

LOWER MONTOYAS ARROYO WATER QUALITY FEATURE

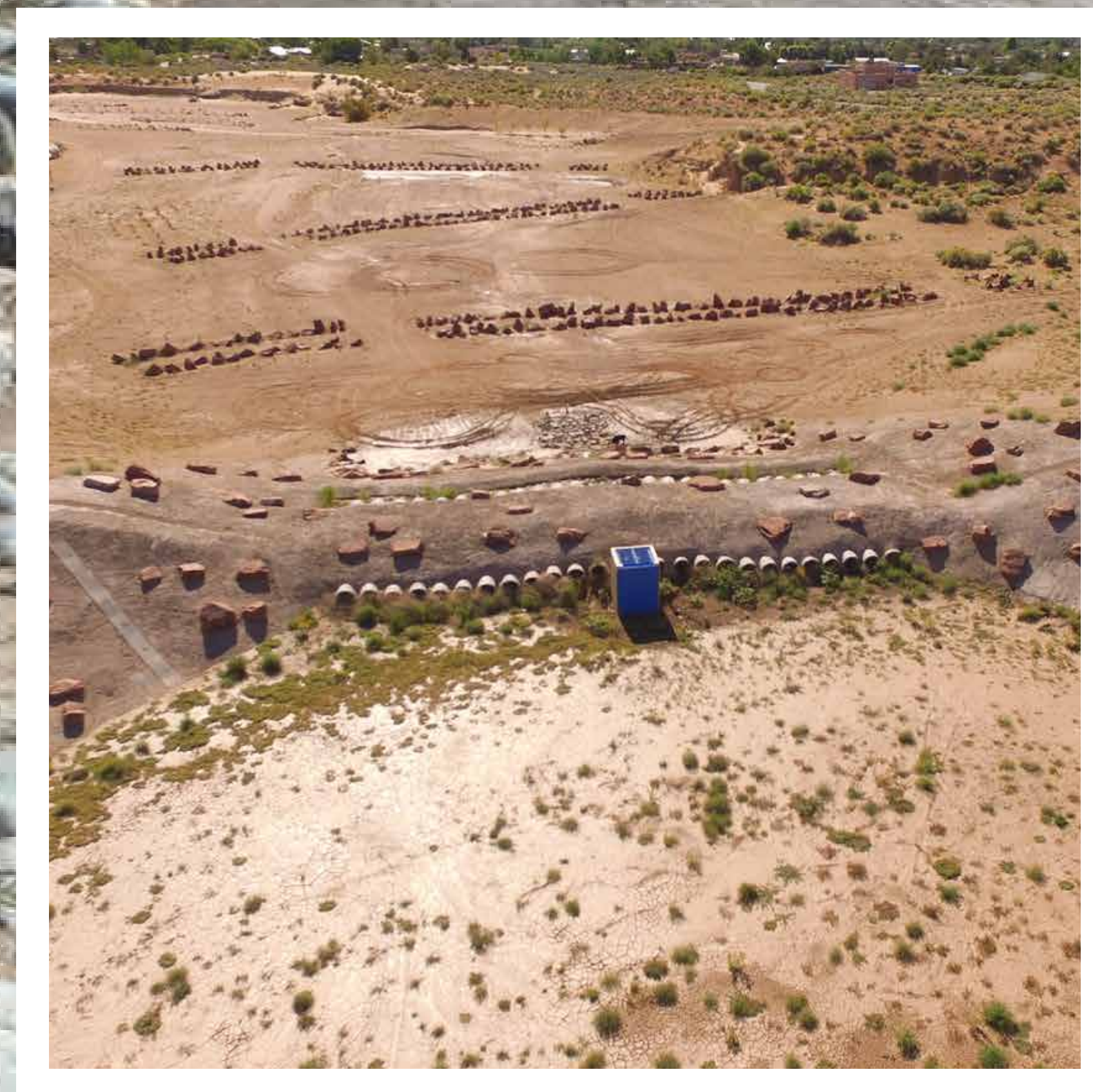
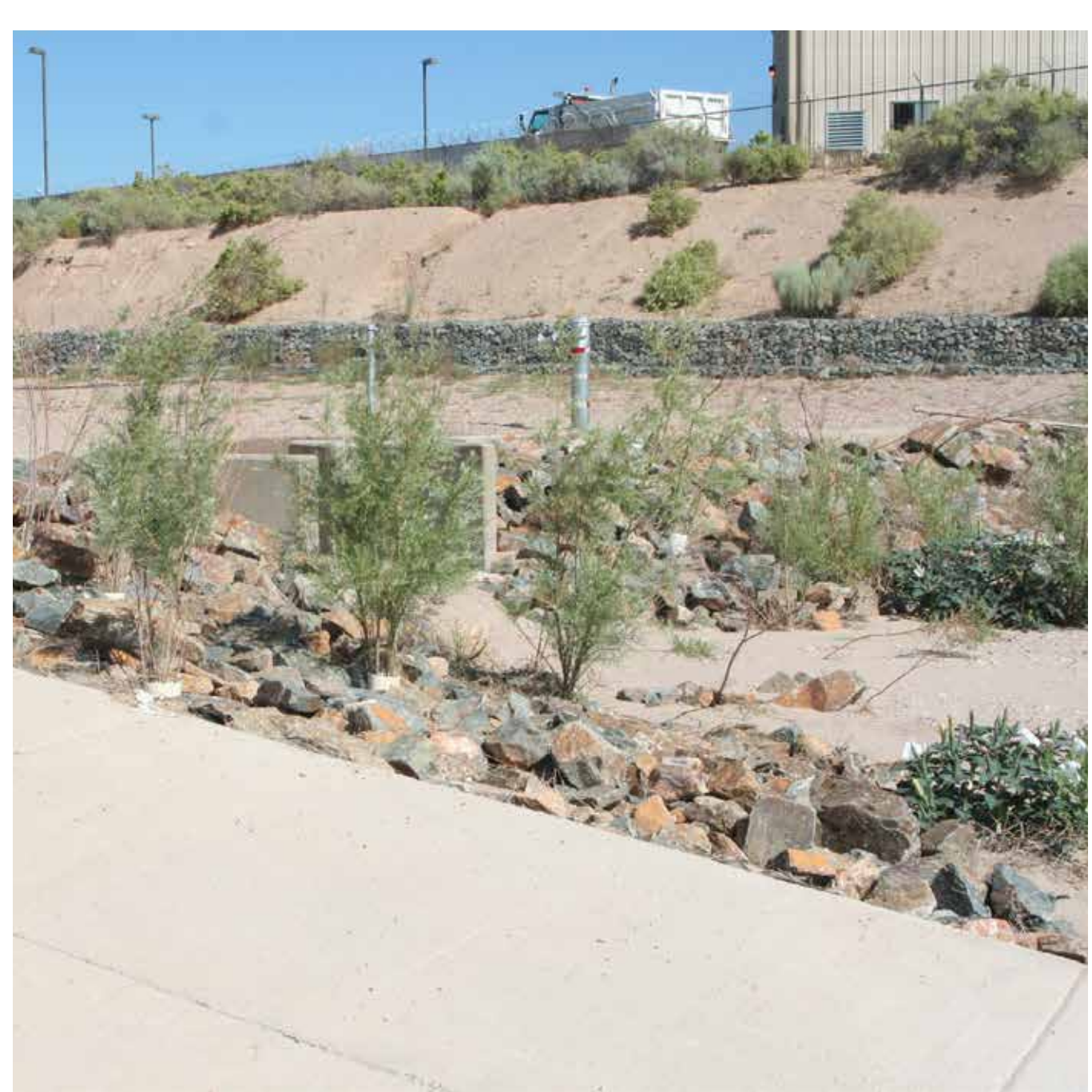
**WILSON
& COMPANY**

INNOVATIVE DESIGN, FLOOD MITIGATION, WATER CONSERVATION AND OPEN SPACE

The objective of this water quality feature, located in Corrales, New Mexico, is to remove up to 65,000 cubic yards of sediment from storm water runoff upstream of the inlet to the concrete-lined Harvey Jones Channel. This feature protects downstream facilities from damage due to sediment deposition and improves water quality of runoff to the Rio Grande. The design of the feature incorporated “green components” using Arid Low Impact Development (LID) techniques providing sediment and gross debris removal. Hardened components incorporate naturalistic features as functional parts of individual components. Features of the project include:

- ARID LID project meets safety and environmental needs in the community.
- Sediment Basins protect downstream infrastructure.
- WaterSMART and LID concepts provide a functional flood control facility enhancing the environment.
- Naturalistic hardened elements consisting of colored grouted boulders, dumped riprap and colored shotcrete integrating plants to assist in removing debris.
- Design allows for groundwater recharge of storm flows utilizing sediment basins, backwater structures to distribute water to landscaped oxbow areas and braided channels with landscaped islands and leaving arroyo channel bottoms natural.
- Promotes growth of local native vegetation, preserves habitat for local wildlife, and removes pollutants with landscaped islands, water quality pond, in-line vegetation, and landscaped oxbows.
- Plants irrigated with reclaimed wastewater from the City of Rio Rancho.
- Provides a community open space asset with pedestrian trails.

This project brought innovative solutions to regular flooding issues through unique design that adds to and protects the Southwest landscape.



EPA Region 6
2016 Green Infrastructure and Low Impact
Development Project Competition

