

2013-15 Water Conservation, Reuse & Storage Grant Applications

City of Halfway

\$40,000 - Reuse

The City of Halfway is conducting a feasibility study to identify reuse of affluent water from their wastewater treatment facility for irrigation purposes. The study will take into consideration the location, size, soil condition and financial feasibility of each land parcel. The reuse water applied to the land parcels will result in improved water quality and greater flows in Pine Creek because it will leave currently diverted irrigation water in the Creek.

City of Newport

\$250,000 - Storage, Above Ground

During construction of a water treatment facility in Newport, engineers discovered that the subsurface soils had a high potential for liquefaction at two reservoir dams-Big Creek Dams 1 and 2. A preliminary geotechnical and seismic evaluation confirmed serious safety deficiencies that could result in catastrophic failure during a seismic event-causing flooding and loss of the city's sole source of drinking water. A feasibility study will enable the city to evaluate the soil composition to assess the behavior of the dams foundation and embankment soils for a decision to repair, rebuild, or replace the dams.

OSU/Benton/Corvallis

\$48,656 - Reuse

This is a collaborative feasibility project between Benton County, the City of Corvallis, and Oregon State University to implement the next phase of the city's comprehensive planning effort to treat storm water via green infrastructure. The first phase has focused on identifying locations and treatment types using an urban watershed scale analysis. This project will help advance the city's effort and similar projects to the next level by investigating field scale planning policies and designs needed to build green infrastructure. Key components of this planning project will include establishment of rain garden sites for identification of field scale design criteria, impact assessments, education and outreach. The sites will be located at a Benton County Facility.

Walla Walla Watershed Council

\$232,500 - Storage, AR

This planning study will focus on the feasibility of aquifer recovery (AR) in the depleted 'Eastside' sub-basin of the Walla Walla Basin's alluvial aquifer. The Eastside ASR project would allow irrigators to leave water in-stream and instead utilize stored water in the aquifer during low-flow months to help improve fish passage, river habitat and reduce water temperature in the Walla Walla River. The feasibility study will focus on four tasks. 1- Work to redesign the existing Eastside irrigation diversion to improve it for ASR use and to eliminate fish stranding. 2- An evaluation of the existing Eastside pipeline and redesign if necessary. 3- Conduct a hydrogeologic analysis of the Eastside sub-basin to determine aquifer characteristics. 4-Drill 3-4 monitoring wells to help with the hydrogeologic analysis and provide data from pumping tests.

Central Oregon Irrigation District

\$17,401 - Conservation

The feasibility study will comprehensively examine a section of COIDE's existing F-Lateral canal, approximately 2,273 linear feet, to confirm the 7.5 cfs (2,673 AF) loss calculated in 2012 and will determine the best alternative to maximize water conservation. The overall goals are to conserve water through this stretch of the lateral for water conservation and delivery improvements. The conserved

water will be permanently in-streamed in the Deschutes River or may be used towards the North Unit Irrigation District Water supply Initiative.

Fifteenmile Watershed Council

\$99,000 - Storage, Above Ground

Fifteenmile Watershed Council is requesting \$99,000 to evaluate the potential application of above-ground storage to augment late season stream flows to provide more stable water supplies. Fifteenmile watershed is home to Federally-listed threatened steelhead, other native fish species, and a vibrant farm community. As stream flow declines each summer, the watermaster regulates junior water right holders in order to protect senior users, including some in-stream rights. Low stream flow is identified as a primary limiting factor for viable fish populations. Also, portions of Fifteenmile streams exceed temperature requirements for salmon and trout rearing, migration, and spawning. The study will evaluate above ground storage opportunities in the basin and determine whether any potential storage facilities could meet the dual goal of benefitting both farms and fish.

Walla Walla Watershed Council

\$25,000 - Storage, Above Ground

The study will identify costs for a Walla Walla River flow improvement project. An initial United States Army Corps of Engineers (Corps) study sponsored by the Confederated Tribes of the Umatilla identified the best alternative to be pumping and piping water from the Columbia River to serve many of the irrigated farms in the Walla Walla Valley so they can leave their Walla Walla River irrigation water rights in the river to improve flows for fish. The Corps and the Tribes worked with the local community to come up with a plan that could meet flow targets for fish, but it was very expensive to build and operate. This study will utilize relevant information from the Corps study but look at a farm-based approach and also include senior water users along the downstream Washington portion of the Walla Walla River to ensure fish flow benefits are protected to the confluence with the Columbia River.

East Valley Water District

\$140,000 - Storage, Above Ground

This is the third phase of the district's efforts to evaluate environmental and financial feasibility for construction of an above ground storage reservoir along Drift Creek. During this phase, they are requesting feasibility funding to secure regulatory permitting requirements, continue flow and temperature readings for the hydrology analysis, prepare the NEPA analysis, and pursue fish passage studies.

Irrigation Canal Company & Union SWCD

\$35,000 - Conservation

This feasibility study request is to determine the amount of water loss in a canal and ditch delivery system serving approximately 58 users. It's an aging system of over 100 years. The object of the study is to evaluate the system to determine water loss, inefficiencies within the system and the potential for improving in-stream flow in the upper Grande Ronde River.