Aspect consulting
IN-DEPTH PERSPECTIVE

FRAMEWORK FOR WATER MANAGEMENT IN WRIA 30

Klickitat River Watershed

VERSION 1.0

Prepared for: WRIA 30 Water Resource Planning & Advisory Committee

Project No. 070024-001-02 • June 29, 2007

Project funded through Ecology Grant No. G0700207

Contents

Introduction

Purpose and Scope

The availability of adequate water supply to meet existing and future water demand is a high priority issue identified in the Water Resource Inventory Area 30 (WRIA 30) Watershed Management Plan (Watershed Plan). With the constraints on issuance of new water rights in the basin, emphasis needs to focus on providing mechanisms that facilitate the efficient use of existing water rights to meet both existing and future in-stream and out-of-stream demands. The Watershed Plan outlines a range of potential approaches to assist toward meeting the Watershed Plan's stated objective to "supply water in sufficient quantity to satisfy the stream flow needs of fish and to ensure that adequate water supplies are available for sustained growth of agriculture, industry, and residential populations". The Watershed Plan promotes implementing measures at the watershed level that protect and facilitate managing the inventory of existing water rights consistent with watershed goals.

The Washington State Department of Ecology (Ecology) provided funds to WRIA 30 under grant G0700207 to evaluate existing water banking and other water management strategies, and develop a conceptual framework for implementation at the watershed level. The scope of work under the grant included the following elements:

- Research and summarize pertinent background information on existing water banking programs (i.e., what they are and how they function) for adaptation to specific needs and circumstances within WRIA 30;
- Develop a range of appropriate water banking concepts, including identifying jurisdictional issues, regulatory process, and transfer mechanism appropriate to WRIA 30;
- Identify and evaluate limitations/constraints of implementing a water bank within the existing regulatory framework; discuss the legislative and/or rule-making process to overcome these constraints; and
- Provide recommendations for implementation of a water management program consistent with WRIA 30 goals.

This report is intended to serve as a scoping document to be further developed during the implementation phase (Phase IV) of WRIA 30 planning process. Although tailored toward implementation in WRIA 30, it is anticipated that the pilot project can provide a framework for adaptation to other watersheds in the state interested in implementing a basin-level water management program. This effort was completed in coordination with the WRIA 30 Water Resources Planning and Advisory Committee (PAC), which includes representation from Ecology, and benefited from input from a wide range of entities involved in water resources throughout the State.

Background on WRIA 30

The Klickitat River Watershed Management Plan for WRIA 30 (Watershed Professionals Network et. al., May 3, 2005), was adopted in January 2006. WRIA 30 is located in south-central Washington, and consists of the Klickitat River basin and the area within Washington State between the mouth of the Klickitat River and the John Day Dam. The southern half of the WRIA lies within Klickitat County and the northern half is in Yakima County.

A variety of competing needs must be met by surface water and groundwater resources in WRIA 30. With the exception of the City of Goldendale and Community of Dallesport (inclusive of the Port of Klickitat), the watershed is rural with an economy largely based on agriculture, forestry, tourism and related service industry. Agricultural irrigation represents the majority (approximately 92 percent) of the total water use in WRIA 30. Residential (including exempt wells) and non-residential uses comprise roughly 7 and 1 percent of the total water use, respectively.

In WRIA 30 there is a total of 59,585 acre-feet/year of water (combined surface water and groundwater) allocated by 881 water right certificates and permits, based on information contained in Ecology's Water Rights Tracking System (WRTS). Of this quantity, approximately 77 percent is allocated to irrigation and the balance to other uses. In addition, there is also 91,062 acre-feet/year associated with 1,178 claims which are almost entirely for irrigation. The WRTS also identifies 92 pending applications for new appropriations (surface water and groundwater) requesting an additional 1,170 acre-feet/year. A total of 64 percent of the pending applications are for irrigation.

There is very limited water storage (i.e., reservoirs and associated conveyance systems) within the Klickitat River basin portion of WRIA 30, other than the limited capacity associated with municipal supplies and individual farm operations. There is also limited irrigation water conveyance infrastructure, other than in Upper Klickitat subbasin associated with diversion off Hellroaring Creek which supplies the Glenwood area. Outside of the Glenwood area, groundwater supplied by on-farm wells is the principal source of irrigation water. Currently, very little of the irrigation water supply in WRIA 30 is from Columbia River surface water diversions.

The extensive use of groundwater resources for existing water supplies within WRIA 30 is an important consideration and notable constraint when evaluating mechanisms for water management such as water banking. The vast majority of water management systems in use, including for example the water bank concept utilized in the Yakima River basin (e.g., by the U.S. Bureau of Reclamation and Irrigation Districts), are oriented toward surface water supplies managed through storage and conveyance systems. Consequently, a water management program in WRIA 30 needs to be adaptable to make use of existing groundwater supplies with the existing limitations in physical conveyance that currently constrains the transfer of water from one place to another. For WRIA 30, a successful water management program must facilitate the use and protection of the watershed's groundwater and surface water resources.

Document Organization

This report presents the goals for developing a water management program in the WRIA 30 watershed based on the Watershed Plan. A brief summary of water management programs (e.g., exchanges, water banking) both in the State of Washington and elsewhere is provided for background information with reference to relevant documents that provide more detailed information. Options for a proposed WRIA 30 Water Management Program, including a framework for establishing a water exchange, are outlined based on consideration of specific watershed conditions and constraints. Existing constraints for implementation and recommendations to address these constraints, including regulatory and statutory changes, are provided.

Water Management Program Objectives

Through the watershed planning process, there is a growing awareness and keen interest in developing a water management program, and specifically the use of mechanisms collectively referred to as "water banking", at the watershed level to address water supply issues. There is a variety of water banking strategies being utilized in the other western states, but implementation of similar programs is relatively new in the State of Washington outside of the Yakima River basin. The success of many of these strategies and adaptability to other watersheds are a function of watershed specific hydrologic conditions (e.g., availability and reliance on surface water versus groundwater supplies) and existing water management infrastructure (e.g., reservoirs and conveyance systems). Consequently, the specific needs and constraints of the watershed define which strategies will work best in formulating a water management program.

The objectives of existing water management reflect the needs and constraints of the water users and community(ies) it serves. In addition to facilitating the efficient transfer (re-allocation) of existing water rights, water management programs have also strived to achieve other objectives, including creating a reliable water supply during drought years, promoting water conservation, acting as a market mechanism, resolving inequities between groundwater and surface water users, and providing mitigation of in-stream flow impacts to support new water right appropriations. Clarifying the watershed's goals for water management is a critical first step in developing appropriate strategies.

The structure and function of a water management program need to be consistent with watershed plan implementation. To be successful, a water management program needs to establish trust between the administrator and the user of the program and operate in way that is acceptable to and will be utilized by the local community. This is often an overlooked shortfall in implementation. This was one of the key findings of a study to evaluate Ecology's Water Right Acquisition Program, undertaken by the Policy Consensus Center titled *"Of Water and Trust: A Review of the Washington Water Acquisition Program"* (Policy Consensus Center, 2004). The study found that with respect to Ecology's water right acquisition program, the program's ability to achieve a high level of utility and acceptance amongst stakeholders rested on two factors: 1) the need to develop a detailed understanding of local conditions, and 2) the degree of trust (or lack thereof) between Ecology or other regulatory entities and water users.

The benefit of implementing water management programs at the watershed level, tailored to local conditions, is also supported by the findings contained in the report *"Analysis of Water Banks in Western States"* (Ecology Publication 04-11-011, July 2004). This study found that regional water banks that are run at a single or multiple watershed level are more active than statewide banks. Many of these same reasons motivate WRIA 30's interest in developing a water management program within the watershed.

WRIA 30 Goals for a Water Management Program

There are regulatory processes in the State of Washington for changing existing water rights. Within WRIA 30, it generally entails working through the Klickitat County Water Conservancy Board or directly with Ecology to complete a water right change. Currently, however, there is no single entity (e.g., "water authority") within the watershed that is focused on providing a full range of water management services. The current regulatory process is generally time consuming and costly, and the outcome is often uncertain. There is also generally limited coordination between the regulatory approval process, administered at the State level, and the planning process at the watershed level. The existing water right change process is further constrained by a lack of educational resources available to existing water right holders in a non-regulatory environment. Water right holders are hesitant to apply to Ecology for a change in their water right without an initial assessment of the extent and validity of their water rights outside of the regulatory process.

The WRIA 30 Watershed Plan recognizes the need to address the limitations of the existing regulatory processes to improve water management. With that aim, the following goals were identified to facilitate the use and protection of existing water rights, and improve water management to benefit both in-stream and out-of-stream uses:

- Establish a centralized information resource center on water management to facilitate public education and outreach, coordinate entities involved in water resource planning, and ensure consistency with implementation of the watershed plan;
- Establish a water market to facilitate the re-allocation of existing water rights to meet changes in use and demand;
- Streamline the water right change process to improve the ease and flexibility of moving water around from one place or use to another within the watershed;
- Promote continued beneficial use of existing water rights within the watershed to support current and future uses, and provide a mechanism for protecting water rights for future uses (prevent relinquishment);
- Develop incentives to conserve water by providing a mechanism to recognize and make available for beneficial use surplus water resulting from irrigation system improvements;
- Establish an institutional program administered by an entity within the watershed, and operated as a brokerage for water rights that are available for transfer and change to meet new demands in the WRIA;
- Create a water bank for the watershed to preserve existing water rights for future use and/or to utilize as mitigation to offset new water rights where needed; and

- Create a program that does not benefit one area or economic sector of the WRIA to the determent of another, as would happen if water rights are transferred downstream depleting the inventory of water rights in upstream communities or from one economic sector to another.

Banking and Other Water Management Programs

This section provides an overview of existing water management concepts, broadly defined under "water banking" in use in the western U.S., and examples of specific water management programs in the State of Washington. The existing programs vary in scope and level of complexity ranging from a limited capacity role of providing and disseminating information (much like a "clearinghouse"), to providing water right transaction support services (similar to that of a "broker"), to actively managing the movement of water or water entitlement between users (i.e., functioning as a "water bank"). These water management concepts reflect the hydrologic, infrastructure, and geographic conditions and constraints of the areas they serve.

The following provides a brief overview of existing water management programs to illustrate the different strategies in use today. This report is focused principally on those strategies that appear adaptable to the WRIA 30 watershed conditions. There are several existing reports that provide a comprehensive review of existing programs, particularly related to water banking. These are referenced in relevant sections of this report and included in the list of references.

Clarifying Terminology

The term "water bank" has been used to refer to a wide variety of water management practices, particularly when comparing programs across the western U.S. This is reflected in the report *"Analysis of Water Banking in the Western United States"*, published by Ecology in 2004 (Ecology, et al., 2004), which adopts a broad definition of water banking as "an institutional mechanism that facilitates the legal transfer and market exchange of various surface, groundwater, and storage entitlements".

In the State of Washington, however, the term "water bank"—although commonly used in a broad sense—has specific meaning in statute as a water management strategy available to Ecology in the Yakima River Basin under the State's Water Right Trust program. Under the legislation, Ecology is authorized to use water banking in the Yakima Basin for several purposes, including mitigation for new water uses, meeting future water supply needs, and statutorily beneficial uses consistent with the terms established by the transferor. Water banking, as defined by the Yakima Basin's Water Enhancement Program's Water Transfer Work Group, means the "deposit of a water entitlement, with a person or entity that makes it available for withdrawal by the depositor or another person or entity, either at the same time and place or later in time or at another place" (YBWTWG, 2003).

The use of the term "water bank" in this report, envisions developing a similar mechanism for use in WRIA 30 as is defined in State statute for the Yakima River Basin (under Engrossed Substitute House bill 1640). It is viewed as one of a menu of mechanisms that WRIA may pursue as part of a WRIA 30 Water Management Program to achieve the watershed goals. As outlined in the report recommendations, it is envisioned that such a program will include facilitating and/or streamlining mechanisms

that are currently available (e.g., established process for changes to existing water rights) and addressing other existing barriers (e.g., limitations in the use of State's Water Trust program with regard to certain groundwater rights).

Water Banking in the Western States

Water banking has had wide application as an innovative way to match supply and demand and improve water management to meet growing demand amongst competing uses throughout the western U.S. These water banking concepts vary significantly in how they operate with respect to water market structure, degree of participation, pricing and price controls, regulatory oversight, environmental objectives, and program administration.

The Ecology report (Clifford et. al., 2004) provides a thorough review of water banking concepts and specific programs within individual western states in the U.S. The following provides a summary of water bank objectives and formats presented in that report. The Ecology report should be consulted for specific information on individual states.

The overarching goal of a water bank is to facilitate the transfer of water from one use to another by bringing buyers and sellers together. The existing programs strive to achieve a multitude of objectives, including:

- Creating reliability in water supply during dry years;
- Creating seasonal water reliability;
- Ensuring a future water supply for people, farms, and fish;
- Promoting water conservation by encouraging water-right holders to conserve and deposit water rights in the bank;
- Acting as a market mechanism;
- Resolving issues of inequity between groundwater and surface-water users; and
- Ensuring compliance with intrastate agreements of in-stream flows.

Water Banking Concepts

In a broad sense, there are two primary forms of water banking. One is strictly a paper transaction or "water exchange" of an entitlement. The second involves the physical banking of "wet water". These general forms of banking are discussed below.

Institutional Banking – often referred to as "paper exchanges" which provide a legal mechanism for exchanging water rights and other forms of entitlements. This concept is often used in areas where physical water storage (e.g., surface water reservoirs) is limited or where the program services a large geographic area. Due to the lack of water storage, this approach is subject to the availability of natural flows (i.e., seasonality of surface water flows as reflected in a hydrograph) and regulatory constraints (e.g., in-stream flow rules). This form of a bank concept is applicable to the majority of WRIA 30, particularly areas dependent on groundwater supplies,

outside the reach of storage benefits associated with the Columbia River basin's dam system.

Surface Storage Banking – this is the most common form of water banking, where a reservoir or series of storage facilities and associated conveyance infrastructure are used to bank and deliver "wet" water allotments. Under this concept, the quantity banked is physically stored in a "depository", which provides higher supply reliability and flexibility that an institutional bank. This form of banking concept has been utilized by irrigation districts in the Yakima Basin utilizing the extensive surface water reservoir and conveyance network operated by the U.S. Bureau of Reclamation (USBR) under the USBR Yakima Basin Project. This form of banking is also utilized for water banking in the Deschutes River Basin in central Oregon.

This form of banking may work for areas in WRIA 30 that can access water from new storage developed pursuant to the Columbia River Basin Water Supply Act (Engrossed Second Substitute House Bill 2860, codified at Chapter 90.90 RCW). Under RCW 90.90.020, one-third of the water from new storage made possible by funding from the Columbia River basin water supply development account established under RCW 90.90.010 shall be available to augment in-stream flows and two-thirds shall be available for out-of-stream appropriation. Ecology is actively evaluating new surface storage opportunities in the Columbia River basin upstream of WRIA 30 that could provide water for appropriation to users who would divert Columbia River surface water or, in lieu of direct diversion, withdraw groundwater in direct hydraulic continuity with the Columbia River.

There might also be surface water storage opportunities within WRIA 30 that can be developed with funding from the Columbia River basin water supply development account. Potential storage sites were identified in a screening-level assessment of storage opportunities in the Little Klickitat River subbasin (Aspect Consulting, 2003). If developed, surface water storage in the Little Klickitat subbasin could improve in-stream flows and provide a source of water for out-of-stream uses within the Little Klickitat subbasin and down stream to the Columbia River. However, surface storage and the attendant conveyance infrastructure do not currently exist, so storage banking in the Little Klickitat subbasin cannot be implemented in the immediate term and is uncertain even in the long term.

Groundwater Banking – these programs provide a mechanism for exchanging credits or entitlements for water withdrawals within an underlying aquifer. This concept has largely been used in California and Arizona, particularly in large alluvial basins in conjunction with surface water recharge project. In southern Arizona, for example, surplus surface water supplies delivered via the Central Arizona Project canal system are recharged to groundwater to mitigate pumping of groundwater from the same alluvial aquifer elsewhere in the basin. Although not historically utilized in the State of Washington, the concept of using exchange credits is identified as a potential water management strategy in several WRIA's (WRIA 45 and 48) to offset the impact of exempt wells on in-stream flows. This banking concept may have application in WRIA 30 given the significant use of groundwater, particularly for irrigation supply.

Groundwater storage of "surplus" water utilizing aquifer storage and recovery systems (ASR). is another form of groundwater banking. Interest in ASR in the State of Washington is rapidly growing, particularly with municipalities dependent on seasonally variable supply sources such as snowpack dependent springs or surface water diversion subject to in-stream flows. ASR refers to the use of the aquifer as a "reservoir" to temporarily store water (often only seasonally available) for later recovery and use – either in-stream or out-of-stream. Aquifer zones within the Columbia River basalts, which occur throughout WRIA 30, are either being utilized or being evaluated for ASR. For example, a successful ASR pilot program has been operated by the City of Walla Walla for many years. There is currently an ASR feasibility study underway for the City of Goldendale.

Water Bank Administration and Range of Services

The administrative services offered by a water bank vary depending on the specific objectives and role in the transaction. In the simplest form, where the function is limited to that of a clearinghouse or resource center, the administrative services may be limited to providing posting services for willing buyers and sellers. Under this concept, the bank serves mainly as a repository for bid and offer information and may assist in facilitating the regulatory process. In a more active role, the bank may assume the role of a broker or market-maker, and manage the process from transaction to actual delivery of water.

The range of services may include:

- Documenting and recording water rights or entitlements;
- Facilitating the regulatory process;
- Regulating or participating in setting the price;
- Setting policies on operations of the bank;
- Determining which rights can be banked;
- Accounting for the quantity banked;
- Determining contract terms;
- Resolving Disputes; and
- Working with Ecology to develop voluntary regional agreements under RCW 90.90.030 and coordinate/administer their implementation within the WRIA.

Water Management Programs in the State of Washington

A number of water management strategies have been implemented in the State of Washington to deal with specific issues such as responding to drought conditions and addressing in-stream flows in critical basins. These programs have generally been limited in their geographic scope, such as in the Yakima basin. The following provides an overview of some of the strategies and associated regulatory programs in the State of Washington related to water management. With the exception of programs in the Yakima basin, the emphasis to date has largely focused on making more water available for in-stream flows. However, as noted below, the Legislative intent of the existing statute

envisioned developing water management programs in the State to satisfy unmet out-of-stream uses as well. Additionally, the Legislature intended that watershed plans developed and approved under Chapter 90.82 RCW guide water resource management. As provided in RCW 90.82.130(3), Ecology shall use an approved watershed plan as the framework for making water resource decisions for the watershed or watersheds subject to the plan and shall rely on approved watershed plans as a primary consideration in determining the public interest related to such decisions. It is imperative that implementation of water resource management programs within WRIA 30 are consistent with the approved watershed management plan.

State of Washington Trust Water Right Program

The 1989 Yakima Basin Trust Water Right Act and the 1991 Water Resources Management Act created a trust mechanism to acquire water rights on a voluntary basis and place them into trust. Chapter 90.42 RCW authorizes the State trust water right program statewide, whereas Chapter 90.38 RCW authorizes the State trust water right program specific to the Yakima River Basin. The stated intent (RCW 90.42.010) of the legislature in creating the State's trust water right program was in recognition of a need "to develop and test a means to facilitate the voluntary transfer of water and water rights, including conserved water, to provide water for presently unmet needs and emerging needs".

These statutes authorize Ecology to acquire water rights and place them into the trust water right program on a permanent or temporary basis and manage trust water rights for both in-stream and out-of-stream uses. This is stated under RCW 90.42.040, "all trust water rights acquired by the state shall be placed in the state trust program to be managed by the department. Trust water rights acquired by the state shall be held or authorized for use by the department for instream flows, irrigation, municipal, or other beneficial uses consistent with applicable regional plans for pilot planning areas, or to resolve critical water supply problems."

The stated purpose (RCW 90.42.005) for creation of the State's trust water right program statewide includes, amongst others listed in the statute: 1) improve the ability of the state to work with the United States, local governments, federally recognized tribal governments, water right holders, water users, and various water interests in water conservation and water use efficiency programs designed to satisfy existing rights, presently unmet needs, and future needs, both in-stream and out-of-stream; 2) establish new incentives, enhance existing incentives, and remove disincentives for efficient water use; and 3) create a trust water rights mechanism for the acquisition of water rights on a voluntary basis to be used to meet presently unmet needs and future needs. To date, the primary focus of the trust water right program has been to increase in-stream flow through the temporary or permanent transfer to trust with the stated purpose of being left in-stream for flow enhancement. However, the trust water right program can also function as a bank for water intended to be used for other purposes. Ecology or any other entity may temporarily transfer a water right to trust pending anticipated future sale or lease for any beneficial use. While the water right is in the trust, it remains in-stream and benefits in-stream flow or, in the case of groundwater, the aquifer.

A key feature of the trust program is protection from relinquishment. A water right held in trust is not subject to relinquishment under the so called 5-year "use it or loose it" rule. The period in which a water right is in the trust is not counted against the 5-year period of use associated with the original purpose of use. Once removed from the trust program, the 5-year relinquishment clock restarts since the water right is beneficially used while in trust. The exemption from relinquishment provides the primary incentives for placing water rights into trust for purposes other than in-stream flow and makes it an effective "depository" for water banking.

Another key feature of Trust Water Right Program is that the acquisition of water rights and subsequent allocation among beneficial uses is to be guided by local watershed management plans. RCW 90.42.040(1) states: "To the extent practicable and subject to legislative appropriation, trust water rights acquired in an area with an approved watershed plan developed under chapter 90.82 RCW shall be consistent with that plan if the plan calls for such acquisition." The importance of coordinating trust water programs with the watershed plan is addressed in the WRIA 30 Watershed Plan (Watershed Professionals Network et. al., 2005), which states: "Because transfer of existing water rights is such an important tool for meeting current and future water demand, water trust programs must at least coordinate with the Implementing Governments and/or Planning Unit." Efforts to put water into trust that are not coordinated with these bodies may seriously undermine watershed plan implementation. One of the challenges of the trust water right program is that several independent entities are acquiring water rights within the State for the purpose of putting them into trust. Coordination is needed to ensure that implementation of the Trust Water Right Program in WRIA 30 supports effective implementation of the Watershed Plan, not undermine it.

The Columbia River Basin Water Supply Act identifies the State's trust water right program as one of the tools to implement the Columbia River basin water supply development program that is enabled under the Act. As provided in RCW 90.90.010(4): "Net water savings achieved through conservation measures funded by the account [Columbia River basin water supply development account] shall be placed in trust in proportion the state funding provided to implement the project." As provided in the WRIA 30 Watershed Plan, Ecology must at least coordinate with the Implementing Governments and/or WRPAC (formerly called the Planning Unit) when implementing the State's trust water right program in WRIA 30. This includes when making water resource decisions pertaining to the funding of conservation projects resulting in the acquisition of trust water rights under RCW 90.90.010(4), as well as when making decisions pertaining to the beneficial uses of trust rights waters thus acquired.

Amendment to the State's Trust Water Right Program for Water Banking

In 2003, the Washington Legislature amended sections of Chapter 90.42 (contained in Engrossed Substitute House Bill 1640) to clarify the use of the trust water right program for water banking purposes. Although there is some debate as to the legislative intent, the amendment language specifically states that "the department is hereby authorized to use the trust water rights program in the Yakima River basin for water banking purposes." Water banking may be used (in the Yakima River basin) for one or more of the following purposes:

- to authorize the use of trust water rights to mitigate for water resources impacts, future water supply needs, or any other beneficial use;
- to provide a source of water rights the department can make available to third parties on a temporary or permanent basis for beneficial use; and
- to document transfers of water rights to and from the trust water rights program.

The first two purposes represent physical banking of "wet water" whereas the third purpose facilitates a water exchange. Clearly it would be very beneficial to be able to use the State's trust water rights program for water banking purposes throughout the state. It is Ecology's opinion that this will require a legislative amendment to do so. Whether or not this is correct, doing so will be a positive step towards development of water banks outside the Yakima Basin. According to Ecology's most recent report to the Legislature (Ecology, 2006), includes recommendations to amend Chapter 90.42 RCW to expand water banking authority to apply statewide.

Additional amendments to the existing statute, beyond those outlined in Ecology's 2006 report to the legislature are also necessary to clarify the conditions under which groundwater rights qualify for placement in the State's trust water right program. At the present time, Ecology's draft implementing policy is very restrictive with regard to the eligibility of groundwater rights for placement into trust. This significantly constrains use of the trust program for potential water banking purposes of existing groundwater rights in WRIA 30 (assuming it was amended by the Legislature for use statewide).

Ecology draft Guidance for Processing Trust Water Rights

Ecology is preparing a guidance document (draft GUID-1220 released to the Water Resources Advisory Committee and open for comment) which lays out the agency's interpretation of statute and policy in administering the State trust water right program. The guidance distinguishes between two types of trust water rights as defined by the controlling statutes, Chapters 90.42 and 90.38 RCW, and acknowledges that trust water rights can be used for multiple purposes including both in-stream and out-of-stream uses. Ecology's draft guidance however limits the eligibility of existing groundwater rights to be placed into the trust program. As articulated in the current draft of GUID-1220, Ecology's interpretation would be that only groundwater rights that benefit in-stream flows and "can be related to specific stream reaches" are eligible (per RCW 90.42.040(2)). This interpretation is very restrictive with regards to the eligibility of groundwater rights and appears to be inconsistent with statute. The statutory language does not require that an existing groundwater water right relate to a specific stream reach

to benefit in-stream flow as a criterion for eligibility. While this interpretation makes sense when a water right is transferred to trust for purposes of in-stream flow, it does not make sense for existing water rights placed into trust for uses other than in-stream flow. As discussed above, the statute explicitly allows water rights to be placed into trust for beneficial uses other than stream flow.

It is important that Ecology's implementation policy provide the maximum flexibility consistent with the Legislative intent and not constrain the use of the trust program as an important water management tool in watersheds, such as WRIA 30, where groundwater makes up a significant percent of the water supply. RCW 90.42.040(2) requires Ecology to issue water right certificates for permanent trust water rights conveyed to the state indicating the reach or reaches of the stream, the quantity, and use or uses to which they may be applied, which we understand to be the basis of Ecology restrictive interpretation regarding putting groundwater into trust. However, the provisions of RCW 90.42.040(2) pertaining nonpermanent conveyances to the trust requires the department to issue certificates or other such instruments as are necessary to reflect the changes in the purpose of use or point of diversion or withdrawal." For nonpermanent conveyances to the state trust water right program, there is no requirement that Ecology issue certificates or other such instruments that indicate the reach or reaches of the stream, and it is clear that this applies to both surface water rights and groundwater rights.

Ecology's Water Acquisition Program

Ecology implemented a Washington Water Acquisition Program utilizing the State's trust water right program to improve in-stream flows in critical basins throughout the state. The market strategies utilized by Ecology under this program, to purchase, lease, and secure donations are discussed in an Ecology report *"Washington Water Acquisition Program – Finding Water to Restore Streams"* (Washington State Department of Ecology, 2003). The Water Acquisition Program is focused in 16 basins in which the state has determined that flow levels are critically low for threatened or endangered fish species. WRIA 30 is not one of these 16 basins. However, if the Washington Water Acquisition Program were to consider acquisition of water rights in WRIA 30, such efforts must, to the extent practicable, be consistent with the WRIA 30 Watershed Plan and coordinated with the WRIA 30 Implementing Governments and/or WRPAC.

Yakima Basin Reverse Auction and Options

One of the water right acquisition strategies that Ecology has utilized in the Yakima River basin is a reverse auction. The goal of the reverse auction is to stimulate a local water right market, identify water rights available for transfer, and provide a means to introduce a form of competitive pricing in an otherwise limited market. To operate a reverse auction, Ecology announces interest in receiving bids from existing water right holders who are willing to sell or lease their water rights. If interested, a water right holder submits a "bid" for what they feel their water right is worth. Auctions have been used to address water supply needs ranging from offsetting groundwater pumping impacts on stream flow from new exempt wells to augmenting stream flows during droughts. Ecology has also utilized a similar strategy to secure an "option" to exercise a seasonal lease of an existing water rights in the event of a drought.

Water Exchange in the Yakima Basin

The Yakima Basin Water Enhancement Program's Water Transfer Work Group (WTWG) has proposed creation of a water management program, referred to as the "Yakima Water Exchange", to facilitate and institutionalize the exchange of water in the Yakima Basin. The WTWG released a report (YBWTWG, 2003) which, in addition to outlining a proposed Yakima Water Exchange Water Program (YWE), provides an informative overview of water banking and other water management programs currently operating at the federal, state, and local (irrigation district) level in the Yakima river basin. The YWE is intended to establish a single entity to provide a full range of water transfer services, including water right transfers and water banking, in the basin. Although other agencies including USBR and Ecology have existing water resources programs in the basin, the YWE will focus on addressing unmet water management needs outside those programs.

The emphasis of the YWE would be to "encourage the exchange of water by reducing bureaucracy, uncertainty, and the administrative costs" associated with transferring water rights among buyers and sellers. The proposal recommends that the YWE include groundwater rights within its scope, since much of the future water need will likely be met through the use of groundwater—similar to that of WRIA 30. A key component of the YWE would be to utilize the State trust water right program as the "depository" in which water rights would be held. The existing water rights would not be subject to relinquishment, while in trust and, therefore, the trust would provide a mechanism to protect or preserve existing rights for future uses in the watershed.

The services envisioned to be offered by the YWE, include:

- Provide pre-application technical review of proposed water transfer, include review of existing water rights;
- Support preparation of documents necessary to process water transfer proposals;
- Function as an information clearinghouse on water banking and water transfer options;
- Provide educational outreach and publication of water transfer-related information;
- Maintain a "multiple listing service" of buyers and sellers of water rights;
- Perform market analysis and outreach to potential buyers and sellers;
- Provide information on pricing (based on comparable transactions and other pricing related research) and ownership information;
- Provide water transfer research and analysis;
- Offer water metering and reporting support services; and
- Many of the functions of proposed "YWE" are relevant to services that may be provided in WRIA 30 and other watersheds through creation of a similar water management program specific to the watershed.

Voluntary Regional Agreements

"Voluntary regional agreements" is a new water management tool established by the Columbia River Basin Water Supply Act. Under RCW 90.90.030(1), Ecology may enter into voluntary regional agreements for the purpose of providing new water for out-of-stream uses, streamlining the application process, and protecting in-stream flow. The opportunity to establish a voluntary regional agreement is only available to provide water to users within WRIA 30 who can divert from the "Columbia River mainstem", which is defined in RCW 90.90.030(12)(a) as the Columbia River within the ordinary high water mark of the main channel of the Columbia River and groundwater within 1 mile of the ordinary high watermark. A voluntary regional agreement applicable in WRIA 30 must ensure that there is no negative impact on Columbia River mainstem in-stream flows in the months of July and August, as a result of appropriations issued under the agreement and ensure that efforts are made to harmonize the agreement with the WRIA 30 Watershed Plan. The mitigation standard (i.e., no negative impact on Columbia River mainstem in-stream flows in the months of July and August) for voluntary regional agreements could be achieved in a number of ways, including through water right acquisition, water conservation projects, and construction of new reservoir facilities. Perhaps the most significant features of voluntary regional agreements are found in RCW 90.90.030(3), which provides that ensuring that there are no negative impacts to Columbia River mainstem in-stream flows during the months of July and August is deemed adequate for purposes of mitigating in-stream flow impacts resulting from any out-of-stream use made under the agreement and that the only applicable consultation provisions under state law regarding in-stream flow impacts are those set forth in RCW 90.90.030(4). Under this subsection, Ecology must complete a sixty-day consultation period and 30-day public review period prior to Ecology executing a voluntary regional agreement. The statutory authority for Ecology to enter into voluntary regional agreements expires on June 30, 2012, but agreements entered into prior to that date remain in full force and effect through the term of the agreement.

Proposed Programs in other WRIAs

There has been considerable interest identified by other WRIAs for implementing some form of water banking to address specific water management issues specific to the watershed. Two watersheds, WRIA 45 and WRIA 48, have outlined proposals for developing mitigation banks to offset potential impacts to in-stream flows resulting from urban growth and forecasted increase in exempt wells for domestic supplies. These programs essentially would entail the acquisition of existing water rights which could be placed in the State's trust water right program. In WRIA 48, this approach is envisioned to provide a means to address the proposed draft in-stream flow rule requirements of a "water for water" strategy to mitigate outdoor water use for new exempt wells in the shallow aquifer portion of the basin.

Proposed Framework within WRIA 30

The following presents an outline of several water management strategies that are applicable to WRIA 30. The management concepts vary in scope and required level of administrative "participation" and oversight. Some of the concepts have applicability throughout WRIA 30, while others have geographic constraints. For those concepts offering limited services—such as providing an information clearinghouse to help facilitate water right transfers—there are few if any barriers to implementation. However, for an actively managed program offering a broad range of services—such as a water bank within the watershed—there are several barriers that need to be addressed.

In considering the range of options, it is important to keep in mind that how well a program is accepted and utilizes by the stakeholders in the watershed is a key measure of success. It is also important to consider and address the potential unintended consequences associated with implementing a water management program. The availability of water can be a major factor in facilitating or constraining economic and population growth, as well as influencing ecosystem functionality.

This section also presents a recommended framework for a water exchange program to facilitate water transactions (sales, leases), which includes a "water banking" concept that aims to protect water rights pending their exchange and promote the use of existing water rights within WRIA 30

Water Management Options

Developing an appropriate approach to water management requires attention to the objectives of the program and acceptable levels of institutional involvement or "participation" necessary to facilitate the transfer of water between users. Three levels of program administration are considered below. With each level, there are progressively increasing level of services and functions, which require additional institutional structure to implement and operate effectively. As noted above, consideration of unintended consequences of different water management options is also important.

Level of Program Administration

Water Information Clearinghouse

This is the simplest and least active mechanism for facilitating the transfer of water between users and uses. There is a need to make information on water rights more readily available in the watershed. The Klickitat County Water Conservancy Board currently aims to fill this void, at least in part. However, the Water Conservancy Board commissioners are all volunteers and the Board meets only once per month. Although the commissioners are available to assist water right holders, (which in the past has included setting up an information booth at local fairs), access to that resource is nonetheless limited. At present, Klickitat County's Natural Resource Department provides facilities for the Water Conservancy Board, and staff is available to provide information regarding

water rights and water resource management in WRIA 30 and to provide referral to appropriate government agencies or resources.

Beyond the level of services currently offered, the clearinghouse could offer a posting service for interested buyers and sellers of water rights to connect with each other. The Water Conservancy Board is enabled under statute to maintain lists of interested buyers and sellers of water rights, but does not do so currently.

Water Market Facilitator

This entails more active involvement of an entity to facilitate and promote an active water market within the watershed. In this capacity, the market facilitator would not only function as a clearinghouse for information (as discussed above) but could also provide service much like a "broker" to facilitate the transactions. Services may include administering a web-based water right "multiple listing service", providing guidance on water right transaction options (including use of exemptions to relinquishment in the water code to relinquishment), and assisting in review of water right validity and extent of beneficial use. Under this concept, the entity would be facilitate the transfer of individual water rights, and relying on existing regulatory processes such as working with the Water Conservancy Board for water right changes. This type of program would require dedicated staff and a physical location within the watershed.

Water Exchange

This is envisioned as a program offering a broad range of services beyond functioning as a clearinghouse and water market facilitator for the watershed. Much like the services outlined for the water exchange proposed for the Yakima Basin, an exchange could actively participate in water management by creating mechanisms to protect and streamline the transfer of existing water rights, such as implementing a water bank concept, tailored to the watershed conditions and constraints. Such a program may involve direct involvement in transactions—as a broker, to facilitate private transactions between buyers and sellers and as a "gatekeeper" to administer the use of mechanism—such as a water bank- that may be implemented in the watershed under the program.

Water Transfer Mechanisms

The following presents several mechanisms for consideration in developing a framework for water management in WRIA 30.

Use of Existing Exemptions to Protect Water Rights for Future Use

The water statute (Chapter 90.14.140 RCW) defines certain conditions which provide "sufficient cause" under which existing water rights are not subject to relinquishment due nonuse of all or a portion of the water by the owner of a water right for a period of 5 or more consecutive years. Where applicable, these exemptions provide an effective means to protect existing water rights for future use. Providing guidance on the applicability of specific exemptions to individual water right holders should be a key role of a water rights resource center. This likely would also include referral for legal advice where appropriate.

The exemptions currently defined in the statute include the following sufficient causes for nonuse of water:

- drought, or other unavailability of water
- military service – both active and nonvoluntary
- federal or state agency leases of or options to purchase lands or water rights which precludes the or reduces the use of the water right
- federal laws imposing land or water use restrictions either directly or through voluntary enrollment (e.g., acreage limitation and production quotas such as crop reduction programs)
- weather conditions that result in a temporary reduction in water use
- reduced irrigation due to participation in electricity buyback programs
- water conservation measured implemented under the Yakima river basin water enhancement project
- reliance on the transitory presence of return flow water in lieu of diversion or withdrawal for irrigation
- reduced use of irrigation water due to crop rotation

In addition, there is no relinquishment for water rights listed below:

- if water right is claimed for power generation
- if water right is used for standby or reserve water supply in time of drought or other low flow period
- if claimed for a determined future development
- if claimed for municipal water supply purposes
- if claimed under federal lands
- if leased to another user and put to beneficial use
- if such right or portion of a right is authorized for a purpose of use that is satisfied by the use agricultural industrial process water

Review of the list illustrates the broad range of exemptions to and exclusions from relinquishment authorized under statute. While the conditions under which certain exemptions apply are fairly easy to understand, for others it is less so. Examples of exemptions that may commonly apply to situations where a water rights are not exercised for a period of time in WRIA 30—including those relating to irrigation—are participation in federal programs that aim to control the quantity of crops on the market (e.g., crop reduction), energy buyback programs, and reduced water use associated with crop rotation. The applicability of these exemptions is often overlooked and should be further considered.

Although currently limited to the Yakima basin, the exemption relating to water made available through implementing conservation measures could have application to many

watersheds if expanded to apply statewide. In addition, under Chapter 90.90.010 RCW, conserved water from projects funded in whole or in part by the Columbia River basin water supply development account is placed in trust and is available to support new appropriations. Further, the use of voluntary regional agreements under RCW 90.90.030, such as that proposed by the Columbia Snake River Irrigators Association, can include use of conservation to make water available for appropriation.

Use of the State's Trust Water Right Program to Protect Existing Water Rights from Relinquishment

Protecting existing water rights from relinquishment to meet future needs, while promoting the conservation and efficient use of water is one of the primary goals for creating a water management program in WRIA 30. Use of the State trust water right program as part of a water management strategy could provide an effective mechanism to achieve this goal. However, Ecology's current interpretation of the trust water right statute may significantly constrain the use of this mechanism to only those water rights where it can be demonstrated that their placement in trust will have a direct benefit to in-stream flows. The WRIA 30 WRPAC does not agree with this interpretation of the statute and believes that the Legislative purpose and intent was to utilize the trust program to include protection of existing water rights to meet future unmet needs. This concept and barriers related to its use are further discussed below.

Voluntary Regional Agreement under the Columbia Water Supply Management Act

As provided in RCW 90.90.030, Ecology may enter into voluntary regional agreements for the purpose of providing new water for out-of-stream use, streamlining the application process, and protecting in-stream flows. The Implementing Governments or other "water authority", in association with the WRIA 30 WRPAC, could develop and enter into a voluntary regional agreement with Ecology and facilitate its implementation within the WRIA.

Creating a Board of Joint Control to Provide Flexibility in Place of Use

The existing water code (Chapter 90.03.380 RCW) provides flexibility in the place of use of existing water rights within irrigation districts without processing a water right change subject to review and approval by Ecology. Changes in the place of use by an individual water user or users of water provided by an irrigation district can be made simply with approval by the district's board of directors when the change lies within the district boundary. The statute also provides for the change in the place of use of water provided by an irrigation entity outside its boundary when it is a member of a "board of joint control" created under Chapter 87.80 RCW. The board of joint control can establish an area of jurisdiction within which it is authorized, without approval from Ecology, to approve changes in place of use of water.

Formation of a board of joint control may have application as a water management mechanism in WRIA 30. Its utility is constrained, however, because commonly a place of use of a groundwater right also requires a change in the point of withdrawal, which would require Ecology approval. Where conveyance is available from the existing point of withdrawal to the new place of use, the creation of a board of joint control within the watershed could be used to streamline the process of moving water from one user to another.

Regional Municipal Water Provider

This concept is based on establishing a service area encompassing all or a part of WRIA 30 with water supply provided by a regional municipal provider. At the present time, the two primary municipal water providers in the watershed include the City of Goldendale and the Klickitat Public Utility District (PUD). The City's service area is contiguous and consistent with the Urban Growth Area Boundary (UGA), whereas the PUD operates eight separate water systems throughout the Klickitat County.

Individual water right holders would assign their existing water rights over to a regional municipal provider through a contractual agreement which would provide for water service. The regional provider would request that all assigned water rights under its control be conformed by Ecology to reflect their use for municipal supply purposes. This process would require approval of the regional provider's water system plan by the State Department of Health (DOH) in coordination with Ecology. Assuming approval by Ecology and DOH, such an approach would afford protection from relinquishment of existing water rights. For water rights that are not beneficially used for municipal water supply purposes at the time of transfer, the regional provider would have to obtain approval of a change from Ecology. Therefore, the utility of a regional municipal water provider in the watershed may primarily be for non-irrigation water supplies.

The Klickitat PUD is pursuing options for use of a large existing surface water right that it currently holds for a diversion from the Columbia River. The water right was previously used to provide industrial water supply to Goldendale Aluminum. The PUD is currently working with Ecology to conform the existing water rights to municipal supply purposes. The PUD is also looking at strategies to utilize the existing water rights for water supply purposes in the watershed.

WRIA 30 Water Exchange Program

The following provides a proposed framework for establishing a "water exchange" in WRIA 30, utilizing mechanisms most adaptable to watershed conditions and constraints. The intent in creating the water exchange is to provide a single entity that is focused on protecting and facilitating the beneficial use of existing surface and groundwater rights in WRIA 30. It would operate in concert with the existing water right transfer processes, so as not to conflict with services provided by Ecology and the Klickitat County Water Conservancy Board. Its mission would be to identify and implement mechanisms that would work in WRIA 30 to streamline the transfer process and improve the flexibility and efficiency of moving water between users and uses.

As discussed in the previous section, there are several water management mechanisms that may be appropriate in addressing different needs and constraints in WRIA 30. Irrespective of the approach, to be successful there needs to be adequate incentives to encourage participation in the exchange. Key incentives that should be provided by the water exchange include streamlining the transfer process (time, cost, and reduced uncertainty) and/or developing alternatives options for moving water around, and mechanisms to protection water rights from relinquishment so they can be available to meet future needs.

Establish a Water Exchange

WRIA 30 would create a water exchange to be administered by an entity "water authority", under the authority of a single governmental agency (e.g., county or PUD) or intergovernmental agreement amongst local governmental agencies. Perhaps the entity that operates the "water authority" could be the WRIA 30 Implementing Governments, either under an intergovernmental agreement or a watershed management partnership established under Chapter 39.34 RCW.

The "water authority" would provide a range of services which may include:

- functioning as an information clearinghouse and staffed resource center to provide information on water rights to holders of existing water rights, persons seeking to acquire or lease water rights, and the general public; and to perform an initial and confidential extent and validity analysis of water rights;
- maintaining a posting service "multiple listing service" to support a local water market;
- acting in the capacity of a "broker" and actively assist in transactions; and
- administering a water exchange program. The exchange would develop water management mechanisms to achieve the watershed goals as defined under the WRIA 30 Watershed Management Plan and Detailed Implementation Plan. Mechanisms could include creating a board of joint control, to provide flexibility in the place of use of water, similar to that of an irrigation district and/or implementing a reserve or "bank" to address unmet current and future needs.

How the Water Exchange Would Operate

The following outlines the general framework for operating a water exchange:

- All existing water rights would be eligible for participating in the water exchange program. However, only those water rights or portions of existing water rights that have been verified by the water authority operating the exchange, in terms of extent and validity through demonstration of beneficial use, will be accepted.
- The water authority would facilitate a water market by matching buyers and sellers of existing water rights in the watershed. In the event that there is a willing buyer/lessee, then transfer would occur through a private transaction and use of the existing water right change process.
- In the event that a willing buyer/lessee is not identified through the water market or there are no exemptions to relinquishment under the water code that are applicable, then the existing water right holder would assign control of the water right to the water authority which would request transfer of the water right for temporary placement in the State's trust water right program.
- Water right holders would be required to assign control of the water right to the water authority through a contractual agreement.

- The water authority would file an application with Ecology for placement of the existing water right in the State's trust water right (TWR) program as a temporary donation (not limited to in-stream flow purposes). The water authority would have authority to negotiate the contract terms for acceptance of the existing water right into the trust program.
- When a new use is identified, the water authority would file an application for water right change through the Water Conservancy Board or Ecology to remove the existing water right from trust; and change the place of use, purpose of use, etc. as necessary for the new use.

The original water right holder would receive financial compensation associated with the sale or lease of the existing water right after completion of the transaction.

Existing Barriers to Implementation

There are a number of barriers to implementation, including limitations in existing statute and regulatory interpretation, willingness on the part of existing water right holders to participate, and program funding. These are discussed below:

1) A key barrier to implementation is the constraints Ecology has identified on use of the State's trust water right program. The language in Chapter 90.42 RCW states that the department is "authorized to use the trust water rights program in the Yakima river basin for water banking purposes". The statute however does not exclude its use for water banking purposes elsewhere. In its most recent report to the Legislature (Ecology, 2006), Ecology noted that the legislation has the "appearance of applying only to the Yakima Basin, and is pursuing legislative amendments to statute which, amongst other proposed revisions, would allow use of the State's trust water right program for water banking purposes throughout the State of Washington. Such an amendment to statute would be useful, particularly with regard to "banking" of water made available through conservation practices. However the proposed framework outlined above for a water exchange may be able to function without designation as a "water bank". The statute expressly authorizes use of the trust water right program as a bank in the Yakima Basin. The trust program can still be used to perform the same function in other watersheds—just don't call it a "bank". As a tool for developing water supplies for out-of-stream and in-stream uses in the Columbia River basin, the Columbia River Basin Water Supply Act enables water rights to be acquired through implementation of conservation measures or other means and placed in the state water trust program.
2) As previously discussed, Ecology's current interpretation of statute regarding use of the trust water right program significantly limits placement of a majority of groundwater rights into temporary trust. Language in Ecology's draft guidance, requiring that groundwater rights must be related to specific reaches of a surface water to be eligible for placement into the trust program, appears inconsistent with the intent of the 1991 Water Resources Management Act and subsequent amendments aimed at preserving water to meet future needs including both in-stream and out-of stream uses.

3) There currently is limited coordination of service areas amongst municipal providers, which may be an issue if pursuing options to expand municipal services within the watershed.

4) The willingness on the part of existing water right holders to utilize a water exchange in WRIA 30 is also a concern. To function and achieve the goals of the watershed, the water exchange requires active participation from stakeholders in the watershed.

5) Setting up a water exchange with the necessary resources to provide public outreach and services requires a sustained source of funds to be viable.

6) In the Columbia River Basin Water Supply Act (Chapter 90.90 RCW), the Legislature declared that a Columbia River basin water supply development program is needed, and directed Ecology to aggressively pursue the development of water supplies to benefit both in-stream and out-or stream uses. Ecology is developing policies and programs to implement the Act. If the policies and programs do not make the water supplies available for appropriation to out-of-stream uses in the areas of the Columbia River basin that are outside of the 1-mile corridor immediately adjacent to the Columbia River, they will be a barrier to effective water resource management within WRIA 30 and may run counter to the WRIA 30 Watershed Plan.

Means to Address Barriers to Implementation

The following discussion outlines proposed actions to address existing barriers to implementing a water exchange framework:

1) Pursue amendments to existing trust water right statute to expressly allow its use for water banking purposes statewide. Engage in the legislative process through local representatives and review language of amendments currently being drafted by Ecology for consideration by the Legislature.

2) Prepare and submit to Ecology comments on the current draft version of Guidance for Processing Trust Water Rights (GUID – 1220) by July 15th. Of particular importance is commenting on Ecology's current implementation policy regarding the eligibility of groundwater rights for placement in the trust program. It is critical that the guidance reflect the Legislative intent and purpose in creating the trust water right program to meet unmet future in-stream and out-stream demand. Ecology's current thinking with regard to policy greatly restricts the placement of existing groundwater rights into the trust water right program. Recommend working collaboratively with Ecology to clarify the conditions for placement of groundwater rights into trust, consistent with the intent and purpose of the 1991 Water Resources Management Act.

3) Evaluate the need for developing a coordinated water system plan in Klickitat County to clarify jurisdictional issues that may arise with expansion of individual water service areas.

4) Further refine the specifics of a WRIA 30 water exchange during the detailed implementation stage of watershed planning. In particular, engage key

stakeholders and solicit input on the appropriate level of program administration and incentives for program participation.

5) Evaluate funding mechanisms for establishing the water exchange, including developing a memorandum of understanding (MOU) amongst local governmental entities involved in water resource planning in the watershed, and evaluating a potential user fee concepts for services.

6) Participate in Columbia River Basin Water Supply Act policy advisory forums (i.e., the Columbia River Policy Advisory Group and County Commissioners' Policy Advisory Group) and work with other WRIA planning units in the Columbia River basin to shape the development of policies and programs that meet the needs of WRIA 30 and are consistent with the WRIA 30 Watershed Plan. Evaluate the need for legislation to clarify the Columbia River basin-wide scope of the Columbia River Basin Water Supply Act.

References

Aspect Consulting, 2003, *Multipurpose Water Storage Screening Assessment Report, WRIA 30*, Prepared for WRIA 30 Planning Unit, June 20, 2003.

Policy Consensus Center, 2004, *Of Water and Trust: A Review of the Washington Water Acquisition Program*.

Washington State Department of Ecology, 2003, *Washington Water Acquisition Program – Finding Water to Restore Streams*.

Washington State Department of Ecology, 2004, *Report to the Legislature: Water Banking in Washington*, Ecology Publication No. 04-11-030, December 2004.

Washington State Department of Ecology, 2006, *Report to the Legislature: Water banking in Washington State*, Ecology Publication No. 06-11-048, December 2006.

Washington State Department of Ecology, 2007, *Water Resources Program Guidance, Guidance for Processing Trust Water Rights*, GUID-1220.

Washington State Department of Ecology and WestWater Research LLC, 2004, *Analysis of Water Banks in the Western States*, Ecology Publication No. 04-11-011, July 2004.

Watershed Professionals Network and Aspect Consulting, 2005, *Klickitat Basin (WRIA 30) Watershed Management Plan*, prepared for WRIA 30 Watershed Planning Unit.

Yakima Basin Water Transfer Work Group (YBWTWG), 2003, *Water Exchange in the Yakima Basin*, Version 5.1, October 6, 2003.

W:\070024 WRIA 30\Deliverables\Water Banking\Framework for Water Management in WRIA 30 (6-29-07).doc