

Oregon Watershed Enhancement Board

Region 6 (Mid Columbia) Review Team

Evaluation for 10/19/2009 Applications

APPLICATION NO.:	210-6043	PROJECT TYPE:	Restoration
PROJECT NAME:	Walla Walla Basin Aquifer Replenishment and Stream Restoration Program (ARSRP)		
APPLICANT:	Walla Walla Basin WSC		
BASIN:	UMATILLA	COUNTY:	Umatilla
OWEB FUNDS REQUESTED:	\$479,755.00	TOTAL COST:	\$841,115.00

APPLICATION DESCRIPTION:

The bistate Walla Walla River begins in the Blue Mountains in northeast Umatilla County and flows down through Washington to the Columbia River. This basin hosts more than 50 spring-creeks that historically provided year-round cool baseflow and habitat for salmonids. Through various human-induced changes the underlying shallow aquifer is in decline. The decline directly jeopardizes both the spring contributions as well as the in-channel groundwater returns that maintain river baseflows. Further complicating this situation are recent efforts to save water through piping irrigation conveyances that have had the unintended effect of further skewing the aquifer's recharge-discharge balance. Starting in 2003 the Walla Walla Basin Watershed Council (WWBWC) and its partners began testing aquifer recharge as a water management tool in the basin. OWEB, Bonneville Power Administration (BPA) and the Washington Department of Energy (WDOE) have committed funding to these efforts that have proven effective at recharging the aquifer and restoring flows to springs. This same partners (BPA & WDOE) have been joined by the Oregon Department of Transportation (ODOT) in this proposal.

The project proposal included construction of additional spreading basin at the Hudson Bay site, construction of spreading basins on two ODOT surplus property, four infiltration galleries will be incorporated into already piped ditch systems as prototypes for the dual purpose recharge concept (conserve water during irrigation season & recharge during winter peak flows). Effectiveness monitoring will quantify the success of the project, monitor water quality, modeling to generate analysis for where/when and how much recharge the program develops. Coupled with the model will be other policy processes that will also help to direct the program in winter flow allotment discussions, current groundwater appropriation management by Oregon Water Resources Department and operations of ditch and natural stream systems to maximize other opportunities for aquifer recharge, and water quality concerns like turbidity during higher spring freshet flows.

OWEB funds would be used for: 7% pre-implementation, 9% project management, 6% in-house personnel, 29% contracted services, 25% supplies/materials, 16% effectiveness monitoring, 1% education/outreach and travel, 7% fiscal administration.

The Mid Columbia Steelhead Recovery Plan identifies water conservation as a key action; the U.S. Army Corp of Engineers Walla Walla River Flow Feasibility Study identifies shallow aquifer recharge as a necessary complementary action to irrigation water conveyance efficiency; the Northwest Power Conservation Council's Walla Walla Subbasin Plan identifies shallow aquifer recharge as a water conservation tool; the Oregon Water Resources Dept. Umatilla Basin Plan (1988) recommends aquifer recharge; Umatilla County Coordinated Ground Water 2050 Groundwater Plan identifies aquifer recharge as one of the primary options to pursue in order to address county wide declines in groundwater storage.

REGIONAL TEAM REVIEW:

This was a resubmit and the application was better written and easier to understand, although there were still complex components of the application that reviewers were not clear about. The application was so large that reviewers got lost, and they thought there was a lot of extraneous information in the application. The review team liked the actual recharge infrastructure component and the effectiveness monitoring of the project but they hesitated on OWEB funds being used for “program development” and “bistate coordination,” questioning whether those activities were part of the “on the ground” restoration work. This is a very complex issue and it was recognized that without the data from this project, future water management will be more difficult. The team continued to struggle with whether the primary benefit will be to water users or to the environment. The team sees a resource benefit now by keeping the 25 cfs in the river and keeping the aquifer charged, but as time goes on and more development occurs and more wells get drilled, does that resource benefit begin to shrink or disappear or require even more water to balance out intake and output of the aquifer? The team also had questions about the staff salaries – how many people does this project employ and are they full time devoted to this project? After a long discussion, the team acknowledged the importance of this project to the watershed. The team was in favor of funding, but paying only for aquifer recharge installations and effectiveness monitoring.

Ecosystems Process & Functions: Stabilizing and restoring aquifer levels will equate to increased spring-creek flows, increased groundwater returns, increased cool water refugia for fish and maintaining instream flows.

REGIONAL TEAM RECOMMENDATION: Fund with reduced budget to reflect funding of constructions and effectiveness monitoring.

REGIONAL TEAM PRIORITY: 12 of 15 Capital

CAPITAL AMOUNT: \$ 391,524 NON-CAPITAL AMOUNT: \$2,250

EFFECTIVENESS MONITORING AMOUNT: \$76,255

STAFF RECOMMENDATION TO BOARD: Fund at a reduced level of \$393,774.