

Coyote Wash Urban Enhanced Runoff Recharge Project

Urbanized areas produce additional storm runoff from streets, parking lots, and roof tops during storms that can be put to beneficial use to increase regional water supplies. The Coyote Wash recharge project now under design will capture some of this additional “urban enhanced runoff” from a watershed, mostly within the City of Sierra Vista, to recharge the underground aquifer.

This innovative, first of its kind project will increase the amount of water available for both local communities and the flows of the San Pedro River in the San Pedro Riparian National Conservation Area (SPRNCA), managed by the U.S. Bureau of Land Management.

The Coyote Wash Urban Enhanced Runoff Recharge Project is designed and engineered through a NRCS Watershed Protection and Flood Prevention Act (PL-566) grant that was awarded to Cochise County for a Watershed Plan / Environmental Assessment and Engineering. This project will increase the infiltration of stormwater in Coyote Wash, and is expected to recharge between 150 and 630 acre-feet of urban enhanced runoff annually to support the base flows of the SPRNCA without alteration of the natural flood flow regime.

The project site, encompassing almost 3,000 acres, was slated for development until it was purchased by The Nature Conservancy and transferred for long-term management to Cochise County for a regional recharge project. These lands were purchased with funding from the U.S. Department of the Army’s Compatible Use Buffer Program.

Abandoned gravel pits on the ranch are being repurposed to increase the infiltration of stormwater into the aquifer. A small diversion dam will be

constructed to divert flood flows from Coyote Wash into the historic gravel pit. In the bottom of the old pit, infrastructure will be constructed to increase infiltration. **The project will not only increase groundwater recharge, but also reduce flooding, runoff, erosion, and sedimentation, which in turn will lower the transportation of E. coli from the urban area upstream to the San Pedro River.**



Topographical surveying of the ephemeral Coyote Wash stream channel at the project site (Photo: B. Bushman)

Project Funding

A follow-on funding request for project construction was submitted in the summer of 2019 by Cochise County to the NRCS Watershed Protection and Flood Prevention Act program for project construction. It is anticipated that **\$3.28M to begin construction will be secured to build this project. At least \$900,000 of non-federal matching funds are still required to leverage the federal funding for the project to launch in 2020.**