snake River must not negatively impact flows in

[43] Ecology defines "conservation" as used in Chapter 90.90 RCW as "a reduction in the volume and/or rate of water diversion required to accomplish a beneficial use." *Final Programmatic Environmental Impact Statement for the Columbia River Water Management Program Under Chapter 90.90 RCW,* Volume I, February 15, 2007, Washington Sate department of Ecology Publication # 07-11-009, p. 6-1.

that river from April through August. RCW 90.90.030(b). This requirement is a primary factor in determining when non-consumptive (saved) water can be used consumptively.

According to Ecology under most circumstances only the portion of the saved water that has been consumptively used will meet the following requirement. Conserved water must be usable within a specified stream reach or reaches for other purposes without:

> (1) impairment or detriment to water rights existing at the time that a water conservation project is undertaken,
> (2) reducing the ability to deliver water, or
> (3) reducing the supply of water that otherwise would have been available to other existing water uses.

Final Programmatic Environmental Impact Statement for the Columbia River Water Management Program Under Chapter 90.90 RCW, Volume I, February 15, 2007, Washington Sate Department of Ecology Publication # 07-11-009, p. 6-4.

However, under Chapter 90.90 RCW non-consumptive water may be used consumptively if it does not negatively impact river flows during critical periods. Whether there is an impact depends upon the timing of the former return flow that is now saved water. If the return flow did not reach the river until after critical flow months for fish, then it did not contribute to stream flow during the critical time period. In such a case the water should be able to be used consumptively without any impact on the river flows during critical months.

Not all parts of the river systems behave the same and it will likely require site-specific studies in order for Ecology to determine how much of the saved water can be consumptively used. For example, if studies show that 50% of the return flow returned to the river during critical flow times while 50% did not, then 50% of the saved water could be transferred for consumptive use, barring any other barriers to the transfer. *Pers. Comm. D. Sandison.*

The use of saved water consumptively is not impossible but it will require technical studies to determine whether there will be an impact on river flows during the critical time periods. As discussed in this memorandum, use of saved water can be accomplished by direct change of the saved water to the new use or as mitigation for new water rights. Ecology is currently using "water banking" or "water exchange" agreements under the Trust Water Right Program to use existing water rights transferred to trust as mitigation for new water applications. See for example, Kittitas Rule developed in Chapter 173-539A WAC.

a. Processing of water right change applications.

One immediate barrier to program implementation is the time it takes to obtain Ecology's approval to transfer water. Ecology acknowledged this problem in the 2008 VRA.[44] However, Ecology has proposed amendments to the Hillis Rule, discussed below, which are intended to make the processing of water right applications through the Office of the Columbia River more efficient.

[44] Additional cuts to Ecology's Water Resources budget have exacerbated this problem.

There are two levels of management for processing applications for new water rights and applications for change of water rights: (1) determining which applications among all the applications received by Ecology must be processed first; and (2) determining which applications seeking water from the "same source" must be processed first.

The general rule is that applications for new water rights may be separated for processing by water source. WAC 173-152-030. This allows Ecology to make decisions from multiple water sources within a region at the same time. In the FEIS, Ecology determined that it would use two processes for approaches to processing new water right applications. The approach that applies to IWM water from a mainstem diversion is as follows:

> If the source of mitigation water is a mainstem conservation . . . project, Ecology will group all applicants in the Columbia River one-mile corridor together. Ecology will process applications from the mainstem independent of WRIA boundaries when the source of water from a water supply project [e.g., saved water from conservation] is from the mainstem Columbia[.]

FEIS, p. 2-33.

The second level of managing applications is determining which applications for water from the same water source are to be processed first. Again we start from the same general rule: the application with the earliest filing date is processed first. However, Ecology is allowed to give priority to the processing of certain applications.

The legislature authorized "two-track" processing under RCW 90.03.380(5)(b). Applications relating to existing surface or ground water rights, i.e., changes and transfers, may be processed and decisions on them rendered independently of processing and rendering decisions on pending applications for new water rights within the same source of supply without regard to the date of filing of the pending applications for new water rights.

As the result of a lawsuit filed against Ecology over the agency's processing of applications, Ecology adopted an administrative rule (the "Hillis Rule", Chapter 173-152 WAC) to allow for priority processing of certain applications for new water rights and applications for change. In Ecology's opinion the Hillis Rule hinders the agency's Columbia River Program in its efforts to achieve the intent of Chapter 90.90 RCW.[45] Ecology is in the process of amending this rule. The proposed amendments include changes that directly affect the Office of the Columbia River and its work.

Ecology has proposed amendments to the Hillis Rule to create a section in the rule specifically for managing the workload of the Columbia River Program under Chapter RCW 90.90.[46],[47]

[45] See, http://www.ecy.wa.gov/programs/wr/rules/hillis.html.

[46] In late 2009 Ecology circulated proposed amendments to the rule and invited public comment. Recently Ecology released revised proposed amendments and has scheduled five public hearings around the state during the month of August. Ecology will be accepting oral and written comments from the public. The revised rule will be adopted no

There are several sections that would directly apply to the transfer of saved water under the IWM project.

The new section that applies to the Office of the Columbia River is WAC 173-152-035. Subsection (2) lists the types of applications the department processes under chapter 90.90 RCW. The following types of applications may include use of saved water from IWM:

> (c) New applications associated with a voluntary regional agreement proposing to divert or withdraw water from the Columbia River mainstem or Lower Snake River mainstem.
>
> (d) New applications proposing to divert surface water within the Columbia River basin for storage or net water savings funded in whole or in part by the Columbia River account.
>
> (e) New applications proposing to withdraw ground water within the Columbia River basin for storage or net water savings funded in whole or in part

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earlier than November 19, 2010. *Ecology proposes rule change expediting Columbia Basin water storage,* Department of Ecology News Release, July 8, 2010, http://www.ecy.wa.gov/news/2010news/2010-159.html.

[47] The proposed amendments include a number of new definitions many of which are specific to work of the OCR. WAC 173-152-020 Definitions. For the purposes of this chapter the following definitions apply:

(1) "Acquisition" means, for the purposes of WAC 173-152-035 [NEW SECTION], buying or leasing water rights using the Columbia River account,

(2) "Application" means an application for either a new appropriation or a change or transfer to an existing water right or both made under chapters 90.03 and 90.44 RCW.

(3) "Application to change or transfer" means applications made under RCW 90.03.380 or 90.44.100.

(4) "Columbia river account" means, for the purposes of WAC 173-152-035 [NEW SECTION] a fund that is created, funded, and expended as provided in RCW 90.90.010.

….

(9) "Mitigation" means a project with a consumptive water use element compensated by allowing no significant impact on a water source or elimination of impairment.

(10) "New application" means any application for a permit made under chapters 90.03 and 90.44 RCW.

….

(13) "Same water source" or "source of water" means an aquifer or surface water body, including a stream, stream system, lake, or reservoir and any spring water or underground water that is part of or tributary to the surface water body or aquifer, that the department determines to be an independent water body for the purposes of water right administration.

(14) "Sources of supply developed under chapter 90.90 RCW" means new storage, modification of existing storage, conservation, pump exchanges, acquisition or any other projects designed to provide access to new water supplies.

(15) "Transfer" means a transfer, change, amendment, or other alteration of a part or all of a water right authorized under chapters 90.03, 90.44, 90.42, and 90.38 RCW.

(16) "Voluntary regional agreement" or "VRA" means an agreement entered into by the department with another entity for the purposes of providing new water for out-of-stream use, streamlining the application process, and protecting instream flow.

….

(18)"Water source" means an aquifer or surface water body, including a stream, stream system, lake, or reservoir and any spring water or underground water that is part of or tributary to the surface water body or aquifer, that the department determines to be an independent water body for the purposes of water right administration

The entire text of the proposed rule is included in Appendix F to this report.

by the Columbia River account where the proposed well(s) use(s) can be mitigated using the same source as that of the withdrawal."

(f) Applications for water rights and trust water within the Columbia River basin associated with a project funded by the Columbia River account.

Subsection (3) lists criteria for selecting a water source for processing applications from water supplies developed in whole or in part by the department. The first of the listed criteria for selecting a water source are priorities outlined in RCW 90.90.020(3), which include "alternatives to groundwater for agricultural users in the Odessa subarea aquifer, sources of water for pending water right applications, and a new uninterruptible supply of water for holders of interruptible water rights on the Columbia River mainstem[.]" Saved water created through IWM to be used in the Odessa Subarea or to be used for new water rights or to make interruptible water rights would qualify as a water source for priority processing under the new rule.

Subsection (6) addresses the situation where numerous applications for water from the same water source are to be investigated and would allow the department to make decisions on one or more water right applications from the same water source in the order in which the applications are received, whether or not the applications are processed collectively.

Subsections (a) – (f) of Section (6) create separate "buckets" of water for processing applications. Rather than grouping all applications on the Columbia River into one water source, the new proposal divides the water sources into six separate reaches of the Columbia River, the Snake River and tributaries.).[48] Ecology may process applications for water within the buckets separately from applications for water from another bucket. One reach is the Columbia or Snake River mainstem under a voluntary regional agreement. WAC 173-152-035(6)(c). Another is a water source (mitigation water) in the Columbia River basin created through conservation funded by the Columbia River Account. WAC 173-152-035(6)(f). Both of these sources could include saved water created through IWM.

Within a single bucket, the applications are processed by category. For example, for the bucket of water on the Columbia River mainstem or Lower Snake River mainstem under a voluntary regional agreement, the department will process applications within three groups in the order in which the applications are received, whether or not the applications are processed collectively:

(i) All new surface water applications within the same pool and downstream of the developed source of supply.

(ii) All new ground water applications where the proposed well(s) can be mitigated by the developed source of supply.

(iii) Applications for change or transfer or trust water applications associated with development of the source if funded by the Columbia river account.

A single application for a water right may be eligible for consideration under more than one bucket. The applicant will have the option of choosing from which source Ecology will process their application. *Pers. Comm.,* Dan Haller, Ecology, May 10, 2010.

[48] Previously all applications for water from the Columbia River were considered to be a single pool of applications.

The proposed rule would also amend WAC 173-152-050, which establishes criteria for priority processing of competing applications. The prioritization in this section applies to applications for water from a single bucket of water. Based on priority an application may move to the head of the line for priority processing within that bucket.

The original proposal for rule amendment allowed Ecology, at its discretion, to approve an application for priority processing, "ahead of all competing applications," if it addressed at least one listed conditions ranked in descending order. Following public comment, the current version allows Ecology to prioritize applications but does not rank the conditions for prioritization. Rather it provides that Ecology, at its discretion, may prioritize and process an application "ahead of competing applications" if the application would resolve or alleviate a public health emergency or a safety emergency.

After applications for water needed to protect public health and safety, the current proposed rule provides that Ecology *within each regional office* may prioritize an application ahead of all competing applications if it falls within (a) through (g) below. The types of applications eligible for priority processing are no longer listed in order of priority. The current proposed rule reordered and consolidated the list as follows at subsection (3). (The applications that may pertain to IWM saved water are shown in italics.) The application:

> (a) Was filed by claimants participating in adjudication, and the court requires a quick decision.
>
> *(b) Is for a proposed water use that is nonconsumptive and if approved would substantially enhance or protect the quality of the natural environment, including donations for instream flows or a change or transfer of water into the state trust water program for instream flows in accordance with chapter 90.38 or 90.42 RCW.*
>
> (c) Is for a change or transfer and, if approved, would result in providing public water supplies including, but not limited to, consolidation of two or more public water systems, to meet general public needs for the regional areas.
>
> *(d) Applications for seasonal water right change authorizations that are effective for a term of one year or less.*
>
> (e) Proposes temporary water use for a public project such as road building.
>
> (f) Proposes a water budget neutral project as defined in WAC 173-152-020(18).[49]
>
> *(g) Is for a new water right that relies on mitigation from a water bank or in the trust water right program in accordance with chapter 90.38 or 90.42 RCW, or is to transfer water rights from a water bank or the trust water right program to a new use.*

A new subsection (4) provides prioritization for new storage rights: "The department may prioritize ahead of competing applications, except as prioritized in subsections (1) and (2) [sic] of this section, a new application for diversionary rights into reservoirs that, if approved, would not conflict with adopted state instream flow rules, federal flow targets, or federal biological opinions, and is funded or supported pursuant to chapter 90.90 RCW."

[49] The correct reference is to WAC 173-152-020(17): a " 'water budget neutral project' means a project where diversions or withdrawals of waters of the state are proposed in exchange for at least an equivalent amount of water from other water rights, donation of water rights into trust, relinquishment of other water rights, or other mitigation that result in no diminishment of the source."

In sum, the proposed changes to the rule would potentially allow water right applications involving saved water to be processed sooner through the OCR because the Columbia River applications are divided into separate buckets; the criteria for selecting a water source for processing applications includes alternatives to groundwater use in the Odessa subarea aquifer, sources of water for pending water right applications, and a new uninterruptible supply of water for holders of interruptible water rights on the Columbia River mainstem; and applications for the use of IWM saved water come within three categories of applications eligible for priority processing.

The rule will not be adopted until after the public hearings have been held. Adoption is anticipated some time after November 15, 2010.

XI. CONCLUSION

Use of saved water created by IWM on lands within the CBP is primarily subject to federal Reclamation Law and contracts between USBR and the irrigation districts. State water law, including the Columbia River Management Act, and irrigation district laws are also important factors to be considered. A process for transferring saved water from lands within the CBP to other lands within the CBP was established in the 2004 transfer of conserved water from ECBID to groundwater users in the Odessa. The process was a cooperative effort between USBR, Ecology, ECBID and farmers in the Odessa within ECBID's boundaries. Given the emphasis on finding new water supplies for groundwater users in Odessa, continued support from Ecology and USBR can be expected.

Use of saved water created by IWM on lands outside the CBP is primarily subject to the Columbia River Management Act and other state water laws. IWM is a pilot project under the 2008 VRA between Ecology and the CSRIA, which is authorized under Chapter 90.90 RCW. The VRA calls for water saved through conservation, including IWM, to be transferred to the Trust Water Rights Program for use as mitigation water for new water rights for CSRIA members. Under state law and regulations CSRIA members must still take their place in line. Consultation by Ecology with state and local agencies and Indian tribes was conducted for the VRA as a whole. Applications for water rights under the VRA are not subject to case-by-case consultation. The standard for impairment has also been narrowed to consideration of the impact on river flows during critical flow months. These factors should decrease the time required for Ecology to act on a change application.

For IWM outside the CBP and not under the VRA, saved water would be transferred directly to other land or used to expand irrigated acres on the farm where IWM is used. Ecology would conduct its standard review under RCW 90.03.380, including case-by-case consultation and an impairment analysis that considers all existing water rights. If the saved water is to be used to increase irrigated acres, Ecology would also conduct an ACQ analysis. Applications could be filed with a county Conservancy Board to reduce processing time.

A recurring concern expressed by Ecology and USBR and discussed in this Report is that water savings under IWM will be temporary and uncertain. Past saved water projects have involved

fixed permanent improvements to infrastructure that increase efficiency and result in less water diverted. (*See* the discussion of the East Columbia Basin Irrigation District saved water pilot project, *supra*.) This has allowed for better estimates of the quantity of saved water and the knowledge the saved water will be permanently available, or at least for a sufficient length of time to justify a contract to deliver the water. Under IWM the conservation measures are not structural but rather are behavioral and are therefore considered temporary not permanent. These characteristics of IWM can create problems. It becomes difficult to create a program that is economical and financially feasible for a farmer who would receive saved water and would need to invest in pumps and pipes to make use of the water. It also potentially creates problems in accounting for how much water is saved and transferred to a new user. Ecology and USBR are concerned that if IWM measures are agreed to in a temporary contract with a farmer there is no assurance the saved water will remain available for the period of time necessary for the return on the required investments.

While there are statutory and contractual hurdles and institutional hindrances to implementing IWM, we conclude that the temporary and uncertain nature of saved water under IWM presents the most significant obstacle to the IWM program.