

431.4 Altar Valley Watershed Restoration Project

Location: Altar Valley Watershed located South of Ajo Highway and west of Three Points.

Scope: This project will include the development of a comprehensive watershed restoration plan for the Altar Valley Watershed that will guide future restoration projects for the next 20 years and the continuation of on-the-ground restoration projects. The Pima County Regional Flood Control District and Natural Resources, Parks and Recreation will co-manage the projects. Approximately 4,500 acres have been improved by restoration efforts to date by the Altar Valley Conservation Alliance (Alliance) with support of grants and donations. The project is organized in two components to address both the main stem of the Brawley/Altar Wash to restore floodplain functions; and to provide upland tributary restoration to treat upland portions of watershed. Project elements will include digital terrain mapping, existing condition assessments, and landscape level restoration utilizing floodplain and runoff retention structures of various scales to maintain and enhance floodplain functions including preserving natural flood storage capacity, sediment transport balance, riparian habitat, wildlife corridor and groundwater recharge functions along the main stem and tributaries of the wash complex, and native habitat plantings to restore native vegetation.

Benefits: The Altar Valley is an ecologically and culturally rich system and an anchor point of the Sonoran Desert Conservation Plan. Due to past land use practices, vegetation changes and climatic changes, the drainage systems of the valley and associated watershed have been degraded causing significant erosion, streambed cutting and increased runoff events. Benefits will include improved water retention on the land, improved groundwater levels, reduced erosion and flood peak flows, improved wildlife habitats, and increased health of the overall grassland systems. The Altar Valley Conservation Alliance has already invested over \$3.8 million dollars in restoration activities in the Altar Valley and will continue to be an active partner in future watershed restoration projects. Pima County has also secured, or helped secure, several grants to enhance the habitat and watershed specifically on county lands.

Total Cost Estimate: \$1,000,000

Bond Funding Estimate: \$1,000,000

Other Funding Estimate: Federal and state grants may be available.

Total Cost Estimate by Major Task: Planning and design at \$500,000, construction at \$500,000

Implementation Periods: 1, 2, 3

Project Schedule by Major Task: Planning and design at 24 months, construction at 4 years

Project Manager: Pima County (Project requested by Altar Valley Conservation Alliance)

Operator: Pima County and Pima County Regional Flood Control District

Future Operating and Maintenance Costs: Estimated annual operating and maintenance costs of \$15,000 will be paid through the General Fund.

Regional Benefits: By reducing the flooding generated by the current degraded watershed conditions, flooding impacts downstream in Avra Valley and Marana should be realized. The Altar

Valley watershed is identified as a key element of the Pima County Sonoran Desert Conservation Plan. Investment in the conservation infrastructure of this watershed promises to further enhance its productivity from a conservation perspective.