

# WRIA 34 – Palouse Watershed Detailed Implementation Plan

Prepared for:  
WRIA 34 Planning Unit

Prepared by:  
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February 20, 2009



**FINAL**

**WRIA 34 - PALOUSE WATERSHED  
DETAILED IMPLEMENTATION PLAN**

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## ANNUAL DIP UPDATE

This Detailed Implementation Plan (DIP) is intended to guide the implementation of the Phase III WRIA 34 Palouse Watershed Management Plan (Watershed Management Plan) (HDR/EES, 2007) and fulfills the requirements of the Watershed Planning Act, Revised Code of Washington (RCW) 90.82.043 and RCW 90.82.048. Implementation actions for the watershed are expected to change over time and an annual process for Planning Unit evaluation of the actions is specified in this DIP. The entire DIP document (text, figures, tables and appendices) is not intended to be revised in the annual DIP updates. Appendix A is the “live document” or “working plan” that will change into the future, subsequent to the annual review of actions and as actions are funded or not funded.

## EXECUTIVE SUMMARY

The Palouse River originates in the mountains northeast of Moscow, Idaho, and flows westerly into eastern Washington (Figure 1). The Palouse Watershed is denoted as Water Resource Inventory Area (WRIA) 34. The WRIA 34 Planning Unit divided the watershed into management areas, as shown in Figure 2, to facilitate the implementation and sequencing of local water management actions developed in the Watershed Management Plan. The geographic boundaries of these management areas have been revised subsequent to the completion of the Watershed Management Plan.

The Palouse River flows from the uplands east of Moscow and Potlatch, Idaho, and then winds through rolling farm and rangeland in Whitman County, Washington, before joining the Snake River at the Whitman/Franklin County line. There are no major man-made impoundments, allowing the Palouse River to flow freely. About six miles upstream of the river’s confluence with the Snake River, the Palouse River drops approximately 185 feet into a deep canyon at Palouse Falls. Due to the natural barrier of the falls, the Palouse River upstream of the falls does not support anadromous salmonids and does not provide critical habitat for Endangered Species Act (ESA)-listed fish species. The Palouse River drains over two million acres, most of which are in Washington. Approximately 17 percent of the Palouse River watershed is within Idaho, primarily Latah County.

The WRIA 34 DIP was developed over a period of several months following the development and adoption (in 2007) of the Watershed Management Plan. Many of the original members of the WRIA 34 Planning Unit continued their dedicated participation to complete this DIP. Those involved include local, state, and federal governments, representatives of local agriculture, environmental representatives and landowners in the watershed. The WRIA 34 Planning Unit’s efforts were guided by its mission statement:

***“Our mission is to treat water as a valuable resource through the development and implementation of a watershed plan for the beneficial management of water resources to balance the present and future needs of local rural and urban communities, agriculture and other industries, fish and wildlife.”***

The Watershed Management Plan contains recommended actions for short-term and long-term water resource management in WRIA 34, both at the basin-wide scale and the management area scale. The actions are in the form of recommendations, projects/actions and studies/assessments.

The actions are to be implemented by various participants as prescribed in the Watershed Management Plan, subject to funding constraints. The Watershed Management Plan actions will be implemented by the lead entities/project sponsors identified for each action. The Palouse Conservation District (CD) will use the Action Tracking Table in Appendix A to establish work

schedules, identify potential partners, apply for grant funding, and track progress on projects. The Palouse CD will update the Action Tracking Table with new information and review priorities on an annual basis. As lead entities/project sponsors identify their respective work schedules, they will use the Planning Unit as a mechanism for coordination (e.g., with supporting entities) on their work plans and implementation efforts.

This DIP provides practical sequencing for implementing the recommended actions in the Watershed Management Plan based on a prioritization framework. This DIP is not intended to be a stand-alone document and is intended to be used in conjunction with the Watershed Management Plan.

This DIP has been approved by the WRIA 34 Planning Unit with the understanding that it will continue to be a living document where new projects will be added and others will be completed, eliminated or revised based on new information. The projects in the DIP will be reviewed and may be revised (if necessary) by the WRIA 34 Planning Unit on an annual basis, or as deemed appropriate. The review process is intended to include the evaluation and revision of priorities as well as the addition or elimination of projects for funding each year.

**ACKNOWLEDGEMENTS**

This DIP was developed through the participation and input of numerous stakeholders from the Palouse Watershed between April 2008 and January 2009, many of whom spent significant time providing information, prioritizing and updating plan actions, and attending meetings to represent their constituencies. These individuals are gratefully acknowledged below. Others who were involved in development of the WRIA 34 Watershed Management Plan (HDR/EES, 2007) are also gratefully acknowledged.

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*Carl Thompson - City of Colfax (Current)*

*Cheryl Morgan - Landowner (South Fork Palouse River)*

*Dan Harwood - Palouse-Rock Lake Conservation District*

*Don Myott - City of Palouse*

*Jack Ensley - Whitman Conservation District*

*Janet Schmidt - WSU Extension*

*Jean Wardwell - Citizen (Pullman)*

*John Pearson - Landowner (North Fork Palouse River, South Fork Palouse River, Palouse River, Cow Creek)*

*Ken Stinson - Latah Soil & Water Conservation District*

*Kevin Gardes - City of Pullman*

*Les MacDonald - City of Moscow*

*Mark Storey - Whitman County Public Works*

*Mark Workman - City of Pullman*

*Michael Largent - Whitman County Commissioners (Current)*

*Mimi Wainwright - WA Dept. of Ecology*

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*Rex Harder - Landowner (Sprague Lake/Cow Creek)*

*Rhod McIntosh - Cattlemen's Association*

*Rob Corcoran – WSU Facilities Operations*

*Rob Lindsay - Spokane County Utilities Division*

*Stephen VanVleet - WSU Extension*

*Steve Robischon - Palouse Basin Aquifer Committee (Current)*

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**LIST OF ACRONYMS AND ABBREVIATIONS**

ASR	Aquifer Storage and Recovery
BMP	Best Management Practice
BW	Basin-wide
CARA	Critical Aquifer Recharge Area
CC	Cow Creek Management Area
CD	Conservation District
cfs	cubic feet per second
CLP	Central Lower Palouse River Management Area
CRC	Cow/Rock Creek Management Area
DIP	Detailed Implementation Plan
DNR	Washington State Department of Natural Resources
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act (Federal)
ESHB	Engrossed Substitute House Bill
gpm	gallons per minute
gpd	gallons per day
GWMA	Groundwater Management Area
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish & Game
IDL	Idaho Department of Lands
IDWR	Idaho Department of Water Resources
IDHW	Idaho Department of Health & Welfare
ISCC	Idaho Soil Conservation Commission
IWG	Implementation Working Group
LP	Lower Palouse River Management Area
LWD	large woody debris
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NFP	North Fork Palouse River Management Area
NMFS	National Marine Fisheries Service
NOAA	National Oceanic & Atmospheric Administration
NRCS	Natural Resource Conservation Service (Federal)
PBAC	Palouse Basin Aquifer Committee
Qa	Annual Volume of Water
Qi	Instantaneous Rate of Flow
RC	Rock Creek Management Area
RCW	Revised Code of Washington
RM	River Mile
SDWA	Safe Drinking Water Act (Federal)
SEPA	State Environmental Policy Act
SFP	South Fork Palouse River Management Area
SWCD	Soil and Water Conservation District
TMDL	Total Maximum Daily Load

U of I	University of Idaho
U.S. EPA	U.S. Environmental Protection Agency
USACE	United States Army Corps of Engineers
USBOR	United States Bureau of Reclamation
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WAC	Washington Administrative Code
Watershed Management Plan	WRIA 34 Watershed Management Plan
WDFW	Washington Department of Fish and Wildlife
WDOH	Washington Department of Health
WMA	Watershed Management Act (RCW 90.82; ESHB 2514) (Washington State)
WRIA	Water Resource Inventory Area
WSCC	Washington State Conservation Commission
WSDA	Washington State Department of Agriculture
WSDOT	Washington State Department of Transportation
WSU	Washington State University
WWTP	Wastewater Treatment Plant

## 1.0 INTRODUCTION AND BACKGROUND

This document presents the Phase IV Detailed Implementation Plan (DIP) for the Palouse Watershed. This DIP was completed in the first year of Phase IV Implementation, in accordance with the Watershed Planning Act, Chapter 90.82 Revised Code of Washington (RCW). The Palouse Watershed is denoted as Watershed Resource Inventory Area (WRIA) 34. This plan addresses the implementation of projects, studies and recommendations that address water supply, streamflow management, surface water quality and groundwater quality in the Palouse Watershed.

The purpose of this DIP is:

1. To guide implementation of the WRIA 34 Watershed Management Plan (Watershed Management Plan) (HDR/EES, 2007) actions; and,
2. To meet the requirements for a detailed implementation plan per RCW 90.82.043 and RCW 90.82.048.

This DIP provides a framework for implementing water resource management in the Palouse Watershed. The plan provides details for implementation of the recommendations, actions and studies that are included in the Watershed Management Plan.

The Watershed Management Plan prescribes numerous projects, studies, and recommendations. This DIP focuses on:

- How the Watershed Management Plan actions will be accomplished;
- How the Watershed Management Plan recommendations will be tracked;
- Defining obligated, lead and supporting entities;
- Defining accountability;
- Developing a schedule for implementation; and,
- Identifying how projects could be funded.

Most of the actions reported in this document have been prioritized by the WRIA 34 Planning Unit so that they can be implemented in a coordinated manner without duplication of effort. If implemented successfully, the actions prescribed in this DIP will result in a coordinated resource management effort that merges water quantity, instream flow, and water quality elements at both a watershed and management area scale. These obligations, and the schedule over which they are implemented, are presented for information. Actual implementation will depend in large measure on the availability of funding, staff resources, technical capability, priorities of the entities involved, and the recommended priorities of the DIP.

This DIP provides priorities and a practical schedule for implementing actions as prescribed in the Watershed Management Plan. This document is not intended to be a stand-alone document; it is intended to be used in conjunction with the Watershed Management Plan. Additional background information pertaining to the prescribed actions can be found in the Watershed Management Plan. This is a working implementation plan that is expected to grow and evolve as projects are

implemented, data are collected and issues are better understood. It is expected that new actions will be added and some existing actions eliminated or revised as new information becomes available.

As with the Watershed Management Plan, this DIP is intended for a number of audiences including: those who are reading the information for the first time; those who have been involved in the Watershed Planning process from the start; and, those entities who will be implementing Watershed Management Plan actions. With this in mind, the DIP is organized as follows:

**Executive Summary** – The Executive Summary along with Tables 2-3 through 2-8 provide a concise overview of this DIP.

**Chapter 1** – presents the purpose of this DIP, describes the physical setting of the Palouse River Watershed, provides an overview of the Watershed Planning process, addresses anticipated operation of the Planning Unit as implementation progresses, identifies supporting information, addresses DIP and Watershed Management Plan updates, describes how the DIP is structured, and, lists the locations where this DIP is available for public review.

**Chapter 2** – documents how implementation actions were prioritized and scheduled by the WRIA 34 Planning Unit.

**Chapter 3** – summarizes completed and ongoing implementation actions.

**Chapter 4** – presents an implementation schedule for the Watershed Management Plan actions.

**Chapter 5** – describes the available options to fund implementation.

**Chapter 6** – addresses the requirements of RCW 90.82.043 (2), (3) and (4) (i.e., water supply strategies, timelines and milestones and coordination / oversight).

**Chapter 7** – summarizes the instream flow work in the WRIA and the instream flow package developed for the North Fork Palouse River.

**Chapter 8** – addresses the planned future use of inchoate municipal water rights per RCW 90.82.048.

**Chapter 9** – addresses the regulatory requirements of this DIP.

**Chapter 10** – lists the references cited in this DIP.

**Appendices:**

Appendix A – includes the Action Tracking Table that will be maintained by the Palouse CD to track the implementation progress of actions and recommendations.

Appendix B – includes a table that links the actions in the Watershed Management Plan to the actions in the DIP.

Appendix C – includes the letter and form sent as part of the inchoate water rights survey.

Appendix D – includes a copy of the Watershed Planning Act - Chapter 90.82 Revised Code of Washington.

Appendix E – includes copies of correspondence received during development of the DIP.

## 1.1 Setting

The Palouse River originates in the mountains northeast of Moscow, Idaho, and flows 124 miles in a westerly direction, entering eastern Washington just east of the City of Palouse, and flowing across Whitman County before joining the Snake River (Figure 1). Six miles before its confluence with the Snake River, the Palouse River drops approximately 185 feet over the Palouse Falls (which is a natural barrier to fish passage). The Palouse River includes over 398 miles of streams and tributaries; these tributaries drain over 2.1 million acres of land in Washington and Idaho. WRIA 34, the Washington portion of the watershed, encompasses approximately 1,755,000 acres, or about 83 percent of the basin. The predominant land use in the basin is dry land agriculture. The residential land use is predominantly rural with a few areas of denser urban development (e.g., Pullman and Moscow).

The main tributaries of the Palouse River include its North and South Forks, Rebel Flat Creek, Rock Creek, Pine Creek, Union Flat Creek and Cow Creek (Figures 1 and 2). However, the amount of runoff from each of these subbasins is not proportional to their size. As examples: the North Fork Palouse River drains 15 percent of the Palouse Watershed, but provides 41 percent of the flow to the Palouse River (at Hooper); Cow Creek drains 20 percent of the land area but yields only 7 percent of the mean annual flow (USDA, 1978); and, the South Fork Palouse River drains 9 percent of the Palouse Watershed, and provides approximately 9 percent of the mean annual flow to the Palouse River (at Hooper) as measured at the South Fork Palouse River at Colfax gage (HDR/EES, 2007; Golder Associates, 2005). Average flows near the mouth of the Palouse River (above Cow Creek) range from 1,800 cubic feet per second (cfs) in March to 300 cfs in August. The Palouse River and its main tributaries flow freely, with no major man-made impoundments.

For Watershed Planning purposes, the WRIA 34 Planning Unit organized WRIA 34 into five management areas<sup>1</sup> (Figure 2) including: Cow Creek Management Area (CC), Rock Creek Management Area (RC), Lower Palouse River Management Area (LP), North Fork Palouse River Management Area (NFP), and South Fork Palouse River Management Area (SFP). It should be noted that the geographic boundaries of these management areas have been revised subsequent to the completion of the Watershed Management Plan. Detailed descriptions of each management area are provided in Section 3 of the Watershed Management Plan.

The Palouse River Watershed encompasses portions of Adams, Lincoln, Spokane and Whitman Counties within Washington and primarily Latah County within Idaho (Figure 1). The Cities of Pullman and Colfax, Washington and Moscow, Idaho are the largest cities located within the watershed.

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<sup>1</sup> The WRIA 34 Planning Unit originally separated the watershed into four management areas in the Watershed Management Plan: Cow/Rock Creek, Central/Lower Palouse, North Fork Palouse, and South Fork Palouse (see Exhibit 1-3 in the Watershed Management Plan). However, the WRIA 34 Planning Unit decided to split Cow Creek and Rock Creek into separate management units and include the Pine Creek and Cottonwood Creek Subbasins as part of the Rock Creek management area for implementation.

## 1.2 Background on Watershed Planning Act

The Watershed Planning Act (Chapter 90.82 RCW) was passed by the Washington State Legislature in 1998 (and amended in 2003) to provide a forum for citizens to develop and implement locally based solutions to watershed issues. A copy of Chapter 90.82 RCW is included in Appendix D. Twelve Washington State agencies signed a Memorandum of Understanding (MOU) identifying roles and responsibilities for coordination under the Act. This MOU commits these agencies to work through issues in order to speak with one governmental voice when sitting at local Planning Unit tables during Phases I, II and III. The Watershed Planning Act (per RCW 90.82.120[2]) does not give the Planning Unit authority to change existing laws, alter water rights or treaty rights, or require any party to take an action unless that party agrees. However, it does provide the Planning Unit considerable flexibility in guiding the planning process and developing and implementing strategies for managing water resources in its WRIA.

Grant funding through the Washington State Legislature is available for watersheds that elect to initiate Watershed Planning to develop and implement a Watershed Plan through four phases:

1. *Phase I* - organize a Watershed Planning Unit;
2. *Phase II* - assess existing conditions and develop technical assessments of water resources;
3. *Phase III* - develop and adopt a Watershed Plan; and,
4. *Phase IV* - develop and carry out an implementation plan to address Watershed Plan actions.

## 1.3 Watershed Planning in WRIA 34

The following sections describe water resources planning and implementation activities in WRIA 34.

### 1.3.1 WRIA 34 Planning Unit

The initiating governments for WRIA 34 are Whitman County, Spokane County, Lincoln County, Adams County, the City of Pullman, and the Steptoe Water District. Franklin County decided not to participate because only a small portion of the county is located in WRIA 34. The initiating governments designated the Palouse Conservation District (Palouse CD) as the lead agency for Watershed Planning. The Palouse CD convened organizational meetings and established a Planning Unit that represents a wide variety of water interests by asking various agencies, organizations and businesses to appoint members, and by inviting individual landowners and others to participate. For the purposes of watershed management, the Planning Unit agreed to plan for the entire Palouse Basin, including the Idaho portion, and solicited Idaho representatives as formal voting members of the Planning Unit.

The WRIA 34 Planning Unit established several sub-committees, including a Steering Committee, Water Quality Committee, Instream Flow/Water Quantity Committee, and a Public Information/Outreach Committee. The Planning Unit served as the decision-making body for WRIA 34 on both technical and administrative issues, and coordinated efforts among the various sub-committees. The Steering Committee helped develop agenda items and framed key technical and administrative issues. The Water Quality Committee met during Phase II Planning to guide development of the technical assessments, but was not active during Phase III and is not expected to be active as Phase IV implementation progresses. However, members of the Water Quality

Committee are participating in the TMDL advisory group. The Instream Flow/Water Quantity Committee transitioned into the North Fork Palouse Instream Flow Committee during Phase III to work with Ecology and WDFW to develop recommendations for instream flow. The North Fork Palouse Instream Flow Committee continued to meet during Phase IV and will continue to meet until the North Fork instream flow work is completed. The Public Information/Outreach Committee developed a public outreach plan during Phase III and is not expected to be active as Phase IV implementation progresses.

### 1.3.2 Phase I Watershed Planning - Organization

The Planning Unit, committee organization, mission and planning goals for WRIA 34 were formed in 2002 under Phase I of Watershed Planning (RCW 90.82). The Planning Unit decided to address the required water quantity component of Watershed Planning along with the optional components of instream flow, water quality, and multi-purpose storage. The issue of fish habitat, while important to Planning Unit members, was not selected as a planning component due to the lack of critical habitat and ESA-listed fish species above Palouse Falls.

The WRIA 34 Planning Unit formed with the following mission:

*“Our mission is to treat water as a valuable resource through the development and implementation of a watershed plan for the beneficial management of water resources to balance the present and future needs of local rural and urban communities, agriculture and other industries, fish and wildlife.”*

### 1.3.3 Phase II Watershed Planning – Technical Assessment

The Phase II Level 1 Assessment (Golder, 2005) presents a compilation and review of existing data on the Palouse River Watershed, including climate, geology, surface hydrology, groundwater quantity, water quality and water demand. In addition, three Phase II, Level 2 Assessments were conducted to gather data, evaluate options, and develop recommendations regarding instream flow, water quality, and multi-purpose storage in WRIA 34. The Level 2 Instream Flow Assessment (Golder, 2006b) provided information for the Planning Unit to better evaluate instream flow issues in the Palouse River (North Fork and mainstem) and the Cow Creek tributary. The Level 2 Water Quality Assessment (Golder, 2007b) provided the Planning Unit with baseline information to support development of water quality plans and policies. The Level 2 Multi-Purpose Storage Assessment (Golder, 2006a) identified potential site locations for storage projects to assist in satisfying minimum instream flows to improve water supply reliability, enhance baseflows and improve water quality.

### 1.3.4 Phase III Watershed Planning – Watershed Management Plan

Information from both the Level 1 and Level 2 assessments was used to support Phase III Planning. The Planning Unit identified four areas of concern within the Palouse Watershed based on information received from the technical assessments and during public workshops: insufficient water supply, poor water quality, loss of riparian and aquatic habitat, and inadequate streamflows. The Planning Unit identified the following key goals to address in the Watershed Plan:

- Protect existing water rights and private property rights.
- Emphasize voluntary, incentive-based management solutions.

- Maintain the existing economy associated with the watershed hydrology, including but not limited to potable water, agriculture, industry, recreation and tourism.
- Establish and maintain ongoing educational and public involvement programs.
- Establish a detailed funding plan for implementation, including: projects; programs; long-term monitoring and evaluation of watershed plan implementation.
- Ensure fairness in distributing costs and burdens for water resource management actions.
- Address differences in local and state water resources regulatory and management approaches, and obtain local, state, federal and tribal buy-in and cooperation for recommended management strategies.
- Provide long-term reliable and predictable water supplies for human uses.
- Protect surface and groundwater quality needed for public drinking water supplies and other uses (livestock watering, recreation, fish etc.).
- Improve consistency, certainty, timeliness and efficiency in addressing water right decisions, and in regulatory approaches across state lines for improving water quantity and quality conditions.
- Improve scientific basis for understanding baseline conditions.
- Identify and implement water conservation and efficiency strategies.

In order to address these issues and attain these goals, the Planning Unit divided the watershed into four “management areas”: Cow and Rock Creek Subbasins; Central/Lower Palouse River from Colfax to the mouth, including Union Flat, Pine, and Cottonwood Creek Subbasins; North Fork Palouse River Subbasin; and, the South Fork Palouse River Subbasin. These areas were delineated based on land use, fish habitat and hydrologic characteristics. The issues, actions and responsible entities, presented in Section 6 and Appendix B of the Watershed Management Plan (HDR/EES, 2007), are the heart of the plan. The Watershed Management Plan was approved by the Planning Unit on October 10, 2007 and unanimously adopted by Adams, Lincoln, Spokane and Whitman Counties at a joint hearing in Colfax on November 26, 2007.

#### 1.3.5 Phase IV Watershed Planning - Implementation

Implementation of the Watershed Management Plan occurs in Phase IV of Watershed Planning, with the first year of Phase IV focused on developing this DIP. During development of this DIP, the WRIA 34 Planning Unit ranked the Watershed Management Plan actions to develop priorities and a schedule for implementation. To facilitate implementation, the Planning Unit divided the watershed into five “management areas” (Figure 2): Cow Creek Subbasin; Rock Creek, Pine, and Cottonwood Creek Subbasins; Lower Palouse River from Colfax to the mouth, including Union Flat Subbasin; North Fork Palouse River Subbasin; and the South Fork Palouse River Subbasin. The Planning Unit consolidated the Watershed Management Plan actions into one list, assigned a unique identifier to each action, and ranked each action. The rankings were then used to establish tiers to guide implementation priorities. The North Fork Instream Flow Committee also continued to meet during the first year of Phase IV to develop instream flow recommendations for the North Fork Palouse River. Instream flow considerations for the North Fork Palouse River are described in Section 7 of this DIP. Correspondence received during development of the DIP is included in Appendix E. The DIP was approved by the Planning Unit at the January 21, 2009 Planning Unit meeting.



### 1.3.6 Oversight and Coordination during Phase IV

In accordance with RCW 90.82.043[3], the DIP “must clearly define coordination and oversight responsibilities.” The primary mechanism for oversight and coordination for implementation of the Watershed Management Plan is provided by the WRIA 34 Planning Unit. The Palouse Conservation District (as the Lead Agency) is responsible for convening the WRIA 34 Planning Unit, preparing meeting summaries, administering implementation grant funds, tracking implementation projects and budgets and handling day-to-day tasks. The WRIA 34 Planning Unit plays the important role of providing overall direction for implementation, development of requests for proposals from contractors, approval of contractor selection, development and approval of scopes of work, and project reviews and approvals. The WRIA 34 Planning Unit is also responsible for development and approval of revisions to the Watershed Management Plan and DIP. The Lead Agency will be responsible (on behalf of the Planning Unit) for presentation of the revisions to the County Commissioners for their approval at a regularly scheduled Board meeting.

The Lead Agency’s role in coordination and implementation is further defined by the following action:

**BW-40:** *Fulfill lead agency responsibilities for watershed plan implementation:*

1. *Intergovernmental coordination and communications*
2. *Pursue additional funding*
3. *Monitor plan implementation*
4. *Information clearinghouse*
5. *Support specific strategies*
6. *Identify issues/ barriers to be addressed*
7. *Targeted public outreach*
8. *Prepare annual progress report*
9. *Coordinate watershed plan updates*
10. *Administrative support*

Coordination and oversight activities identified in Section 7.4 of the Watershed Management Plan include:

- Tracking implementation of plan actions by the many organizations involved to ensure actions are being carried out in a timely fashion, that the balanced nature of the plan is retained as actions are implemented, and that the most important priorities defined by the Planning Unit are being addressed.
- Coordinating efforts to seek funding for plan actions to avoid duplication of effort and ensure the State legislature and funding agencies see well-organized and unified support for funding requests.
- Providing information to the public on plan implementation and resulting improvements in watershed conditions.
- Providing early warning systems and joint responses to changing conditions, including physical conditions in the watershed, new regulatory developments, and new project proposals.
- Monitoring of watershed conditions across jurisdictional boundaries, data management, and providing data access.

- Annual review of the plan, detailing accomplishments from the previous year and priorities for the upcoming year. A comprehensive evaluation of the plan will initially take place after the third year, and then every five years thereafter to review and update the plan as necessary.
- Other consideration and oversight activities will be added as necessary.
- In order to provide a venue for these activities, it is recommended that the Palouse River Watershed Planning Unit transition from planning functions to coordination and oversight functions as listed above. The Planning Unit's purpose will be to foster an organized and collaborative approach to implementation (as many individual organizations carry out specific actions under their jurisdictions), and to secure funding for implementation.

The continued support by cities and towns, CDs, counties and Ecology throughout implementation is recommended by the following action:

**BW-39:** Planning Unit Support Beyond Phase IV.

The Watershed Management Plan recognizes that the continued involvement of Planning Unit members will be needed for the Planning Unit to be effective. As stated in Section 7.4 of the Watershed Management Plan:

*For the Planning Unit to be effective in the coordination and oversight role, local jurisdictions such as Adams, Lincoln, Spokane and Whitman Counties, cities and conservation districts, along with state, federal and other agencies will need to make staff resources available. Other groups such as the Sprague Lake Users Groups, PBAC and the Palouse-Clearwater Environmental Institute, as well as private landowners and land managers, need to participate in order to maintain a balanced approach to watershed management.*

The Watershed Management Plan notes that the involvement of the organizations identified as lead entities, supporting entities, and obligated entities in the Watershed Management Plan is vital to successful implementation. To further define the oversight structure presented in the Watershed Management Plan, the obligated, lead and supporting entities identified in the Watershed Management Plan are also identified in this DIP for each action to be implemented (see the Action Tracking Table, Table A-1 in Appendix A). For the purposes of this DIP, lead entities, supporting entities, and obligated entities are defined as:

***Lead Entity:*** An organization / individual that is primarily responsible for the completion of the action and guides other agencies collaborating on the action. The lead is in charge of securing funding for the action.

***Supporting Entity:*** An organization / individual that is in support of an action and therefore, collaborates as needed on action items, working in coordination with the lead entity; supports action funding strategies; and dedicates in-kind support and/or funding when possible.

***Obligated Entity:*** An organization / individual that accepted the obligation to complete the action.

The Watershed Management Plan (HDR/EES, 2007) recognizes that implementation by lead entities, supporting entities, and obligated entities is subject to funding and staffing availability. Actions are

identified as either obligations or recommendations (consistent with RCW 90.82.130) in Appendix B of the Watershed Management Plan (HDR/EES, 2007). Obligations in the Watershed Management Plan are defined by the Planning Unit as actions which the Planning Unit, or its designee, has committed to or has a responsibility to complete. Recommendations in the Watershed Management Plan are defined by the Planning Unit as desirable actions intended to help meet or address one or more of the planning objectives. Actions that are obligations are denoted on the Section 2 action tables (i.e., Tables 2-3 through 2-7). Actions that are not denoted as obligations on the Section 2 action tables (i.e., Tables 2-3 through 2-7) are defined as Watershed Management Plan recommendations. These actions (i.e., Watershed Plan recommendations) are intended to help address one or more of the planning objectives but do not have a lead entity that has obligated itself to implement the action.

It should be noted that the definition of a “recommendation” in this DIP is different from the definition in the Watershed Management Plan. These definitions are clarified below:

***DIP Recommendation:*** Policy statement and statement of support by the WRIA 34 Planning Unit for another entity to continue existing activities, develop programs, or implement a project (see Section 2.1).

***Watershed Management Plan Recommendation:*** Desirable action intended to help meet or address one or more of the planning objectives.

### 1.3.7 Transition into Implementation (Phase IV and Beyond)

A general conceptual organizational structure and implementation approach developed by the Planning Unit is presented in Figure 3. During the next four years of implementation, the Planning Unit expects to maintain its current form; however, the role of the Planning Unit may shift and it is anticipated that more of the meetings will be spent in sharing information and reporting back on project status by project sponsors. The Planning Unit may also meet as smaller groups to focus interest on geographic location or a specific project, as necessary.

The WRIA 34 Planning Unit also identified the following goals and intentions for Planning Unit operation during the next four years of Phase IV Implementation:

- Meet as needed to bring closure to the instream flow work or determine further instream flow work in the watershed and meet quarterly thereafter. The Lead Entity (currently the Palouse CD) will coordinate meeting arrangements and agenda.
- Continue to communicate to Ecology that the WRIA 34 Planning Unit intends to be involved in any potential instream flow rule making in the watershed.
- Coordinate between project sponsors to avoid duplication. This includes having PBAC report back to the group as a standing agenda item.
- Allocate staff resources to help pursue grant funding and write grant proposals. The Planning Unit can assist in determining which proposals to pursue with its implementation funding.

Assuming that the Phase IV process continues on the current funded cycle, Phase IV of Watershed Planning will end in December 2012. It will be the responsibility of the Palouse CD, as the Lead Agency during Phase IV, to work with WRIA 34 Planning Unit members to establish

an organizational structure to continue locally based water resources planning and implementation in WRIA 34 after Phase IV is complete.

- It is recommended that the post Phase IV organizational structure be confirmed by the WRIA 34 Planning Unit in December 2010 and that steps be taken prior to December 2011 to transition to this new structure. Since most of the actions in the DIP must be implemented at the local level, it will be important that local agencies, citizens / landowners and other locally-based interest groups continue to be involved.

#### **1.4 Total Maximum Daily Load Assessments**

Several water bodies in the Palouse River watershed do not meet water quality standards and are on the 2004 303(d) list of polluted water bodies. Waters placed on the 303(d) list require the preparation of a Total Maximum Daily Load (TMDL) assessment to determine the amounts of pollutant loading that a given water body (river, marine water, wetland, stream, or lake) can receive and still meet water quality standards. TMDLs have been or are being developed for the Palouse River, North Fork Palouse River, and South Fork Palouse River.

The Palouse River Chlorinated Pesticide and PCB TMDL was developed by Ecology in July 2007 and approved by U.S. EPA in November 2007. The report is listed below.

*Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load: Water Quality Improvement Report and Implementation Plan (Ecology, 2007b)*

The North Fork Palouse River Fecal Coliform TMDL was approved by U.S. EPA in March 2005, and Ecology worked with local agencies and organizations to develop a water quality implementation plan (WQIP) which was completed in June 2006. The report is listed below.

*North Fork Palouse River Fecal Coliform Total Maximum Daily Load - Water Quality Implementation Plan (Ecology, June 2006)*

Ecology is also developing TMDLs for the following waterbodies:

- South Fork Palouse River: The TMDLs address fecal coliform bacteria, temperature, dissolved oxygen, pH, and nutrients in the South Fork Palouse River and its tributaries. Existing data indicates the South Fork Palouse River, Paradise Creek, and Missouri Flat Creek are impaired. Ecology began three studies on the South Fork Palouse River and its tributaries in May 2006. One study is focused on fecal coliform, the second on temperature and the third is focused on dissolved oxygen, pH and nutrients. Ecology formed an advisory group in June 2008 to review the studies' results and recommend strategies to improve water quality. Members of the Water Quality Subcommittee are participating in the TMDL advisory group.
- Palouse River (mainstem): The TMDLs address fecal coliform bacteria, temperature, dissolved oxygen, pH, and nutrients on the Palouse River and Rebel Flat Creek. One study is focused on fecal coliform, the second on temperature and the third is focused on dissolved oxygen, pH and nutrients. The North Fork Palouse River is not included in the fecal coliform study because it is addressed in the North Fork Fecal Coliform TMDL.

## 1.5 Public Outreach

The WRIA 34 Planning Unit has encouraged public involvement throughout the planning process. The purpose of these efforts is to:

- Raise the community's awareness of the planning process and water resource related issues;
- Gain community involvement and input; and,
- Facilitate the exchange of information between the community and the Palouse Watershed Planning Unit.

A significant amount of public outreach and education have taken place in conjunction with implementation of specific actions in the first year of Phase IV Implementation. These include the following actions by the Planning Unit or Palouse CD:

- Sent out notices for and encouraged participation in the Planning Unit meetings (which are open to the public).
- Sent letter to and held workshop (May 20, 2008) for municipal water providers in order to inform the water providers of the Watershed Planning process and to obtain information on inchoate water rights (per RCW 90.82.048 [1] and [2]).
- Presented an overview of the DIP at the 2008 Palouse Water Summit in Moscow on October 7, 2008.
- Held advertised public meetings to inform the public about this DIP on December 2, 2008 in Ritzville and December 3, 2008 in Pullman.

## 1.6 Approval and Update Schedule for the Detailed Implementation Plan

This DIP was approved by the WRIA 34 Planning Unit at the January 21, 2009 Planning Unit meeting. Following the WRIA 34 Planning Unit's approval, this DIP was sent to Ecology to fulfill the requirements of the Watershed Planning Act and the deliverables for the WRIA 34 Phase IV grant. As noted in Section 7 of the Watershed Management Plan, the WRIA 34 Planning Unit recognizes the need to develop an adaptive management program to maintain the relevance of the Watershed Management Plan over the 20-year planning horizon. This DIP is scheduled to be reviewed annually by the WRIA 34 Planning Unit during Phase IV in December 2009, December 2010 and December 2011. As part of the annual review, the Planning Unit will update the information in the implementation notes column of the Action Tracking Table (Appendix A) and the Planning Unit will re-evaluate projects as needed and identify which projects the Planning Unit will submit for funding based on the funding opportunities available for that year. In addition, the Planning Unit may add new actions and remove or revise irrelevant or duplicative actions. Actions may be added, removed or revised under the following conditions:

- Must have the approval, per the Operating Procedures<sup>2</sup>, of the WRIA 34 Planning Unit;
- New actions must be linked to stated objectives in the Watershed Management Plan; and

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<sup>2</sup> A copy of the WRIA 34 Planning Unit Operating Procedures is available upon request from the Palouse CD.

- Must have the approval of the entities that will be designated to implement or support the implementation of the action.

WRIA 34 covers four counties, and formal approval to changes in the Watershed Management Plan will require the approval of 12 county commissioners (3 commissioners per county). Although the Planning Unit has determined that actions can be added or deleted from the DIP as part of its annual update under the conditions listed above, the County Commissioners should be informed of the addition of actions that could impact zoning and building permits in their county. The Palouse CD will update the information in the Action Tracking Table (Appendix A) based on the information provided in the annual review. The actual document (text, figures, and tables) is not intended to be revised in the annual DIP updates. Appendix A is the “live document” or “working plan” that will change into the future, subsequent to the annual review of actions and as actions are funded or not funded.

This DIP is not intended to be a stand-alone document. It is intended to be used in conjunction with the Watershed Management Plan. As noted in Section 7.9 of the Watershed Management Plan, the WRIA 34 Planning Unit recognizes the need to review and revise the Watershed Management Plan since management priorities within the watershed may shift over time with new data, changing conditions, changing regulatory and funding programs and, the new projects may affect water resources within the region. In addition, the implementation process may result in some modifications of the recommended actions as they are actually carried out.

To accommodate this ongoing evolution of information and events in the region, the Planning Unit recommended that the Watershed Management Plan be reviewed by the Planning Unit or its successor, as one of its implementation responsibilities. The first review should occur within three years of the date that the Watershed Management Plan is adopted by the Boards of County Commissioners. The Watershed Management Plan was adopted in December 2007. Therefore, the next Watershed Management Plan update is scheduled for 2010.

A member of the Planning Unit has asked the Planning Unit to consider removing or modifying the following actions in the Watershed Management Plan as part of the first update:

- CC-13: Consider removing the action.
- CC-17: Consider removing the action.
- BW-16: Consider revising list item number 3 to: “Develop and implement Conservation Tillage Aquifer Recharge Program on acreage that includes conventionally cultivated summer fallow and highly erodible land.”
- BW-31: Consider removing list item number “3” from the action.
- BW-48: Consider removing list item “f” from the action.

## 1.7 New Action for Inclusion in the Watershed Management Plan and DIP

The Planning Unit agreed to include the following new actions in this DIP and to add the actions to the Watershed Management Plan in the first update (scheduled for 2010):

*BW-50: Evaluate the feasibility of constructing surface water storage facilities in the Palouse River Watershed to augment water supply for instream and/or out-of-stream purposes.*

This new action fulfills Objectives BW17 and BW12 of the Watershed Management Plan:

Objective BW17: Identify and develop opportunities to enhance available water supply, emphasizing out of stream storage, shallow aquifer recharge, deep aquifer storage and recovery, source substitution, reclamation and reuse, and stormwater retention.

Objective BW12: Provide long-term reliable and predictable water supplies for municipal, residential, commercial, industrial, agricultural, livestock, recreational, and instream water uses.

*BW-51: Develop a road map for instream flow assessments and recommendations for the entire watershed within the second year of implementation. Determine whether instream flows will be set in other management areas and at what point instream flow recommendations for the North Fork Palouse River will be adopted into rule by Ecology.*

This new action fulfills Objectives BW12 and CRC3 of the Watershed Management Plan.

Objective BW12: Provide long-term reliable and predictable water supplies for municipal, residential, commercial, industrial, agricultural, livestock, recreational, and instream water uses.

Objective CRC3: Set minimum instream flow in Cow Creek for senior water rights and aquatic habitat.

## 1.8 Detailed Implementation Plan Availability

Copies of this DIP, including the Appendices, are available for review:

- At the Palouse Conservation District, 325 NW State Street, Pullman, WA 99163;
- Online on the Palouse Conservation District Website (<http://www.palousecd.org/>); and,
- On Compact Disc (CD) that can be obtained by calling the Palouse Conservation District office in Pullman, WA at (509) 332-4101.

## 2.0 IMPLEMENTATION APPROACH

This section describes the WRIA 34 Planning Unit's approach to prioritizing projects/actions and studies/assessments for implementation of the Watershed Management Plan. This section also includes documentation of a ranking strategy and the resulting implementation priorities, ranked by tier. These priorities will drive corresponding timelines for implementation of the actions in the Watershed Management Plan.

### 2.1 Priority Actions

The Watershed Management Plan contains watershed actions pertaining to water supply, streamflow management, surface water quality and groundwater quality at the basin-wide scale (Table A-2 of the Watershed Management Plan) and management area scale (Tables 6-1, 6-2, 6-4, and 6-5 of the Watershed Management Plan). The Watershed Management Plan also identifies the lead, supporting, and obligated entities (if any) for each action (Tables B-1 to B-5 of the Watershed Management Plan).

Many of the actions were duplicated in the Watershed Management Plan tables because they applied to more than one management area. The WRIA 34 Planning Unit decided that actions should be ranked according to the action and not based on the area to which it applied. Therefore, the actions were grouped based on the action description and a unique action identifier was created for this DIP in order to develop one list of actions. The unique identifier reflects the geographic area(s) to which the action applies:

- BW: Basin-wide
- CC: Cow Creek Management Area
- CC and LP: Cow Creek and Lower Palouse Management Areas
- CC and RC: Cow Creek and Rock Creek Management Areas
- LP: Lower Palouse River Management Area
- LP and RC: Lower Palouse River and Rock Creek Management Area
- NFP: North Fork Palouse River Management Area
- NFP and SFP: North Fork Palouse River and South Fork Palouse River Management Areas
- RC: Rock Creek Management Area
- SFP: South Fork Palouse River Management Area

The wording for some of the actions in the Watershed Management Plan was refined by the WRIA 34 Planning Unit during development of this DIP so that the actions could be better understood for prioritization and implementation. The refinements of the actions as listed in this DIP are not significant enough to necessitate an amendment to the Watershed Management Plan, rather the refinements add specificity to the original Watershed Management Plan actions. The link between



the original actions in the Watershed Management Plan and the refined actions in this DIP is provided in Appendix B.

Actions were also categorized into three groups to facilitate ranking: actions/projects, studies/assessments, and recommendations:

- **Actions/projects** are actions that require funding to implement specific, on-the-ground projects or to develop and implement programs.
- **Studies/assessments** are actions that require funding to obtain more information that could be used to further the WRIA 34 Planning Unit's understanding of the watershed or provide the technical basis for other actions/projects.
- **Recommendations** are policy statements and statements of support by the WRIA 34 Planning Unit for another entity to continue existing activities, develop programs, or implement a project. Recommendations were not ranked by the WRIA 34 Planning Unit because they do not require the WRIA 34 Planning Unit to obtain funding to implement.

#### 2.1.1 Criteria and Process for Ranking

WRIA 34 Planning Unit members participated in a prioritization exercise during Phase III Watershed Planning. The WRIA 34 Planning Unit generated the following criteria for selection of high priority projects:

- Measurable cost versus benefits (practicality).
- Will it benefit our future generations (grandchildren)?
- Protection of existing rights – property and water (value).
- Will it support the ability for long-term sustainable water supply (municipal, domestic, agriculture, other)?
- Benefit to the most people.
- Supports multiple use/or benefits.
- Public acceptance/support.
- Low potential for alternative funding outside the WRIA project.
- Will improve water quality – (temperature, etc.)?

The Planning Unit agreed by consensus on the top five, high priority, early implementation actions/projects for submission to Ecology for Implementation Funding during Phase III Watershed Planning. The actions are identified by "Identified as the Planning Unit's #\_\_ Priority in the Watershed Management Plan" in the implementation notes column of Table A-1 in Appendix A. Meeting minutes and the session notes for the priority projects that were identified are available in Appendix E of the Watershed Management Plan.

The criteria used to identify the top five, high priority, early implementation actions/projects during the Phase III planning process were used as the basis for the criteria used to prioritize the actions/projects and studies/assessments for this DIP. The criteria and the relative weight associated with the criteria are specified in Tables 2-1 and 2-2 on the following pages. The Planning Unit agreed

to a list of questions for each criteria to assist Planning Unit members in consistently scoring each of the actions/projects and studies/assessments for this DIP. The scores provided by the WRIA 34 Planning Unit members were averaged to obtain a score for each action/project and study/assessment.

### 2.1.2 Prioritization Results

The action scores were used to group the actions into four tiers based on quartiles. Each tier represents approximately one quarter of the actions ranked. There are 22 actions in Tier 1 (26 percent), 24 actions in Tier 2 (28 percent), 26 actions in Tier 3 (30 percent), and 14 actions in Tier 4 (16 percent). The highest ranked actions fall into Tier 1, and the lowest ranked actions fall into Tier 4. Both basin-wide and management area specific actions are included in the prioritization process.

Figure 4 provides a visual analysis of the tier in which each action is ranked and the management area to which the action applies. Figure 5 provides a visual analysis of the topic addressed by each action and the tier. Tables 2-3 to 2-7 include the unique action identifier, action description, lead entities/project sponsors, and implementation notes of the actions by tier. The Planning Unit decided to identify whether the Tier 1 projects were capital projects or operational projects to more easily identify funding opportunities. Table 2-3 lists the Tier 1 capital projects, and Table 2-4 lists the Tier 1 operational projects. Tables 2-5, 2-6 and 2-7 list the Tier 2, 3, and 4 projects, respectively. The funding and implementation status of each action is also identified in the tables. Actions that have been completed, or are in the process of being completed, are identified in the Action Tracking Table (Table A-1 in Appendix A) as Completed or Ongoing in the Implementation Notes column and are also listed in Section 3.0.

The Planning Unit did not rank recommendations. However, recommendations are listed in Table 2-8, along with the entity to which the recommendation is directed. The WRIA 34 Planning Unit intends to continue to track the recommendations with the lead and supporting entities and to update the implementation notes in the Action Tracking Table, Table A-1 in Appendix A.

## 2.2 **Timelines**

The timelines for implementing the actions in this DIP are based on setting a percent funded target for each tier. The DIP includes a total of 86 ranked actions and 41 recommendations. The Planning Unit was ambitious in developing actions that could benefit the watershed, and therefore it prioritized the actions to focus its efforts during implementation. Many of the high priority actions are capital projects and studies/assessments that may require significant funding and time to implement. The percent funded targets set reasonable goals for the Planning Unit to obtain funding for projects and begin implementation, considering the number of actions and the time, money, and effort needed to complete the actions. The timelines reflect the Planning Unit's priorities and are focused on implementing Tier 1 and Tier 2 actions.

Percent funded targets for Tier 1 and 2 actions are as follows:

- 2012 (Year 5)
  - 20 percent of Tier 1 actions (4 actions funded and ongoing);
  - 5 percent of Tier 2 actions (2 actions funded and ongoing)
- 2018 (Year 11)

- 50 percent of Tier 1 actions (11 actions funded and ongoing);
- 10 percent of Tier 2 actions (2 actions funded and ongoing)

The goal of the funding targets is to get as many of the Tier 1 actions funded as possible, but also to take advantage of funding opportunities for actions in other tiers, as funding becomes available. See Section 4.0 for additional detail.

**TABLE 2-1**

**Projects/Actions Prioritization Framework**

<b>TOTAL POSSIBLE SCORE: 40 pts</b>
<b>1. Benefits (0 - 20 pts.)</b>
<ul style="list-style-type: none"> <li>• Cost/Benefit: Does the action/project provide measurable benefits for the cost (is it practical)?</li> <li>• Benefit: Will the project/action benefit our grandkids (e.g., will the benefits be for the long term vs. short term)? Will it provide benefit to the most people, or support multiple uses/or benefits? Will it maintain the landscape that we enjoy now?</li> <li>• Does the action/project have a positive effect on other watershed plan elements (water quality, habitat)?</li> <li>• Sustainable Water: Will the project/action support our ability to sustain our water supply over the long-term (municipal, domestic, agriculture, other) (e.g., does it result in more efficient use of our water or extend the availability of our water in the future)?</li> </ul>
<b>2. Implementation Considerations (0 - 20 pts.)</b>
<ul style="list-style-type: none"> <li>• Foundation: Will implementation lead to the ability to implement other projects in WRIA 34?</li> <li>• Would implementation support goals / objectives of adjoining WRIAs?</li> <li>• Willing Sponsor: Does this project/action have a strong project proponent who can propose and/or sponsor the project/study?</li> <li>• Acceptance: Does the project have broad acceptance by the Planning Unit and the Public?</li> <li>• Rights: Does the action/project protect existing rights – property &amp; water (value)?</li> </ul>

Notes:

- Cost is not evaluated as part of this process.

**TABLE 2-2****Studies/Assessments Prioritization Framework**

<b>TOTAL POSSIBLE SCORE: 40 pts</b>
<b>1. Benefits (0 - 20 pts.)</b>
<ul style="list-style-type: none"> <li>• Cost/Benefit: Will the study/assessment provide measurable benefits for the cost (is it practical)?</li> <li>• Benefit: Will the results of the study benefit our grandkids (e.g., will the benefits be for the long term vs. short term)? Will it provide benefit to the most people, or support multiple uses/or benefits? Will it maintain the landscape that we enjoy now?</li> <li>• Does the action/project have a positive effect on other watershed plan elements (water quality, habitat)?</li> </ul>
<b>2. Implementation Considerations (0 - 20 pts.)</b>
<ul style="list-style-type: none"> <li>• Foundation: Are the results of this study/assessment necessary to have in order to implement other projects in WRIA 34?</li> <li>• Would the study/assessment support goals / objectives of adjoining WRIAs?</li> <li>• Willing Sponsor: Does this study/assessment have a strong project proponent who can propose and/or sponsor the project/study?</li> <li>• Acceptance: Does the study have broad acceptance by the Planning Unit and the Public?</li> </ul>

Notes:

- Cost is not evaluated as part of this process.

### 3.0 EARLY IMPLEMENTATION

This section briefly describes completed and ongoing implementation efforts in WRIA 34.

#### 3.1 Completed Actions

Completed Watershed Management Plan actions are designated by “Completed” in the implementation notes column of the Action Tracking Table (Table A-1 in Appendix A). This includes:

- LP-3: Secure additional water supply/water rights.

*The town of Colton’s water right transfer was completed in November 2007.*

#### 3.2 Ongoing Actions

There are a number of Watershed Management Plan actions and portions of Watershed Management Plan actions that are currently being implemented. These are designated by “Ongoing” or “Ongoing and/or funded” in the implementation notes column of the Action Tracking Table (Table A-1 in Appendix A). These include:

- NFP-1: Identify appropriate areas for permanent gaging stations upstream of Colfax.

*A continuous, stand alone gage was installed on the North Fork Palouse River at Elberton in May 2007. However this gage was removed in September 2007 and will be relocated to a site farther downstream.*

- CC and RC-3: Hydrogeologic study to understand the impacts of groundwater withdrawal on groundwater levels and streamflows in Cow Creek and Rock Creek Subbasins. Study to be conducted cooperatively with the other WRIAs (34, 54, and 56) regarding water use and instream flow setting (in an adjudicated basin).
  1. Characterize the hydrology and hydrogeology, including connectivity and interaction between surface water, groundwater, springs, lakes and gravel beds. Study to include review of flow data.
  2. Develop a groundwater-surface water flow model.
  3. Use the model to:
    - a. characterize hydraulic continuity between wells and streams on Cow Creek,
    - b. develop potential recharge and flow enhancement strategies for Cow Creek,
    - c. assess the impact of new groundwater withdrawals (e.g., for stock watering, irrigation, and municipal water supply for Cheney, Airway Heights and Medical Lake) on the streamflows and groundwater flows of the Cow Creek and Rock Creek Subbasins.
  4. Plan for future water supply in the Cow Creek Subbasin considering both the hydrogeology and the 1984 adjudication.
  5. Develop appropriate management strategies to address the results for both the Cow Creek and Rock Creek Subbasins.

*Spokane County is leading the effort for the portion of the management area within Spokane County and intends to fund these efforts through WRIA 54.*

- CC-2: Conduct hydrogeologic characterization of Cheney and Medical Lake areas and establish location of groundwater divide. Conduct hydrologic study and establish surface water divides. Based on the results of these studies, evaluate the need to remap WRIA boundaries in the Cheney and Medical Lake areas. Coordinate with adjacent WRIs, as needed.

*Spokane County is currently performing a hydrogeologic study, is leading the effort for the portion of the management area within Spokane County and intends to fund these efforts through WRIA 54.*

- NFP and SFP-2: Further develop the feasibility of enhanced infiltration at the basement – basalt contact at Kamiak Butte, with preference for an infiltration ditch that would follow the contact between the basalt and the basement rocks. Consider the North Fork and Fourmile Creek as potential sources of water for infiltration. Conduct surface water sampling to support assessment of treatment options for water diverted from the North Fork of the Palouse River and Fourmile Creek.

*This feasibility study was funded by Ecology in 2006 and has been documented in a recent final report (Golder and HDR, 2008). Based on the results of this study, the Planning Unit agrees that enhanced infiltration of water at surface is unlikely to be effective to enhance recharge to the basalts.*

- NFP-7: Develop instream flow package for North Fork Palouse; establish minimum instream flows for North Fork Palouse River. Consider a partial closure during low flow summer months; along with a reservation for year round domestic and municipal use and a maximum allocation during high flow; consider water reservation for storage.

*The North Fork Palouse Instream Flow Working Group worked with Ecology and WDFW to develop instream flow recommendations during Year 1 of Phase IV Implementation. The recommendations are discussed in Section 7.0 of this DIP.*

- NFP-16: Identify funding opportunities to address TMDL concerns on the mainstem Palouse River in Washington and in Idaho.

*Centennial Clean Water Grant/Loan funds, 319 Nonpoint Pollution Grant funds, and 319 Direct Implementation funds (a subset of the nonpoint pollution funds).*

- SFP-6: Conduct ongoing studies and data collection to monitor groundwater conditions, and to better understand how recharge occurs (in Palouse Basin Aquifer).

*PBAC funds a continuing monitoring program that fits under this action. Since 1999, student research projects have been coupled with monitoring activities. Currently the Wanapum monitoring activity is funded through May of 2009; the Grande Ronde monitoring student researcher completed his research in May of 2008, and Steve Robischon is now doing the monitoring. PBAC has had ongoing discussions about whether the monitoring is best conducted by student researchers or a dedicated employee.*

## 4.0 IMPLEMENTATION SCHEDULE

The Planning Unit was ambitious in developing actions that could benefit the watershed, and therefore it prioritized the actions to focus its efforts during implementation. The DIP includes a total of 86 ranked actions and 41 recommendations. Many of the high priority actions are capital projects or studies/assessments that may require significant funding and time to implement.

In order to develop a practical schedule for implementation, the Planning Unit decided to set percent funded targets for the actions in each tier for each year remaining in Phase IV (i.e., Years 2, 3, 4 and 5). The percent funded targets provide flexibility in implementing actions as funding becomes available. The goal of the funding targets is to get as many of the Tier 1 actions funded as possible but also to take advantage of funding opportunities for actions in other tiers as funding becomes available. As Tier 1 projects get funded, other projects will move up in priority.

Project proponents can state the Planning Unit's support for all tiered actions when applying for grants. The Planning Unit supports all of the actions in the DIP and a lead entity/project sponsor can obtain funding for an action in any tier.

### 4.1 Implementation 2009 (Year 2)

Percent funded targets for Tier 1 and 2 actions are as follows:

- 5 percent (1 action) of Tier 1 actions funded and ongoing
- 0 percent (no actions) of Tier 2 actions funded and ongoing. However, Tier 2 projects can be funded during this time.

The percent funded targets set a goal of obtaining funding for 1 action in Tier 1 and no actions in Tiers 2, 3, and 4 in 2009, although Tier 2, 3 and 4 actions can be funded during this time (see Tables 2-3 through 2-7 for listing of Tier 1, 2, 3 and 4 actions). These actions are in addition to the actions identified in Section 3.0 as completed or ongoing. In addition to the ranked actions, the Planning Unit will also implement and track the progress of recommendations (see Table 2-8). The WRIA 34 Planning Unit will also communicate with the City of Malden, Town of Rosalia, City of Endicott and City of Sprague water providers and give them an opportunity to attend Planning Unit meetings to discuss their water rights issues (see Section 8.0). The WRIA 34 Planning Unit will provide support to the water providers as they can and on a case-by-case basis.

### 4.2 Implementation 2010 (Year 3)

Percent funded targets for Tier 1 and 2 actions are as follows:

- 10 percent (2 actions) of Tier 1 actions funded and ongoing
- 0 percent (no actions) of Tier 2 actions funded and ongoing. However, Tier 2 projects can be funded during this time.

The percent funded targets set a goal of obtaining funding for 1 additional action in Tier 1 and no actions in Tiers 2, 3, and 4 in 2010, although Tier 2, 3 and 4 actions can be funded during this time (see Tables 2-3 through 2-7 for listing of Tier 1, 2, 3 and 4 actions). In addition to the ranked actions, the Planning Unit will also implement and track the progress of recommendations (see Table 2-8).



### **4.3 Implementation 2011 (Year 4)**

Percent funded targets for Tier 1 and 2 actions are as follows:

- 15 percent (3 actions) of Tier 1 actions funded and ongoing
- 0 percent (no actions) of Tier 2 actions funded and ongoing. However, Tier 2 projects can be funded during this time.

The percent funded targets set a goal of obtaining funding for 1 additional action in Tier 1 and no actions in Tiers 2, 3, and 4 in 2011, although Tier 2, 3 and 4 actions can be funded during this time (see Tables 2-3 through 2-7 for listing of Tier 1, 2, 3 and 4 actions). In addition to the ranked actions, the Planning Unit will also implement and track the progress of recommendations (see Table 2-8).

### **4.4 Implementation 2012 (Year 5)**

Percent funded targets for Tier 1 and 2 actions are as follows:

- 20 percent (4 actions) of Tier 1 actions funded and ongoing
- 5 percent (1 action) of Tier 2 actions funded and ongoing

The percent funded targets set a goal of obtaining funding for 1 additional action in Tier 1, 1 action in Tier 2, and no actions in Tiers 3 and 4 in 2012, although Tier 3 and 4 actions can be funded during this time (see Tables 2-3 through 2-7 for listing of Tier 1, 2, 3 and 4 actions). In addition to the ranked actions, the Planning Unit will also implement and track the progress of recommendations (see Table 2-8).

### **4.5 Implementation Post 2012**

Percent funded targets for Tier 1 and 2 actions are as follows:

- 50 percent (11 actions) of Tier 1 actions funded and ongoing by 2018
- 10 percent (2 actions) of Tier 2 actions funded and ongoing by 2018

The percent funded targets set a goal of obtaining funding for 7 additional actions in Tier 1, 1 additional action in Tier 2, and no actions in Tiers 3 and 4 by 2018, although Tier 3 and 4 actions can be funded during this time (see Tables 2-3 through 2-7 for listing of Tier 1, 2, 3 and 4 actions). This would mean that 11 Tier 1 actions and 2 Tier 2 actions would be funded by 2018, which is approximately 15 percent of the Tier 1, 2, 3 and 4 ranked actions. In addition to the ranked actions, the Planning Unit will also continue to implement and track the progress of recommendations (see Table 2-8).

### **4.6 Review of Actions and Update Schedule for this Implementation Plan**

Since this DIP is a living document, it will grow and evolve over time as actions are implemented and as a better understanding of the Palouse Watershed is established. The Palouse CD will maintain an electronic version of the Action Tracking Table (Table A-1 in Appendix A) and update it annually. There are actions that will require annual review by the WRIA 34 Planning Unit. The following tasks are recommended to be included within the annual review and DIP update processes:

1. Review, on an annual basis, the list of high priority actions from the Watershed Management Plan that have unknown schedules and attempt to establish timelines and / or reconsider the actions and lead entities/project sponsors. If new timelines / actions / lead entities / project sponsors are established, these should be included in updates of the DIP as needed, and no less than annually. Work to identify lead entities for orphan actions and recommendations (i.e. actions and recommendations that currently have not been assigned to an implementing entity).
2. Annual review of Watershed Management Plan recommendations.
3. Review of actions that require funding. The Tier 1, 2, 3, and 4 actions should be reviewed to identify any actions that may need to move to a different tier.
4. Annual review of funding opportunities including review of information in Appendix F of the Watershed Management Plan.
5. Update the information in the implementation notes column (Table A-1 in Appendix A) to accurately reflect the status of the action and current efforts to implement the action. The implementation notes column should be updated with the following information:
  - a. Implementation Status: Complete, ongoing, funded.
  - b. Funding status: Specific information regarding actions taken to obtain funding (e.g., submitted project proposal in 2008). Also, identify if it would be a capital project.
  - c. Institutional knowledge: Additional information that describes the background and purpose of the action to aid implementation.
  - d. Other considerations: Other information that would be useful to know to implement the action. This can include information regarding related actions undertaken by other entities that could be used to eliminate duplication and inconsistencies.

This DIP is scheduled to be reviewed annually by the WRIA 34 Planning Unit during Phase IV in December 2009, December 2010, December 2011 and December 2012. During the annual review, the actions to be implemented that year will be confirmed by the WRIA 34 Planning Unit. New actions may be added and irrelevant or duplicative actions may be removed. Section 1.6 discusses the process by which actions can be added or removed. Changes in priority of projects may also be considered.

## 5.0 FUNDING MECHANISMS

This section addresses the requirement for the Phase IV Implementation Plan to define “specific funding mechanisms” (per RCW 90.82.043[3]) for implementation of the Watershed Management Plan actions. The following funding mechanisms are considered: (1) Phase IV Implementation grant funds; (2) resources committed by implementing entities; and, (3) other grant funding.

In the Watershed Management Plan, the WRIA 34 Planning Unit recognized that implementation is subject to budgetary constraints and that no entity is obligated to implement an action unless adequate funding is available. In reality, since there is insufficient funding through Watershed Planning Phase IV to implement all the actions, resources to implement actions will come primarily from the obligated/lead entities identified in the Watershed Management Plan and from additional funding sources. The WRIA 34 Planning Unit could also consider hiring a grant writer to assist with applying for potentially available funds.

### 5.1 Phase IV Watershed Planning Funds

Phase IV Watershed Planning Implementation funds provided by the State Legislature include:

- Up to \$100,000 for the first three years of implementation, with a 10 percent required match (\$10,000 per year). Second year funding is conditioned on the completion of an approved DIP.
- At the end of three years, up to \$50,000 for the fourth and fifth years of implementation, with a 10 percent required match (\$5,000 per year).

Phase IV Implementation funds (potentially available through 2012) will be utilized primarily by the WRIA 34 Planning Unit to administer and facilitate implementation of the Watershed Management Plan and implement Tier I and Tier 2 projects.

### 5.2 Resources Committed by Lead Entities/Project Sponsors

The Action Tracking Table (Table A-1 in Appendix A) provides a summary of the Watershed Management Plan recommendations, actions/projects, studies/assessments and the entities that have committed, by approval of the Watershed Management Plan, to fulfill these obligations and recommendations. No attempt has been made to quantify the value of these commitments. However, the total value is significant. An overview of some of these important funding commitments includes:

- Grant No. G0800439 between Ecology and Palouse CD for up to \$100,000 for the first three years of implementation, with a 10 percent required match (\$10,000 per year) and for up to \$50,000 for the fourth and fifth years, with a 10 percent required match (\$5,000 per year).
- Time committed from Planning Unit members for staff to attend Planning Unit and Committee meetings and to keep their organizations informed of the WRIA 34 Watershed Planning process.
- Some projects have been funded (see Section 3.0) and their status is indicated in the implementation tables. Some of these projects include:
  - Kamiak Butte recharge study (Golder and HDR, 2008) – funded by Ecology in 2006.
  - Rock Lake reservoir feasibility study – ranked for funding by Ecology through the Columbia River Management Program in 2008.

- PBAC funds a continuing monitoring program that fits under action SFP-6. The Wanapum monitoring activity is funded through May of 2009.

### 5.3 Review of Grant Funding Sources

Appendix F of the Watershed Management Plan includes an overview of potential funding sources that may be considered for those actions that do not have a secured funding source. It is recommended that this resource be reviewed by the WRIA 34 Planning Unit to confirm priority projects for funding on a year-by-year basis along with the annual review of the DIP. The most common funding sources in addition to Phase IV Watershed Planning funds include:

- Specific grants that may be available through Ecology for projects in Washington (e.g., Watershed Planning implementation funds and Columbia River Management Program funds), WDFW, WDOH, DNR, and CDs. These will vary over time.
- Direct appropriations from the Washington State Legislature for specific projects in the Palouse basin in Washington, based on requests to be formulated as the Watershed Management Plan is implemented.
- Entities within the State of Idaho will secure funding for projects related to that portion of the watershed within Idaho.
- Boise State University's Environmental Finance Center has partnered with the U.S. EPA's Environmental Finance Program to provide a searchable database containing funding options for a variety of environmental protection programs including watershed planning. The database can be found at the following Boise State website: <http://efc.boisestate.edu/watershed/searchmenu.asp>. The Palouse CD has a list of grant funding sources on file from the Boise State database.
- Federal funding sources for monitoring, pollution prevention and control, watershed and drinking water source protection, wetlands and wildlife. These funding sources are compiled in U.S. Environmental Protection Agency's (U.S. EPA) *Catalog of Federal Funding Sources for Watershed Protection* (U.S. EPA, 2003).
- Centennial Clean Water 319 Funds available through Ecology.
- The Northwest Power and Conservation Council funding of habitat restoration projects and public involvement and education through the Bonneville Power Administration (BPA).
- Grants or low interest loans from existing funding programs, such as the Public Works Trust Fund, the salmon recovery funds (state and federal), the State Revolving Fund for drinking water and many other sources may be used for funding management actions. See Appendix F of the Watershed Management Plan for a more detailed listing of grant and loan programs and descriptions of the types of watershed management actions that can be funded through these sources.
- Rates and hookup charges collected from customers by public water systems.
- County permitting fees or general fund revenues.
- Assessments on property through local improvement districts, for projects that benefit those properties (subject to local approval).

- Private industry funds, for voluntary projects at selected industrial facilities (supplemented by public funds where possible).
- Landowners, for voluntary projects at selected sites (supplemented by public funds where possible).
- While not called out for any specific actions under the plan, Public Utility Districts and Washington Conservation Districts have authority under State law to levy property taxes up to certain limits. If this source of funding is desired, it must be subjected to a vote of the affected public. This is a potential supplementary source of funding, particularly for activities that cross local jurisdictional boundaries.
- Many agencies and jurisdictions are currently funding programs that align closely with the objectives and recommendations of this plan. In many cases, existing expenditures can be effectively integrated with this plan, reducing the overall financial impact.

## 6.0 IMPLEMENTATION STRATEGIES

This section addresses the requirements of RCW 90.82.043 (2), (3) and (4) (i.e., water supply strategies, timelines and milestones, coordination and efforts to eliminate duplication).

### 6.1 Water Supply Strategies, Timelines and Milestones

In accordance with RCW 90.82.043[2], the DIP “must contain strategies to provide sufficient water for: (a) Production agriculture; (b) commercial, industrial and residential use; and, (c) instream flows”; and, “must contain timelines to achieve these strategies and interim milestones to measure progress.”

The following WRIA 34 technical assessment information and Watershed Management Plan actions scheduled for implementation (as described in Section 4 of this DIP) provide strategies to provide water for current and future needs in accordance with RCW 90.82.043[2].

1. The Phase II, Level 2 Assessment for WRIA 34 (Golder, 2005) includes estimates of current and future agricultural, municipal and domestic water use. The North Fork Water Use Technical Memorandum (Golder, 2007a) includes estimates of current and future domestic water use in the North Fork Palouse River Management Area.
2. Actions CC-12 and NFP-5 recommend additional investigation into water supply and projected demand in Medical Lake and for small communities in the North Fork Palouse Management Area.
3. The Level 2 Instream Flow Assessment (Golder, 2006b) includes flow values derived from the instream flow methods that were compared to the hydrology characteristics to determine appropriate range of flows for aquatic habitat consistent with seasonally available flows for the stream of interest.
4. Since an instream flow rule has not been adopted to date in WRIA 34, there is currently uncertainty in the amount of water available to support future water supply for production agriculture, commercial, industrial and residential use and instream flows. Actions CC-15 and NFP-7 are to develop instream flow packages for the Cow Creek and North Fork Palouse Management Areas, respectively.
5. Action BW-22 recommends that the WRIA 34 Planning Unit consider recommending that the Washington state legislature revise the statute to provide for a water banking program in the basin. The intent of this action is to consider water banking as a means to facilitate the selling or leasing of valid water rights at a local level.
6. Actions BW-18, BW-19, BW-20, BW-48, SFP-24, SFP-25 and LP-5 promote agricultural and municipal water conservation, reclamation and reuse strategies in WRIA 34.
7. Storage options in the Cow Creek Management Area were identified by the Planning Unit as a way to potentially address the lack of instream flow to meet adjudicated water rights in Cow Creek. The primary approaches considered were: (i) optimize existing adjudicated storage facilities; and (ii) provide for additional storage in Sprague Lake. Specific actions related to these primary storage options include BW-8, CC-3, CC-4, CC-7, and CC-10.

8. Storage options in the North Fork Palouse and South Fork Palouse Management Areas were identified as a way to potentially address the water supply needs (resulting from significant groundwater declines in the basalt aquifer) for the major communities in the area. The primary storage options considered were: (i) aquifer recharge to recover aquifer levels over the long-term using enhanced surface infiltration; and (ii) Aquifer storage and recovery (ASR) to meet water demand and offset groundwater use. Actions LP and RC-2, CC and RC-3, SFP-10, BW-9, BW-15, and BW-16 promote the development and implementation of aquifer recharge and flow enhancement strategies. Actions CC and RC-4, SFP-15, SFP-16, SFP-19, and BW-13 promote implementation of aquifer storage and recharge to enhance water supply.

## 6.2 Agreements, Approvals and Permits

The Watershed Management Act (per RCW 90.82.043[3]) states that, “The implementation plan must clearly define coordination and oversight responsibilities; any needed interlocal agreements, rules, or ordinances; any needed state or local administrative approvals and permits that must be secured; and specific funding mechanisms.”

The necessary agreements, approvals and permits required to implement the obligations and recommendations outlined in the Watershed Management Plan and DIP will be analyzed on an individual or collective basis, as each project is considered and pursued. At the time this DIP was prepared, the following are relevant:

- **Coordination and Oversight Responsibilities:** The Palouse CD is the lead agency and responsible for administering grant funds for watershed planning grants. Coordination and oversight responsibilities during Phase IV Implementation are discussed in Section 1.3.6.
- **Interlocal Agreements:** No interlocal agreements are required, but they may be recommended to support implementation.
- **Ordinances:** No ordinances are required but may be recommended to support implementation.
- **Specific Funding Mechanisms:** Section 5.0 of this DIP addresses funding mechanisms for Watershed Management Plan implementation.
- **Administrative Approvals:** This DIP was reviewed and approved by the WRIA 34 Planning Unit at the January 21, 2009 Planning Unit meeting and will be presented to the Adams County, Lincoln County, Spokane County, and Whitman County Commissioners for their approval at a regularly scheduled Board meeting.
- **Contract Approvals:** The WRIA 34 Planning Unit and/or a designated subcommittee will develop requests for proposals for any implementation projects needing contractor services. The WRIA 34 Planning Unit and/or a designated subcommittee will be responsible for approving contractor selection. The Palouse CD, as Lead Agency during Phase IV, will be responsible for administering contracts.
- **Memoranda of Understanding (MOUs) and Memoranda of Agreement (MOAs):** No MOUs or MOAs are required but may be recommended to support implementation.

- **Rules:** Following development of an instream flow package for the watershed, instream flow rule making is anticipated.
- **Permits:** Permits required from federal, state or local agencies to implement the WRIA 34 Watershed Management Plan actions will be determined on a case-by-case basis and may require the applicant to go through the State Environmental Policy Act (SEPA). Projects with a federal nexus would require National Environmental Policy Act (NEPA) and additional compliance measures. Some of the common permits (and issuing agencies) include:
  - Hydraulic permit approval (WDFW) – for work that will use, divert, obstruct or change the flow or channel of any State water.
  - Section 401 Water Quality Certification (Ecology) – needed when federal approval is required for a project.
  - Section 404 Permit (USACE) – needed for discharge of dredge and fill below the ordinary high water mark.
  - Water right permit (Ecology) – for any water use that does not meet the provisions of exempt well water use (e.g., exempt well provisions include stock watering use and residential use less than 5,000 gallons per day).
  - Dam safety (Ecology) – for impoundments per Ecology’s specifications.
  - Construction and Land Use Permits (Whitman, Adams, Spokane and Lincoln Counties) – for construction / building activities, for example along shorelines and within Critical Aquifer Recharge Areas (CARAs).

### 6.3 Eliminating Duplication and Inconsistencies

In accordance with RCW 90.82.043[4], during development of the DIP, the WRIA 34 Planning Unit “must consult with other entities planning in the watershed management area and identify and seek to eliminate any activities or policies that are duplicative or inconsistent.”

The primary mechanism to avoid duplication and inconsistencies associated with implementation of the WRIA 34 Watershed Management Plan actions is the diverse membership of the Planning Unit. The Planning Unit members include most of the entities involved in water resources management in WRIA 34. The Planning Unit membership and meetings therefore provide forums for the WRIA 34 water resource managers to consult with each other about ongoing and future water resource management activities in WRIA 34.

The following will help further to avoid duplication and inconsistencies:

- Standing agenda item for PBAC to report on status of projects to the Planning Unit.
- Standing agenda item for the Planning Unit to report on status of projects to PBAC.
- Reporting on implementation progress at the annual Palouse Water Summit.
- Tracking the efforts of other WRIs concerning work that is related to WRIA 34 actions in the implementation notes column (Table A-1 in Appendix A).



- The Washington State Department of Health (WDOH) will provide water system plans and updates to Ecology to review to make the determination of whether or not the plans / updates are “not inconsistent” with the WRIA 34 Watershed Plan. It is Ecology’s responsibility to make this determination.
- Ecology will update the Planning Unit on activities in WRIA 34 and surrounding WRIs as these activities relate to water resources management in WRIA 34.

#### **6.4 General Considerations for Implementation**

Successful implementation requires obtaining funding for projects. In order for a project to be successfully funded through grants, sufficient time, effort and detail needs to be put into the grant application. The Planning Unit or lead entities/project sponsors should consider hiring a grant writer and attending grant writing workshops, as needed.

There is also a need for more formalized coordination of implementation efforts between the states. This may be especially true for large-scale groundwater projects that may require joint funding.

A number of actions recommend implementing best management practices (BMPs) to control erosion from pasture, rangeland, cropland, and forest land (BW-26), to reduce sediment loads entering surface waters (BW-28), to limit water quality impacts (BW-29), to reduce fecal coliform levels (BW-31), and to limit water quality impacts from fecal coliform (BW-32). BMPs should be tailored to specific needs and local conditions, and the effectiveness of the BMPs should be previously demonstrated through effectiveness monitoring before implementation.

## 7.0 INSTREAM FLOW

The WRIA 34 Planning Unit included instream flow as a component of Watershed Planning and has been addressing instream flow in the Palouse watershed since the Phase II Technical Assessment work commenced in the fall of 2003. This DIP integrates the current recommendations of the Planning Unit, Ecology and WDFW, who worked together to develop an instream flow package for the North Fork Palouse River. Looking ahead, the Planning Unit, Ecology and WDFW will need to address additional details in the second year of implementation, including consideration of instream flow work for other Palouse Watershed streams along with management and implementation details to support adoption of an instream flow rule for the North Fork Palouse River.

This chapter summarizes instream flow studies and planning conducted within the WRIA 34 Watershed Planning process and includes the current recommendations made by the North Fork Palouse Instream Flow Working Group for a North Fork Palouse portion of an Instream Flow Rule.

Instream flow setting in other management areas in WRIA 34 will be evaluated by the Planning Unit within the second year of implementation. Given this, a new action has been added to this DIP that recommends the Planning Unit develop a road map for instream flow assessments and management recommendations for the entire Palouse Watershed within the second year of implementation.

*BW-51 - In coordination with Ecology, the Planning Unit shall develop a road map for instream flow assessments and management recommendations for the entire watershed within the second year of implementation. Determine whether instream flows will be set in other management areas and develop an outline of the schedule and process for addressing remaining instream flow management recommendations and rule-making in the basin.<sup>3</sup>*

### 7.1 Phase II Technical Assessment

During Phase II of watershed planning, all streams within WRIA 34 were reviewed for potential inclusion in an instream flow study. Due to limited funding, an effort was made to prioritize streams during the Phase II instream flow work based on the following factors:

- Potential future water demands;
- Recreational fish species and distribution;
- Interest in overall management area health;
- Interest in future water rights management;
- Availability of long term hydrology data; and,
- Presence of a stream gaging station or nearby control point.

Initial review of these items resulted in the selection of four streams for further instream flow work by the Planning Unit: North Fork Palouse River, South Fork Palouse River, Palouse River mainstem, and

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<sup>3</sup> If the Planning Unit decides to complete instream flow management recommendations for the basin, Ecology would make every effort to coordinate initiation of rule-making in concert with the Planning Unit's schedule as budget and resources allow. If the Planning Unit decides not to work any further on instream flows, Ecology would prioritize the remaining instream flow assessments and follow-on rulemaking in relation to current instream flow work, as priorities, budget and resources allow. Ecology will involve the Planning Unit or its successor (assuming the Planning Unit or its successor exists and wants to be involved).

Cow Creek. The North Fork Palouse River and Cow Creek were selected by the Planning Unit as the two top priority streams for the following reasons:

- North Fork Palouse River: The presence of recreational fisheries in North Fork Palouse, presence of rainbow trout in the management area, long term hydrology data available at the upstream and downstream portions of the sub-basin, including active stream gages (see Figure 6), and the potential for future water demand and development in the management area.
- Cow Creek: Water rights management concerns in Cow Creek, the adjudication and interest in additional flow data for that management area.

The Planning Unit selected the Palouse River mainstem as the third priority stream based on its continuity to the North Fork and Cow Creek and downstream flow management for recreational fish in that management area.

The Planning Unit selected the South Fork Palouse River as the fourth priority stream based on limited fish species and distribution data and limitations with available flow data within the management area. Additional data on fish species distribution and presence would have to be collected and, although the stream has 35 years of USGS flow data, the gage is located upstream of the City of Pullman wastewater discharge. Continuous flow data collection below Pullman, flow modeling, and correlation with other gages would need to have been completed. The technical complications coupled with limited funding for the studies resulted in the ultimate withdrawal of the South Fork Palouse River from inclusion in the Phase II instream flow study.

The Phase II instream flow study included an evaluation of the flow levels necessary to support aquatic habitat and in some instances, wetland function in the Palouse River (North Fork Palouse River and Mainstem Palouse River) and Cow Creek (Golder, 2006b). The instream flow analysis describes the characteristics of the existing flow regimes and hydrology for the streams of interest, summarizes the fish species of interest and their status, considers future out-of-stream needs, and evaluates instream flow needs based on the Tennant method and Wetted-width method. Flow values derived from the study were then compared to hydrologic characteristics of the water bodies to determine the range of flows required for healthy aquatic habitat consistent with seasonally available flows. The flow values provide a foundation for developing instream flow recommendations. Figure 7 shows flows and aquatic habitat needs for the North Fork Palouse River.

## **7.2 Phase III Instream Flow Planning**

In November 2006, the WRIA 34 Planning Unit participated in an Instream Flow Working Session to determine how to move forward with instream flow issues in the Palouse Watershed. The outcomes of the working session are described in a technical memorandum (Golder, 2006c). The Planning Unit opted to continue to develop instream flow recommendations for the North Fork Palouse management area and formed a “North Fork Palouse” Instream Flow Working Group that was tasked to explore instream flow options more fully and discuss these options with Ecology and WDFW.

At that time, the Planning Unit decided not to develop an instream flow package for the Cow Creek management area until it had a better understanding of the groundwater and surface water interactions at multiple locations in the Cow Creek management area and of the implications of the Cow Creek Adjudication. The Planning Unit suggested conducting a hydrogeologic study of groundwater/surface water interactions and collecting information on current use and projected future use (concern about growing industrial demands) to better understand the impacts of current and

projected future groundwater withdrawal on groundwater levels, streamflow, and long-term trends. The Planning Unit wants to be involved in any future instream flow rule-making for the Cow Creek management area.

In addition, the Planning Unit opted not to develop an instream flow package for the mainstem Palouse River during Phase IV Implementation, but wants to be involved in any future instream flow rule-making for the mainstem Palouse. The Planning Unit identified specific concerns regarding an instream flow rule for the mainstem Palouse River in a technical memorandum (Golder, 2006c), including:

- Implement a partial closure rather than a full closure to enable storage; and,
- Any closure or flow setting should be packaged with a reservation for uninterruptible water rights for domestic and municipal use, and a maximum allocation for potential future storage.

### **7.3 Phase IV Instream Flow Planning**

While developing recommendations for a North Fork Palouse instream flow package during Phase IV Implementation, the Planning Unit and associated working groups identified the following working policies and understanding to be carried through Phase IV as instream flow rule(s) are developed:

- The Watershed Plan (and Planning Unit) does not make any specific recommendations regarding existing water rights applications. The Planning Unit is deferring to Ecology to process specific applications.
- A minimum instream flow and/or closure only affects new water rights. Any future instream flow rule will not impact existing surface or groundwater rights; livestock or otherwise. Instream flow rules would also not affect existing water rights resolved under an adjudication process (Cow Creek adjudication).
- The Planning Unit believes riparian livestock rights have been and should be recognized as an inherent water right for landowners of streamside parcels and those existing rights should not be conditioned to instream flows.<sup>4</sup> Adequate flows for stock watering must be retained in setting instream flows pursuant to RCW 90.22.010 and RCW 90.22.040.
- Use of permit-exempt wells included as part of a reservation will not be curtailed if minimum instream flows are not met.
- Habitat needs for ESA listed species below Palouse Falls were not considered because the management point will be above the falls.

### **7.4 North Fork Palouse River Instream Flow Planning**

In an effort to create an instream flow package for the North Fork Palouse River management area, the North Fork Palouse Instream Flow Working Group and the Planning Unit have done significant work to understand water availability in the North Fork Palouse management area and to collaborate on the elements of an instream flow package. The North Fork Palouse Instream Flow Working Group has convened since March 2007 to discuss the components of an instream flow package for the Washington portion of the North Fork Palouse River management area, including a reservation for

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<sup>4</sup> Regarding this statement, Ecology has noted the following: "Riparian stock watering would need to be adjudicated (e.g. Cow Creek) to provide certainty for landowners of stream parcels." (Ecology 2007)

future water use, a maximum allocation during high flow months and a flow regime to be applied to the North Fork Palouse River above Colfax.

#### 7.4.1 North Fork Palouse Water Use Estimates

An assessment of water use in the North Fork Palouse Management Area (Golder, 2007a) was prepared to support water allocation and availability decisions for an instream flow package for the North Fork Palouse River. Analysis of existing water rights allocated to Group A systems in the North Fork Palouse management area indicates that the Group A systems' (Colfax, Palouse and Garfield) water rights should be able to support forecast 2025 and 2050 water use if current inchoate rights are not legally diminished. Additional water needs in the management area (e.g., Group B water systems and permit-exempt wells) were also estimated based on two potential growth scenarios and a range of household water use factors. The water use study estimated that an additional 0.17 to 1.45 cfs (42 to 350 AF/yr) would be needed to support future domestic use through 2025. If the planning horizon is extended to 2050, an additional 0.51 to 6.14 cfs (123 to 1,483 AF/yr) would be needed to support domestic water use associated with growth between 2007 and 2050. These "total" water use estimates include **both** that water which is utilized indoors and returned via septic recharge to the river system (non-consumptive use) and that water that is used outdoors that evaporates or evapotranspires and is not returned to the river system (consumptive use)<sup>5</sup>.

#### 7.4.2 Community Needs

A statement of Community Need was drafted by the North Fork Palouse Instream Flow Working Group in June 2007 (Golder, 2007c) and included as an appendix to the Watershed Plan. Since that time, the Working Group has continued to develop instream flow recommendations for the North Fork Palouse River. The Working Group agreed to the following principles in its statement of Community Need in 2007:

##### **Reservation for Future Water Use**

- The quantity of water in the reservation should support community water needs over a 25 year timeframe.
- Language that defines the reservation in rule should specify that the reservation "be sufficient for" so as not to allow for any misinterpretation that would limit the reservation's uses.
- Ensure that the reservation is uninterrupted (e.g., not subject to minimum instream flow).
- Ensure that the reservation can actually be used immediately (and for the timeframe defined) and ensure that it is not just set aside for some "future" use that cannot be justified.
- The uses for which the reservation can be applied should include uses other than municipal and domestic (e.g., agriculture). Qualified uses of the reservation are part of Phase IV discussions.
- The Planning Unit supports requests to Ecology for water right transfers, and the ability to increase the quantity of water in the reservation by utilizing a transfer of an existing water right to the reservation.

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<sup>5</sup> Note that water use estimates considered for purposes of reservation accounting consider total use (consumptive and non-consumptive) and are not reduced based on septic recharge return to the hydrologic system.

- The County, when implementing a program to track reservation water, should consider only that portion of water use which is consumptive. Further analysis of purveyor data could be used to more specifically estimate the consumptive portion of water use in the North Fork Palouse management area if the North Fork Instream Flow Working Group or Planning Unit chooses<sup>6</sup>.
- Recommend that a future groundwater study be designed and implemented to determine the conditions under which groundwater use should actually apply to an instream flow reservation. If the study indicates that withdrawal from certain hydrogeologic units does not negatively affect a stream, or that wells located greater than a certain distance from a stream have low probability of negatively affecting the stream, allow them to be exempt from debiting the reservation.

### 7.5 North Fork Palouse River Instream Flow Package

The instream flow package for the North Fork Palouse River contains collaborative agreements on flow regimes, maximum allocation quantities for storage during high flow months and a reservation for uninterrupted water use for municipal, domestic and other uses permitted under the exempt well statute. The “Package” as recommended by the Planning Unit is described below. The Planning Unit recommends that Ecology adopt this package for the North Fork Palouse River Management Area.

Ecology staff have suggested that Ecology will not initiate rule making for the North Fork Palouse management area until instream flows in other management areas in WRIA 34 have been addressed.<sup>7,8</sup> The Instream Flow Working Group for the North Fork would like to reserve the option to adjust process and methodology in determining instream flows and maximum allocations in other sub-basins along with re-evaluating flows, maximum allocation and reservation numbers (include the debit quantities to the reservation) if and when other management areas are ready to move forward with instream flows. If methodologies have been refined or new methodologies are developed, there should be opportunity to consider applying them to the North Fork Palouse River. Current statutes, regulations and case law will also need to be considered.

Recognizing that significant growth could occur in the years prior to a rule being promulgated, the City of Colfax and Whitman County have agreed to start tracking permit-exempt domestic uses in January of 2009. Remote metering of permit exempt uses was also discussed by Whitman County and the City of Colfax during the North Fork Palouse Instream Flow Working Group meetings. Permit exempt wells and water use will be tracked for the next 2 years (until January 2011). At that time, instream flow rule making and the recommendations below will be re-evaluated.

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<sup>6</sup> Although this principal was recommended in the statement of Community Need in 2007, current recommendations for reservation accounting do not consider septic recharge, but rather, conservatively consider both consumptive and non-consumptive uses.

<sup>7</sup> Generally, rules established pursuant to the Water Resources Act of 1971 are promulgated according to WRIA per Chapter 173-500 WAC either singularly (Chapter 173-501 – Instream Resources Protection Program Nooksack Water Resource Inventory Area WRIA 1) or for multiple WRIsAs (Chapter 173-503 WAC Instream Resource Protection Program Lower and Upper Skagit Water Resource Inventory Area WRIA 3 and 4). In addition it generally takes several years and considerable resources to complete the rule-making process. Dividing a WRIA for rulemaking would add a significant burden of time, budget and resources unnecessarily.

<sup>8</sup> If the Planning Unit decides to complete instream flow management recommendations for the basin, Ecology would make every effort to coordinate initiation of rule-making in concert with the Planning Unit’s schedule as budget and resources allow. If the Planning Unit decides not to work any further on instream flows, Ecology would prioritize the remaining instream flow assessments and follow-on rulemaking in relation to current instream flow work, as budget and resources allow.

7.5.1 Recommended Instream Flow Levels and Maximum Allocation

The Working Group discussed the Draft State Caucus Instream Flow recommendations and the rationale for seasonal flows. After discussion by the Working Group, it was determined that protection of aquatic habitat would be used as the rationale for flow setting from October through June (wetland benefit flows would not be used as the rationale for any month or season) and the 10% exceedance would be used from July through September. The final flows and maximum allocation by month are presented in Table 7-1. The flows and maximum allocation are also summarized below:

<u>Flows<sup>c</sup></u>	
<b>Nov-May - 63cfs</b>	
<b>June - 52cfs</b>	
<b>July - 39cfs</b>	} July-Sept 10% exceedance
<b>Aug - 20cfs</b>	
<b>Sept - 34cfs</b>	
<b>Oct - 52cfs</b>	

Maximum Allocation:  
**33 cfs<sup>a,b</sup> from Dec 1 – June 15 [Consistent with Surface Water Source Limitation (SWSL) dates]**

<sup>a</sup> With the condition that 22 cfs (two thirds) of the maximum allocation is specified for large municipal supply projects and that the intended purpose of the maximum allocation is re-evaluated after 22 cfs has been appropriated. Note that final language, including the formal definition of “a large municipal supply project” will be determined at the time of rule making.

<sup>b</sup> 33cfs is based on 10% of the 50% exceedance flow. The rationale used to determine maximum allocation in other sub-watersheds in WRIA 34 may be different.

<sup>c</sup> The rationale used to determine minimum instream flow in other sub-watersheds in WRIA 34 may be different.

**Table 7-1  
North Fork Palouse Instream Flow and Allocation Recommendations**

Month	Proposed Flows	Priority/Rational	Proposed Allocation	50% Exceedance	90 % Exceedance
Oct	52 cfs	Aquatic Habitat		20	10 cfs
Nov	63 cfs	Aquatic Habitat		56	15 cfs
Dec	63 cfs	Aquatic Habitat	33 cfs	113	32 cfs
Jan	63 cfs	Aquatic Habitat	33 cfs	147	42 cfs
Feb	63 cfs	Aquatic Habitat	33 cfs	333	56 cfs
Mar	63 cfs	Aquatic Habitat	33 cfs	548	152 cfs
Apr	63 cfs	Aquatic Habitat	33 cfs	765	219 cfs
May	63 cfs	Aquatic Habitat	33 cfs	357	77 cfs
Jun 1-15	52 cfs	Aquatic Habitat	33 cfs	120	45 cfs
Jun 15 -30	52 cfs	Aquatic Habitat	0	68	25 cfs
Jul	39 cfs	10% Exceedance		20	8 cfs
Aug	20 cfs	10% Exceedance		8	3 cfs
Sep	34 cfs	10% Exceedance		9	3 cfs

Month	90 % Exceedance	50 % Exceedance	10 % Exceedance
Oct	8 cfs	15cfs	84 cfs
Oct	12 cfs	24 cfs	76 cfs
Nov	14 cfs	36 cfs	156 cfs
Nov	15 cfs	76 cfs	355 cfs
Dec	29 cfs	83 cfs	321 cfs
Dec	34 cfs	143 cfs	1187 cfs
Jan	50 cfs	128 cfs	815 cfs
Jan	33 cfs	165 cfs	2194 cfs
Feb	51 cfs	361 cfs	2624 cfs
Feb	61 cfs	306 cfs	2279 cfs
Mar	127 cfs	365 cfs	1578 cfs
Mar	177 cfs	731 cfs	2391 cfs
Apr	248 cfs	905 cfs	1767 cfs
Apr	189 cfs	625 cfs	1671 cfs
May	84 cfs	436 cfs	1044 cfs
May	69 cfs	278 cfs	1189 cfs
Jun	45 cfs	120 cfs	277 cfs
Jun	25 cfs	68 cfs	173 cfs
Jul	11 cfs	27 cfs	50 cfs
Jul	5 cfs	14 cfs	28 cfs
Aug	3 cfs	9cfs	20 cfs
Aug	3 cfs	7 cfs	20 cfs
Sep	2 cfs	8 cfs	28 cfs
Sep	4 cfs	10 cfs	40 cfs



### 7.5.2 Recommended Reservation

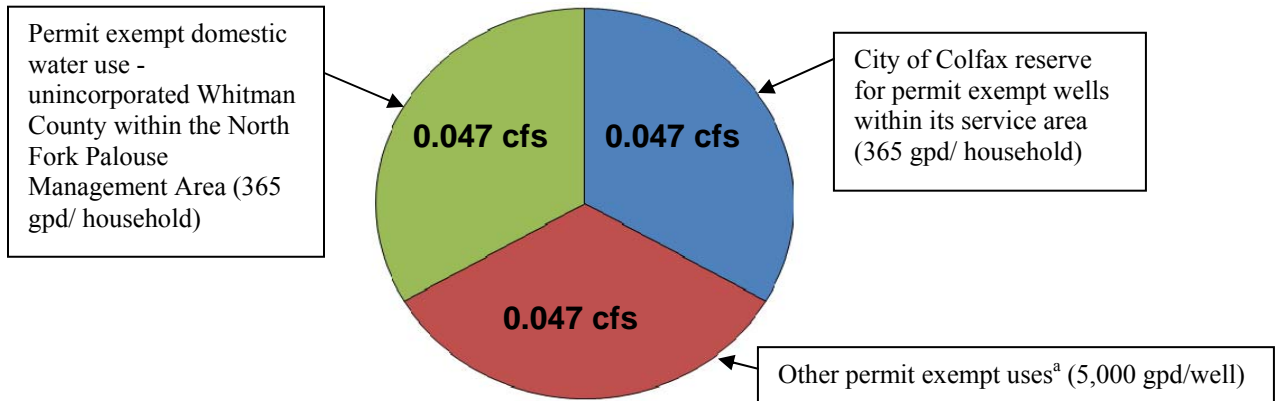
***Reservation for domestic use (permit-exempt wells): 0.14 cfs.***

The Working Group agreed that a 4% loss of habitat (0.14 cfs) is as an acceptable loss for purposes of a reservation for uninterrupted water supply for domestic uses. Given the 4% habitat loss, reservation of this water that is not subject to flows may require a determination of Overriding Consideration for the Public Interest (OCPI) by the Director of the Department of Ecology.

The 0.14 cfs will be split into three equal components as follows and as shown in Figure 8:

- 1/3 or 0.047 cfs – City of Colfax to provide permit exempt wells within their service area where infrastructure improvements are still required. The Planning Unit had initially agreed on a debit to the reservation of 365 gpd/household, but recognized that further evaluation and documentation will be needed to support or revise this estimate of household water use. In addition, Ecology staff noted that debiting based on an estimate of annual average water use rather than seasonal water use may not meet current legal standards. However, a debit of 365 gpd would support 83 new households within the City of Colfax’s water service area.
- 1/3 or 0.047 cfs – Unincorporated Whitman County within the North Fork Palouse Sub-watershed for permit-exempt domestic use. The Planning Unit had initially agreed on a debit to the reservation of 365 gpd/household, but recognized that further evaluation and documentation will be needed to support or revise this estimate of household water use. In addition, Ecology staff noted that debiting based on an estimate of annual average water use rather than seasonal water use may not meet current legal standards. However, a debit of 365 gpd would support 83 new households in Whitman County within the North Fork Palouse Sub-watershed.
- 1/3 or 0.047 cfs – For permit-exempt uses that support small hobby agriculture or other valid permit-exempt uses (in accordance with RCW 90.44.050). Debit to the reservation would be 5,000 gpd/well, resulting in 6 additional permit-exempt uses that would encourage economic growth in a rural area.

**Figure 8. North Fork Palouse Reservation = 0.14 cfs**



<sup>a</sup>This includes the support of small hobby agriculture and other valid permit exempt uses under RCW 90.44.050.

After review of local residential water use for the Cities of Palouse and Colfax, and significant discussion, the Working Group determined that each single domestic use should debit the reservation by 365 gallons per day and no credit will be given for septic returns (non-consumptive uses). This would result in a net debit of 365 gallons per day per household. This household water use factor was based on the following rationale:

- The annualized water use for the Town of Palouse (289 gpd in 2007) and the City of Colfax (270 gpd in 2005). The average annualized<sup>9</sup> household water use factors are considered appropriate given the expansive area of the North Fork management area and varying distances between future domestic withdrawals and the North Fork Palouse River.
- The expectation that rural water uses may be higher than those experienced in cities and towns in some instances. An additional 30% use was added to the average annualized Palouse and Colfax water use.
- The conservative assumption that no credit is being proposed for septic returns or other non-consumptive uses.
- At the time an applicant submits for a building permit, they would be required to sign a letter of understanding or statement regarding the limitations of their water use including the irrigation of no more than one half acre (a limitation set forth in the exempt well statute).

Given this 0.14 cfs reservation and proposed debit of 365 gallons per day for domestic household use and 5000 gallons per day for other permissible permit-exempt uses, the reservation would support **approximately 166 new permit exempt, single domestic wells** in the North Fork management area

<sup>9</sup> It should be noted that there was a discussion concerning annualizing average water use. Ecology is currently involved in litigation challenging the use of annualized numbers in lieu of utilizing peak water use numbers during the low flow season thus the outcome of that litigation may alter water use accounting methodology.

and an additional 6 permit exempt wells that support both domestic use and other small hobby farm activities consistent with RCW 90.44.050. Additional rationales will need to be developed to justify or revise the per household water use number used to debit the reservation<sup>10</sup>.

The reservation quantity could be increased/credited through purchase and retirement of water rights, replacement of valid permit exempt well use by water system purveyors, and mitigation such as providing additional recharge to the sub-basin through different forms of storage. Concepts for crediting the reserve need to be more fully developed and defined at the time of rulemaking. Crediting and debiting the water reservation for the North Fork Palouse management area is essentially a running water budget.

Whitman County will likely be the implementing agency for reservation accounting in collaboration with Ecology, and the vehicle used to track the reservation will likely be the building permit process. The County requests that the system remain simple and that implementation require minimal time and effort.

In addition, future work that characterizes the hydrogeology and hydraulic continuity of different hydrogeologic units and the North Fork Palouse River may enable the delineation of a zone or zones wherein the reservation is debited, and a zone or zones where the reservation is not debited due lack of hydraulic connection. To date, adequate data are not available to designate these areas. The science must be demonstrated (e.g., people have the option to hire a hydrogeologist and demonstrate that they do not need to debit the reservation); however, the burden of proof is on the well user.

## **7.6 Conclusion**

Additional details associated with the North Fork Palouse instream flow package will need to be addressed prior to formal rule making. Furthermore, Ecology has suggested that the North Fork as a management area will not move toward rule making until instream flows in the remaining management areas in WRIA 34 have been addressed. There is a need for the Planning Unit to develop a clear approach to further assessment of instream flows and water management. A new action has been added to this DIP to address this need, and it directs the Planning Unit in coordination with Ecology to develop a road map for instream flow assessments and recommendations for the entire Palouse Watershed within the second year of implementation.

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<sup>10</sup> For example, consider debits associated with “new household use” consistent with building permits in cases where multiple households utilize one well or tap into an existing well.

## **8.0 PLANNED FUTURE USE OF INCHOATE MUNICIPAL WATER RIGHTS**

This section of the DIP meets the requirement of RCW 90.82.048 [1]and [2] for the WRIA 34 Planning Unit to address the planned future use of inchoate municipal water rights, including how these rights will be used “to meet the projected needs identified in the watershed plan, and how the use of these rights will be addressed when implementing instream flow strategies identified in the watershed plan”.

### **8.1 The Municipal Water Law Case**

On June 11, 2008, King County Superior Court decided the *Lummi Indian Nation, et al. v. State* challenge to the constitutionality of the 2003 Municipal Water Law. The Court struck down three provisions of the 2003 Municipal Water Law: the definitions of “municipal water supplier” and “municipal water supply purposes” and the language establishing that “pumps and pipes” water right certificates issued before September 9, 2003 are rights in good standing. An important component of the decision is that, since the definitions have been declared unconstitutional, private water suppliers cannot be considered municipal water suppliers with all the benefits inherent thereto, including exemption from relinquishment, flexibility with place of use equaling service area, and service connections and population figures not providing a limit on the exercise of the rights. However, under the Court’s ruling, private purveyors do not have to meet the conservation standards prescribed in the 2003 Municipal Water Law, since they no longer meet the definition. Until final court action occurs, Ecology and WDOH will not change any reviews and decisions made between the time the Municipal Water Law was enacted in 2003 and the June 11, 2008 ruling.

The decision from the Superior Court has been cross appealed directly to the Washington Supreme Court. The Washington Supreme Court may decide to hear the case or send the case to the Court of Appeals. Additionally, there may be legislation to amend these definitions to make them constitutional. However, until the case is decided, the inchoate water rights assessment in this DIP uses the definition in the 2003 Municipal Water Law. The sections of the DIP that relate to the Municipal Water Law will be updated when there is more certainty regarding the court’s decision and legislative response.

### **8.2 Inchoate Municipal Water Rights in WRIA 34**

In April 2008, the WRIA 34 Planning Unit sent letters to all Group A water suppliers in WRIA 34 inviting them to attend a workshop in May to inform water systems about the Watershed Planning process. Included in the letter was also a form for the water system operators asking them to provide information on current and future projected water use, inchoate rights and if they had sufficient inchoate rights to provide water to their anticipated service population in 20 years. A copy of the letter and form sent is included in Appendix C. At the May meeting, the suppliers attending the meeting were introduced to the Watershed Planning process and each water system representative discussed water use and future water supply needs.

Responses were received and compiled from eleven municipal water providers (Table 8-1). Additional information for five municipal water providers was obtained from water system plans on file with the WDOH in Spokane, Washington (Table 8-1). Information for the City of Colfax, City of Palouse and City of Garfield were obtained from the document *Final North Fork Water Use Technical Memorandum* (Golder, 2007a) (Table 8-1). Information for the City of Cheney was obtained from the WRIA 56 Detailed Implementation Plan (WRIA 56 Watershed Implementation Team, et al., 2008) (Table 8-1). Current and future service areas and inchoate rights for fifteen of the

providers are illustrated on Figure 9. These fifteen providers include fourteen of the largest water providers located within the watershed. Inchoate rights are quantified as the difference between the total water right and the actual year 2007 (or information year) water use.

With reference to Table 8-1, concerns regarding inchoate rights to support future growth over the next 20 years were identified as follows:

- The City of Malden identified that its current inchoate water rights are not anticipated to be sufficient to supply water to the service area in the future. However no explanation was provided on its returned form to further explain this issue.
- The Town of Rosalia noted on its returned form that the town is looking for more water rights to purchase in the future to allow the town to continue to grow.
- The City of Endicott identified in its water system plan that its inchoate water rights will not be sufficient to supply water to the service area and it estimates it will have a deficit of 83 acre-ft/year. The City of Endicott is currently updating its water system plan and addressing this issue.
- The City of Sprague water system plan identifies that its inchoate water rights will not be sufficient to supply water to the service area in the future. The City is currently researching ways to address this deficit.

During Year 2 of implementation (i.e., 2009), the WRIA 34 Planning Unit will communicate with these water providers and give them an opportunity to attend Planning Unit meetings to discuss their water rights issues. The WRIA 34 Planning Unit will provide support to the water providers as they can and on a case-by-case basis.

## 9.0 PHASE IV REQUIREMENTS

The following list provides the sections of Chapter 90.82 RCW that identify the specific requirements related to Phase IV Implementation. These requirements are addressed in this DIP and the pertinent sections are referenced.

- RCW 90.82.043[1] Within one year of accepting Phase IV funding, “the planning unit must complete a detailed implementation plan. Submittal of a detailed implementation plan to the department [of Ecology] is a condition of receiving grants for the second and all subsequent years of the phase four grant.”
  - This DIP fulfills this requirement.
- RCW 90.82.043[2] “Each implementation plan must contain strategies to provide sufficient water for: (a) Production agriculture; (b) commercial, industrial, and residential use; and, (c) instream flows.”
  - This requirement is addressed in Section 6.1 of this DIP.
- RCW 90.82.043[2] “Each implementation plan must contain timelines to achieve these strategies and interim milestones to measure progress.”
  - This requirement is addressed in Sections 2.2 and 4 of this DIP.
- RCW 90.82.043[3] “The implementation plan must clearly define coordination and oversight responsibilities; any needed interlocal agreements, rules, or ordinances; any needed state or local administrative approvals and permits that must be secured; and specific funding mechanisms.”
  - This requirement is addressed in Sections 1.3.6, 5, 6.2 of this DIP.
- RCW 90.82.043[4] “In developing the implementation plan, the planning unit must consult with other entities planning in the watershed management area and identify and seek to eliminate any activities or policies that are duplicative or inconsistent.”
  - This requirement is addressed in Section 6.3 of this DIP.
- RCW 90.82.048[1] “The timelines and interim milestones in a detailed implementation plan ...must address the planned future use of existing water rights for municipal water supply purposes, as defined in RCW 90.03.105, that are inchoate, including how these rights will be used to meet the projected future needs identified in the watershed plan, and how the use of these rights will be addressed when implementing instream flow strategies identified in the watershed plan.”
  - This requirement is addressed in Sections 7 and 8 of this DIP.
- RCW 90.82.048[2] “The watershed planning unit or other authorized lead agency shall ensure that holders of water rights for municipal water supply purposes not currently in use are asked to participate in defining the timelines and interim milestones to be included in the detailed implementation plan.”
  - This requirement is addressed in Section 8 of this DIP.
- RCW 90.82.048[3] “The department of health shall annually compile a list of water system plans and plan updates to be reviewed by the department during the upcoming year and shall consult with the departments of community, trade and economic

development, ecology and fish and wildlife to: (a) identify watersheds where further coordination is needed between water system planning and local watershed planning under this chapter; and (b) develop a work plan for conducting the necessary coordination.”

- This requirement is addressed in Section 6.3 of this DIP.

**10.0 REFERENCES**

- Golder Associates. 2005. Final Phase II – Level 1 Technical Assessment For the Palouse Basin (WRIA 34). March 2005.
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