APPENDIX A

ACTION TRACKING TABLE

Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
BW-1	1	Action	Continue instream flow and water quality monitoring through permanent and seasonal gauges and water quality monitoring stations. Specifically, - flow monitoring through permanent and seasonal gauges on North Fork and South Fork Palouse River (including City of Colfax and City of Pullman) - monthly flow measurements at sites throughout the Cow Creek subbasin that are currently monitored by the Adams CD	Basin-wide	CDs in CRC, Ecology	CDs in CLP, NFP, and SFP; IDWR, City of Pullman, Planning Unit, USGS, IDEQ	Ecology (for the monitoring station in Pullman)	North Fork monitoring: A continuous, stand alone gage was installed at Elberton in May 2007. However this gage was removed in September 2007 and will be relocated to a site farther downstream (see action NFP-1).	Streamflow, Water Quality, and Groundwater Monitoring
BW-2	4	Action	Upgrade diversions to install measuring devices where needed.	Individual irrigators (throughout area)	Individual irrigators	Ecology	--	--	Streamflow, Water Quality, and Groundwater Monitoring
BW-3	3	Action	Provide opportunities for voluntary water quality sampling on private wells (sample kits).	Basin-wide	WDOH	CDs, Counties, Cities and Towns in NFP, Ecology, NRCS, WSU Extension, IDEQ	--	--	Streamflow, Water Quality, and Groundwater Monitoring
BW-4	Not Ranked	Recommendation	Continue to support regional (Washington and Idaho) management efforts and solutions for Grand Ronde aquifer decline.	Basin-wide	--	Ecology	--	--	Characterize Surface Water and Groundwater Resources
BW-5	Not Ranked	Recommendation	Continue to support and fund research and study efforts for determining characteristics and solutions for declining Grand Ronde aquifer.	Basin-wide	--	Ecology	--	--	Characterize Surface Water and Groundwater Resources
BW-6	3	Action	Identify and prioritize areas for potential wetland creation, restoration, and enhancement for storage purposes and enhancement and/or restoration of natural floodplain, riparian or wetland areas.	Basin-wide	CDs, Counties, NRCS	Ecology, Individual Landowners, WSU Extension, IDEQ, IDWR, Cooperative Extension	--	--	Enhancement/Restoration of Floodplain, Riparian or Wetland Areas
BW-7	2	Action	Characterize riparian conditions and identify restoration/enhancement areas where appropriate; implement riparian function enhancement projects with willing landowners, tailored to their strategies and needs, in priority areas where appropriate using incentive-based approaches (using Whitman County Growth Management Plans to assist in identification of critical areas). Develop a managed grazing program that addresses the use of riparian areas while protecting and enhancing water resources.	Basin-wide	CDs, Counties	Ecology, Individual Landowners, WSU Extension	--	--	Enhancement/Restoration of Floodplain, Riparian or Wetland Areas

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BW-8	Not Ranked	Recommendation	Enhance existing surface water storage in reservoirs and/or lakes.	Basin-wide	CDs	Ecology	--	Projects need to be thoroughly evaluated for their appropriateness; the Columbia River Water Management Program is currently funding a Rock Lake storage feasibility study.	Surface and Groundwater Storage
BW-9	2	Action	Identify opportunities for recharge (including retention/settling basins, rainfall collection, small scale structures for improving baseflows, and other small scale storage opportunities). Encourage and work with individual landowners to construct small storage, infiltration or additional retention/settling basins to improve baseflows in the summer. Consider the Laird Park (ID) site as a demo site for local Conservation Districts in the NFP to show to interested landowners. Areas to consider in the NFP MA include outside Harvard, Old Mill Site west of Potlatch (flat plane for flood control), Strychnyne Creek (on stream reservoir), and above Laird Creek (dam).	Basin-wide	City of Moscow, City of Pullman, Colfax, Albion, Counties, CDs	Ecology, IDEQ, IDWR, USFS, NRCS, Individual landowners	--	CAPITAL	Surface and Groundwater Storage
BW-10	2	Action	Identify and prioritize areas to implement the following strategies to improve stormwater management and treatment and increase groundwater infiltration: 1. sediment basins 2. infiltration trenches 3. swales / wetlands 4. rural/urban drainage ditch upgrades This action is applicable in the following locations of the CC, RC, NFP and LP management areas: CC: 1. Drainage facilities on rural roads 2. City of Sprague drainage ditches RC: 1. Drainage facilities on rural roads 2. City of Lamont drainage ditch NFP: Drainage facilities on rural and urban roads LP: Drainage facilities on rural roads	1. Drainage facilities on rural roads 2. City of Sprague drainage ditches 3. City of Lamont drainage ditch 4. Drainage facilities on rural and urban roads	Counties, WSDOT, Cities and Towns in NFP	All development in CLP, Towns in CLP, CDs in CLP, NRCS, State Transportation Departments except WSDOT	--	CAPITAL if tied to a specific project and location.	Stormwater Management and Treatment
BW-11	Not Ranked	Recommendation	Implement updated stormwater management requirements, BMPs, and plans (consistent with the Eastern Washington Stormwater Manual or Idaho equivalent) for existing and/or new developments and roadways.	Basin-wide	Cities and Towns, Counties	Ecology, NRCS, Latah County Highway Districts	--	--	Stormwater Management and Treatment

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BW-12	Not Ranked	Recommendation	Adopt the Eastern Washington Stormwater manual and/or develop updated stormwater management requirements.	Basin-wide	--	State, Counties, Cities, Towns	--	--	Stormwater Management and Treatment
BW-13	Not Ranked	Recommendation	Implement aquifer storage and recovery (ASR) and reuse to meet potable water demand and to offset groundwater use.	Basin-wide	Cities and Towns	--	--	--	Municipal Water Supply and Demand
BW-14	Not Ranked	Recommendation	Support efforts of municipalities to develop alternative water supplies.	Basin-wide	Ecology	WDOH	Ecology	--	Municipal Water Supply and Demand
BW-15	1	Action	Develop/implement potential recharge and flow enhancement strategies. Strategies to consider include: balancing basins, floodplain storage, wetland restoration, the use of small check dams, and infiltrating water that is withdrawn from surface water in the high-flow winter months into shallow groundwater in locations that will result in return flows to streams during summer months via surface infiltration.	Basin-wide	CDs	Cities and Towns in NFP, Ecology, IDEQ, IDWR, PBAC, Individual Landowners	--	CAPITAL if tied to a project; Operational if just defining strategies.	Recharge and Flow Enhancement
BW-16	1	Action	1. Hydrologic study/assessment to evaluate alternative tillage practices that address water management objectives. 2. Pursue trials of various conservation tillage operations (e.g. Cook/Stations – Cunningham farm), and then demonstrate these conservation tillage approaches (e.g. no-till, mulch till, etc.) and results to area growers (e.g., benefits gained including soil quality, erosion rates, water infiltration rates, etc.). 3. Develop and implement Conservation Tillage Aquifer Recharge Program: This program focuses on improving aquifer recharge by changing farming practices on approximately 50,000 acres (35,000 WA & 15,000 ID)	Start in SFP MA, and if successful apply to rest of management areas	CDs, WSU Extension	USDA, NRCS	--	Project Proposal submitted in 2008 for the study. Identified as the Planning Unit's #2 priority in the Watershed Plan. CAPITAL. This action was written to evaluate conservation tillage for water savings and aquifer recharge purposes. Start in SFP MA, and if successful apply to rest of management areas. 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." as part of the first update of the Watershed Management Plan. The 50,000 acre number is not intended to limit the extent of conservation tillage on of conventional summer fallow land or other highly erodible land but to be used as a starting point to promote and implement conservation tillage practices in the basin	Recharge and Flow Enhancement

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BW-17	Not Ranked	Recommendation	In the future Ecology should involve the PU in any future studies, study recommendations and rule-making from instream flow studies in WRIA 34 and should include existing information collected during the instream flow needs assessment in future rulemaking. Instream flows should be developed in a balanced fashion considering regional aquifer issues, future growth and environmental concerns.	Basin-wide	Ecology	Planning Unit, WDFW	Ecology, WDFW	--	Instream Flow
BW-18	1	Action	Continue efforts and identify and prioritize additional locations to implement the following water conservation and efficiency strategies for agricultural systems: 1. Conservation tillage 2. Irrigation efficiencies 3. Minimize conventional summer fallow. Consider the area between Pullman and Colfax in the SFP MA.	Basin-wide	CDs, Individual irrigators	Individual landowners, NRCS, WSU Extension, USDA, Ecology	--	CAPITAL if tied to a specific project and location.	Water Conservation and Efficiency Strategies - Agricultural
BW-19	Not Ranked	Recommendation	WDOH to provide technical assistance and work with water utilities to set goals and implement individual conservation programs as appropriate and compliant with WAC 246-290. Items to be considered include: 1. System water audits, 2. Leak detection and repair, 3. Source metering, 4. Consumer metering, 5. Consumption/seasonal rates, 6. Bills with consumption history, 7. Reuse of reclaimed water, 8. Plumbing retrofit kits, 9. User water audits, 10. Landscaping/irrigation guidelines, 11. User education, 12. Secure funding for implementation.	Basin-wide	Cities and towns, Public Water Systems, WDOH	--	--	--	Water Conservation and Efficiency Strategies - Domestic
BW-20	Not Ranked	Recommendation	Consider supporting legislation to provide incentives to water rights holders to conserve water.	Basin-wide	Washington State Legislature	Ecology, IDWR, Planning Unit	--	--	Water Rights
BW-21	Not Ranked	Recommendation	Study the impacts, effectiveness, and water savings of abolishing Ecology's "use it or lose it" policy with respect to water rights.	Basin-wide	--	Ecology	--	Recommendation to Ecology	Water Rights
BW-22	2	Action	Provide background information on water banking to the Planning Unit. Planning Unit to consider recommending that the Washington state legislature revise the statute to provide for water banking in WRIA 34, allowing unused water to be sold/leased to other users commensurate with current statutory and case law.	Basin-wide	Washington State Legislature, Ecology	IDWR, Planning Unit	--	--	Water Rights

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BW-23	2	Action	Support Adams CD in water quality sampling for temperature, pH, dissolved oxygen, nutrients, phosphorus, etc. Adams CD is obligated to: "Include water quality sampling and analysis of the mouths of Cow Creek and Rock Creek in the Palouse River Mainstem TMDL studies."	Willow Creek, Rebel Creek (Adams County), Rock Creek	Adams CD	CDs except Adams CD, Ecology	Adams CD (see action)	--	Water Quality - Sampling and Analysis
BW-24	4	Study /Assessment	Conduct microbial source tracking (including DNA, RNA ribotyping, and other new techniques) and analysis of bacteria to identify sources.	Basin-wide	--	CDs in CLP, IDEQ	--	--	Water Quality - Sampling and Analysis
BW-25	2	Study /Assessment	Conduct further characterization of groundwater for potential contamination from nitrates using existing data (USGS, WDOH, etc), identify risk areas and develop and implement management strategies to reduce nitrate contamination. Options for focusing activities include: hand dug / shallow wells (300 ft or above), proximity to sewer / fertilizer runoff lift stations, and recharge areas.	Basin-wide	WDOH	CDs, Counties, Cities and Towns in NFP, Ecology, NRCS, WSU Extension, PBAC, Planning Unit, IDEQ, IDWR	--	--	Water Quality - Nitrate
BW-26	2	Action	Establish and promote the following BMPs for erosion control for pasture, rangeland, cropland, and forest land. Options include: • bank stabilization • riparian buffers • grazing management systems • Conservation tillage • Divided slopes • Minimize conventional summer fallow • Strip cropping • Feedlot placement • Use of site-based NRCS manuals • Forest road stabilization and abandonment Provide incentives to landowners to implement BMPs. Specific areas to consider include Hooper in the CC management area.	Basin-wide	CDs	Counties in NFP, Individual Landowners, NRCS, WSDA, WSU Extension, WDFW, Ecology, USFS, ISCC, IDEQ	--	CAPITAL if tied to a specific project and location.	Water Quality - Erosion and Sedimentation
BW-27	3	Action	Identify and prioritize sites for bank stabilization and implement activities to minimize water quality impacts from flood events. Specific area to consider includes the mainstem Palouse River.	Basin-wide	--	CDs in NFP, Ecology, IDEQ, IDWR, USACE, WDFW	--	--	Water Quality - Erosion and Sedimentation

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BW-28	3	Study /Assessment	Conduct further characterization of sediment sources, and identify and evaluate potential options to reduce sediment loads entering surface waters. Options could include: 1. BMPs for agriculture, range, forest (forest road stabilization and abandonment). 2. Rural Roadway BMPs 3. Streambank stabilization, cropping systems, livestock management, and other practices	Basin-wide	CDs in CRC and CLP, USFS	CDs in SFP and NFP, Counties, Ecology, Individual landowners, IDEQ, NRCS, WSU Extension, IDWR, Latah County Highway District, WSDOT, WDFW	--	--	Water Quality - Erosion and Sedimentation
BW-29	3	Action	Work with individual landowners to review pesticide and fertilizer use and implement the following BMPs to limit water quality impacts: 1. Implement nutrient management plans on agriculture / rangelands 2. Follow labels for appropriate application 3. Evaluate and support opportunities for funding of high precision agricultural systems to reduce pesticide use 4. Reduce nutrient loading to local waterbodies 5. Enhance riparian areas 6. Urban/rural education program 7. Conservation tillage 8. Cleaning equipment 9. Buffer zones	Basin-wide	CDs	Ecology, IDEQ, WSDA, WSU Extension, NRCS, Individual irrigators, Individual Landowners, ISCC	--	--	Water Quality - Pesticide and Fertilizer Use (Review, Implement BMPs)
BW-30	2	Action	When appropriate for resource conservation objectives, develop cost-share program to promote use of chemical fallow vs. summer fallow.	Basin-wide	CDs	--	--	--	Water Quality - Pesticide and Fertilizer Use (Review, Implement BMPs)

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BW-31	2	Action	Characterize surface water for potential contamination from fecal coliform. Identify sources of fecal coliform (e.g., agricultural runoff or natural populations of waterfowl and/or other species) using best available practices. Identify and prioritize locations to implement strategies to reduce fecal coliform levels. Consider implementing the following strategies to reduce fecal coliform levels: 1. Enhance riparian areas / buffers 2. Minimize direct discharge from livestock operations (feedlots and/or grazing) 3. Out of stream watering of livestock 4. Identify and address septic systems 5. Explore waterfowl management options 6. Reduce or eliminate combined sewage overflows 7. Expanded lagoons/lines aerated lagoons 8. Urban sources 9. Inventory/dye testing of septic systems adjacent to floodplains and waterways 10. Other applicable BMPs 11. Monitoring 12. Education/outreach	Basin-wide, Sprague Lake Outlet	CDs, Counties	Planning Unit, Ecology, Individual landowners, NRCS, WSU Extension, USFS, WDOH, WDFW, IDEQ	--	Some projects could be eligible for CAPITAL funding.	Water Quality - Fecal Coliform
BW-32	2	Action	Work with individual livestock owners/managers to review management practices, and implement the following BMPs through grants and other programs to limit water quality impacts: 1. livestock BMPs (specific to type of animal), 2. monitoring, 3. expanded lagoons / lined aerated lagoons, 4. nutrient management plans.	Basin-wide, Along length of North Fork (lower elevations)	CDs in NFP	CDs except CDs in NFP, Ecology, IDEQ, Individual landowners, NRCS, WSU Extension, ISCC	--	--	Water Quality - Fecal Coliform
BW-33	Not Ranked	Recommendation	Review and update, as needed, best-available-science-based riparian buffer zones and critical areas regulations.	Basin-wide	USFS, Counties, Cities and Towns in NFP	Cities in SFP, Towns in SFP, Ecology, WDFW, Cooperative Extension, IDFG, IDWR, NRCS, Towns in CLP	--	--	Land Use and Development
BW-34	Not Ranked	Recommendation	Evaluate effectiveness of critical areas ordinances; modify ordinances to improve effectiveness as necessary.	Basin-wide	Cities and Towns in NFP, Counties	Ecology	--	--	Land Use and Development

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BW-35	Not Ranked	Recommendation	Implement/enforce land use and management regulations by appropriate agencies to protect critical areas and pristine areas of the management area (e.g. critical areas and shorelines programs).	Basin-wide	Cities and Towns, Counties, USFS	Ecology, WDFW	--	--	Land Use and Development
BW-36	Not Ranked	Recommendation	Consider fisheries management and recreational fishing in conjunction with enhancement of natural lake storage.	Basin-wide	WDFW	--	--	Recommendation to WDFW	Fish and Aquatic Plants
BW-37	Not Ranked	Recommendation	Evaluate pros and cons of conducting Use Attainability Analysis (UAA) for meeting water quality standards. Include Planning Unit in discussions. Revise water quality standards (e.g. temperature) to reflect local conditions. Specific areas to consider include Paradise Creek and the South Fork Palouse.	Basin-wide	Ecology	Cities in SFP, Planning Unit, IDEQ	--	--	Programs and Plans
BW-38	Not Ranked	Recommendation	Planning Unit members should actively participate in state TMDL process to ensure that PU concerns are reflected, specifically with regard to voluntary management actions to reduce pollutant loads.	Basin-wide	Planning Unit, Ecology	--	Ecology (for including the Planning Unit in the TMDL process)	ONGOING	Programs and Plans
BW-39	Not Ranked	Recommendation	Planning Unit Support Beyond Phase 4.	Basin-wide	CDs	Cities and Towns, Counties, Ecology	--	--	Programs and Plans
BW-40	Not Ranked	Recommendation	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	Basin-wide	Palouse CD	0	--	Recommendation to Palouse CD	Programs and Plans
BW-41	Not Ranked	Recommendation	Increase access to Federal Implementation Funding.	Basin-wide	CDs	USDA	--	--	Programs and Plans
BW-42	Not Ranked	Recommendation	Work with WRIA 34 regarding water management and policy decisions within watershed for identified WRIA 34 policy and management priorities.	Basin-wide	--	Ecology, WDFW	--	--	Programs and Plans
BW-43	Not Ranked	Recommendation	Use Ecology's start card filing database to alert team of local geologists of wells that are planned in the Palouse.	Basin-wide	--	Ecology	--	--	Programs and Plans

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BW-44	2	Action	Conduct further inventory of septic systems, and identify and evaluate potential options to repair systems and reduce waste from entering surface waters and water quality impacts (evaluate opportunities for assistance to landowners for repairs).	Basin-wide	Counties	IDEQ, Individual landowners, NRCS, USFS, Ecology, WDOH, WSU Extension	--	--	Wastewater
BW-45	Not Ranked	Recommendation	Conduct public education program on TMDL and water quality standards.	Basin-wide	Ecology	CDs, IDEQ	Ecology	--	Public Education and Outreach
BW-46	Not Ranked	Recommendation	Increase awareness by development and implementation of an education program targeting septic system issues.	Basin-wide	WDOH	Counties in NFP, Individual landowners, NRCS, USFS, Ecology, WSU Extension, IDEQ	--	--	Public Education and Outreach
BW-47	3	Action	Identify opportunities and implement targeted one-on-one outreach on land management planning and practices.	Early emphasis: Deep Creek, ID; Clear Creek, ID	CDs	IDFG, NRCS, USFS, WSU Extension	--	--	Public Education and Outreach
BW-48	1	Action	Secure funding, develop, promote and implement a community education program on water quality and water quantity management options, including conservation, ASR, groundwater recharge and streamflow enhancement, and instream flows. Education programs regarding conservation measures could include: 1. Communicating existing efforts and opportunities for funding to individual landowners 2. Increasing funding, methods and outreach of conservation measures to all water users 3. Developing regional workshops that target all water users on the following topics: a. water re-use b. lawn watering c. water efficiencies d. equipment installation and use e. riparian and watershed function f. out of stream livestock watering	Basin-wide	Counties, CDs in CLP and SFP	WDOH, Towns in CLP, Ecology, IDEQ, IDWR, WSU/U of I Extensions, Individual landowners, NRCS, Non-profit organizations, Public Water Systems, CDs except CDs in CLP and SFP	--	--	Public Education and Outreach
BW-49	2	Action	Provide additional resources to CDs to increase individual farm and urban household BMP planning and implementation assistance.	Basin-wide	CDs, NRCS, WSCC	ISCC, Planning Unit, Counties in CLP, DNR, Towns in CLP, Ecology	--	--	Funding

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BW-50	to be ranked in first update of DIP	Study/ Assessment	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.	Basin-wide	cities, counties, CDs	Ecology, IDWR, PBAC, USACE	--	Moscow has $150,000 in budget to conduct a feasibility study of surface water storage in Moscow area. Columbia River Water Management Program funds feasibility studies for surface water storage. CRWMP has funded Rock Lake storage feasibility study. Scope of work should be developed by end of 2008.	Surface and Groundwater Storage
BW-51	to be ranked in first update of DIP	Action	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.	Basin-wide	Palouse CD, Planning Unit, Ecology	--	--	Planning Unit will be developing the roadmap in year 2 implementation.	Instream Flow
CC and LP-1	4	Action	Coordinate supporting information with Adams Conservation District water quality monitoring studies for fecal coliform and nutrients on Cow Creek and baseline nutrient and other water quality information on CLP.	Entire MA	Adams CD	Ecology	--	--	Water Quality - Sampling and Analysis
CC and RC-1	2	Action	Re-establish gauging stations on lower Cow Creek and Sprague Lake and establish a network of gauges to manage water effectively.	Cow Creek, Rock Creek, Sprague Lake Outlet, Above Rock Lake, below Rock Lake, confluence of Rock Lake and Palouse River	Ecology	CDs in CRC, USGS	--	Sprague Lake gauge was funded and installed.	Streamflow, Water Quality, and Groundwater Monitoring
CC and RC-2	Not Ranked	Recommendation	Encourage Whitman County to form a Groundwater Management Area (GWMA) in order to increase support for characterizing the regional hydrogeology and developing sound groundwater management strategies.	Whitman County	--	Whitman County, Planning Unit	--	This action may be unnecessary if future instream flow rule includes adequate groundwater management strategies.	Characterize Surface Water and Groundwater Resources

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CC and RC-3	1	Study/ Assessment	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 stockwatering, 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.	Entire MA - CRC, Sheep Springs, Cow Lake, Finnell Lake, Hallin Lake, Rock Creek, Cow Creek subbasin, Airway Heights, Cheney	Planning Unit (for #5), Ecology	CDs in CRC, Airway Heights, Cheney, Spokane County, Lincoln County, USGS	Ecology for #5	ONGOING. 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. Spokane County would like the Planning Unit's support for its work related to this action.	Characterize Surface Water and Groundwater Resources
CC and RC-4	3	Action	Identify and prioritize selected areas for storage of excess runoff during peak flows, including aquifer storage in increments on river reaches.	Entire MA	Adams CD	CDs in CRC except Adams CD, Ecology	--	CAPITAL	Surface and Groundwater Storage
CC-1	2	Action	Cow Creek Well Decommissioning & Casing Project. Locate, case and/or decommission wells that have been identified as cascading from the upper to lower aquifers.	West of Cow, Hallin, and Finnell Lakes	Adams CD	Ecology	--	CAPITAL	Characterize Surface Water and Groundwater Resources
CC-2	1	Study/ Assessment	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 WRIAs, as needed.	Cheney, Medical Lake	Spokane County	Ecology	--	ONGOING - Spokane County currently doing hydrogeologic study. 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. Spokane County would like the Planning Unit's support for its work related to this action.	Characterize Surface Water and Groundwater Resources

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CC-3	Not Ranked	Recommendation	Optimize the use of existing storage facilities throughout the Cow Creek subbasin when there is water in streams over and above that needed to satisfy senior water rights.	Cow Creek Subbasin	CDs in CRC	Ecology, USACE	--	--	Surface and Groundwater Storage
CC-4	Not Ranked	Recommendation	Consider granting a storage right for Sprague Lake to store water between the minimum and maximum adjudicated level. Concerns such as flooding, property damage, etc. may need to be addressed along with a cost-benefit analysis and completion of the SEPA process.	Above Sprague Lake	Ecology	Planning Unit	--	--	Surface and Groundwater Storage
CC-5	3	Action	Collect additional flow and elevation data at the inlet and outlet of Sprague Lake and key locations between Sprague Lake and Hooper and compare to flows throughout the Cow Creek system to establish a reliable data set to confirm when water is likely to be available for storage in Sprague Lake and impacts of storage in Sprague Lake.	Key locations between Sprague Lake and Hooper, including: Cow Lake, Finnell Lake, Sheep Springs.	CDs in CRC	Ecology	--	--	Surface and Groundwater Storage
CC-6	3	Action	Develop monthly water balance estimates for Sprague Lake by installing an evaporation pan and flow monitoring and water level elevation gauges.	Sprague Lake	CDs in CRC	Ecology, USGS	--	--	Surface and Groundwater Storage
CC-7	3	Action	Convene a PU Subcommittee to discuss storage options in the Cow Creek Subbasin during high flows and how they would be implemented. Determine whether this is possible given the Adjudication. If mutually beneficial, discuss a maximum allocation associated with water use during high flows.	Cow Creek subbasin	Planning Unit	CDs in CRC, Ecology	--	--	Surface and Groundwater Storage
CC-8	4	Study/ Assessment	Study feasibility of storing water in Sprague Lake to rehabilitate lake for recreation.	Sprague Lake	--	Planning Unit, CDs in CRC	--	--	Surface and Groundwater Storage
CC-9	3	Study/ Assessment	Assess additional storage feasibility, including surface water losses to groundwater, for Cow/Hallin Lake, Finnell Lake, and Sheep Springs Reservoir.	Cow/Hallin Lake, Finnell Lake, Sheep Springs Reservoir	CDs in CRC	Ecology	--	--	Surface and Groundwater Storage
CC-10	3	Study/ Assessment	Determine availability of surface water above Sprague Lake for storage or use downstream.	Above Sprague Lake	Ecology	Planning Unit	--	--	Surface and Groundwater Storage
CC-11	4	Study/ Assessment	Further evaluate feasibility, including costs and benefits of flood control for the City of Sprague.	City of Sprague	City of Sprague	Ecology, USACE	--	--	Surface and Groundwater Storage
CC-12	2	Study/ Assessment	Assess water supply and projected demand due to growth in Medical Lake.	Medical Lake	Medical Lake	Spokane County, Ecology	Medical Lake	--	Municipal Water Supply and Demand

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Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
CC-13	4	Study/ Assessment	Determine feasibility of pumping water (at sustainable levels) from deep aquifer wells to enhance surface flows in Cow Creek.	Entire MA	--	CDs in CRC, Ecology	--	--	Recharge and Flow Enhancement
CC-14	Not Ranked	Recommendation	Provide technical assistance in evaluating the Cow Creek instream flow study, establish minimum instream flows for Cow Creek (if warranted), and consider pending water rights applications when setting instream flows.	Entire MA	Ecology	--	--	--	Instream Flow
CC-15	3	Action	Convene a PU Subcommittee to work on an instream flow package for the Cow Creek Subbasin. Consider package components: 1. Partial closure to address groundwater use and include along with that closure a reservation for uninterruptible water for domestic, municipal, and stockwater purposes, and storage. 2. Define an acceptable daily use level for permit exempt wells and other single family households. 3. Meter new water uses to verify that the water use levels applied to the reservation are accurate. 4. Apply findings on groundwater and surface water interaction (actions CC and RC-3 and CC-12) to develop instream flow package in Cow Creek.	Cow Creek subbasin and Cow Creek	Planning Unit, CDs in CRC	Ecology, WDFW	--	--	Instream Flow
CC-16	Not Ranked	Recommendation	Manage water rights/uses consistent with prior adjudication.	Cow Creek	Ecology	--	--	--	Water Rights
CC-17	4	Action	Seek funding sources for off-site stock watering sites (estimated requirement is one supply site per mile for riparian grazing areas).	Every mile on Cow Creeks on both sides	Adams CD	CDs in CRC except Adams CD, Ecology	--	--	Water Quality - Erosion and Sedimentation
CC-18	4	Action	Construct Fish Passage Barrier on Cow Creek below Sprague Lake to prevent repopulation of Sprague Lake with undesirable species.	Cow Creek	--	WDFW	--	--	Fish and Aquatic Plants
CC-19	4	Study /Assessment	Study the potential use of aquatic plants (e.g., duck weed or native species) that can be used to reduce or eliminate algal blooms in Sprague Lake.	Sprague Lake	--	WSU Extension	--	--	Fish and Aquatic Plants
CC-20	3	Study /Assessment	Conduct Cheney WWTP Effluent Discharge Relocation Study.	Cheney	--	City of Cheney, Ecology	--	--	Wastewater
LP and RC-1	1	Study/ Assessment	Characterize groundwater resources; map approximate location, depth, and geographic extent of aquifers in the Lower Palouse and Rock Creek Management Areas. Also determine regional quantities and movement of groundwater.	1. Two miles outside of jurisdiction of each town in the management areas 2. Region wide	--	Ecology, USGS, Towns in CLP, PBAC	--	--	Characterize Surface Water and Groundwater Resources

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Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
LP and RC-2	1	Study/ Assessment	Characterize hydrology and connectivity of surface water and springs, and develop potential recharge and flow enhancement strategies at the following locations in the Lower Palouse and Rock Creek Management Areas: 1. Eastern portion of the Basin (Adams/Whitman County Line to Washtucna) 2. Streams – Palouse River, Union Flat Creek, Willow Creek, Rebel Flat Creek, Pine Creek, Cottonwood Creek	Entire MA	--	Ecology, IDEQ, USGS, IDWR	--	--	Characterize Surface Water and Groundwater Resources
LP and RC-3	Not Ranked	Recommendation	Conduct a TMDL study for bacteria, temperature, and dissolved oxygen in the Central Lower Palouse management area. Include sampling at the mouths of the major tributaries.	Entire MA	Ecology	IDEQ	Ecology	--	Water Quality - Sampling and Analysis
LP and RC-4	Not Ranked	Recommendation	Improve and streamline permitting process for bank stabilization and other projects.	Entire MA	USACE	WDFW, Counties in CLP	--	--	Water Quality - Erosion and Sedimentation
LP-1	4	Study/ Assessment	Determine feasibility of stream re-engineering to improve flows and water quality.	West of Endicott on Rebel Flat Creek	CDs in CLP	Ecology, IDEQ, NRCS, IDWR	--	--	Recharge and Flow Enhancement
LP-2	Not Ranked	Recommendation	Consider the concerns of the Planning Unit in future instream flow rule-making, including: 1. Implementing a partial closure to enable storage 2. Reservation for uninterruptible water rights for domestic and municipal use, and a maximum allocation for potential future storage.	Entire MA	Ecology	CDs in CLP, Planning Unit	--	--	Instream Flow
LP-3	4	Complete	Secure additional water supply/water rights	Colton	Colton	Ecology	--	COMPLETE. The town of Colton's water right transfer was completed Nov. 2007.	Water Rights
LP-4	3	Action	Identify the source(s) of foaming (potential organics or detergent sources) that occurs on the mainstem Palouse River, and then identify and implement corrective actions to address the cause of the foaming on the mainstem Palouse River.	Mainstem between Colfax and Whitman county line	Ecology	CDs in CLP, ISCC, NRCS, IDEQ	--	--	Water Quality - Sampling and Analysis
LP-5	3	Action	Assist the City of Endicott in securing grant funding to implement its water system C.I.P. to improve system storage, fire flow, conservation and reliability.	Endicott	City of Endicott	WDOH	--	Possible recommendation to WDOH.	Funding
NFP and SFP-1	3	Study/ Assessment	Further develop the concept of aquifer recharge using recharge wells to stabilize and recover aquifer levels in both the Wanapum and Grand Ronde basalts. Educate and involve the public in water management options.	Entire MA - NFP and SFP	PBAC	CDs in NFP, Ecology, Pullman, WSU, IDWR, CDs in SFP	--	--	Recharge and Flow Enhancement

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Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
NFP and SFP-2	2	Study/ Assessment	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.	Kamiak Butte, NFP management area	PBAC	USGS, Ecology, CDs in NFP	--	Funded. CAPITAL. The feasibility study was funded by Ecology in 2006 and has been documented in a recent report (Golder and HDR, 2008). Based on the results of this study, the Planning Unit agreed that enhanced infiltration of water at surface is unlikely to be effective to enhance recharge to the basalts.	Recharge and Flow Enhancement
NFP-1	1	Action	Identify appropriate areas for permanent gauging stations upstream of Colfax.	Upstream of Colfax	Ecology	USGS, IDWR, IDEQ	--	Ongoing. Ecology is assessing gage locations and is intending to site a new gaging station just upstream of Colfax on the North Fork.	Streamflow, Water Quality, and Groundwater Monitoring
NFP-2	1	Action	Establish and maintain groundwater monitoring wells in support of instream flow management in the North Fork Palouse.	Entire MA	Ecology	IDWR	--	--	Streamflow, Water Quality, and Groundwater Monitoring
NFP-3	1	Study/ Assessment	Characterize hydrology and connectivity of surface water, groundwater, and springs within the North Fork Palouse Management Area.	Entire MA	--	Ecology, IDWR, IDEQ, PBAC, USGS	--	--	Characterize Surface Water and Groundwater Resources
NFP-4	4	Action	Enhance and/or restore wetlands at the following locations with willing landowners; evaluate incentive-based approaches to wetland restoration: 1. City of Potlatch – old mill site, 2. Upper forest meadows (USFS)	Entire MA	USFS, Latah CD	CDs in NFP except Latah CD, Ecology, IDEQ, IDWR, NRCS	--	--	Enhancement/Restoration of Floodplain, Riparian or Wetland Areas
NFP-5	3	Action	Survey small communities within the watershed for water management / supply issues and projects; query regarding economic development being limited by water availability.	Endicott, Rosalia	Counties in NFP	CDs in NFP, Counties, Planning Unit	--	--	Municipal Water Supply and Demand
NFP-6	Not Ranked	Recommendation	Obligate agencies to collaborate with and assist in identifying funding for developing a full instream flow package for the North Fork Palouse to support quantification of flows, a reservation, and maximum allocation. Assist in identifying funding to educate the Planning Unit/community on instream flow setting.	Entire MA	Ecology, WDFW	CDs in NFP, Planning Unit	Ecology, WDFW	ONGOING	Instream Flow
NFP-7	2	Action	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.	North Fork Palouse River	Ecology	CDs in NFP, WDFW, Planning Unit	--	ONGOING	Instream Flow

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NFP-8	Not Ranked	Recommendation	Manage local development to minimize impacts to natural resources.	Entire MA	Cities and Towns in NFP	Counties in NFP, WDFW, Ecology	--	--	Land Use and Development
NFP-9	Not Ranked	Recommendation	Encourage water re-use systems and stormwater management plans for new construction.	Entire MA	Cities and Towns in NFP	Counties in NFP, Ecology, Individual landowners, Non-profit organizations	--	--	Land Use and Development
NFP-10	Not Ranked	Recommendation	Evaluate and review the impact of the Idaho Forest Practices Act on water quality.	Idaho portion of MA	--	IDL, IDEQ	--	--	Programs and Plans
NFP-11	4	Action	Review and evaluate key strategies for water management from Clearwater National Forest Management Plan, state practices and forest practices to use in water management planning throughout the management area.	Entire MA	Planning Unit	USFS	--	--	Programs and Plans
NFP-12	3	Study /Assessment	Investigate legality of use of gray water and evaluate impacts to surface water flows.	Entire MA	Cities and Towns in NFP	Counties in NFP, Ecology, IDEQ, IDWR, Individual landowners, Non-profit organizations	--	--	Wastewater
NFP-13	3	Study /Assessment	Evaluate the feasibility, cost and funding sources for a sewer extension for eastside Palouse.	City of Palouse (Fisher Addition)	City of Palouse	Ecology	--	--	Wastewater
NFP-14	Not Ranked	Recommendation	Encourage public participation in the TMDL process.	Entire MA	--	CDs in NFP, Ecology, IDEQ	--	ONGOING?	Public Education and Outreach
NFP-15	2	Action	Secure funding to implement the 14 water quality actions referenced in the 2002 North Fork Palouse River Watershed Management Plan.	North Fork Palouse River	Planning Unit	--	--	--	Funding
NFP-16	2	Action	Identify funding opportunities to address TMDL concerns on the mainstem Palouse River in Washington and in Idaho.	Mainstem Palouse in Washington and Idaho	--	CDs in NFP, Ecology, Planning Unit	--	Ongoing and/or funded. Centennial Clean Water Grant/Loan funds, 319 Nonpoint Pollution Grant funds, and 319 Direct Implementation funds (a subset of the nonpoint pollution funds).	Funding
SFP-1	3	Action	Install permanent gauging on Fourmile Creek.	Fourmile Creek	--	Palouse CD, USGS	--	--	Streamflow, Water Quality, and Groundwater Monitoring
SFP-2	1	Action	Cunningham Farm Monitoring Field Well Project - Install and monitor as many as 5 wells in the Palouse Basin Aquifer at Cunningham Farms, Kamiak Gap, Whitman County Landfill, 4- mile gap and Staley to characterize the geology and hydrogeology of the area.	Cunningham Farm and other locations in the Palouse Basin Aquifer	PBAC	Ecology	--	Project Proposal submitted in 2008. PBAC's #2 Priority. Identified as the Planning Unit's #3 Priority in the Watershed Plan. This could be partially funded with CAPITAL funding sources depending on if we can tie the effort to an ASR, SAR or Reclamation Reuse Project.	Characterize Surface Water and Groundwater Resources

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Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
SFP-3	1	Action	Develop a framework for water resource management decisions concerning the Palouse Basin Aquifer.	Entire MA	PBAC	Ecology, CDs in SFP, Counties in SFP, Cities in SFP	--	Project Proposal submitted in 2008. PBAC's #1 priority. Identified as the Planning Unit's #1 Priority in the Watershed Plan. This action has been a topic of discussion at PBAC, but as of August 2008 there is no dedicated funding allocated. The grant proposal written by Jerry Fairley was submitted to the Planning Unit through PBAC, and the item also appears in the draft of the Palouse Basin portion of the ($20M) Idaho Aquifer Study / Water Plan project. The current timeline calls for initiation of work on the Palouse beginning in mid-2010, but the project is subject to annual appropriation and the SCOPE DETAILS COULD WELL CHANGE between now and then.	Characterize Surface Water and Groundwater Resources
SFP-4	1	Action	Establish a central and permanent office for storage of geologic/ hydrologic information on the Palouse Basin.	Entire MA	PBAC	--	--	There is no dedicated PBAC funding to this effort as of August 2008.	Characterize Surface Water and Groundwater Resources
SFP-5	1	Study/ Assessment	Continue to characterize groundwater resources; map approximate location, depth, and extent of aquifers in the South Fork Palouse Management Area. Also determine regional quantities and movement of groundwater. Age-date water to identify young water in shallow and deep aquifer systems.	Pullman/ Moscow	PBAC	Ecology, IDWR, USGS	--	Project Proposal submitted in 2008 for the age-dating portion. Identified as the Planning Unit's #4 Priority in the Watershed Plan.	Characterize Surface Water and Groundwater Resources

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Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
SFP-6	1	Study/ Assessment	Conduct ongoing studies and data collection to monitor groundwater conditions, and to better understand how recharge occurs (in Palouse Basin Aquifer).	Entire MA	PBAC	Ecology, IDEQ, IDWR	--	ONGOING. 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 next year; the Grande Ronde monitoring student researcher completed his research in May, 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.	Characterize Surface Water and Groundwater Resources
SFP-7	2	Study/ Assessment	Carbon 14 dating of Sediments of Bovil and Vantage well water.	Bovil and Vantage	PBAC	--	--	--	Characterize Surface Water and Groundwater Resources
SFP-8	2	Study/ Assessment	Develop more detailed Grande Ronde flow maps by comprehensive basalt sampling/chemistry	Entire MA	PBAC	--	--	--	Characterize Surface Water and Groundwater Resources
SFP-9	1	Study/ Assessment	Look at whether proposed new Colfax well project will impact shallow aquifer, springs and streamflows by characterizing the hydrology and connectivity of surface water, groundwater, and springs within the South Fork Palouse Management Area.	Entire MA, Colfax	--	Ecology, PBAC, USGS, City of Colfax	--	--	Characterize Surface Water and Groundwater Resources

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Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
SFP-10	1	Study/ Assessment	Characterize hydrology and connectivity of surface water, groundwater, and springs, and develop potential recharge and flow enhancement strategies at the following locations: 1. Moscow Mountain, 2. Sand Road area, 3. Smoot Hill, 4. Kamiak Butte, 5. Latah County (eastern basin), 6. upper reaches of tributaries. Specifically include geologic characterization of the Kamiak and Four-Mile "gaps" by further investigation of well logs and additional test drilling.	Entire MA; Kamiak and Four-Mile "gaps"	PBAC	Ecology, IDEQ, USGS	--	This could be partially funded with CAPITAL funding depending on if we can tie the effort to an ASR, SAR or Reclamation Reuse Project. A major objective of the Kamiak part of the study is to determine the extent of the Grande Ronde portion of the aquifer system. PBAC funded past geophysical research that indicated the Grande Ronde is not continuous through the Kamiak Gap. Test drilling there will help verify/refute that conclusion. The log investigation and test drilling will also help with the objectives to characterize hydrology and connectivity of surface water, groundwater, and springs, and develop potential recharge and flow enhancement strategies.	Characterize Surface Water and Groundwater Resources
SFP-11	3	Study/ Assessment	Develop a 3-D model of the geology of the Palouse Basin Aquifer.	Entire MA	PBAC	USGS	--	--	Characterize Surface Water and Groundwater Resources
SFP-12	3	Study/ Assessment	Completion of 1:24,000 scale geologic maps for the Colfax South, Garfield, and Ewartsville quads.	Entire MA	PBAC	USGS	--	--	Characterize Surface Water and Groundwater Resources
SFP-13	3	Study/ Assessment	Completion of 1:48,000 and 1:100,000 scale geologic map of the Palouse Basin Aquifer.	Entire MA	PBAC	USGS	--	--	Characterize Surface Water and Groundwater Resources
SFP-14	1	Action	Identify and evaluate potential aquifer recharge areas, for winter flow diversions, ASR, Class A treated effluent, etc.	Pullman/Moscow	PBAC	City of Moscow, City of Pullman	--	CAPITAL	Surface and Groundwater Storage
SFP-15	2	Action	If feasible, develop pilot scale ASR program(s) using existing wells/water system infrastructure.	City of Pullman	--	City of Pullman, WSU, Ecology, CDs in SFP	--	CAPITAL	Surface and Groundwater Storage

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Unique Identifier	Tier	Category	DIP Action Description	Location	Lead Entities/ Project Sponsors[1,2]	Supporting Entities[2,3]	Obligated Entities, if any[4]	Implementation Notes[5]	Topic
SFP-16	1	Study/ Assessment	Complete further study on ASR feasibility in Pullman, beginning with a pre-feasibility document including: 1. identification/examination of existing wells for possible retrofit to ASR 2. geochemical compatibility screening to confirm compatibility of surface water for use as a source for aquifer storage and recovery (ASR). Surface water sampling to support assessment of treatment options for water diverted from Paradise Creek and the South Fork of the Palouse River 3. preliminary operational scenarios and water system compatibility overview 4. proposed observation well network and monitoring plan 5. educate and involve the public in water management options.	City of Pullman, Entire MA - SFP	City of Pullman	PBAC, Ecology, CDs in SFP, IDEQ	--	CAPITAL. PBAC has agreed in principal to fund a project that will look at the hydraulic impacts of ASR, and as of the spring of 2008 was pending identification of a student researcher. This project would also involve the activity of continuing the Grande Ronde portion of the PBAC monitoring program. However, the proposed project does not propose to address much of the scope of the action.	Surface and Groundwater Storage
SFP-17	4	Study/ Assessment	Conduct an economic evaluation/feasibility study that addresses, with other new supply options, supply development (i.e. "harvesting") opportunities, and compare costs.	Entire MA	PBAC	Ecology, IDWR	--	--	Municipal Water Supply and Demand
SFP-18	3	Study /Assessment	Rainfall/Wanapum well correlation study to determine recharge areas and amounts.	Entire MA	PBAC	Ecology, IDWR, IDEQ	--	--	Recharge and Flow Enhancement
SFP-19	2	Study /Assessment	Paradise Creek/Palouse Mall Area Aquifer Recharge Study.	Paradise Creek/ Palouse Mall Area	PBAC	CDs in SFP, Ecology, IDEQ, IDWR	--	CAPITAL	Recharge and Flow Enhancement
SFP-20	2	Study /Assessment	Further develop the preliminary feasibility of enhanced infiltration at the crystalline bedrock-basalt margins as a long-term groundwater level management tool. Conduct an investigation including the use of geophysics and test pits to determine if the contact can be identified and exposed.	Entire MA	PBAC	CDs in SFP, USGS, Ecology	--	CAPITAL	Recharge and Flow Enhancement
SFP-21	Not Ranked	Recommendation	Conduct tentative determination of status and validity of existing surface water rights, claims, certificates and permits (including riparian stockwater rights), including place of use, point of diversion and usage information for existing water right holders.	South Fork below Pullman	--	--	--	--	Water Rights
SFP-22	3	Study /Assessment	Palouse Aquifer Water Chemical Analysis Study.	Entire MA	Pullman	--	--	--	Water Quality - Sampling and Analysis
SFP-23	Not Ranked	Recommendation	Encourage low impact development and sustainable growth strategies to limit impacts to water resources.	Entire MA	Counties in SFP	Cities and Towns in SFP	--	--	Land Use and Development
SFP-24	Not Ranked	Recommendation	Support Pullman and WSU efforts to obtain funding (Legislature and other sources) for wastewater reuse project.	City of Pullman	--	Ecology	--	Ecology has obligated to fund a portion of the project.	Wastewater

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SFP-25	1	Action	Identify and implement wastewater effluent reuse strategies where practicable, considering legal interpretation of obligation/amount of water to supply and protect water rights, including riparian stockwatering rights, below city discharge points.	Pullman/ Moscow	City of Moscow, City of Pullman, WSU	Ecology	--	CAPITAL. Submitted funding proposal through WRIA as capital project and close to getting funding commitment from Ecology; funded up to 30 percent design which has been completed by WSU through its budget (completed 2002) – project waiting for funding to complete final design and construction. Partnership between city of Pullman and WSU. As stated in the Watershed Management Plan, "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 (p. 5-4)." 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).	Wastewater
SFP-26	Not Ranked	Recommendation	Continue the "Palouse Water Summit" as an annual event to discuss Palouse Watershed water resources issues in a public forum.	Entire MA	Palouse CD	Cities in SFP, U of I, WSU, Counties in SFP, Ecology, USGS	--	--	Public Education and Outreach

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Notes

1. 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.
2. CRC CDs, cities, towns, and counties:
   - CDs in CRC include Adams County CD, Lincoln County CD, Palouse Rock Lake CD, Pine Creek CD, and Spokane County CD.
   - Cities in CRC include Medical Lake and Sprague.
   - Towns in CRC include Lamont.
   - Counties in CRC include Adams, Lincoln, Spokane, and Whitman.

   CLP CDs, cities, towns, and counties:
   - CDs in CLP include Adams County CD, Latah SWCD, Pine Creek CD, Palouse CD, Palouse Rock Lake CD, Spokane County CD, and Whitman County CD.
   - Towns in CLP include Colton, Endicott, Farmington, Genesee (ID), LaCrosse, Malden, Oakesdale, Rosalia, Saint John, and Uniontown.
   - Counties in CLP include Whitman, Spokane, Latah (ID), Benewah (ID), and Nez Perce (ID).

   NFP CDs, cities, towns, and counties:
   - CDs in NFP include Palouse CD, Latah SWCD, Whitman County CD, and Palouse Rock Lake CD.
   - Cities and towns in NFP include Palouse, Potlatch (ID), and Onaway (ID).
   - Counties in NFP include Whitman, Latah (ID), and Benewah (ID).

   SFP CDs, cities, towns, and counties:
   - CDs in SFP include Palouse CD, Whitman County CD and Latah SWCD.
   - Cities in SFP include Colfax, Pullman, and Moscow (ID).
   - Towns in SFP include Albion.
   - Counties in SFP include Whitman and Latah (ID).
3. 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.
4. An organization / individual that accepted the obligation to complete the action. "--" indicates that no obligated entity was identified in the Watershed Management Plan. Actions where no obligated entity is identified are defined as Watershed Management Plan Recommendations (desirable actions intended to help meet or address one or more of the planning objectives.
5. The implementation notes column should be updated with the following information:
   a. Completion Status: Complete, Ongoing and/or 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.

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APPENDIX B

LINK BETWEEN WATERSHED MANAGEMENT PLAN ACTIONS AND DIP ACTIONS

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
BW-1	Continue instream flow and water quality monitoring through permanent and seasonal gauges and water quality monitoring stations. Specifically, - flow monitoring through permanent and seasonal gauges on North Fork and South Fork Palouse River (including City of Colfax and City of Pullman) - monthly flow measurements at sites throughout the Cow Creek subbasin that are currently monitored by the Adams CD	40 (BW): Continue instream flow and water quality monitoring through permanent and seasonal gauges. QT-4a (CLP): Continue instream flow and water quality monitoring through permanent and seasonal gauges and water quality monitoring stations. QT-2a (NFP): Continue instream flow monitoring through permanent and seasonal gauges on North Fork; identify appropriate areas for permanent gauging stations upstream of Colfax QT-2b (SFP): Continue instream flow monitoring through permanent and seasonal gauges on South Fork. QT-2c (SFP): Continue to operate and maintain gauging station in Pullman. QT-2a (CRC): Continue monthly flow measurements at sites throughout the Cow Creek subbasin that are currently monitored by the Adams CD.	Basin-wide	CDs (L- Adams), IDEQ (L), USGS, Ecology (L), IDWR, City of Pullman, Planning Unit	Ecology (for the monitoring station in Pullman)	NFP1, BW13, BW14, CRC2	Ongoing or Near-term	Low or Medium	combined actions; split action QT-2a (NFP). other part of split action is in NFP-1.
BW-2	--	30 (BW) and QT-2c (CRC): Upgrade diversions to install measuring devices where needed.	Individual irrigators (throughout area)	Ecology, Individual irrigators (L)	--	BW17	Mid-term	Medium	combined actions. no change to language
BW-3	Provide opportunities for voluntary water quality sampling on private wells (sample kits).	33 (BW) and QL-2 (NFP): Conduct further characterization of groundwater for potential contamination from nitrates; provide opportunities for voluntary water quality sampling on private wells (sample kits).	Basin-wide	CDs, Counties, Cities and Towns in NFP, Ecology, NRCS, WDOH (L), WSU Extension, IDEQ (L)	--	BW18	Mid-term	Medium	split action. other part of split action is in BW-25.
BW-4	Continue to support regional (Washington and Idaho) management efforts and solutions for Grand Ronde aquifer decline.	9 (BW): Continue to support regional (Washington and Idaho) management efforts and solutions for Grand Ronde aquifer.	Basin-wide	Ecology	--	--	--	--	changed language
BW-5	--	10 (BW): Continue to support and fund research and study efforts for determining characteristics and solutions for declining Grand Ronde aquifer.	Basin-wide	Ecology	--	--	--	--	no change

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BW-6	Identify and prioritize areas for potential wetland creation, restoration, and enhancement for storage purposes and enhancement and/or restoration of natural floodplain, riparian or wetland areas.	15 (BW): Evaluate needs and identify areas that would benefit from enhancement and/or restoration of riparian vegetation. 19 (BW): Conduct feasibility study to identify opportunities for wetland creation, restoration, and enhancement for storage and environmental enhancement purposes. QT-7a (CRC): Conduct a study to identify priority selected areas for enhancement and/or restoration of natural floodplain, riparian or wetland areas. QT-4d (NFP): Conduct feasibility of and implement potential wetland storage locations. QT-5b (SFP): Conduct study to identify opportunities for wetland creation, restoration and enhancement for storage purposes. QT-2b (CLP): Evaluate needs and identify areas that would benefit from enhancement and/or restoration of riparian vegetation and wetlands	Basin-wide	CDs (L), Counties (L), Ecology, Individual Landowners, WSU Extension, IDEQ, IDWR, NRCS (L), Cooperative Extension	--	BW10, BW11, CRC1	Near-term	Medium or Low	combined actions
BW-7	Characterize riparian conditions and identify restoration/enhancement areas where appropriate; implement riparian function enhancement projects with willing landowners, tailored to their strategies and needs, in priority areas where appropriate using incentive-based approaches (using Whitman County Growth Management Plans to assist in identification of critical areas). Develop a managed grazing program that addresses the use of riparian areas while protecting and enhancing water resources.	18 (BW) and QT-4c (NFP): Characterize riparian conditions and identify restoration/enhancement areas where appropriate; implement riparian function enhancement projects with willing landowners, tailored to their strategies and needs, in priority areas where appropriate using incentive-based approaches (using Whitman County Growth Management Plans to assist in identification of critical areas). 41 (BW): Develop managed grazing program that addresses use of riparian areas while protecting and enhancing water resources. 49 (BW): Fund and support riparian restoration/ preservation projects within watershed.	Basin-wide	CDs (L), Counties (L), Ecology, Individual Landowners, WSU Extension	--	BW10, BW11	Near-term	Medium	combined actions
BW-8	--	21 (BW): Enhance existing surface water storage in reservoirs and/or lakes.	Basin-wide	CDs (L), Ecology	--	--	--	--	no change

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BW-9	Identify opportunities for recharge (including retention/settling basins, rainfall collection, small scale structures for improving baseflows, and other small scale storage opportunities). Encourage and work with individual landowners to construct small storage, infiltration or additional retention/settling basins to improve baseflows in the summer. Consider the Laird Park (ID) site as a demo site for local Conservation Districts in the NFP to show to interested landowners. Areas to consider in the NFP MA include outside Harvard, Old Mill Site west of Potlatch (flat plane for flood control), Strychnyne Creek (on stream reservoir), and above Laird Creek (dam).	20 (BW): Work with individual landowners to construct small storage, infiltration, or additional retention/settling basins. QT-5a (SFP): Conduct study to identify opportunities for additional retention/settling basins to enhance supply. Consider rainfall collection. QT-4b (NFP): Identify opportunities for additional retention/settling basins: small scale and large scale. QT-6a (NFP): Encourage use of small scale structures by landowners to improve baseflows in the summer, (e.g. those at Laird Park, ID). Consider the Laird Park site as a demo site for local Conservation Districts to show to interested landowners. QT-2a (CLP): Identify opportunities and areas and work with individual landowners to construct small storage, infiltration or additional retention/settling basins.	Basin-wide	City of Moscow (L), City of Pullman (L), Colfax (L), Albion (L), Counties (L), Ecology, IDEQ, IDWR, USFS, NRCS, CDs (L), Individual landowners	--	BW8, BW12, BW15, BW16, BW17, NFP2	Near-term and Mid-term	Low	combined actions
BW-10	Identify and prioritize areas to implement the following strategies to improve stormwater management and treatment and increase groundwater infiltration: 1. sediment basins 2. infiltration trenches 3. swales / wetlands 4. rural/urban drainage ditch upgrades This action is applicable in the following locations of the CC, RC, NFP and LP management areas: CC: 1. Drainage facilities on rural roads 2. City of Sprague drainage ditches RC: 1. Drainage facilities on rural roads 2. City of Lamont drainage ditch NFP: Drainage facilities on rural and urban roads LP: Drainage facilities on rural roads	42 (BW) and QL-5 (NFP): Identify and prioritize areas to implement strategies to improve stormwater management and treatment and increase groundwater infiltration. QL-3b (CRC): Adopt the Eastern Washington Stormwater manual and implement the following strategies to improve stormwater management and treatment and increase groundwater infiltration: 1. sediment basins 2. infiltration trenches 3. swales / wetlands 4. rural/urban drainage ditch upgrades QL-4b (CLP): Implement the following strategies to improve stormwater management and treatment and increase groundwater infiltration: 1. sediment basins 2. infiltration trenches 3. swales / wetlands	1. Drainage facilities on rural roads 2. City of Sprague drainage ditches 3. City of Lamont drainage ditch 4. Drainage facilities on rural and urban roads	Counties (L), All development in CLP, Towns in CLP, CDs in CLP, NRCS, State Transportation Departments (L-WSDOT), Cities and Towns in NFP (L- Palouse, Potlatch ID, Onaway ID)	--	BW20, CRC4, BW7, BW15, BW21, CLP1	Mid-term, Near to Mid-term, and Long-term	Medium	combined actions. split action QL-3b (CRC). other part of split action is in BW-11 and BW-12.

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BW-11	Implement updated stormwater management requirements, BMPs, and plans (consistent with the Eastern Washington Stormwater Manual or Idaho equivalent) for existing and/or new developments and roadways.	32 (BW): Implement stormwater management BMPs and plans (consistent with the Eastern Washington Stormwater Manual or Idaho equivalent) for existing and/or new urban and rural developments and roadways. QL-4a (CLP): Develop updated stormwater management requirements and plans for existing and/or new developments and roadways. QL-3a (CRC): Implement stormwater management BMPs and plans (such as the Eastern Washington Stormwater Manual) for existing and/or new urban and rural developments and roadways. QL-3b (CRC): Adopt the Eastern Washington Stormwater manual and implement the following strategies to improve stormwater management and treatment and increase groundwater infiltration: 1. sediment basins 2. infiltration trenches 3. swales / wetlands 4. rural/urban drainage ditch upgrades QL-5 (SFP): Implement stormwater management BMPs and plans (such as the Eastern Washington Stormwater Manual) for existing and/or new urban and rural developments and roadways.	Basin-wide	Cities and Towns (L), Counties (L), North Latah Highway District (L), Ecology, NRCS	--	BW7, BW8, BW19, BW20, BW21, CLP1, CRC4	Near-term, Mid-term, Ongoing	Low	combined actions. split actions QL-4a (CLP), QL-3b (CRC) and QL-5 (SFP). other parts of split actions are in BW-12 and part of QL-3b (CRC) is also in BW-10.
BW-12	Adopt the Eastern Washington Stormwater manual and/or develop updated stormwater management requirements.	QL-3b (CRC): Adopt the Eastern Washington Stormwater manual and implement the following strategies to improve stormwater management and treatment and increase groundwater infiltration: 1. sediment basins 2. infiltration trenches 3. swales / wetlands 4. rural/urban drainage ditch upgrades QL-4a (CLP): Develop updated stormwater management requirements and plans for existing and/or new developments and roadways. QL-5 (SFP): Implement stormwater management BMPs and plans (such as the Eastern Washington Stormwater Manual) for existing and/or new urban and rural developments and roadways.	Basin-wide	State, Counties, Cities, Towns	--	BW20, CRC4	Mid-term	Medium	combined actions. split actions QL-4a (CLP), QL-3b (CRC) and QL-5 (SFP). other parts of split actions are in BW-11 and part of QL-3b (CRC) is also in BW-10.
BW-13	Implement aquifer storage and recovery (ASR) and reuse to meet potable water demand and to offset groundwater use.	13 (BW): Implement aquifer storage and recovery (ASR) and reuse to meet potable supply demand and to offset groundwater use.	Basin-wide	Cities and Towns (L)	--	--	--	--	changed language

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BW-14	--	27 (BW): Support efforts of municipalities to develop alternative water supplies.	Basin-wide	Ecology (L), WDOH	Ecology	--	--	--	no change
BW-15	Develop/implement potential recharge and flow enhancement strategies. Strategies to consider include: balancing basins, floodplain storage, wetland restoration, the use of small check dams, and infiltrating water that is withdrawn from surface water in the high-flow winter months into shallow groundwater in locations that will result in return flows to streams during summer months via surface infiltration.	QT-4a (NFP): Develop potential recharge and flow enhancement strategies. 26 (BW): Develop potential recharge and flow enhancement strategies. 24 (BW): Enhance baseflows by the use of balancing basins, floodplain storage, wetland restoration, and the use of small check dams. 25 (BW): Enhance baseflows by infiltrating water that is withdrawn from surface water in the high-flow winter months into shallow groundwater in locations that will result in: 1. Return flows to streams during summer months; and 2. surface infiltration facilities.	Basin-wide	Cities and Towns in NFP (City of Palouse, City of Potlatch, City of Garfield), Ecology, IDEQ, IDWR, PBAC, CDs (L), Individual Landowners	--	BW16	Mid to Long-term	Medium	combined actions
BW-16	1. Hydrologic study/assessment to evaluate alternative tillage practices that address water management objectives. 2. Pursue trials of various conservation tillage operations (e.g. Cook/Stations – Cunningham farm), and then demonstrate these conservation tillage approaches (e.g. no-till, mulch till, etc.) and results to area growers (e.g., benefits gained including soil quality, erosion rates, water infiltration rates, etc.). 3. Develop and implement Conservation Tillage Aquifer Recharge Program: This program focuses on improving aquifer recharge by changing farming practices on approximately 50,000 acres (35,000 WA & 15,000 ID)	23 (BW): Compare different forms of conservation tillage (i.e. no-till, mulch till, etc.) to conventional tillage, determining benefits gained including soil quality, erosion rates, water infiltration rates, etc. QT-3f (SFP): Pursue trials of various no-till operations (e.g. Cook/Stations – Cunningham farm), and then demonstrate these conservation tillage approaches and results to area growers. QT-4a (SFP): Develop and implement Conservation Tillage Aquifer Recharge Program: This program focuses on improving aquifer recharge by changing farming practices on approximately 50,000 acres (35,000 WA & 15,000 ID).	Start in SFP MA, and if successful apply to rest of management areas	CDs (L), USDA, WSU (L), NRCS	--	BW8, BW14, BW16, BW17, SFP2, SFP6	Near-term or Mid-term	Low or High	combined actions
BW-17	In the future Ecology should involve the PU in any future studies, study recommendations and rule-making from instream flow studies in WRIA 34 and should include existing information collected during the instream flow needs assessment in future rulemaking. Instream flows should be developed in a balanced fashion considering regional aquifer issues, future growth and environmental concerns.	59 (BW): Work together and with WRIA 34 to develop instream flows in a balanced fashion considering regional aquifer issues, future growth and environmental concerns. 50 (BW): Continued Planning Unit Instream Flow & TMDL Involvement. QT-4b (CLP): In the future Ecology should involve the PU in any future studies, study recommendations and rule-making from instream flow studies in WRIA 34 and should include existing information collected during instream flow needs assessment in future rulemaking.	Basin-wide	Ecology (L), Planning Unit, WDFW	Ecology, WDFW	BW6, BW8, BW14	Long-term	Medium	combined actions. split action 50 (BW). other part in BW-38.

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BW-18	Continue efforts and identify and prioritize additional locations to implement the following water conservation and efficiency strategies for agricultural systems: 1. Conservation tillage 2. Irrigation efficiencies 3. Minimize conventional summer fallow. Consider the area between Pullman and Colfax in the SFP MA.	14 (BW): Continue efforts to implement the following water conservation and efficiency strategies for agricultural systems: 1. Conservation tillage and 2. Irrigation efficiencies. QT-3c (SFP): Continue efforts to implement the following water conservation and efficiency strategies for agricultural systems: 1. conservation tillage and 2. irrigation efficiencies. QT-6b (CRC): Identify and prioritize locations for implementing water conservation and efficiency strategies for agricultural irrigation systems. 17 (BW) and QT-5a (NFP): Identify and prioritize locations to implement water conservation and efficiency strategies for agricultural irrigation systems. 22 (BW): Study the amount of water saved from conservation practices (i.e. direct seeding).	Basin-wide	CDs (L), Individual landowners, NRCS, Individual irrigators (L), WSU Extension, USDA, Ecology	--	BW8, BW17	Near-term	Low	combined actions
BW-19	WDOH to provide technical assistance and work with water utilities to set goals and implement individual conservation programs as appropriate and compliant with WAC 246-290. Items to be considered include: 1. System water audits, 2. Leak detection and repair, 3. Source metering, 4. Consumer metering, 5. Consumption/seasonal rates, 6. Bills with consumption history, 7. Reuse of reclaimed water, 8. Plumbing retrofit kits, 9. User water audits, 10. Landscaping/irrigation guidelines, 11. User education, 12. Secure funding for implementation.	12 (BW): Develop goals, define and implement WDOH compliant (WAC 246-290) municipal conservation program considering items such as: 1. System water audits, 2. Leak detection and repair, 3. Source metering, 4.Consumer metering, 5. Consumption/seasonal rates, 6. Bills w/consumption history, 7. Reuse of reclaimed water, 8. Plumbing retrofit kits, 9. User water audits, 10. Landscaping/irrigation guidelines, 11. User education, 12. Secure funding for implementation. 31 (BW): Work with water utilities to set goals and implement individual conservation programs compliant with WAC 246-290. QT-6a (CRC); QT-3b (CLP); QT-5b (NFP); QT-3b (SFP): Implement WDOH municipal conservation program elements as appropriate.	Basin-wide	Medical Lake (L), Sprague (L), Lamont (L), Endicott (L), Colton (L), Farmington (L), Genessee (L), La Crosse (L), Malden (L), Oakesdale (L), Rosalia (L), Saint John (L), Uniontown (L), Palouse (L), Potlatch ID (L), Onaway ID (L), City of Moscow (L), City of Pullman (L), Colfax (L), Albion (L), Public Water Systems (L), WDOH (L)	--	BW17, CLP3	Near-term	Low to Medium	combined actions
BW-20	--	57 (BW) and RG-4 (SFP): Consider supporting legislation to provide incentives to water rights holders to conserve water.	Basin-wide	Ecology, IDWR, Planning Unit, State Legislature (L)	--	BW2	Mid-term	Medium	combined actions. no change to language

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BW-21	--	8 (BW): Study the impacts, effectiveness, and water savings of abolishing Ecology's "use it or lose it" policy with respect to water rights.	Basin-wide	Ecology	--	--	--	--	no change
BW-22	Provide background information on water banking to the Planning Unit. Planning Unit to consider recommending that the state legislature revise the statute to provide for water banking in WRIA 34, allowing unused water to be sold/leased to other users commensurate with current statutory and case law.	58 (BW): Support and establish legal framework for water banking, allowing unused water to be sold/leased to other users commensurate with current statutory and case law. RG-5 (SFP): Consider water banking, allowing unused water to be sold/leased to other users commensurate with current statutory and case law.	Basin-wide	Ecology, IDEQ, Planning Unit, State Legislature (L)	--	BW1, BW2	Mid-term	Medium	combined actions
BW-23	Support Adams CD in water quality sampling for temperature, pH, dissolved oxygen, nutrients, phosphorus, etc. Adams CD is obligated to: "Include water quality sampling and analysis of the mouths of Cow Creek and Rock Creek in the Palouse River Mainstem TMDL studies."	QL-3b (CLP) and QL-5b (CRC): Conduct studies of water quality sampling and analysis for temperature, pH, dissolved oxygen, nutrients, phosphorus, etc. (including ongoing Adams CD efforts). 39 (BW): Conduct studies of water quality sampling and analysis for temperature, pH, dissolved oxygen, nutrients, phosphorus, etc.	Willow Creek, Rebel Creek (Adams County), Rock Creek	CDs (L-Adams), Ecology	Adams CD (see action)	BW19, CLP1, BW18	Mid-term or Near-term	Medium	combined actions
BW-24	--	48 (BW) and QL-2b (CLP): Conduct microbial source tracking (including DNA, RNA ribotyping, and other new techniques) and analysis of bacteria to identify sources.	Basin-wide	CDs in CLP, Ecology, IDEQ (L)	--	CLP1	Mid-term	Medium	combined actions. no change to language
BW-25	Conduct further characterization of groundwater for potential contamination from nitrates using existing data (USGS, WDOH, etc), identify risk areas and develop and implement management strategies to reduce nitrate contamination. Options for focusing activities include: hand dug / shallow wells (300 ft or above), proximity to sewer / fertilizer runoff lift stations, and recharge areas.	QL-1 (CLP): Conduct further characterization of groundwater for potential contamination from nitrates and develop and implement management strategies to reduce nitrate contamination. QL-2 (SFP): Conduct further characterization of groundwater for potential contamination from nitrates using existing data (USGS, Dept. of Health, etc), and identify risk areas. 33 (BW) and QL-2 (NFP): Conduct further characterization of groundwater for potential contamination from nitrates; provide opportunities for voluntary water quality sampling on private wells (sample kits).	Basin-wide	CDs, Counties, Cities and Towns in NFP, Ecology, NRCS, WDOH (L), WSU Extension, IDEQ (L), PBAC, Planning Unit	--	BW18, CLP1, BW13	Mid-term or Near-term	Medium	combined actions. split actions QL-2 (NFP) and 33 (BW). other part of split actions is in BW-3.

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BW-26	Establish and promote the following BMPs for erosion control for pasture, rangeland, cropland, and forest land. Options include: • bank stabilization • riparian buffers • grazing management systems • Conservation tillage • Divided slopes • Minimize conventional summer fallow • Strip cropping • Feedlot placement • Use of site-based NRCS manuals • Forest road stabilization and abandonment Provide incentives to landowners to implement BMPs. Specific areas to consider include Hooper in the CC management area.	35 (BW): Implement (Individual Landowners) or Establish and promote the following BMPs for erosion control for pasture and rangeland, cropland, and forest land: 1. Conservation tillage; 2. Minimize conventional summer fallow; 3. Improved grazing management; 4. Increased grassed waterways; 5. Buffers; 6. Strip cropping; 7. Feedlot placement; 8. Use of site-based NRCS manuals; 9. Forest road stabilization and abandonment. QL-2b (CRC): Establish and promote the BMPs to reduce erosion and sediment levels for pasture and rangeland. QL-5b (CLP): Establish and promote BMPs for erosion control for pasture and rangeland, cropland, and forest land. QL-4b (NFP): Establish and promote the following BMPs for erosion control and improved infiltration for cropland: 1. increase opportunities for conservation tillage, when applicable (including long-term incentives) 2. bank stabilization 3. riparian buffers 4. grazing management systems QL-4 (SFP): Implement the following strategies to reduce erosion and sediment levels: 1. Enhance riparian areas 2. Divided slopes 3. Conservation tillage 4. Streambank stabilization 5. Provide incentives to landowners	Basin-wide	CDs (L), Counties, Individual Landowners, NRCS, WSDA, WSU Extension, WDFW, Ecology, USFS	--	CRC6, CLP1, BW8, BW10, BW11, BW19, BW20, BW23, NFP4, FP1	Ongoing	Low or Medium	combined actions
BW-27	Identify and prioritize sites for bank stabilization and implement activities to minimize water quality impacts from flood events. Specific area to consider includes the mainstem Palouse River.	44 (BW) and QL-4c (NFP): Conduct bank stabilization activities to minimize water quality impacts from flood events.	Basin-wide	CDs in NFP, Ecology, IDEQ, IDWR, USACE, WDFW	--	BW10	Mid-term	Low to Medium	combined actions

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BW-28	Conduct further characterization of sediment sources, and identify and evaluate potential options to reduce sediment loads entering surface waters. Options could include: 1. BMPs for agriculture, range, forest (forest road stabilization and abandonment). 2. Rural Roadway BMPs 3. Streambank stabilization, cropping systems, livestock management, and other practices	QL-2a (CRC): Characterize sediment sources, and identify and evaluate potential options to reduce erosion and sediment loads entering surface waters. 38 (BW) and QL-3a (CLP): Conduct further characterization of sediment sources, and identify and evaluate potential options to reduce sediment loads entering surface waters. QL-4a (NFP): Conduct further characterization of sediment sources, and identify and evaluate potential options to reduce sediment loads entering surface waters, including: 1. BMPs for agriculture, range, forest (forest road stabilization and abandonment). 2. Rural Roadway BMPs 3. Deep Creek, ID: streambank stabilization, cropping systems, livestock management, and other practices	Basin-wide	CDs in CRC (L-Adams), Counties, Ecology, Individual landowners, NRCS, WSU Extension, IDEQ (L), IDWR, Latah County Highway District, USFS (L), WSDOT, WDFW	--	BW18, BW19,CR C6	Mid-term or Near-term	Low or Medium	combined actions

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BW-29	Work with individual landowners to review pesticide and fertilizer use and implement the following BMPs to limit water quality impacts: 1. Implement nutrient management plans on agriculture / rangelands 2. Follow labels for appropriate application 3. Evaluate and support opportunities for funding of high precision agricultural systems to reduce pesticide use 4. Reduce nutrient loading to local waterbodies 5. Enhance riparian areas 6. Urban/rural education program 7. Conservation tillage 8. Cleaning equipment 9. Buffer zones	52 (BW): Implement the following water quality strategies for agricultural systems: 1. Work with individual landowners to review pesticide and fertilizer use; 2. Implement the following BMPs to limit water quality impacts: a. cleaning equipment, b. buffer zones, c. alternative weed control at banks. 36 (BW): Work with individual landowners to review pesticide and fertilizer use and implement the following BMPs to limit water quality impacts, including promoting biotechnology and other innovative technologies: 1. Implementation of nutrient management plans on agriculture / rangelands; 2. Follow labels for appropriate application; 3. Evaluate and support opportunities for funding of high precision agricultural systems to reduce pesticide use (e.g. biotechnology and other innovative technologies); 4. Cleaning equipment; 5. Buffer zones/ riparian restoration; 6. Alternative weed control at banks; 7. Urban/rural education; 8. Conservation tillage. QL-6b (NFP): Work with individual landowners to review pesticide and fertilizer use and implement the following BMPs to limit water quality impacts: 1. Implementation of nutrient management plans on agriculture / rangelands; 2. Follow labels for appropriate application; 3. Evaluate and support opportunities for funding of high precision agricultural systems to reduce pesticide use. QL-4a (CRC): Work with individual landowners to review pesticide and fertilizer use; and to implement the following best management practices to limit water quality impacts: 1. Manage Sprague Lake inputs to reduce nutrient loading; 2. Enhance riparian areas; 3. urban/rural education program; 4. conservation tillage. QL-6 (SFP): Work with urban and rural individual landowners to review pesticide and fertilizer use; and to implement the following best management practices to limit water quality impacts: 1. Enhance riparian areas; 2. Urban/rural education program; 3. Conservation tillage. QL-5a (CLP): Implement the following water quality strategies for agricultural irrigation systems: 1. work with individual landowners to review pesticide and fertilizer use 2.implement the following BMPs to limit water quality impacts: a. cleaning equipment; b. buffer zones; c. alternative weed control at banks	Basin-wide	CDs (L), Ecology, IDEQ, WSDA, WSU Extension, NRCS, Individual irrigators, Individual Landowners	--	BW18, BW19, NFP4, NFP5, BW20, BW8, BW11	Ongoing or Near-term	Low	combined actions

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BW-30	--	5 (BW): When appropriate for resource conservation objectives, develop cost-share program to promote use of chemical fallow vs. summer fallow.	Basin-wide	CDs (L)	--	--	--	--	no change
BW-31	Characterize surface water for potential contamination from fecal coliform. Identify sources of fecal coliform (e.g., agricultural runoff or natural populations of waterfowl and/or other species) using best available practices. Identify and prioritize locations to implement strategies to reduce fecal coliform levels. Consider implementing the following strategies to reduce fecal coliform levels: 1. Enhance riparian areas / buffers 2. Minimize direct discharge from livestock operations (feedlots and/or grazing) 3. Out of stream watering of livestock 4. Identify and address septic systems 5. Explore waterfowl management options 6. Reduce or eliminate combined sewage overflows 7. Expanded lagoons/lines aerated lagoons 8. Urban sources 9. Inventory/dye testing of septic systems adjacent to floodplains and waterways 10. Other applicable BMPs 11. Monitoring 12. Education/outreach	34 (BW): Implement the following strategies to reduce fecal coliform levels: 1. Riparian enhancement, 2. Improve/encourage grazing management for operations adjacent to streams, 3. Feed lot nutrient management/location, 4. Septic system inventory/ management/straight pipes, 5. Reduce or eliminate combined sewage overflows, 6. Expanded lagoons/lines aerated lagoons, 7. Urban sources, 8. Inventory/dye testing of septic systems adjacent to floodplains and waterways, 9. Other applicable BMPs, 10. Explore waterflow management options (Adams), 11. Education, 12. Monitoring. 45 (BW): Conduct further characterization of surface water for potential contamination of fecal coliform, using best available practices including bacterial source tracking methods (i.e. species of origin). QL-1a (CRC): Characterize surface water for potential contamination from fecal coliform; identify sources (e.g., agricultural runoff or natural populations of waterfowl), including Sprague Lake. QL-3a (SFP): Conduct further characterization of surface water for potential contamination from fecal coliforms; identify sources (e.g., agricultural runoff or natural populations of waterfowl and/or other species) using best available practices to identify fecal sources. QL-2a (CLP): Implement strategies to reduce fecal coliform levels. QL-3b (SFP): Implement the following strategies to reduce fecal coliform levels: 1. enhance riparian areas, 2. livestock/grazing management, 3. out of stream watering of livestock; 4. identify failing septic systems; 5. education/outreach. QL-1b (CRC): Identify and prioritize locations to implement the following strategies to reduce fecal coliform levels: 1. Restore riparian buffers; 2. Manage grazing in riparian areas; 3. Explore waterfowl management options. QL-3a (NFP): Identify sources of fecal coliform (by species) and implement the following strategies to reduce water quality impacts: 1. minimize direct discharge from livestock operations (feedlots and/or grazing); 2. enhance riparian buffers.	Basin-wide, Sprague Lake Outlet	CDs (L), Counties (L), IDEQ (L), Planning Unit, Ecology, Individual landowners, NRCS, WSU Extension, USFS, WDOH, WDFW	--	BW13, BW8, BW11, BW18, BW19, CLP1, SFP1, CRC4, NFP4	Near-term or Mid-term	Low or Medium	combined actions

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BW-32	--	46 (BW) and QL-6a (NFP): Work with individual livestock owners/managers to review management practices, and implement the following BMPs through grants and other programs to limit water quality impacts: 1. livestock BMPs (specific to type of animal), 2. monitoring, 3. expanded lagoons / lined aerated lagoons, 4. nutrient management plans.	Basin-wide, Along length of North Fork (lower elevations)	CDs (L-Palouse, Whitman, Palouse-Rock Lake, Latah SWCD), Ecology, IDEQ, Individual landowners, NRCS, WSU Extension	--	BW8, BW19, NFP4	Near-term	Low to Medium	combined actions. no change to language
BW-33	Review and update, as needed, best-available-science-based riparian buffer zones and critical areas regulations.	55 (BW): Review and update riparian buffer zones and critical areas regulations as needed, using best available practices and science, or Idaho equivalent. RG-3 (SFP): Review and update riparian buffer zones and critical areas regulations as needed, using best available practices and science. RG-2 (NFP): Review and update, as needed, best-available-science-based riparian buffer zones and critical areas regulations. RG-2 (CLP): Review and update, as needed, best-available-science-based riparian buffer zones and critical areas regulations.	Basin-wide	Cities in SFP, Towns in SFP, USFS (L), Ecology, IDEQ, WDFW, Cooperative Extension, Cities and Towns in NFP (L-Palouse, Potlatch ID, Onaway ID), Counties (L), IDFG, IDWR, NRCS, Towns in CLP	--	BW6, BW7, BW8, BW10, BW11	Ongoing	Low	combined actions
BW-34	--	56 (BW) and RG-4 (NFP): Evaluate effectiveness of critical areas ordinances; modify ordinances to improve effectiveness as necessary.	Basin-wide	Cities and Towns (L-Palouse, Potlatch ID, Onaway ID), Counties (L), IDEQ, Ecology	--	BW7	Near-term	Low	combined actions. no change to language
BW-35	--	54 (BW), RG-2 (CRC), RG-1 (CLP), RG-1 (NFP), and RG-2 (SFP): Implement/enforce land use and management regulations by appropriate agencies to protect critical areas and pristine areas of the management area (e.g. critical areas and shorelines programs).	Basin-wide	Cities and Towns (L), Counties (L), USFS (L), Ecology, IDEQ, WDFW	--	BW6, BW7, BW8, BW10, BW18, CRC1	Ongoing	Low	combined actions. no change to language
BW-36	--	11 (BW): Consider fisheries management and recreational fishing in conjunction with enhancement of natural lake storage.	Basin-wide	WDFW (L)	--	--	--	--	no change

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BW-37	Evaluate pros and cons of conducting Use Attainability Analysis (UAA) for meeting water quality standards. Include Planning Unit in discussions. Revise water quality standards (e.g. temperature) to reflect local conditions. Specific areas to consider include Paradise Creek and the South Fork Palouse.	QL-1b (SFP): Evaluate pros and cons of conducting Use Attainability Analysis (UAA) for meeting water quality standards. 60 (BW) and RG-3 (CRC): Evaluate state water quality and water rights regulations and actions for applicability to local basin conditions. 47 (BW): Revise water quality standards (e.g. temperature) to reflect local conditions.	Basin-wide	Cities in SFP, IDEQ (L), Ecology (L), Planning Unit	--	BW18, SFP1, BW21	Near-term or Mid-term	Medium or Low	combined actions
BW-38	Planning Unit members should actively participate in state TMDL process to ensure that PU concerns are reflected, specifically with regard to voluntary management actions to reduce pollutant loads.	50 (BW): Continued Planning Unit Instream Flow & TMDL Involvement. 51 (BW): Include the Planning Unit in the TMDL process. QL-6a (CLP): Planning Unit members actively participate in state TMDL process to ensure that PU concerns are reflected, specifically with regard to voluntary management actions to reduce pollutant loads.	Basin-wide	Planning Unit (L), Ecology (L)	Ecology (for including the Planning Unit in the TMDL process)	BW19, BW22, CLP1	Long-term	Low	combined actions; split 50 (BW). other part in BW-17.
BW-39	--	1 (BW): Planning Unit Support Beyond Phase 4.	Basin-wide	CDs (L), Counties, Ecology	--	--	--	--	no change
BW-40	--	2 (BW): 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	Basin-wide	CDs (L-Palouse)	--	--	--	--	no change
BW-41	--	6 (BW): Increase access to Federal Implementation Funding.	Basin-wide	CDs (L), USDA	--	--	--	--	no change
BW-42	--	28 (BW): Work with WRIA 34 regarding water management and policy decisions within watershed for identified WRIA 34 policy and management priorities.	Basin-wide	Ecology, WDFW	--	--	--	--	no change
BW-43	--	29 (BW): Use Ecology's start card filing database to alert team of local geologists of wells that are planned in the Palouse.	Basin-wide	Ecology	--	--	--	--	no change

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BW-44	--	43 (BW) and QL-3b (NFP): Conduct further inventory of septic systems, and identify and evaluate potential options to repair systems and reduce waste from entering surface waters and water quality impacts (evaluate opportunities for assistance to landowners for repairs).	Basin-wide	Counties (L), IDEQ, Individual landowners, NRCS, USFS, Ecology, WDOH, WSU Extension	--	BW18, BW19, NFP4	Near-term	Low to Medium	combined actions. no change to language
BW-45	--	37 (BW) and QL-1a (SFP): Conduct public education program on TMDL and water quality standards.	Basin-wide	Ecology (L), IDEQ (L), CDs	Ecology	BW9	Near-term	Low	combined actions. no change to language
BW-46	--	53 (BW) and QL-3c (NFP): Increase awareness by development and implementation of an education program targeting septic system issues.	Basin-wide	Counties in NFP, IDEQ (L), Individual landowners, NRCS, USFS, Ecology, WDOH (L), WSU Extension	--	BW18, BW19, NFP4	Near-term	Low to Medium	combined actions. no change to language
BW-47	--	G-1 (NFP) and 3 (BW): Identify opportunities and implement targeted one-on-one outreach on land management planning and practices.	Early emphasis: Deep Creek, ID; Clear Creek, ID	CDs (L), IDFG, NRCS, USFS, WSU Extension	--	BW7, BW8	Near-term	Low	combined actions. no change to language

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BW-48	Secure funding, develop, promote and implement a community education program on water quality and water quantity management options, including conservation, ASR, groundwater recharge and streamflow enhancement, and instream flows. Education programs regarding conservation measures could include: 1. Communicating existing efforts and opportunities for funding to individual landowners 2. Increasing funding, methods and outreach of conservation measures to all water users 3. Developing regional workshops that target all water users on the following topics: a. water re-use b. lawn watering c. water efficiencies d. equipment installation and use e. riparian and watershed function f. out of stream livestock watering	7 (BW): Develop/promote education programs regarding conservation measures, including: 1. Communicate existing efforts basin–wide and 2. Develop regional workshops that target all water users, focusing on landscape watering, efficiencies, equipment (including installation). 16 (BW): Implement management area-wide conservation program, including: 1. Communicating existing efforts and opportunities for funding to individual landowners; 2. Increasing funding, methods and outreach of conservation measures to all water users; 3. Developing regional workshops that target all water users on the following topics: a. water re-use, b. lawn watering, c. water efficiencies, d. equipment installation and use, e. riparian and watershed function, f. out of stream livestock watering. G-1 (CLP): Develop/promote education programs regarding conservation measures, including: 1. communicate existing efforts basin–wide 2. develop regional workshops that target all water users, focusing on landscape watering, efficiencies, equipment (including installation) QT-5c (NFP): Implement management area-wide conservation program, including: 1. Communicating existing efforts and opportunities for funding to individual landowners 2. Increasing funding, methods and outreach of conservation measures to all water users 3. Developing regional workshops that target all water users on the following topics: a. water re-use b. lawn watering c. water efficiencies d. equipment installation and use e. riparian and watershed function f. out of stream livestock watering QT-3d (SFP): Secure funding and implement community education program on water conservation and water quantity management options.	Basin-wide	CDs (L), Counties (L), WDOH, Towns in CLP, Ecology, IDEQ, IDWR, WSU/U of I Extensions, Individual landowners, NRCS, Non-profit organizations, Public Water Systems and CDs in SFP (L-Palouse, Whitman, Latah SWCD (ID))	--	BW2, BW4, BW9, BW11, BW17	Near-term or Ongoing	Low to Medium	combined actions

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BW-49	Provide additional resources to CDs to increase individual farm and urban household BMP planning and implementation assistance.	G-3 (NFP), G-1 (SFP), G-2 (CLP), QL-4b (CRC): Provide additional resources to CDs to increase individual farm and urban household BMP planning and implementation assistance. 4 (BW): Seek additional resources to increase individual farm and urban household BMP planning and implementation assistance.	Basin-wide	CDs (L), ISCC, NRCS (L), WSCC (L), CDs in SFP, Planning Unit, Counties in CLP, CDs in CLP, DNR, Towns in CLP, CDs in CRC, Ecology	--	BW8, BW9, NFP4, BW17, CRC6	Near-term	Medium	combined actions
CC and LP-1	--	QL-6d (CLP): Coordinate supporting information with Adams Conservation District water quality monitoring studies for fecal coliform and nutrients on Cow Creek and baseline nutrient and other water quality information on CLP.	Entire MA	Adams CD (L), Ecology	--	CLP1	Near-term	Low	no change
CC and RC-1	--	QT-2b (CRC): Re-establish gauging stations on lower Cow Creek and Sprague Lake and establish a network of gauges to manage water effectively.	Cow Creek, Rock Creek, Sprague Lake Outlet, Above Rock Lake, below Rock Lake, confluence of Rock Lake and Palouse River	CDs in CRC, Ecology (L), USGS	--	BW13, CRC2	Near-term	Low	no change
CC and RC-2	Encourage Whitman County to form a Groundwater Management Area (GWMA) in order to increase support for characterizing the regional hydrogeology and developing sound groundwater management strategies.	G-1 (CRC): Encourage Whitman County to join GWMA in order to increase support for characterizing the regional hydrogeology and developing sound groundwater management strategies.	Whitman County	Whitman County, Planning Unit	--	BW14, BW15, BW17, CRC5, CRC8	Near-term	Low	changed language

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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 stockwatering, 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.	QT-1a (CRC): Characterize the hydrology, connectivity and interaction between surface water, groundwater, springs, and gravel beds, and develop potential recharge and flow enhancement strategies, using modeling (including characterization of hydraulic continuity between wells and streams on Cow Creek); study to include review of flow data. QT-1c (CRC): Assess the impact of new groundwater withdrawals (e.g., for stockwatering, irrigation, and municipal water supply for Cheney and Medical Lake) on the streamflows of the Cow Creek subbasin and plan for future water supply considering both the hydrogeology of the subbasin and the 1984 adjudication. QT-4b (CRC): Analyze how water demands meet growth needs for Medical Lake; how Airway Heights and Cheney will impact Cow Creek and Rock Creek drainage area (surface and groundwater flows). QT-1b (CRC): Hydrogeologic study to understand the impacts of groundwater withdrawal on groundwater levels, streamflow, and long-term trends. Develop appropriate management strategies to address the results. Study to be conducted cooperatively with the other WRIAs (34, 54, and 56) regarding water use and instream flow setting (in an adjudicated basin).	Entire MA - CRC, Sheep Springs, Cow Lake, Finnell Lake, Hallin Lake, Rock Creek, Cow Creek subbasin, Airway Heights, Cheney	CDs in CRC, Airway Heights, Cheney, Spokane County, Planning Unit (L for #5), Ecology (L), USGS	Ecology for #5	BW14, BW15, CRC2	Near-term	High	combined actions. Split action QT-4b (CRC). other part of split action is in CC-12.
CC and RC-4	Identify and prioritize selected areas for storage of excess runoff during peak flows, including aquifer storage in increments on river reaches.	QT-4c (CRC): Conduct a study to identify priority selected areas for storage of excess runoff during peak flows, including aquifer storage in increments on river reaches.	Entire MA	CDs (L-Adams), Ecology	--	BW15, BW16, CRC1	Mid-term	Medium	changed language
CC-1	--	QT-7c (CRC): Cow Creek Well Decommissioning & Casing Project. Locate, case and/or decommission wells that have been identified as cascading from the upper to lower aquifers.	West of Cow, Hallin, and Finnell Lakes	Adams CD, Ecology	--	CRC2, CRC5	Near-term	High	no change
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 WRIAs, as needed.	QT-1d (CRC): Conduct hydrogeologic characterization study of Cheney and Medical Lake areas; remap hydrologic/watershed boundaries in the Cheney and Medical Lake areas.	Cheney, Medical Lake	Spokane County (L), Ecology	--	BW15	Mid-term	Medium	changed language

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CC-3	--	QT-4d (CRC): Optimize the use of existing storage facilities throughout the Cow Creek subbasin when there is water in streams over and above that needed to satisfy senior water rights.	Cow Creek Subbasin	CDs (L-Adams, Lincoln County, Palouse-Rock Lake, Pine Creek, and Spokane County), Ecology, USACE	--	CRC1	Mid-term	Medium	no change
CC-4	Consider granting a storage right for Sprague Lake to store water between the minimum and maximum adjudicated level. Concerns such as flooding, property damage, etc. may need to be addressed along with a cost-benefit analysis and completion of the SEPA process.	QT-5d (CRC): Determine availability of surface water above Sprague Lake for storage or use downstream; consider granting a storage right for Sprague Lake to store water between the minimum and maximum adjudicated level. Concerns such as flooding, property damage, etc. may need to be addressed along with a cost-benefit analysis and completion of the SEPA process.	Above Sprague Lake	Ecology (L), Planning Unit	--	BW11, BW16	Mid-term	Medium	split action. other part of split action is in CC-10.
CC-5	--	QT-5a (CRC): Collect additional flow and elevation data at the inlet and outlet of Sprague Lake and key locations between Sprague Lake and Hooper and compare to flows throughout the Cow Creek system to establish a reliable data set to confirm when water is likely to be available for storage in Sprague Lake and impacts of storage in Sprague Lake.	Key locations between Sprague Lake and Hooper, including: Cow Lake, Finnell Lake, Sheep Springs.	CDs (L-Adams, Lincoln County, Palouse-Rock Lake, Pine Creek, and Spokane County), Ecology	--	BW12, BW17, CRC1, CRC2, CRC9	Near-term to Long-term	Medium	no change
CC-6	--	QT-5b (CRC): Develop monthly water balance estimates for Sprague Lake by installing an evaporation pan and flow monitoring and water level elevation gauges.	Sprague Lake	CDs (L-Adams, Lincoln County, Palouse-Rock Lake, Pine Creek, and Spokane County), Ecology, USGS	--	CRC2, CRC9	Near-term	Medium	no change
CC-7	--	QT-4a (CRC): Convene a PU Subcommittee to discuss storage options in the Cow Creek Subbasin during high flows and how they would be implemented. Determine whether this is possible given the Adjudication. If mutually beneficial, discuss a maximum allocation associated with water use during high flows.	Cow Creek subbasin	CDs, Ecology, Planning Unit (L)	--	CRC8, BW17	Near-term	Low	no change
CC-8	--	QT-5c (CRC): Study feasibility of storing water in Sprague Lake to rehabilitate lake for recreation.	Sprague Lake	Planning Unit, Ecology, CDs	--	BW16, CRC1,CRC9	Mid-term	Medium	no change
CC-9	--	QT-4e (CRC): Assess additional storage feasibility, including surface water losses to groundwater, for Cow/Hallin Lake, Finnell Lake, and Sheep Springs Reservoir.	Cow/Hallin Lake, Finnell Lake, Sheep Springs Reservoir	CDs (L-Adams, Lincoln County, Palouse-Rock Lake, Pine Creek, and Spokane County), Ecology	--	CRC1, BW15	Mid-term	Medium	no change

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CC-10	Determine availability of surface water above Sprague Lake for storage or use downstream.	QT-5d (CRC): Determine availability of surface water above Sprague Lake for storage or use downstream; consider granting a storage right for Sprague Lake to store water between the minimum and maximum adjudicated level. Concerns such as flooding, property damage, etc. may need to be addressed along with a cost-benefit analysis and completion of the SEPA process.	Above Sprague Lake	Ecology (L), Planning Unit	--	BW11, BW16	Mid-term	Medium	split action. other part of split action is in CC-4.
CC-11	--	QT-7e (CRC): Further evaluate feasibility, including costs and benefits of flood control for the City of Sprague.	City of Sprague	City of Sprague (L), Ecology, USACE	--	BW1, CRC1	Mid-term	Medium	no change
CC-12	Assess water supply and projected demand due to growth in Medical Lake.	QT-4b (CRC): Analyze how water demands meet growth needs for Medical Lake; how Airway Heights and Cheney will impact Cow Creek and Rock Creek drainage area (surface and groundwater flows)	Medical Lake	Medical Lake (L), Spokane County, Ecology	Medical Lake	BW3, BW11, BW16, CRC8	Near-term	Medium	changed language. split action. other part of split action is in CC and RC-3.
CC-13	--	QT-1e (CRC): Determine feasibility of pumping water (at sustainable levels) from deep aquifer wells to enhance surface flows in Cow Creek.	Entire MA	CDs in CRC, Ecology	--	CRC8	Mid-term	Medium	no change
CC-14	--	RG-5 (CRC): Provide technical assistance in evaluating the Cow Creek instream flow study, establish minimum instream flows for Cow Creek (if warranted), and consider pending water rights applications when setting instream flows.	Entire MA	Ecology (L)	--	CRC 2, CRC 3, BW 14, BW 15	Near-term	Medium	no change
CC-15	Convene a PU Subcommittee to work on an instream flow package for the Cow Creek Subbasin. Consider package components: 1. Partial closure to address groundwater use and include along with that closure a reservation for uninterruptible water for domestic, municipal, and stockwater purposes, and storage. 2. Define an acceptable daily use level for permit exempt wells and other single family households. 3. Meter new water uses to verify that the water use levels applied to the reservation are accurate. 4. Apply findings on groundwater and surface water interaction (actions CC and RC-3 and CC-12) to develop instream flow package in Cow Creek.	QT-3a (CRC): Convene a PU Subcommittee to work on an instream flow package for the Cow Creek Subbasin. Consider package components: 1. Partial closure to address groundwater use and include along with that closure a reservation for uninterruptible water for domestic, municipal, and stockwater purposes, and storage. 2. Define an acceptable daily use level for permit exempt wells and other single family households. 3. Meter new water uses to verify the water use levels applied to the reservation are accurate. QT-3b (CRC): Apply findings on groundwater and surface water interaction (QT-1a - c) to develop instream flow package in Cow Creek.	Cow Creek subbasin and Cow Creek	CDs (L-Adams, Lincoln County, Palouse-Rock Lake, Pine Creek, and Spokane County), Ecology, Planning Unit (L), WDFW	--	BW14, CRC2, CRC3, BW15	Near-term	Low-Medium	combined actions
CC-16	--	RG-1 (CRC): Manage water rights/uses consistent with prior adjudication.	Cow Creek	Ecology (L)	--	BW1	Ongoing	Medium	no change
CC-17	--	QT-7b (CRC): Seek funding sources for off-site stock watering sites (estimated requirement is one supply site per mile for riparian grazing areas).	Every mile on Cow Creeks on both sides	CDs (L-Adams), Ecology	--	BW10, BW11, CRC6	Mid-term	Low	no change

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CC-18	--	G-2 (CRC): Construct Fish Passage Barrier on Cow Creek below Sprague Lake to prevent repopulation of Sprague Lake with undesirable species.	Cow Creek	WDFW	--	CRC9	Mid-term	Medium	no change
CC-19	--	QL-5a (CRC): Study the potential use of aquatic plants (e.g., duck weed or native species) that can be used to reduce or eliminate algal blooms in Sprague Lake.	Sprague Lake	Ecology, WSU Extension	--	BW19, CRC4	Mid-term	Low	no change
CC-20	--	QT-7d (CRC): Conduct Cheney WWTP Effluent Discharge Relocation Study.	Cheney	City of Cheney, Ecology	--	CRC8	Near-term	Low	no change
LP and RC-1	Characterize groundwater resources; map approximate location, depth, and geographic extent of aquifers in the Lower Palouse and Rock Creek Management Areas. Also determine regional quantities and movement of groundwater.	QT-1a (CLP): Characterize groundwater resources; map approximate location, depth, and geographic extent of aquifers. Also determine regional quantities and movement of groundwater.	1. Two miles outside of jurisdiction of each town in the management areas 2. Region wide	Ecology, PBAC (L), USGS, Towns in CLP	--	BW12, BW14, CLP3	Mid-term	Medium	changed language
LP and RC-2	Characterize hydrology and connectivity of surface water and springs, and develop potential recharge and flow enhancement strategies at the following locations in the Lower Palouse and Rock Creek Management Areas: 1. Eastern portion of the Basin (Adams/Whitman County Line to Washtucna) 2. Streams – Palouse River, Union Flat Creek, Willow Creek, Rebel Flat Creek, Pine Creek, Cottonwood Creek	QT-1b (CLP): Characterize hydrology and connectivity of surface water and springs, and develop potential recharge and flow enhancement strategies at the following locations: 1. Eastern portion of the Basin (Adams/Whitman County Line to Washtucna) 2. Streams – Palouse River, Union Flat Creek, Willow Creek, Rebel Flat Creek, Pine Creek, Cottonwood Creek	Entire MA	Ecology, IDEQ, USGS	--	BW12, BW14, BW16	Mid-term	Medium	changed language
LP and RC-3	Conduct a TMDL study for bacteria, temperature, and dissolved oxygen in the Central Lower Palouse management area. Include sampling at the mouths of the major tributaries.	QL-6e (CLP): Conduct a TMDL study for bacteria, temperature, and dissolved oxygen in the Palouse River mainstem. Include sampling the mouths of the major tributaries.	Entire MA	Ecology (L), IDEQ	Ecology	BW19, CLP1	Mid-term	Medium	changed language
LP and RC-4	--	RG-3 (CLP): Improve and streamline permitting process for bank stabilization and other projects.	Entire MA	USACE (L), WDFW, Counties	--	BW6	Near-term	Medium	no change
LP-1	--	QT-2c (CLP): Determine feasibility of stream re-engineering to improve flows and water quality.	West of Endicott on Rebel Flat Creek	CDs (L-Adams County, Latah SWCD, Pine Creek, Palouse, Palouse-Rock Lake, Spokane County, and Whitman), Ecology, IDEQ, NRCS	--	BW10, BW19, CLP1	Mid-term	Medium -High	no change

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
LP-2	--	QT-4c (CLP): Consider the concerns of the Planning Unit in future instream flow rule-making, including: 1. Implementing a partial closure to enable storage 2. Reservation for uninterruptible water rights for domestic and municipal use, and a maximum allocation for potential future storage.	Entire MA	CDs in CLP, Ecology (L), Planning Unit	--	BW14, BW17	Long-term	Low	no change
LP-3	--	QT-3c (CLP): Secure additional water supply/water rights.	Colton	Colton (L), Ecology	--	BW13, CLP3	Near-term	Medium	no change
LP-4	Identify the source(s) of foaming (potential organics or detergent sources) that occurs on the mainstem Palouse River, and then identify and implement corrective actions to address the cause of the foaming on the mainstem Palouse River.	QL-6b (CLP): Identify the source(s) of foaming (potential organics or detergent sources) that occurs on the mainstem Palouse River. QL-6c (CLP): Identify and implement corrective actions to address the cause of the foaming on the mainstem Palouse River.	Mainstem between Colfax and Whitman county line	CDs in CLP, Ecology (L), IDEQ (L), ISCC, NRCS	--	BW19, CLP1	Near-term or Mid-term	Low or Medium	combined actions
LP-5	Assist the City of Endicott in securing grant funding to implement its water system C.I.P. to improve system storage, fire flow, conservation and reliability.	QT-3a (CLP): Implement City of Endicott water system C.I.P. to improve system storage, fire flow, conservation and reliability (including assistance in securing grant funding).	Endicott	City of Endicott (L), WDOH	--	CLP2	Mid-term	Medium	changed language
NFP and SFP-1	--	QT-6c (NFP) and QT-6g (SFP): Further develop the concept of aquifer recharge using recharge wells to stabilize and recover aquifer levels in both the Wanapum and Grand Ronde basalts. Educate and involve the public in water management options.	Entire MA - NFP and SFP	CDs in NFP, Ecology, Pullman, WSU, IDWR, PBAC (L), CDs in SFP	--	BW12, BW17, SFP2	Mid-term	Medium -High	combined actions. no change to language
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.	QT-6b (NFP) and QT-6c (SFP): 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. QL-8 (NFP): Conduct surface water sampling to support assessment of treatment options for water diverted from the North Fork of the Palouse River and Fourmile Creek.	Kamiak Butte, NFP management area	Palouse CD, PBAC (L), USGS, Ecology, CDs in NFP	--	BW12, BW17, BW20, NFP5	Mid-term	Low-Medium or Medium -High	combined actions
NFP-1	Identify appropriate areas for permanent gauging stations upstream of Colfax.	QT-2a (NFP): Continue instream flow monitoring through permanent and seasonal gauges on North Fork; identify appropriate areas for permanent gauging stations upstream of Colfax.	Upstream of Colfax	Ecology (L), IDEQ (L), USGS, IDWR	--	BW13, NFP1	Ongoing	Low	split action. other part of split action is in BW-1.
NFP-2	Establish and maintain groundwater monitoring wells in support of instream flow management in the North Fork Palouse.	QT-2b (NFP): Establish and maintain groundwater monitoring wells.	Entire MA	PBAC (L), IDWR, Ecology	--	BW13, NFP2	Ongoing	Medium	changed language

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
NFP-3	Characterize hydrology and connectivity of surface water, groundwater, and springs within the North Fork Palouse Management Area.	QT-1a (NFP): Characterize hydrology and connectivity of surface water, groundwater, and springs within the management area.	Entire MA	Ecology, IDWR, PBAC, USGS	--	BW12, BW14, NFP2	Mid-term	Medium	changed language
NFP-4	--	QT-4e (NFP): Enhance and/or restore wetlands at the following locations with willing landowners; evaluate incentive-based approaches to wetland restoration: 1. City of Potlatch – old mill site, 2. Upper forest meadows (USFS)	Entire MA	CDs (L-Latah), Ecology, IDEQ, IDWR, NRCS, USFS (L)	--	BW10	Mid-term	Medium	no change
NFP-5	--	G-4 (NFP): Survey small communities within the watershed for water management / supply issues and projects; query regarding economic development being limited by water availability.	Endicott, Rosalia	CDs in NFP, Counties (L-Whitman County, Latah County (ID), and Benewah County (ID)), Planning Unit	--	BW3, BW11, BW12	Near-term	Low	no change
NFP-6	--	QT-3a (NFP): Obligate agencies to collaborate with and assist in identifying funding for developing a full instream flow package for the North Fork Palouse to support quantification of flows, a reservation, and maximum allocation. Assist in identifying funding to educate the Planning Unit/community on instream flow setting.	Entire MA	CDs in NFP, Ecology (L), WDFW (L), Planning Unit	Ecology, WDFW	BW14, BW18, NFP4	Near-term	Low	no change
NFP-7	--	QT-3b (NFP): 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.	North Fork Palouse River	CDs in NFP, Ecology (L), WDFW, Planning Unit	--	NFP1	Mid-term	Medium	no change
NFP-8	--	RG-5 (NFP): Manage local development to minimize impacts to natural resources.	Entire MA	Cities and Towns (L-Palouse, Potlatch ID, Onaway ID), Counties in NFP, WDFW, Ecology, IDEQ, IDFG	--	BW3, BW8, BW11, BW18	Ongoing	Low to Medium	no change

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
NFP-9	Encourage water re-use systems and stormwater management plans for new construction.	QT-5d (NFP): Encourage water re-use systems and stormwater management plans for new construction; investigate legality of use of gray water and evaluate impacts to surface water flows.	Entire MA	Cities and Towns (L-Palouse, Potlatch ID, Onaway ID), Counties in NFP, Ecology, IDEQ, IDWR, Individual landowners, Non-profit organizations	--	BW15	Ongoing	Low	split action. other part of split action is in NFP-12.
NFP-10	--	RG-3 (NFP): Evaluate and review the impact of the Idaho Forest Practices Act on water quality.	Idaho portion of MA	IDEQ (L), IDL	--	NFP6	Near-term	Low	no change
NFP-11	--	G-2 (NFP): Review and evaluate key strategies for water management from Clearwater National Forest Management Plan, state practices and forest practices to use in water management planning throughout the management area.	Entire MA	Planning Unit (L), USFS	--	BW6, NFP3	Near-term	Low	no change
NFP-12	Investigate legality of use of gray water and evaluate impacts to surface water flows.	QT-5d (NFP): Encourage water re-use systems and stormwater management plans for new construction; investigate legality of use of gray water and evaluate impacts to surface water flows.	Entire MA	Cities and Towns (L-Palouse, Potlatch ID, Onaway ID), Counties in NFP, Ecology, IDEQ, IDWR, Individual landowners, Non-profit organizations	--	BW15	Ongoing	Low	split action. other part of split action is in NFP-9.
NFP-13	--	QL-3d (NFP): Evaluate the feasibility, cost and funding sources for a sewer extension for eastside Palouse.	City of Palouse (Fisher Addition)	City of Palouse (L), Ecology	--	BW18, BW19, NFP4	Near-term	Low	no change
NFP-14	--	QL-7a (NFP): Encourage public participation in the TMDL process.	Entire MA	CDs in NFP, Ecology, IDEQ (L)	--	BW9, BW18, BW19	Near-term	Low	no change
NFP-15	Secure funding to implement the 14 water quality actions referenced in the 2002 North Fork Palouse River Watershed Management Plan.	QL-1 (NFP): Reference 2002 North Fork Palouse River Watershed Management Plan for water quality strategies and measures.	North Fork Palouse River	Planning Unit (L)	--	BW18, BW19, NFP4	Near-term	Low	changed language
NFP-16	Identify funding opportunities to address TMDL concerns on the mainstem Palouse River in Washington and in Idaho.	QL-7b (NFP): Identify mainstream/alternative funding opportunities for TMDL studies and implementation activities on the mainstem Palouse River and in Idaho.	Mainstem Palouse in Washington and Idaho	CDs in CLP, Ecology, Planning Unit	--	BW4	Near to Mid-term	Low	changed language
SFP-1	--	QT-2a (SFP): Install permanent gauging on Fourmile Creek.	Fourmile Creek	Palouse CD, Ecology, USGS	--	BW14, 17, SFP2	Near-term	Low	no change

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
SFP-2	Cunningham Farm Monitoring Field Well Project - Install and monitor as many as 5 wells in the Palouse Basin Aquifer at Cunningham Farms, Kamiak Gap, Whitman County Landfill, 4- mile gap and Staley to characterize the geology and hydrogeology of the area.	QT-1h (SFP): Cunningham Farm Monitoring Field Well Project (PBAC's #2 Priority).	Cunningham Farm and other locations in the Palouse Basin Aquifer	PBAC (L), Ecology	--	BW12	Mid-term	Low-Medium	changed language
SFP-3	Develop a framework for water resource management decisions concerning the Palouse Basin Aquifer.	G-3 (SFP): Develop a framework for water resource management decisions in the Palouse Basin Aquifer (PBAC's #1 priority).	Entire MA	PBAC (L), Ecology, CDs, Counties in SFP, Cities in SFP	--	BW6, BW8, SFP5	Near-term	Low	changed language
SFP-4	--	G-2 (SFP): Establish a central and permanent office for storage of geologic/ hydrologic information on the Palouse Basin.	Entire MA	PBAC (L)	--	BW8, SFP5	Near-term	Low	no change
SFP-5	Continue to characterize groundwater resources; map approximate location, depth, and extent of aquifers in the South Fork Palouse Management Area. Also determine regional quantities and movement of groundwater. Age-date water to identify young water in shallow and deep aquifer systems.	QT-1a (SFP): Continue to characterize groundwater resources; map approximate location, depth, and extent of aquifers. Also determine regional quantities and movement of groundwater. Age-date water to identify young water in shallow and deep aquifer systems.	Pullman/ Moscow	Ecology, IDWR, PBAC (L), USGS	--	BW14, SFP2, SFP6	Mid-term	High	changed language
SFP-6	Conduct ongoing studies and data collection to monitor groundwater conditions, and to better understand how recharge occurs (in Palouse Basin Aquifer).	QT-1d (SFP): Conduct ongoing studies and data collection to monitor groundwater conditions, and to better understand how recharge occurs.	Entire MA	PBAC (L), Ecology, IDEQ, IDWR	--	BW14	Ongoing	Medium	changed language
SFP-7	--	QT-1k (SFP): Carbon 14 dating of Sediments of Bovil and Vantage well water.	Bovil and Vantage	PBAC (L)	--	BW17, SFP6	Mid-term	Medium	no change
SFP-8	--	QT-1l (SFP): Develop more detailed Grande Ronde flow maps by comprehensive basalt sampling/chemistry	Entire MA	PBAC (L)	--	BW15, SFP6	Mid-term	Medium	no change
SFP-9	Look at whether proposed new Colfax well project will impact shallow aquifer, springs and streamflows by characterizing the hydrology and connectivity of surface water, groundwater, and springs within the South Fork Palouse Management Area.	QT-1m (SFP): Characterize hydrology and connectivity of surface water, groundwater, and springs within the management area, specifically looking at whether proposed new Colfax well project will impact shallow aquifer, springs and streamflows.	Entire MA, Colfax	Ecology, PBAC, IDWR, USGS, City of Colfax	--	BW12, BW14. SFP6	Mid-term	Medium	changed language

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
SFP-10	Characterize hydrology and connectivity of surface water, groundwater, and springs, and develop potential recharge and flow enhancement strategies at the following locations: 1. Moscow Mountain, 2. Sand Road area, 3. Smoot Hill, 4. Kamiak Butte, 5. Latah County (eastern basin), 6. upper reaches of tributaries. Specifically include geologic characterization of the Kamiak and Four-Mile "gaps" by further investigation of well logs and additional test drilling.	QT-1i (SFP): Geologic characterization of the Kamiak and Four-Mile "gaps" by further investigation of well logs and additional test drilling (PBAC's #3 Priority). QT-1c (SFP): Characterize hydrology and connectivity of surface water, groundwater, and springs, and develop potential recharge and flow enhancement strategies at the following locations: 1. Moscow Mountain 2. Sand Road area 3. Smoot Hill 4. Kamiak Butte 5. Latah County (eastern basin) 6. upper reaches of tributaries	Entire MA; Kamiak and Four-Mile "gaps"	Ecology, IDEQ, PBAC (L), USGS	--	BW14, BW15, BW16, SFP6	Mid-term	Medium	combined actions
SFP-11	--	QT-1g (SFP): Develop a 3-D model of the geology of the Palouse Basin Aquifer.	Entire MA	PBAC (L), USGS	--	BW15, SFP6	Mid-term	Medium -High	no change
SFP-12	--	QT-1e (SFP): Completion of 1:24,000 scale geologic maps for the Colfax South, Garfield, and Ewartsville quads.	Entire MA	PBAC (L), USGS	--	BW15, SFP6	Mid-term	Low-Medium	no change
SFP-13	--	QT-1f (SFP): Completion of 1:48,000 and 1:100,000 scale geologic map of the Palouse Basin Aquifer.	Entire MA	PBAC (L), USGS	--	BW15, SFP6	Mid-term	Low-Medium	no change
SFP-14	Identify and evaluate potential aquifer recharge areas, for winter flow diversions, ASR, Class A treated effluent, etc.	QT-1b (SFP): Identify and evaluate potential aquifer recharge areas, such as winter flow diversions, ASR, Class A treated effluent, etc.	Pullman/Moscow	City of Moscow, City of Pullman	--	BW15, BW16	Mid-term	Medium	changed language
SFP-15	If feasible, develop pilot scale ASR program(s) using existing wells/water system infrastructure.	QT-6h (SFP): Following the pre-feasibility state, and if ASR in Pullman is considered a good potential to improve water supply reliability, develop a pilot scale program(s) using existing wells/water system infrastructure. Educate and involve the public in water management options.	City of Pullman	City of Pullman, WSU, Ecology, CDs in SFP	--	BW12, BW17, SFP2	Long-term	High	changed language

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
SFP-16	Complete further study on ASR feasibility in Pullman, beginning with a pre-feasibility document including: 1. identification/examination of existing wells for possible retrofit to ASR 2. geochemical compatibility screening to confirm compatibility of surface water for use as a source for aquifer storage and recovery (ASR). Surface water sampling to support assessment of treatment options for water diverted from Paradise Creek and the South Fork of the Palouse River 3. preliminary operational scenarios and water system compatibility overview 4. proposed observation well network and monitoring plan 5. educate and involve the public in water management options.	QT-6d (SFP): Complete further study on ASR feasibility in Pullman, beginning with a pre-feasibility document including: 1. identification/examination of existing wells for possible retrofit to ASR 2. geochemical compatibility screening 3. preliminary operational scenarios and water system compatibility overview 4. proposed observation well network and monitoring plan 5. educate and involve the public in water management options. QT-6f (SFP): Conduct geochemical analysis to confirm compatibility of surface water for use as a source for aquifer storage and recovery (ASR). QT-6b (SFP): Pullman ASR Feasibility. QL-8 (SFP): Conduct surface water sampling to support assessment of treatment options for water diverted from Paradise Creek and the South Fork of the Palouse River.	City of Pullman, Entire MA - SFP	City of Pullman, PBAC, Ecology, CDs in SFP, IDEQ	--	BW12, BW17, BW20, NFP2, SFP2, SFP1	Mid-term	Low-Medium, Medium or High	combined actions
SFP-17	--	QT-5c (SFP): Conduct an economic evaluation/feasibility study that addresses, with other new supply options, supply development (i.e. “harvesting”) opportunities, and compare costs.	Entire MA	PBAC (L), Ecology, IDWR	--	BW14, BW16	Mid-term	Low	no change
SFP-18	--	QT-1j (SFP): Rainfall/Wanapum well correlation study to determine recharge areas and amounts.	Entire MA	PBAC (L), Ecology, IDWR, IDEQ	--	BW17, SFP2	Mid-term	Medium	no change
SFP-19	--	QT-6a (SFP): Paradise Creek/Palouse Mall Area Aquifer Recharge Study.	Paradise Creek/ Palouse Mall Area	CDs in SFP, Ecology, IDEQ, IDWR, PBAC (L)	--	BW17, SFP2	Mid-term	Medium-High	no change
SFP-20	--	QT-6e (SFP): Further develop the preliminary feasibility of enhanced infiltration at the crystalline bedrock-basalt margins as a long-term groundwater level management tool. Conduct an investigation including the use of geophysics and test pits to determine if the contact can be identified and exposed.	Entire MA	CDs in SFP, PBAC (L), USGS, Ecology	--	BW12, BW17, SFP2, SFP6	Mid-term	Medium-High	no change
SFP-21	--	RG-1 (SFP): Conduct tentative determination of status and validity of existing surface water rights, claims, certificates and permits (including riparian stockwater rights), including place of use, point of diversion and usage information for existing water right holders.	South Fork below Pullman	Ecology (L)	--	BW1, SFP4	Mid- term	Medium	no change
SFP-22	--	QL-7 (SFP): Palouse Aquifer Water Chemical Analysis Study.	Entire MA	Pullman (L)	--	BW19	Mid-term	Low-Medium	no change

Unique Identifier[1]	Refined Action Description	Original Description in Watershed Management Plan[2]	Location	Lead (L) and Supporting Entities[3]	Obligated Entities, if any[4]	Supported Objectives	Schedule[5]	Cost[5]	Revisions to watershed plan action description[6]
SFP-23	--	QT-4b (SFP): Encourage low impact development and sustainable growth strategies to limit impacts to water resources.	Entire MA	Counties (L-Whitman and Latah (ID)), Cities, and Towns in SFP	--	BW7, BW8, BW9	TBD	TBD	no change
SFP-24	--	QT-3e (SFP): Support Pullman and WSU efforts to obtain funding (Legislature and other sources) for wastewater reuse project.	City of Pullman	Ecology	--	BW16, SFP2	Ongoing	Low	no change
SFP-25	--	QT-3a (SFP): Identify and implement wastewater effluent reuse strategies where practicable, considering legal interpretation of obligation/amount of water to supply and protect water rights, including riparian stockwatering rights, below city discharge points.	Pullman/ Moscow	City of Moscow (L), City of Pullman (L), WSU, Ecology	--	BW15, SFP4	Mid-term	High	no change
SFP-26	--	G-4 (SFP): Continue the “Palouse Water Summit” as an annual event to discuss Palouse Watershed water resources issues in a public forum.	Entire MA	Palouse CD (L), Cities in SFP, U of I, WSU, Counties in SFP, Ecology, USGS	--	BW6, BW8, NFP5	Near-term to Long-term	Low - Medium	no change

Notes

1. The unique identifier is the link to the information developed as part of the DIP process that is provided in Table A-1 in Appendix A. The number in the unique identifier **does not** reflect prioritization. The abbreviation in the unique identifier reflects the management 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, and SFP: South Fork Palouse River Management Area.
2. The letters and numbers at the beginning of each description is the action number used in the Watershed Management Plan. The abbreviation in parenthesis after the action number indicates the management area to which the action applied: BW: Basin-wide, CLP: Central Lower Palouse Management Area, CRC: Cow Rock Creek Management Area, NFP: North Fork Palouse River Management Area, and SFP: South Fork Palouse River Management Area. The actions are from the following tables in the Watershed Management Plan: BW actions are from Appendix B-1, CLP actions are from Table 6-2, CRC actions are from Table 6-1, NFP actions are from Table 6-4, and SFP actions are from Table 6-5.
3. The lead entity for an action is denoted with an "(L)" after the entity's name. An entity that leads an action is primarily responsible for the completion of an action and guides other entities collaborating on the action. The lead is in charge of securing funding for the action. An entity listed in this column without the “(L)” after the entity’s name is a supporting entity. A supporting entity is 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. Lead and supporting entities are identified in Appendix B of the Watershed Management Plan.
4. This column identifies the entities that have committed to or have a responsibility to complete the action from the entities listed in the Lead and Supporting Entities column. "--" indicates that no obligated entity was identified in the Watershed Plan. Obligated entities are identified in Appendix B of the Watershed Management Plan. Actions where no obligated entity is identified are desirable actions intended to help meet or address one or more of the planning objectives (defined by the Planning Unit as “Recommendations” in the Watershed Management Plan).
5. The information is these columns is directly from the Watershed Management Plan and does not reflect updates developed as part of the DIP process.
6. These notes indicate how the Watershed Management Plan action descriptions were refined so that they could be better understood for prioritization as part of the DIP process. In addition, some actions were split and some were combined to remove duplication.

APPENDIX C

INCHOATE WATER RIGHTS LETTER AND FORM

WRIA 34: Palouse Watershed Planning Unit
325 NW State Street
Pullman, WA 99163

April 22, 2008

Water System Name
Attention: Contact
Address
City, State Zip

Dear Group A Water System Owner / Operator:

I am sending you this letter on behalf of the Palouse Watershed Planning Unit. The Planning Unit members include concerned citizens and landowners of the Palouse Watershed along with representatives of agriculture, commerce, industry, utilities, real estate, and environmental interests as well as local, state and federal government agencies. The Planning Unit has recently developed a Watershed Management Plan that includes actions to insure there is adequate water for the future as communities grow.

The Planning Unit invites you to attend a workshop on Tuesday, May 20th from 1:30 pm to 4:30 pm at the Wren Pierson Multi-Purpose Room, located at 615 4th Street, Cheney, WA. ***Please RSVP by Friday May 9*** to this invitation via phone or email (to Bryony Stasney at 208-755-1010 / bstasney@golder.com). Pastries and refreshments will be provided.

The purpose of the workshop is to inform you of the Watershed Planning process (per RCW 90.82) in the Palouse and to obtain information from you to help with future water resources planning. Per RCW 90.8.2.048(1), the Planning Unit is required to address the planned future use of municipal water rights that are inchoate (i.e., currently unused). I have included the definition of a municipal water supplier and an information request form with this letter. If your system is a municipal water supplier, please complete the form and return it within the enclosed stamped and addressed envelope or bring it to the workshop where we can assist you. If you have any questions or need assistance filling out the form, please contact Bryony at 208-755-1010 / bstasney@golder.com.

We look forward to meeting you.

Best regards,

Bryony Stasney, L.HG.
Senior Project Hydrogeologist, Golder Associates Inc.

On behalf of
Suzanne Hamada
Palouse Watershed Planning Coordinator
WRIA 34 Palouse Watershed Planning

WATER SYSTEM SURVEY FORM

Thank you for choosing to participate in our voluntary survey of Group A municipal water right holders. Your participation is greatly appreciated and the information you provide will help the Palouse Watershed (WRIA 34) Planning Unit as it prepares its Detailed Implementation Plan. The purpose of this form is to obtain information from each water system to help with future water resources planning. The estimates of inchoate water rights are based on information provided voluntarily and do not constitute an official examination of the water right.

Please return this form by mail to Bryony Stasney in the enclosed self-addressed stamped envelope by May 20th, 2008. You may also bring this form with you to the workshop on May 20th, 2008.

If you have any questions about this form, please contact Bryony Stasney at 208-755-1010 / bstasney@golder.com

Please complete the below information. This information can be found on your Water Facilities Inventory Report:

Residential Connections:_____

Total Connections:_____

Approved Connections:_____

You have a total of _____ connections available for future growth.

Purveyor Name:_____

Water System ID Number:_____

Contact Name:_____

Phone Number:_____

Email Address:_____

Please see reverse side.

Please fill out the table below for each of your water rights.

Future Water Quantity Needs for Municipal Water Suppliers [1]				
Water Right Control Number	**Total Water Right**		**2007 Water System Use[3]**	
	Q_i[2]	**Q_a (acre-feet per year)**	**Q_i (max GPM/CFS)**	**Q_a (annual total)**

(1) Per RCW 90.03.015 (3) and (4) "Municipal water supplier" means an entity that supplies water for municipal water supply purposes. "Municipal water supply purposes" means a beneficial use of water: (a) For residential purposes through fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year; (b) for governmental or governmental proprietary purposes by a city, town, public utility district, county, sewer district, or water district; or (c) indirectly for the purposes in (a) or (b) of this subsection through the delivery of treated or raw water to a public water system for such use. If water is beneficially used under a water right for the purposes listed in (a), (b), or (c) of this subsection, any other beneficial use of water under the right generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes. If a governmental entity holds a water right that is for the purposes listed in (a), (b), or (c) of this subsection, its use of water or its delivery of water for any other beneficial use generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes.

(2) In GPM (gallons per minute) for groundwater rights, CFS (cubic feet per second) for surface water rights.

(3) Master meter total or highest annual volume ever used.

Are your existing water rights adequate to support future growth for the next 20 years and beyond?

Yes_____ No_____ Unknown_____

If not, please describe your plan to meet future water demands.
(This information may be in your water system plan, if not, one way to estimate this is to use the average number of connections added annually over the last 4-5 years and project it to 20 years. Will you have enough connections to meet that current growth rate of connections for 20 years?)

Are you planning to use your entire water right over the next 20 years?

Yes_____ No_____ Unknown_____

Is there anything else we should know about provision of municipal drinking water in your area, or are there any other comments you would like to share? Thanks for your time!

APPENDIX D

WATERSHED PLANNING ACT
CHAPTER 90.82 REVISED CODE OF WASHINGTON

Chapter 90.82 RCW
WATERSHED PLANNING

(Formerly Water resource management)

RCW SECTIONS

RCW 90.82.005
Purpose.

The purpose of this chapter is to develop a more thorough and cooperative method of determining what the current water resource situation is in each water resource inventory area of the state and to provide local citizens with the maximum possible input concerning their goals and objectives for water resource management and development.

It is necessary for the legislature to establish processes and policies that will result in providing state agencies with more specific guidance to manage the water resources of the state consistent with current

law and direction provided by local entities and citizens through the process established in accordance with this chapter.

[1997 c 442 § 101.]

RCW 90.82.010
Finding.

The legislature finds that the local development of watershed plans for managing water resources and for protecting existing water rights is vital to both state and local interests. The local development of these plans serves vital local interests by placing it in the hands of people: Who have the greatest knowledge of both the resources and the aspirations of those who live and work in the watershed; and who have the greatest stake in the proper, long-term management of the resources. The development of such plans serves the state's vital interests by ensuring that the state's water resources are used wisely, by protecting existing water rights, by protecting instream flows for fish, and by providing for the economic well-being of the state's citizenry and communities. Therefore, the legislature believes it necessary for units of local government throughout the state to engage in the orderly development of these watershed plans.

[1997 c 442 § 102.]

RCW 90.82.020
Definitions.

Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) "Department" means the department of ecology.

(2) "Implementing rules" for a WRIA plan are the rules needed to give force and effect to the parts of the plan that create rights or obligations for any party including a state agency or that establish water management policy.

(3) "Minimum instream flow" means a minimum flow under chapter 90.03 or 90.22 RCW or a base flow under chapter 90.54 RCW.

(4) "WRIA" means a water resource inventory area established in chapter 173-500 WAC as it existed on January 1, 1997.

(5) "Water supply utility" means a water, combined water-sewer, irrigation, reclamation, or public utility district that provides water to persons or other water users within the district or a division or unit responsible for administering a publicly governed water supply system on behalf of a county.

(6) "WRIA plan" or "plan" means the product of the planning unit including any rules adopted in conjunction with the product of the planning unit.

[1997 c 442 § 103.]

RCW 90.82.030
Principles.

In order to have the best possible program for appropriating and administering water use in the state, the legislature establishes the following principles and criteria to carry out the purpose and intent of chapter 442, Laws of 1997.

(1) All WRIA planning units established under this chapter shall develop a process to assure that water resource user interests and directly involved interest groups at the local level have the opportunity, in a fair and equitable manner, to give input and direction to the process.

(2) If a planning unit requests technical assistance from a state agency as part of its planning activities under this chapter and the assistance is with regard to a subject matter over which the agency has jurisdiction, the state agency shall provide the technical assistance to the planning unit.

(3) Plans developed under chapter 442, Laws of 1997 shall be consistent with and not duplicative of efforts already under way in a WRIA, including but not limited to watershed analysis conducted under state forest practices statutes and rules.

[1997 c 442 § 104.]

RCW 90.82.040
WRIA planning units -- Watershed planning grants -- Eligibility criteria -- Administrative costs.

(1) Once a WRIA planning unit has been initiated under RCW 90.82.060 and a lead agency has been designated, it shall notify the department and may apply to the department for funding assistance for conducting the planning and implementation. Funds shall be provided from and to the extent of appropriations made by the legislature to the department expressly for this purpose.

(2)(a) Each planning unit that has complied with subsection (1) of this section is eligible to receive watershed planning grants in the following amounts for the first three phases of watershed planning and phase four watershed plan implementation:

(i) Initiating governments may apply for an initial organizing grant of up to fifty thousand dollars for a single WRIA or up to seventy-five thousand dollars for a multi-WRIA management area in accordance with RCW 90.82.060(4);

(ii)(A) A planning unit may apply for up to two hundred thousand dollars for each WRIA in the management area for conducting watershed assessments in accordance with RCW 90.82.070, except that a planning unit that chooses to conduct a detailed assessment or studies under (a)(ii)(B) of this subsection or whose initiating governments choose or have chosen to include an instream flow or water quality component in accordance with RCW 90.82.080 or 90.82.090 may apply for up to one hundred thousand additional dollars for each instream flow and up to one hundred thousand additional dollars for each water quality component included for each WRIA to conduct an assessment on that optional component and for each WRIA in which the assessments or studies under (a)(ii)(B) of this subsection are conducted.

(B) A planning unit may elect to apply for up to one hundred thousand additional dollars to conduct a detailed assessment of multipurpose water storage opportunities or for studies of specific multipurpose storage projects which opportunities or projects are consistent with and support the other elements of the

planning unit's watershed plan developed under this chapter; and

(iii) A planning unit may apply for up to two hundred fifty thousand dollars for each WRIA in the management area for developing a watershed plan and making recommendations for actions by local, state, and federal agencies, tribes, private property owners, private organizations, and individual citizens, including a recommended list of strategies and projects that would further the purpose of the plan in accordance with RCW 90.82.060 through 90.82.100.

(b) A planning unit may request a different amount for phase two or phase three of watershed planning than is specified in (a) of this subsection, provided that the total amount of funds awarded do not exceed the maximum amount the planning unit is eligible for under (a) of this subsection. The department shall approve such an alternative allocation of funds if the planning unit identifies how the proposed alternative will meet the goals of this chapter and provides a proposed timeline for the completion of planning. However, the up to one hundred thousand additional dollars in funding for instream flow and water quality components and for water storage assessments or studies that a planning unit may apply for under (a)(ii)(A) of this subsection may be used only for those instream flow, water quality, and water storage purposes.

(c) By December 1, 2001, or within one year of initiating phase one of watershed planning, whichever occurs later, the initiating governments for each planning unit must inform the department whether they intend to have the planning unit establish or amend instream flows as part of its planning process. If they elect to have the planning unit establish or amend instream flows, the planning unit is eligible to receive one hundred thousand dollars for that purpose in accordance with (a)(ii) of this subsection. If the initiating governments for a planning unit elect not to establish or amend instream flows as part of the unit's planning process, the department shall retain one hundred thousand dollars to carry out an assessment to support establishment of instream flows and to establish such flows in accordance with RCW 90.54.020(3)(a) and chapter 90.22 RCW. The department shall not use these funds to amend an existing instream flow unless requested to do so by the initiating governments for a planning unit.

(d) In administering funds appropriated for supplemental funding for optional plan components under (a)(ii) of this subsection, the department shall give priority in granting the available funds to proposals for setting or amending instream flows.

(e) A planning unit may apply for a matching grant for phase four watershed plan implementation following approval under the provisions of RCW 90.82.130. A match of ten percent is required and may include financial contributions or in-kind goods and services directly related to coordination and oversight functions. The match can be provided by the planning unit or by the combined commitments from federal agencies, tribal governments, local governments, special districts, or other local organizations. The phase four grant may be up to one hundred thousand dollars for each planning unit for each of the first three years of implementation. At the end of the three-year period, a two-year extension may be available for up to fifty thousand dollars each year. For planning units that cover more than one WRIA, additional matching funds of up to twenty-five thousand dollars may be available for each additional WRIA per year for the first three years of implementation, and up to twelve thousand five hundred dollars per WRIA per year for each of the fourth and fifth years.

(3)(a) The department shall use the eligibility criteria in this subsection (3) instead of rules, policies, or guidelines when evaluating grant applications at each stage of the grants program.

(b) In reviewing grant applications under this subsection (3), the department shall evaluate whether:

(i) The planning unit meets all of the requirements of this chapter;

(ii) The application demonstrates a need for state planning funds to accomplish the objectives of the planning process; and

(iii) The application and supporting information evidences a readiness to proceed.

(c) In ranking grant applications submitted at each stage of the grants program, the department shall give preference to applications in the following order of priority:

(i) Applications from existing planning groups that have been in existence for at least one year;

(ii) Applications that address protection and enhancement of fish habitat in watersheds that have aquatic fish species listed or proposed to be listed as endangered or threatened under the federal endangered species act, 16 U.S.C. Sec. 1531 et seq. and for which there is evidence of an inability to supply adequate water for population and economic growth from:

(A) First, multi-WRIA planning; and

(B) Second, single WRIA planning;

(iii) Applications that address protection and enhancement of fish habitat in watersheds or for which there is evidence of an inability to supply adequate water for population and economic growth from:

(A) First, multi-WRIA planning; and

(B) Second, single WRIA planning.

(d) Except for phase four watershed plan implementation, the department may not impose any local matching fund requirement as a condition for grant eligibility or as a preference for receiving a grant.

(4) The department may retain up to one percent of funds allocated under this section to defray administrative costs.

(5) Planning under this chapter should be completed as expeditiously as possible, with the focus being on local stakeholders cooperating to meet local needs.

(6) Funding provided under this section shall be considered a contractual obligation against the moneys appropriated for this purpose.

[2003 1st sp.s. c 4 § 2; 2001 c 237 § 2; 1998 c 247 § 1; 1997 c 442 § 105.]

NOTES:

Findings -- 2003 1st sp.s. c 4: "The legislature declares and reaffirms that a core principle embodied in chapter 90.82 RCW is that state agencies must work cooperatively with local citizens in a process of planning for future uses of water by giving local citizens and the governments closest to them the ability to determine the management of water in the WRIA or WRIAs being planned.

The legislature further finds that this process of local planning must have all the tools necessary to accomplish this task and that it is essential for the legislature to provide a clear statutory process for

implementation so that the locally developed plan will be the adopted and implemented plan to the greatest extent possible." [2003 1st sp.s. c 4 § 1.]

Finding -- Intent -- 2001 c 237: "The legislature is committed to meeting the needs of a growing population and a healthy economy statewide; to meeting the needs of fish and healthy watersheds statewide; and to advancing these two principles together, in increments over time.

The legislature finds that improved management of the state's water resources, clarifying the authorities, requirements, and timelines for establishing instream flows, providing timely decisions on water transfers, clarifying the authority of water conservancy boards, and enhancing the flexibility of our water management system to meet both environmental and economic goals are important steps to providing a better future for our state.

The need for these improvements is particularly urgent as we are faced with drought conditions. The failure to act now will only increase the potential negative effects on both the economy and the environment, including fisheries resources.

Deliberative action over several legislative sessions and interim periods between sessions will be required to address the long-term goal of improving the responsiveness of the state water code to meet the diverse water needs of the state's citizenry. It is the intent of the legislature to begin this work now by providing tools to enable the state to respond to imminent drought conditions and other immediate problems relating to water resources management. It is also the legislature's intent to lay the groundwork for future legislation for addressing the state's long-term water problems." [2001 c 237 § 1.]

Severability -- 2001 c 237: "If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected." [2001 c 237 § 33.]

Effective date -- 2001 c 237: "This act is necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and takes effect immediately [May 10, 2001]." [2001 c 237 § 34.]

Intent -- 2001 c 237: See note following RCW 90.66.065.

RCW 90.82.043
Implementation plan.

(1) Within one year of accepting funding under RCW 90.82.040(2)(e), the planning unit must complete a detailed implementation plan. Submittal of a detailed implementation plan to the department is a condition of receiving grants for the second and all subsequent years of the phase four grant.

(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. Each implementation plan must contain timelines to achieve these strategies and interim milestones to measure progress.

(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.

(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.

(5) By December 1, 2003, and by December 1st of each subsequent year, the director of the department shall report to the appropriate legislative standing committees regarding statutory changes necessary to enable state agency approval or permit decision making needed to implement a plan approved under this chapter.

[2003 1st sp.s. c 4 § 3.]

NOTES:

Findings -- 2003 1st sp.s. c 4: See note following RCW 90.82.040.

RCW 90.82.048
Implementation plan -- Timelines and milestones.

(1) The timelines and interim milestones in a detailed implementation plan required by RCW 90.82.043 must address the planned future use of existing water rights for municipal water supply purposes, as defined in RCW 90.03.015, 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.

(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.

(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 coming 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.

[2003 1st sp.s. c 5 § 9.]

NOTES:

Severability -- 2003 1st sp.s. c 5: See note following RCW 90.03.015.

RCW 90.82.050
Limitations on liability.

(1) This chapter shall not be construed as creating a new cause of action against the state or any county, city, town, water supply utility, conservation district, or planning unit.

(2) Notwithstanding RCW 4.92.090, 4.96.010, and 64.40.020, no claim for damages may be filed against the state or any county, city, town, water supply utility, tribal governments, conservation district, or planning unit that or member of a planning unit who participates in a WRIA planning unit for performing responsibilities under this chapter.

[1997 c 442 § 106.]

RCW 90.82.060
Initiation of watershed planning -- Scope of planning -- Technical assistance from state agencies.

(1) Planning conducted under this chapter must provide for a process to allow the local citizens within a WRIA or multi-WRIA area to join together in an effort to: (a) Assess the status of the water resources of their WRIA or multi-WRIA area; and (b) determine how best to manage the water resources of the WRIA or multi-WRIA area to balance the competing resource demands for that area within the parameters under RCW 90.82.120.

(2) Watershed planning under this chapter may be initiated for a WRIA only with the concurrence of: (a) All counties within the WRIA; (b) the largest city or town within the WRIA unless the WRIA does not contain a city or town; and (c) the water supply utility obtaining the largest quantity of water from the WRIA or, for a WRIA with lands within the Columbia Basin project, the water supply utility obtaining from the Columbia Basin project the largest quantity of water for the WRIA. To apply for a grant for organizing the planning unit as provided for under RCW 90.82.040(2)(a), these entities shall designate the entity that will serve as the lead agency for the planning effort and indicate how the planning unit will be staffed. For purposes of this chapter, WRIA 40 shall be divided such that the portion of the WRIA located entirely within the Stemilt and Squilchuck subbasins shall be considered WRIA 40a and the remaining portion shall be considered WRIA 40b. Planning may be conducted separately for WRIA 40a and 40b. WRIA 40a shall be eligible for one-fourth of the funding available for a single WRIA, and WRIA 40b shall be eligible for three-fourths of the funding available for a single WRIA.

(3) Watershed planning under this chapter may be initiated for a multi-WRIA area only with the concurrence of: (a) All counties within the multi-WRIA area; (b) the largest city or town in each WRIA unless the WRIA does not contain a city or town; and (c) the water supply utility obtaining the largest quantity of water in each WRIA.

(4) If entities in subsection (2) or (3) of this section decide jointly and unanimously to proceed, they shall invite all tribes with reservation lands within the management area.

(5) The entities in subsection (2) or (3) of this section, including the tribes if they affirmatively accept the invitation, constitute the initiating governments for the purposes of this section.

(6) The organizing grant shall be used to organize the planning unit and to determine the scope of the planning to be conducted. In determining the scope of the planning activities, consideration shall be given to all existing plans and related planning activities. The scope of planning must include water quantity elements as provided in RCW 90.82.070, and may include water quality elements as contained in RCW 90.82.090, habitat elements as contained in RCW 90.82.100, and instream flow elements as contained in RCW 90.82.080. The initiating governments shall work with state government, other local governments within the management area, and affected tribal governments, in developing a planning process. The initiating governments may hold public meetings as deemed necessary to develop a proposed scope of work and a proposed composition of the planning unit. In developing a proposed composition of the planning unit, the initiating governments shall provide for representation of a wide range of water resource interests.

(7) Each state agency with regulatory or other interests in the WRIA or multi-WRIA area to be planned shall assist the local citizens in the planning effort to the greatest extent practicable, recognizing

any fiscal limitations. In providing such technical assistance and to facilitate representation on the planning unit, state agencies may organize and agree upon their representation on the planning unit. Such technical assistance must only be at the request of and to the extent desired by the planning unit conducting such planning. The number of state agency representatives on the planning unit shall be determined by the initiating governments in consultation with the governor's office.

(8) As used in this section, "lead agency" means the entity that coordinates staff support of its own or of other local governments and receives grants for developing a watershed plan.

[2003 c 328 § 1; 2001 c 229 § 1; 1998 c 247 § 2.]

RCW 90.82.070
Water quantity component.

Watershed planning under this chapter shall address water quantity in the management area by undertaking an assessment of water supply and use in the management area and developing strategies for future use.

(1) The assessment shall include:

(a) An estimate of the surface and ground water present in the management area;

(b) An estimate of the surface and ground water available in the management area, taking into account seasonal and other variations;

(c) An estimate of the water in the management area represented by claims in the water rights claims registry, water use permits, certificated rights, existing minimum instream flow rules, federally reserved rights, and any other rights to water;

(d) An estimate of the surface and ground water actually being used in the management area;

(e) An estimate of the water needed in the future for use in the management area;

(f) An identification of the location of areas where aquifers are known to recharge surface bodies of water and areas known to provide for the recharge of aquifers from the surface; and

(g) An estimate of the surface and ground water available for further appropriation, taking into account the minimum instream flows adopted by rule or to be adopted by rule under this chapter for streams in the management area including the data necessary to evaluate necessary flows for fish.

(2) Strategies for increasing water supplies in the management area, which may include, but are not limited to, increasing water supplies through water conservation, water reuse, the use of reclaimed water, voluntary water transfers, aquifer recharge and recovery, additional water allocations, or additional water storage and water storage enhancements. The objective of these strategies is to supply water in sufficient quantities to satisfy the minimum instream flows for fish and to provide water for future out-of-stream uses for water identified in subsection (1)(e) and (g) of this section and to ensure that adequate water supplies are available for agriculture, energy production, and population and economic growth under the requirements of the state's growth management act, chapter 36.70A RCW. These strategies, in and of themselves, shall not be construed to confer new water rights. The watershed plan must address the strategies required under this subsection.

(3) The assessment may include the identification of potential site locations for water storage projects. The potential site locations may be for either large or small projects and cover the full range of possible alternatives. The possible alternatives include off-channel storage, underground storage, the enlargement or enhancement of existing storage, and on-channel storage.

[2001 2nd sp.s. c 19 § 2; 1998 c 247 § 3.]

NOTES:

Intent -- 2001 2nd sp.s. c 19: "The legislature recognizes the potential for additional water storage as a solution to the water supply needs of the state. Last year the legislature created a task force to examine the role of increased water storage in providing water supplies to meet the needs of fish, population growth, and economic development, and to enhance the protection of people's lives and their property and the protection of aquatic habitat through flood control facilities. One solution discussed by the task force to address the state's water supply problem is to store water when there is excess runoff and stream flow, and deliver or release it during the low flow period when it is needed. The task force discussed the need for assessments of potential site locations for water storage projects. The legislature intends this act to assist in obtaining the assessments relating to water storage." [2001 2nd sp.s. c 19 § 1.]

RCW 90.82.080
Instream flow component -- Rules -- Report.

(1)(a) If the initiating governments choose, by majority vote, to include an instream flow component, it shall be accomplished in the following manner:

(i) If minimum instream flows have already been adopted by rule for a stream within the management area, unless the members of the local governments and tribes on the planning unit by a recorded unanimous vote request the department to modify those flows, the minimum instream flows shall not be modified under this chapter. If the members of local governments and tribes request the planning unit to modify instream flows and unanimous approval of the decision to modify such flow is not achieved, then the instream flows shall not be modified under this section;

(ii) If minimum stream flows have not been adopted by rule for a stream within the management area, setting the minimum instream flows shall be a collaborative effort between the department and members of the planning unit. The department must attempt to achieve consensus and approval among the members of the planning unit regarding the minimum flows to be adopted by the department. Approval is achieved if all government members and tribes that have been invited and accepted on the planning unit present for a recorded vote unanimously vote to support the proposed minimum instream flows, and all nongovernmental members of the planning unit present for the recorded vote, by a majority, vote to support the proposed minimum instream flows.

(b) The department shall undertake rule making to adopt flows under (a) of this subsection. The department may adopt the rules either by the regular rules adoption process provided in chapter 34.05 RCW, the expedited rules adoption process as set forth in RCW 34.05.353, or through a rules adoption process that uses public hearings and notice provided by the county legislative authority to the greatest extent possible. Such rules do not constitute significant legislative rules as defined in RCW 34.05.328, and do not require the preparation of small business economic impact statements.

(c) If approval is not achieved within four years of the date the planning unit first receives funds from

the department for conducting watershed assessments under RCW 90.82.040, the department may promptly initiate rule making under chapter 34.05 RCW to establish flows for those streams and shall have two additional years to establish the instream flows for those streams for which approval is not achieved.

(2)(a) Notwithstanding RCW 90.03.345, minimum instream flows set under this section for rivers or streams that do not have existing minimum instream flow levels set by rule of the department shall have a priority date of two years after funding is first received from the department under RCW 90.82.040, unless determined otherwise by a unanimous vote of the members of the planning unit but in no instance may it be later than the effective date of the rule adopting such flow.

(b) Any increase to an existing minimum instream flow set by rule of the department shall have a priority date of two years after funding is first received for planning in the WRIA or multi-WRIA area from the department under RCW 90.82.040 and the priority date of the portion of the minimum instream flow previously established by rule shall retain its priority date as established under RCW 90.03.345.

(c) Any existing minimum instream flow set by rule of the department that is reduced shall retain its original date of priority as established by RCW 90.03.345 for the revised amount of the minimum instream flow level.

(3) Before setting minimum instream flows under this section, the department shall engage in government-to-government consultation with affected tribes in the management area regarding the setting of such flows.

(4) Nothing in this chapter either: (a) Affects the department's authority to establish flow requirements or other conditions under RCW 90.48.260 or the federal clean water act (33 U.S.C. Sec. 1251 et seq.) for the licensing or relicensing of a hydroelectric power project under the federal power act (16 U.S.C. Sec. 791 et seq.); or (b) affects or impairs existing instream flow requirements and other conditions in a current license for a hydroelectric power project licensed under the federal power act.

(5) If the planning unit is unable to obtain unanimity under subsection (1) of this section, the department may adopt rules setting such flows.

(6) The department shall report annually to the appropriate legislative standing committees on the progress of instream flows being set under this chapter, as well as progress toward setting instream flows in those watersheds not being planned under this chapter. The report shall be made by December 1, 2003, and by December 1st of each subsequent year.

[2003 1st sp.s. c 4 § 4; 1998 c 247 § 4.]

NOTES:

Findings -- 2003 1st sp.s. c 4: See note following RCW 90.82.040.

RCW 90.82.085
Instream flows -- Assessing and setting or amending.

By October 1, 2001, the department of ecology shall complete a final nonproject environmental impact statement that evaluates stream flows to meet the alternative goals of maintaining, preserving, or enhancing instream resources and the technically defensible methodologies for determining these stream

flows. Planning units and state agencies assessing and setting or amending instream flows must, as a minimum, consider the goals and methodologies addressed in the nonproject environmental impact statement. A planning unit or state agency may assess, set, or amend instream flows in a manner that varies from the final nonproject environmental impact statement if consistent with applicable instream flow laws.

[2001 c 237 § 3.]

NOTES:

Finding -- Intent -- Severability -- Effective date -- 2001 c 237: See notes following RCW 90.82.040.

Intent -- 2001 c 237: See note following RCW 90.66.065.

RCW 90.82.090
Water quality component.

If the initiating governments choose to include a water quality component, the watershed plan shall include the following elements:

(1) An examination based on existing studies conducted by federal, state, and local agencies of the degree to which legally established water quality standards are being met in the management area;

(2) An examination based on existing studies conducted by federal, state, and local agencies of the causes of water quality violations in the management area, including an examination of information regarding pollutants, point and nonpoint sources of pollution, and pollution-carrying capacities of water bodies in the management area. The analysis shall take into account seasonal stream flow or level variations, natural events, and pollution from natural sources that occurs independent of human activities;

(3) An examination of the legally established characteristic uses of each of the nonmarine bodies of water in the management area;

(4) An examination of any total maximum daily load established for nonmarine bodies of water in the management area, unless a total maximum daily load process has begun in the management area as of the date the watershed planning process is initiated under RCW 90.82.060;

(5) An examination of existing data related to the impact of fresh water on marine water quality;

(6) A recommended approach for implementing the total maximum daily load established for achieving compliance with water quality standards for the nonmarine bodies of water in the management area, unless a total maximum daily load process has begun in the management area as of the date the watershed planning process is initiated under RCW 90.82.060; and

(7) Recommended means of monitoring by appropriate government agencies whether actions taken to implement the approach to bring about improvements in water quality are sufficient to achieve compliance with water quality standards.

This chapter does not obligate the state to undertake analysis or to develop strategies required under

the federal clean water act (33 U.S.C. Sec. 1251 et seq.). This chapter does not authorize any planning unit, lead agency, or local government to adopt water quality standards or total maximum daily loads under the federal clean water act.

[1998 c 247 § 5.]

RCW 90.82.100
Habitat component.

If the initiating governments choose to include a habitat component, the watershed plan shall be coordinated or developed to protect or enhance fish habitat in the management area. Such planning must rely on existing laws, rules, or ordinances created for the purpose of protecting, restoring, or enhancing fish habitat, including the shoreline management act, chapter 90.58 RCW, the growth management act, chapter 36.70A RCW, and the forest practices act, chapter 76.09 RCW. Planning established under this section shall be integrated with strategies developed under other processes to respond to potential and actual listings of salmon and other fish species as being threatened or endangered under the federal endangered species act, 16 U.S.C. Sec. 1531 et seq. Where habitat restoration activities are being developed under chapter 246, Laws of 1998, such activities shall be relied on as the primary nonregulatory habitat component for fish habitat under this chapter.

[1998 c 247 § 6.]

RCW 90.82.110
Identification of projects and activities.

The planning unit shall review historical data such as fish runs, weather patterns, land use patterns, seasonal flows, and geographic characteristics of the management area, and also review the planning, projects, and activities that have already been completed regarding natural resource management or enhancement in the management area and the products or status of those that have been initiated but not completed for such management in the management area, and incorporate their products as appropriate so as not to duplicate the work already performed or underway.

The planning group is encouraged to identify projects and activities that are likely to serve both short-term and long-term management goals and that warrant immediate financial assistance from the state, federal, or local government. If there are multiple projects, the planning group shall give consideration to ranking projects that have the greatest benefit and schedule those projects that should be implemented first.

[1998 c 247 § 7.]

RCW 90.82.120
Plan parameters.

(1) Watershed planning developed and approved under this chapter shall not contain provisions that: (a) Are in conflict with existing state statutes, federal laws, or tribal treaty rights; (b) impair or diminish in any manner an existing water right evidenced by a claim filed in the water rights claims registry established under chapter 90.14 RCW or a water right certificate or permit; (c) require a modification in the basic operations of a federal reclamation project with a water right the priority date of which is

before June 11, 1998, or alter in any manner whatsoever the quantity of water available under the water right for the reclamation project, whether the project has or has not been completed before June 11, 1998; (d) affect or interfere with an ongoing general adjudication of water rights; (e) modify or require the modification of any waste discharge permit issued under chapter 90.48 RCW; (f) modify or require the modification of activities or actions taken or intended to be taken under a habitat restoration work schedule developed under chapter 246, Laws of 1998; or (g) modify or require the modification of activities or actions taken to protect or enhance fish habitat if the activities or actions are: (i) Part of an approved habitat conservation plan and an incidental take permit, an incidental take statement, a management or recovery plan, or other cooperative or conservation agreement entered into with a federal or state fish and wildlife protection agency under its statutory authority for fish and wildlife protection that addresses the affected habitat; or (ii) part of a water quality program adopted by an irrigation district under chapter 87.03 RCW or a board of joint control under chapter 87.80 RCW. This subsection (1)(g) applies as long as the activities or actions continue to be taken in accordance with the plan, agreement, permit, or statement. Any assessment conducted under RCW 90.82.070, 90.82.090, or 90.82.100 shall take into consideration such activities and actions and those taken under the forest practices rules, including watershed analysis adopted under the forest practices act, chapter 76.09 RCW.

(2) Watershed planning developed and approved under this chapter shall not change existing local ordinances or existing state rules or permits, but may contain recommendations for changing such ordinances or rules.

(3) Notwithstanding any other provision of this chapter, watershed planning shall take into account forest practices rules under the forest practices act, chapter 76.09 RCW, and shall not create any obligations or restrictions on forest practices additional to or inconsistent with the forest practices act and its implementing rules, whether watershed planning is approved by the counties or the department.

[1998 c 247 § 8.]

RCW 90.82.130
Plan approval -- Public notice and hearing -- Revisions.

(1)(a) Upon completing its proposed watershed plan, the planning unit may approve the proposal by consensus of all of the members of the planning unit or by consensus among the members of the planning unit appointed to represent units of government and a majority vote of the nongovernmental members of the planning unit.

(b) If the proposal is approved by the planning unit, the unit shall submit the proposal to the counties with territory within the management area. If the planning unit has received funding beyond the initial organizing grant under RCW 90.82.040, such a proposal approved by the planning unit shall be submitted to the counties within four years of the date that funds beyond the initial funding are first drawn upon by the planning unit.

(c) If the watershed plan is not approved by the planning unit, the planning unit may submit the components of the plan for which agreement is achieved using the procedure under (a) of this subsection, or the planning unit may terminate the planning process.

(2)(a) With the exception of a county legislative authority that chooses to opt out of watershed planning as provided in (c) of this subsection, the legislative authority of each of the counties with territory in the management area shall provide public notice of and conduct at least one public hearing on the proposed watershed plan submitted under this section. After the public hearings, the legislative

authorities of these counties shall convene in joint session to consider the proposal. The counties may approve or reject the proposed watershed plan for the management area, but may not amend it. Approval of such a proposal shall be made by a majority vote of the members of each of the counties with territory in the management area.

(b) If a proposed watershed plan is not approved, it shall be returned to the planning unit with recommendations for revisions. Approval of such a revised proposal by the planning unit and the counties shall be made in the same manner provided for the original watershed plan. If approval of the revised plan is not achieved, the process shall terminate.

(c) A county legislative authority may choose to opt out of watershed planning under this chapter and the public hearing processes under (a) and (b) of this subsection if the county's affected territory within a particular management area is: (i) Less than five percent of the total territory within the management area; or (ii) five percent or more of the total territory within the management area and all other initiating governments within the management area consent. A county meeting these conditions and choosing to opt out shall notify the department and the other initiating governments of that choice prior to commencement of plan adoption under the provisions of (a) of this subsection. A county choosing to opt out under the provisions of this section shall not be bound by obligations contained in the watershed plan adopted for that management area under this chapter. Even if a county chooses to opt out under the provisions of this section, the other counties within a management area may adopt a proposed watershed plan as provided in this chapter.

(3) The planning unit shall not add an element to its watershed plan that creates an obligation unless each of the governments to be obligated has at least one representative on the planning unit and the respective members appointed to represent those governments agree to adding the element that creates the obligation. A member's agreeing to add an element shall be evidenced by a recorded vote of all members of the planning unit in which the members record support for adding the element. If the watershed plan is approved under subsections (1) and (2) of this section and the plan creates obligations: (a) For agencies of state government, the agencies shall adopt by rule the obligations of both state and county governments and rules implementing the state obligations, or, with the consent of the planning unit, may adopt policies, procedures, or agreements related to the obligations or implementation of the obligations in addition to or in lieu of rules. The obligations on state agencies are binding upon adoption of the obligations, and the agencies shall take other actions to fulfill their obligations as soon as possible, and should annually review implementation needs with respect to budget and staffing; (b) for counties, the obligations are binding on the counties and the counties shall adopt any necessary implementing ordinances and take other actions to fulfill their obligations as soon as possible, and should annually review implementation needs with respect to budget and staffing; or (c) for an organization voluntarily accepting an obligation, the organization must adopt policies, procedures, agreements, rules, or ordinances to implement the plan, and should annually review implementation needs with respect to budget and staffing.

(4) After a plan is adopted in accordance with subsection (3) of this section, and if the department participated in the planning process, the plan shall be deemed to satisfy the watershed planning authority of the department with respect to the components included under the provisions of RCW 90.82.070 through 90.82.100 for the watershed or watersheds included in the plan. The department shall use the plan as the framework for making future water resource decisions for the planned watershed or watersheds. Additionally, the department shall rely upon the plan as a primary consideration in determining the public interest related to such decisions.

(5) Once a WRIA plan has been approved under subsection (2) of this section for a watershed, the department may develop and adopt modifications to the plan or obligations imposed by the plan only

through a form of negotiated rule making that uses the same processes that applied in that watershed for developing the plan.

(6) As used in this section, "obligation" means any action required as a result of this chapter that imposes upon a tribal government, county government, or state government, either: A fiscal impact; a redeployment of resources; or a change of existing policy.

[2003 1st sp.s. c 4 § 5; 2001 c 237 § 4; 1998 c 247 § 9.]

NOTES:

Findings -- 2003 1st sp.s. c 4: See note following RCW 90.82.040.

Finding -- Intent -- Severability--Effective date -- 2001 c 237: See notes following RCW 90.82.040.

Intent -- 2001 c 237: See note following RCW 90.66.065.

RCW 90.82.140
Use of monitoring recommendations in RCW 77.85.210.

In conducting assessments and other studies that include monitoring components or recommendations, the department and planning units shall implement the monitoring recommendations developed under RCW 77.85.210.

[2001 c 298 § 2.]

NOTES:

Finding -- Intent -- 2001 c 298: See note following RCW 77.85.210.

RCW 90.82.900
Part headings not law -- 1997 c 442.

As used in this act, part headings constitute no part of the law.

[1997 c 442 § 803.]

RCW 90.82.901
Severability -- 1997 c 442.

If any provision of this act or its application to any person or circumstance is held invalid, the remainder of the act or the application of the provision to other persons or circumstances is not affected.

[1997 c 442 § 805.]

RCW 90.82.902
Captions not law -- 1998 c 247.

As used in this act, captions constitute no part of the law.

[1998 c 247 § 15.]

APPENDIX E

CORRESPONDENCE

Larry Morgan

From: "Larry Morgan" <lmorgan103@verizon.net>
To: "Paul LaRiviere" <larivpel@dfw.wa.gov>; "Dave Burdick" <dbur461@ecy.wa.gov>; "Alan Wald" <waldarw@dfw.wa.gov>
Sent: Thursday, May 01, 2008 10:41 AM
Subject: Pullman/WSU Effluent Reuse Project

Hello Paul, Dave and Alan:
I have listed a select few issues concerning the reuse project that may be of interest to you.
I can provide you with documented copies of the details when we meet if you wish. Let me know if you need any documented info and any or all of them.

1. In 1993 a private 18-hole golf course and effluent reuse project was proposed. The SEPA was appealed, thus an EIS was mandated. The private party withdrew his proposal. There were numerous environmental issues which were being ignored.
2. 2002 WSU Water Plan (Attachment A page 9 item W) states "additional 9 holes on golf course is entirely dependent on reclaim water project" Estimated Date 2003-2015.
3.Irrigation engineer for the new golf course, Kuhn Assoc., estimates July golf course irrigation needs at 900,000gpd, leaving little remaining for other irrigation needs, even at full build out. (I believe Mike from WSU at the last meeting stated somewhere in the 350,000gpd) I think that was the gpd used for the old course)
4. WRIA-34 Palouse Watershed Plan adopted in Nov. 2007 clearly states (SFPR-Appendix B-5 pg. 1 & page 16)) "....wastewater effluent reuse.....protect water rights, including riparian stockwatering rights, below city discharge points".
5. Washington Water Law (page II:7) [R]riparian owners are entitled to have their natural wants supplied by using so much of the water as is necessary for strictly domestic purposes, and furnish drink to man and beast, **before any can be used for purposes of irrigation**.....
[I know for a fact, DOE **failed** to acknowledge riparian stockwatering rights when they made their informal determination of the gpd that could be used for the re-use project) It must be acknowledged by all, that **[all]** water rights including stockwatering rights(RCW 90.22.010) must be accounted for through-out the entire Palouse River system before a formal determination of the gpd for reuse can be allowed. **The SFPR flows do not stop at Colfax !!!** Any flows removed for reuse would have significant impacts on others throughout the system.
6.Washington law provides that '[i]t is the policy of this state that a flow of water sufficient to support game fish and food fish populations be maintained at all times in the streams of this state." These limitations would affect any solution for diversion or storage of water on the Palouse River system during the summer months.
7. In may of 2007, Governor Gregoire vetoed Section 4 of Senate Bill 6117 because the portion of the proposed bill that changes the standard for mitigating impairment of existing water rights. I am not aware if there was any amendment to that bill concerning her veto.
a. I know the reuse issue is a "hot" subject in other areas of our State also. Their concerns echo the concerns of the riparian landowners living within the Palouse Basin Watershed.
8. Pullman's shorelines and critical areas ordinance has "no teeth" in them for protection of the waterways located within their boundaries. Floodplains and wetlands continue to be filled in and developed requiring very little if any mitigation for the protection of water quality and water quantity, thus natural flows from the floodplains and wetlands to the waterways no longer exist during the summer months. **Perhaps the effluent flows should be the mandated mitigation for the impairment of summer flows from the filling in of floodplains and wetlands.**

I have provided you with a few concerns. My downstream neighbors also are very concerned, if in fact, the reuse project is allowed.

I strongly believe an EIS must be mandated. The EIS must consider not only the SFPR, but the flows of the **entire Palouse Basin River System**. This is the only way all paper water rights including riparian stockwatering rights would not be impaired. Perhaps an adjudication of the entire Palouse River System is needed to sort out water rights including riparian stockwatering rights before any final decision is made for any proposed reuse project. Any impairments within the SFPR and downstream of the SFPR would definitely present an economical loss to riparian property owners, thus would be a direct violation of private property rights.

Without a mandated EIS and an adjudication of the entire Palouse Basin River System, agency decisions for the

proposed Pullman/WSU Reuse Project will be based entirely on a piecemeal approach and not on a holistic approach, thus their (agency) decisions would not be defendable in court.

Thank you for taking the time to consider a few of my concerns. I welcome any response you may have to any of them and will be looking forward to meeting with you soon.
Cheryl Morgan

WSU 2002 Water System Plan

Table 2.3
2000-2015 Major Campus Development

	Project	Location	Remarks	Gross Area (s.f.)	Estimated Date
A.	Rec. Center	North Fairway Rd		160,000	Opened Jan 2001
B.	Plant BioScience Bldgs	Current Johnson Hall Site	Research and Lab	70,000 Phase I 70,000 Phase II 275,000 completed	2004 const Ph I 2006 const Ph II 2011 Final Phase
C.	Teaching & Learning Center	Stadium and College	3.5 Levels parking plus classrooms	80,000	2002 complete
D.	Murrow addition	Veterans Way	Communications Studio	25,000	2005 complete
E.	Shock Physics Lab	Adjacent to Webster Hall		29,000	2003 complete
F.	Education Classrooms Bldg	South of Cleveland Hall	Classroom	20,000	2001 or 2003 const
G.	Science Addition	Replaces Admin Annex	Labs and Classroom	80,000	2009 complete
H.	Public Safety Bldg	Currently across from CUB moves to Motor Pool Location	Police, Fire, EMT, 911 Replaces 20,000 facility	30,000 (10,000 increase)	2009 complete
I.	Motor Pool	Dairy Rd	Relocated and rebuilt	No change from current sf	
J.	Indoor Practice Facility	South Fairway Rd		50,000	2007 const
K.	Hotel	3 possible sites at North side of campus	Includes 500 person conference facility	150 Unit	2006 const
L.	Veterinary Med	South of Wegner Hall	Lab and Clinic	70,000	2009 const
M.	Academic space	Grimes Way at rugby field	Classrooms	125,000	2015
N.	Indoor Tennis Complex	South Fairway Rd		80,000 (10 indoor)	2007
O.	Greenhouse relocate	Wilson Rd	Increase existing sf by 25%	65,000 (13,000 increase)	2012
P.	Housing and Classrooms	West of Commons Hall	Valley Crest Village will be razed and replacement units located on this site.	Housing >45,000 classroom ~35,000 sf	2007 housing const 2010 classrooms
Q.	White Hall	Existing	Remodel	60,000	
R.	Compton Union Bldg	Existing	Remodel, remove hotel and ballroom	220,000	2007 complete
S.	AMID and Facility +	Holland -Old Library	Remodel	200,000	2007 complete
T.	Football Stadium Renovation	Existing	Remodel to add 12,000 seats, press boxes and executive boxes.	No change	2015
U.	Regents Complex	Colorado Street	Replace existing complex with new housing closer to Colorado St.	130,000	2005 to 2011
V.	1. Wilmer-Davis 2. Duncan Dunn 3. Community Hall 4. McCrosky Hall	Existing	Remodel housing units	180,000	2007 to 2011
W.	Additional 9 holes on golf course	East of existing	Entirely dependent on reclaim water project		2015 2003 Design of reclaim
X.	Steam Plant Renovation	Existing	Replacement of generation equipment		2002 – 2003 const

Larry Morgan

From: "Larry Morgan" <lmorgan103@verizon.net>
To: "Paul LaRiviere" <larivpel@dfw.wa.gov>; "Dave Burdick" <dbur461@ecy.wa.gov>; "Alan Wald" <waldarw@dfw.wa.gov>
Sent: Friday, May 16, 2008 1:03 PM
Subject: City of Pullman/WSU Effluent Reuse Project

Hi Paul, Dave and Alan:

There are many residents in this area who have been and continue to be opposed to the golf course expansion for numerous reasons. Many do not speak out because they or their spouses work at WSU.

I came across an interesting news article printed in the Moscow/Pullman Daily News dated April 17,2004, of which I have a copy for you when we meet. "Water issue continues to muddy golf course expansion plans at WSU" I have listed a few.

How maintenance and operations of the course will be paid for.
The proposal documents indicate that water use at the new course would double.
PBAC has said it will not support the concept of an expanded or new golf course using deep aquifer water.

Even if the wastewater reuse plan is fully funded and the filtration pumps and pipes are in place, it is not a "silver bullet" to the water question for some local geologists.
"I've heard it said that it's "a waste to return our wastewater to the stream. This denies the legitimate legally binding claims of downstream users of streamflows." said WSU geology faculty member Kent Keller. " I would be uncomfortable taking the position in principle that watering WSU's golf course is more important to the university than the water uses of our fellow citizens downstream. It makes us poor neighbors, hydrological speaking, when we should be leaders by example in an increasingly water-short region."
Larry Kirkland from PBAC agrees with Keller that downstream users of water don't view water in streams running through Pullman and Moscow as wasted water.

"For much of the year the effluent (from treatment plants in Pullman and Moscow) is improving the quality of the South Fork of the Palouse River and Paradise Creek. "The quantity of water (discharged) is also important to prevent the streams from becoming intermittent" Kirkland said.

Keller also disputes the idea floated by some in WSU's capital planning office that watering the golf course will help recharge shallow groundwater bodies.
"Ive heard a claim that golf course irrigation will recharge groundwater", he said. "That would be true only if the course were over-watered.
Irrigation schemes are designed to apply only the water that plants need. So little, if any, of the water diverted for golf course irrigation would go to groundwater recharge." **I (Cheryl) found this statement of interest. His statement claims any possibility of recharge would require over-watering of the course. Would over-watering also be required for mitigation for flows to other streams. I am sure over-watering of the WSU golf course would cause erosion problems because of the steepness of the course and golfers would not be very happy golfing on a soggy course.**

Just wanted to pass this info on to you.
Thank you for taking the time to look at the "big picture". WSU has placed the cart before the horse once again.
Cheryl Morgan

May 30, 2008

To: Paul LaRiviere, Dave Burdick and Alan Wald

Re: City of Pullman/WSU Effluent Reuse Project

Hello Paul, Dave and Alan:

In March 2006 through June 12, 2007, I participated (as did others) in a study of groundwater quality conditions along the South Fork of the Palouse River. The project was conducted through DOE by Kirk Sinclair. I received a written summary (dated May 16, 2008) from Kirk showing the water levels and water quality data his staff obtained from my well during the testing period.

Kirk stated within the report that **"the water level elevations for your well were consistently below the streambed elevation-which suggests the creek may be feeding the groundwater at your location.**

If there is any possibility that hydraulic continuity of the SF is feeding the groundwater at my location, it is of great concern to me if the flows of the SF are diminished in any way. My two neighbors living in close proximity to me just drilled wells in Dec. 2007. We are all county residents, however, both of my neighbors are currently hooked up to the City of Pullman's Public Water System and have been for over [40] years. The City would not allow me and my husband to hook up to their system when we moved to our property in 1970, even though the service line is located just across the county road from us. The depth of our well is 90 feet.

DOE and the City of Pullman have **no regulatory enforceable** management of exempt well drilling, thus providing no protection of impairment to senior water rights and stream flows. Kittias County and other areas in the state are experiencing significant issues concerning **"non regulatory enforcement"** by DOE for the drilling of exempt wells, thus providing no sustainability of water quality and water quantity for our present and future generations.

It is strongly documented within the Washington Water Law Code that basic scientific principles help describe the relationship of movement and exchange between surface and ground waters, thus the complex nature of surface and ground water interactions has shaped the law of ground water in Washington. Where hydraulic continuity occurs, surface and ground water cannot be considered separate sources; withdrawals from one will affect the other.

I personally believe as do others living in Pullman, that the Big Ground Water Pumpers (Pullman and WSU) have played a significant role in the depletion of natural flows of the streams located within the SFPR sub-basin. Those of us who have lived along the SF for most of our lives (60+years) are not in agreement with the statement "there wouldn't have been any summer flows in the SF if it weren't for the effluent flows of the WWTPs

of Moscow and Pullman". I have continued to disagree with this statement through-out the public watershed planning process. My comments have continued to be ignored.

However, if sound scientific studies have proven that the flows in the SF have always been solely supplied by the conveyance of the WWTPs from Moscow and Pullman, any water that might be targeted for reclamation has already been part of the water budget for several years, thus allowing **non**-mitigated "in-kind" mandates for past and present allowable land uses within urban jurisdiction, such as the filling in of the floodplains and wetlands, etc. Floodplains and wetlands have historically been the storage tanks providing natural flows to all streams during the dry seasons.

The Water Resources Act of 1971 sets forth several principles of water management that must be considered in permitting decisions. Wash. Rev. Code 90.54. This act includes **retention of waters within streams** and lakes in **sufficient quantity and quality** to support game fish, food fish, wildlife, stockwatering requirements, etc. It has been clearly documented with the approval of numerous WRIA Watershed Plans through-out this State, that the State of Washington has "failed big time" in the protection of water quantity and water quality of our streams in the majority of our state-wide watersheds.

The lack of a **"holistic and in-kind mitigation"** approach for decision making has been the number "one" reason for the failure of the continued significant impairments of our natural resources, thus providing no sustainability for present and future generations.

The WRIA-34 Plan for the Palouse Basin has identified four areas of concern within the Palouse watershed: (1.) Insufficient water supply, (2.) Poor water quality, (3.) Loss of riparian and aquatic habitat, and (4.) Inadequate instream flows. (Sustained surface flows have been reduced due to changes in the basin's land uses and vegetative cover. Infiltration to groundwater and subsequent discharge to streams has been reduced, exacerbating low flows in late summer and early fall.)

I believe all [4] of the concerns are directly related to the allowable piecemeal management of land uses within the Palouse Basin. The SFPR is the sub-basin I live in. I am a rural resident, however my home and property is on the border of the City of Pullman. Piecemeal development and the lack of "in-kind" mitigation allowed by the City and WSU provide a lack of sustainability of our natural resources for our present and future generations.

The private property owners located along the SF just downstream of the City are being unjustly accused of the continued degradation of the stream/s running through our lands, when in fact; the continued degrading of the water quality and water quantity of the SF is caused by the piecemeal approval of upstream land uses. The dredging of the river in the late 1950' or early 1960's, the armoring (1983) of the river bank at the city's WWTP providing [no] in-kind mitigation for the protection of ongoing significant bank erosion/lose of adjacent and downstream properties, the continued filling in of the floodplain and the wetlands, illegal point source conveyance of stormwater to all streams located within urban jurisdiction (this includes WSU), there are [3] municipal landfills

located in close proximity to the SF providing encroachment and the leaching of pollutants into the SF. The SFPR basically has been trashed, only to be used as a utility channel to transport waste, thus aquatic life is short lived or has disappeared completely (dead fish is a common occurrence in the SF). This is unacceptable to those of us living within the riparian corridors of the SFPR watershed.

In my [12] years of watershed planning, agencies continue to blame riparian livestock grazing to be the number [1] cause of water quality degradation of our streams located within the Palouse Basin.

Livestock grazing was a predominate use of the riparian lands along the SF until the mid 1970's at which time land upstream of the city core was annexed into the city and the land use was then regulated under the city's jurisdiction.

It is a known fact by those of us who have lived along the SFPR for many years that the river and its tributaries no longer support the aquatic life as the streams once did through the mid [1970's], thus it clearly appears that [past] riparian livestock grazing practices located within the SF sub-basin of WRIA 34 played a significant role (an unrecognized role by many) in providing the enhancement and protection of the natural environment. We are seeing just the opposite under the piecemeal land management of urbanization.

DOE is charged by numerous State and Federal Water Laws to protect the retention of waters within streams in sufficient quantity and quality to protect instream natural values and rights.

Instream flow values and rights can only be protected and managed by the adoption of an instream flow ruling. There are many variables that must be considered to ensure the needed levels of protection. This requires sound scientific data.

Because there was not [sufficient] sound scientifically defensible data available for the SF, the consensus of the WRIA 34 Planning Unit chose not to examine instream flows as part of their plan development for the SF, however, the law does give Ecology the authority to adopt instream flows by rule in a basin where local flow recommendations were not reached through the WRIA Planning process.

A mandated holistic scientific study of the SF must be performed before any final decisions are made to allow any projects that would minimize instream flows of the SFPR, regardless if the project is for effluent reuse or for a storage project.

1. The study must address the ground water and surface water continuity of the SFPR to determine the extent of potential impairments to existing water rights (surface and ground water). This would require a ground/surface water monitoring program, similar to the monitoring performed on my well by Kirk Sinclair. The monitoring must be ongoing for 3 to 5 years to collect sufficient scientific data before the approval of reuse/storage projects are made.

2. A study addressing current summer and fall stream flows must be performed at numerous designated sites. The study must address upstream and downstream flows, because impairments can occur both upstream and downstream of the prospective source of reclaimed water. The study must be ongoing for 3 to 5 years to collect scientific data before the approval of reuse/storage projects are made.

3. If reuse/storage projects are approved, DOE must be obligated to retain a watermaster to resume continued monitoring of flows of the SF providing the protection of any possible impairments to water rights and to the natural environment of the SFPR.

4. On June 11, 2008, DOE will be hosting a meeting to form an advisory group addressing the TMDL of the SFPR. It would only stand to reason that the reuse project will be addressed within the TMDL public process.

5. Publication No. 03-11-007 dated March 2003 was provided to the WRIA 34 Planning Unit. This document was published under the direction of DOE and WDFW. It is clearly documented through out this publication that management of all public waters of this state must "ensure that instream resources and values are protected and preserved before any new water uses are allowed. To meet this statutory mandate, the recommended instream flows must be scientifically defensible". The **lack** of scientifically defensible data is the **prime** reason the WRIA 34 Planning Unit chose **not** to examine instream flows as part of their plan development for the SFPR sub-basin.

Those of us living along the riparian corridor of the SF, contend that allowing less flows to the SF during critical times of the year would **minimize** instream flows to the extent of continued significant impairment of the natural environment of the SF, thus providing no preservation for game and food fish, and other wildlife and would diminish recreational and aesthetic values of said public waters.

In summary of my concerns, I strongly encourage you to reject the proposal for the reuse project at this time until a holistic sound scientific study is performed and an "instream flow" rule has been adopted by DOE for the SFPR. Without the adoption of the "instream flow" rule, decisions would be premature offering no sustainability of the natural environment of the SFPR for current and future generations.

Please confirm by email if you received this comment letter.

Sincerely,

Cheryl Morgan

Cheryl Morgan
102 Hayward Rd.
Pullman, WA. 99163

Sept. 8, 2008

From: Cheryl Morgan, Planning Unit Member for WRIA-34
102 Hayward Rd.
Pullman, WA. 99163

To: WRIA-34 Planning Unit Members

Re: City of Pullman/WSU Proposed Wastewater Effluent Reuse Project SFPR

Dear Planning Unit Members:

I have been a resident of Whitman County for my entire life of 65 years and have lived within the riparian corridor of the SFPR for 60 years. The past [12] years I have been an active participant in Watershed Planning for the Palouse Basin Watersheds.

My continued role and commitment to Watershed planning within the Palouse Basin is to have a voice in the planning process for the protection of riparian property and water rights and instream flow rights, thus providing sustainability of these rights for our present and future generations.

I have attached three letters directed to Dave Burdick (DOE Water Resources Program), Paul LaRiviere (WDFW Instream Flow Biologist) and Alan Wald (WDFW) for your review.

My comment letters were to provide them with a "holistic over-view" of facts and concerns for the protection of riparian property and water rights and instream flow rights for the SFPR before they make any final decisions to move forward with the proposed reuse project. To date I have not been contacted by them addressing my concerns.

The objective of the Clean Water Act (CWA) "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters", thus the implementation of the CWA is delegated to the state, so Ecology is charged with carrying out all of these programs.

The Water Resources Act of 1971 establishes a comprehensive program to protect instream flow. The statute mandates the retention of "base flows", thus DOE and WDFW are charged by numerous State and Federal Laws to protect the retention of waters within streams in [sufficient] quantity and quality to protect instream natural values and rights. **The "base flow" for the SFPR has not been implemented.**

The protection of property rights, water rights, stream rights and the protection of the over-all natural environment of the SFPR have a lawful right of "due process" as set forth by numerous Federal and State Laws before any reuse and/or storage projects are approved and permitted by DOE and WDFW for the SFPR.

1,

Also, the Washington State Pollution Control Hearings Board has recently ruled "there's not a problem with the declining aquifer (Grande Ronde) which supplies WSU", thus DOE was not required to analyze the declining aquifer.

The following are questions I have for the Planning Unit Members:

1. Because the WSPCHB has ruled the declining aquifer supplying WSU "is not a problem", what is the urgency in the implementation of a **[very costly reuse project]** at this time?

2. If there has not been a [scientifically defensible] "instream flow rule" adopted for the SFPR, how does DOE and WDFW propose to enforce the protection of water rights, private property rights and instream values for present and future generations?

3. Why is DOE and WDFW mandating the adoption of the " instream flow rule" for the NFPR and not for the SFPR?

I could list more questions, but perhaps after reading my comment letters you will have additional comments and questions.

As Planning Unit Members of WRIA-34 we must recognize Watershed Management is to provide sustainability of our valued ecosystem for our present and future generations for the long term not for the short term, thus decisions must be based on a "holistic" approach not a "piecemeal" approach.

Thank you for taking the time to review my comment letters concerning the proposed reuse project.

Sincerely,

Cheryl Morgan

Cheryl Morgan

From: Larry Morgan [mailto:lmorgan103@verizon.net]
Sent: Wednesday, October 15, 2008 4:41 PM
To: Stasney, Bryony
Subject: WRIA-34--Comment Draft DIP (083-93055.200)

Hi Bryony!!
I have been reading through the Palouse Watershed Plan trying to locate the page/s as to why the Planning Unit voted to move forward with the instream flow rule for the North Fork, Cow Creek sub-basin, providing the reason why the North Fork and Cow Creek sub-basin was selected.

I know why as do the other members of the planning unit. However, the concerned public and riparian landowners do not know.

It would have been of benefit to the citizens and to the riparian landowners of the SF to have mentioned that the SF was not selected at this time for an instream flow rule within the final adopted Palouse Watershed Plan (section 6-4 (page 6-40SFPR Management Area). Giving the reason/s why.

One of the main reasons was because of the lack of funding. Watershed Planning only provided 100K to address instream base flows. In a watershed as large a WRIA 34, it was quickly realized that money would not go far. The North Fork and the Cow Creek sub-basin had more data on stream flows than the SF, thus those streams were chosen.

I would like the above (or similar wording) to be added to Section 7.0 Instream Flows (page 29) within the Draft DIP.

I strongly believe adopted Instream Base Flows must be a deciding factor in the approval of all "public funding" for proposed implementation projects within the Palouse Basin. Otherwise, without an adopted In Stream Base Flow Rule for streams located within the Palouse Basin Watershed there will be absolutely **[no]** enforceable management of [out] of stream and [in]stream values for our present and future generations, thus our mission statement means nothing and the WRIA-34 Palouse Basin Watershed Plan really offers no valuable resource for future development and implementation for the protection of a valued resource (water) within the Palouse Basin. We will be back to "square one".

I will most likely be sending you other comments.

Please let me know if you have received this email. Please feel free to provide me with any comment you may have addressing my input.

Sincerely,
Cheryl Morgan

From: Larry Morgan [mailto:lmorgan103@verizon.net]
Sent: Friday, October 17, 2008 4:35 PM
To: Stasney, Bryony
Subject: Selection of North Fork for instream Flows---WRIA-34

Hi Bryony !!!
I have soooo many documents concerning the WRIA process that I can not locate the meeting minutes when the Planning Unit selected the NF and Cow Creek for stream flows. Perhaps the minutes would give us more information as to why the NF and Cow Creek were selected. I seem to recall the NF and Cow Creek had more historical recorded flow data at various sites. The SF only has one flow site, thus the 100K would not go very far in pursuing the scientific data needed to tackle stream flows for the SF. Because the Cow Creek had been adjudicated we felt Cow Creek would be a easy stream to tackle, thus Cow and the NF streams were selected. We soon realized Cow Creek was more complicated than we thought and there simply was not enough funding to do the NF and Cow, so we chose the NF to provide us with just how the process really works. It appears the process is very complex, so it will be interesting to see just how the Planning Unit proceeds.
Is DOE mandated to begin setting flows within the Palouse Basin in 2010?
Thank you for your help. Have a nice week-end.
Cheryl Morgan

October 18, 2008

From: Cheryl Morgan, WRIA-34 Planning Unit Member
102 Hayward Rd.
Pullman, WA. 99163
(509-332-4741)

To: Golder Associates, Inc. and Dally Environmental

Attn: Bryony Stasney and Lisa Dally Wilson

Re: Draft 1 (083-93055.200) WRIA 34- Palouse Watershed Detailed Implementation Plan

The following are my comments in regards to Draft 1 of the DIP:

Page 3

1.1 Setting. The "Draft" DIP is intended for a number of audiences including many who are reading the information for the first time for public comment, thus I recommend:

(a) To include a map of the entire WRIA 34 [DIP figure 2] and also a description of each of the [5] management areas plus a map of each management area as was provided within section 3 of the Adopted Watershed Plan. Move paragraph 3 to paragraph 2 then enter the description of the [5] management areas as provided in the Plan, then continue with the paragraph "the main tributaries of the Palouse include.....

(b) Include list of the problem/issues definition as provided in section 2. 3.3 in the adopted Watershed Plan (pages 2-4 & 2-5).

(c) Also provide current information concerning the TMDL process in each Basin. Is the TMDL completed or ongoing? This is a very important issue to consider within the DIP when requesting funding for current and future proposed projects/actions and studies/assessments. There could be possible conflicts in funding if a TMDL is not completed within the 303(d) listing of impaired water bodies within a subbasin.

Page 3

1.1 Setting. (2nd paragraph) The main tributaries of the Palouse River include its North and South Forks..... However, the amount of runoff from these subbasins is not proportional in 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),.....

It would be of benefit to those of us living within the SF subbasin to also include the percentages of drainage and flows of the SF to the mainstem Palouse.

Page 5

1.3.2 Phase I Watershed Planning (RCW 90.82)
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....."
Need to include the listing of key goals identified by the Planning Unit to be addressed in the watershed plan as listed on page 1-5 (1.3) of our adopted Watershed Plan (Dec. 2007).

Page 29

7.0 Instream Flows

The first paragraph needs to provide the reason/s the Planning Unit selected the North Fork and Cow Creek over the SF and other streams located within the Palouse Basin in addressing the setting of the instream flow rule.

As I recall, one of the main reasons was because of the lack of funding. Watershed Planning only provided $100K to address instream flows, thus because the Palouse Basin WRIA area is so large, it was realized that money would not go very far. Also, because the NF and Cow Creek had more scientifically defensible historical and current data on stream flows than the SF and other streams, it only stood to reason to select the NF and Cow Creek.

Table 2-3 (Page 3 of 4) Tier 1 Capital Projects/Actions and Studies/Assessments

SFP-25 " Identify and implement wastewater effluent reuse strategies where practicable, considering legal interpretation of obligation/amount of water to supply and protect water rights, including riparian stockwatering rights, below city discharge points".

Need to add a foot note concerning stockwatering rights as provided within the Palouse Watershed Plan adopted Dec. 2007. Refer to Basin-Wide Management Actions [5.3 page 4]. "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".
Also need to add foot note of comment by DOE which states: "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)

Appendix A, Table A-1—Action Tracking Table

SFP-25 "Identify and implement wastewater effluent reuse strategies....." (same as above)

Need to add same foot notes I have requested for above under Table 2-3.

Page ES-2(Paragraph 2)

"This DIP is adopted 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 or omitted 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, 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".

During the DIP process I have provided the WRIA 34 Planning Unit with new information concerning the proposals of an effluent reuse project and an aquifer storage and recovery (ASR) project which will be located within the South Fork of the Palouse River Subbasin. During the WRIA 34 Planning Unit meeting held on Feb. 13, 2008 (as per approved minutes), I once again (as I have for the past 3 years during the Planning Process of WRIA 34 to no avail) expressed my concerns of the study preformed by DOE in 2002/2003 concerning the proposed wastewater reuse project proposed by the City of Pullman and WSU. One of my ongoing concerns through out the Planning process was, if in fact, DOE had taken into account livestock watering within the riparian corridor of the SF and the mainstem of the Palouse when they (DOE) made their informal determination of how much effluent water could be diverted from the flow to the SF for reuse. Others attending the meeting were in question also. Mimi stated she didn't know if livestock watering rights were included. She said she would find out and report back at the March 12th meeting. Because of the lack of time my other concerns were not allowed to be presented at the Feb. meeting.

During the WRIA 34 Planning Unit meeting held on March 12, 2008, I questioned Mimi if she had found out if livestock watering had been accounted for within the DOE study. She stated, "that although the study which examined the amount of water available for the reuse project did not take into account riparian livestock watering, the amount of paper water rights (certificated water rights and claims) evaluated is estimated to exceed actual water use and that the study was confined to examining impacts on the South Fork from the point of diversion to the confluence with the North Fork". Because of the lack of time during the March meeting, Mimi suggested my other concerns could be addressed in the DIP. The Planning Unit agreed that my other issues concerning the reuse project could be addressed in the DIP (as per approved minutes).

During the WRIA 34 Planning Unit meeting held on Sept. 10th, I was finally allowed to distribute copies of my letter dated Sept 8th (with attachments) addressed to the Planning Unit Members (see attached). My letters of concern were to be discussed at the next Steering Committee Meeting which was held on Oct. 8th from 11:00am to noon, at which time the Steering Committee was to make some sort of recommendation/s to the Planning Unit in response to my many concerns.

The Steering Committee did meet on Oct. 8th to discuss my issues as presented in my letters, however, the out come of the Steering Committee meeting was not mentioned during the WRIA 34 Planning Unit meeting held on Oct. 8th from 1:00pm to 4:00pm.

When will my concerns be addressed by the WRIA 34 Planning Unit Members?

Sincerely,

Cheryl Morgan

Cheryl Morgan

From: Larry Morgan [mailto:lmorgan103@verizon.net]
Sent: Wednesday, October 22, 2008 6:12 AM
To: Lisa Dally Wilson; Bryony Stasney
Subject: Additional Comments to WRIA-34 DIP

Hello Lisa and Bryony:

I didn't want to take up time during the NF instream Flow meeting yesterday (Oct. 21, 2008). Does the protection of livestock watering fit into the "reservation" or will livestock watering come into play when DOE sets the NF instream flow rule?

As you know, that issue has been of concern to me regardless of which subbasin we are/will be addressing in setting the instream flow rule.

The reason for my concern is because the Planning Unit has listed Basin-wide Instream Flow Actions within our adopted Watershed Plan on page 5-4. One of the actions was "The Planning Unit believes livestock rights have been and should be recognized as an inherent right for landowner....." The foot note by DOE: "Riparian stock watering would need to be adjudicated (e.g. Cow Creek) to provide certainty for landowners of stream parcels." (Ecology 2007) **(this foot note is concerning to me for future protection of riparian property rights)**

I know both instream and groundwater watering for livestock has been a "hot" issue between DOE and The Cattlemen's Assoc. for a few years now, but am not sure if there has been any final court ruling made to date. I think this will be of great concern to riparian landowners during the setting of instream flow rules within the Palouse Basin. In the long-run DOE may end up being partitioned by the riparian landowners to adjudicate all streams within the Palouse Basin if this will be the only way to protect riparian rights.

When the Draft DIP goes out for "public comment", this is one issue that needs to be strongly brought to the attention of the riparian landowners within each subbasin.

My additional requested comment to the draft DIP is to include [all]of the bulleted items listed on page 5-4 & 5-5 of the adopted Watershed Plan within the "Instream Flows" section of the DIP (7.0 beginning on page 29) with the added foot note from DOE.

******I still want my comment to be entered for Table 2-3, etc. as I have requested on page 2 of my comment letter dated Oct. 18, 2008.**

Lisa, after I returned home from the meeting I received the email from Bryony on the reason the NF, Cow Creek were selected for instream flows over other streams within the Palouse Basin. The response was really well written. Would it be possible to enter the entire response as provided within the email?

Thank you,
Cheryl Morgan