

Floodprone Land Acquisition Program (FLAP) Property Highlights



1990 Black Wash flooding

Floodprone Land Acquisition: Black Wash

Background

The Black Wash is located approximately 20 miles southwest of Tucson and drains from southeast to northwest into the Brawley Wash, then finally to the Santa Cruz River. The Black Wash's headwaters are in the Sierrita Mountains, with the watershed encompassing a 147.21 square mile drainage area. This ephemeral stream is a complex braided system with numerous small tributaries flowing between 1 and 11 days per year on average. Absent well-defined channels, numerous shallow, low flow channels proliferate ranging between 500 and 1,000 feet across to over 4,000 feet wide. Flow depths within the floodway ranged from 1 to 4 feet. (Source: Avra Valley – Black Wash Ecosystem Evaluation and Restoration Feasibility Study by RECON Environmental, Inc., May 23, 2008)

Prior to 1980, there was no 100-year floodplain or 100-year floodway delineated, severely hampering the Flood Control District's ability to accurately determine potential flood impacts. Absent specific data, applying a higher measure of regulation was not possible. The District gathered data, aerial photos, analyzed soil samples, and floodplain use permit applications and building permits were reviewed to evaluate floodplain status.

A study commissioned in the late 1980's was funded to determine two critical factors: a designated floodplain and floodway to aide in future applications and approve permissible uses in the wash area. Since many parcels were sold and settled prior to a floodplain ordinance, retroactive application of the new regulations could not happen. As a result, many of these floodprone structures were grandfathered and allowed to remain.

The District's Floodprone Land Acquisition Program (FLAP) had been buying parcels from willing sellers both prior to the administrative floodplain designation (1989) and after. The area of the Black Wash was flooded in 1983 and then again in 1993. Over the next 20 years, the District acquired approximately 1,400 acres of land in the Black Wash. With the new data, Floodplain Use Permits could now be reviewed with fresh information and evaluated more accurately. The approach taken following the study findings included leaving the now identified administrative floodway vacant for flood storage, groundwater recharge, open space recreation and wildlife habitat.

Historical and Cultural Resources

Previous activities were primarily farming and ranching. Surveys and trenching done prior to the building of the Avra Valley wastewater treatment plant resulted in the possibility of three archaeological sites within 1000 feet of the plant site.

Biological Resources

The Black Wash area provides wildlife habitat and movement corridors for indigenous species between the Tucson and Roskrige Mountains. The occurrence of specific threatened or endangered species within the Black Wash include many bird species - Abert's Towhee, Bells vireo, Swainson's hawk, and the Rufous-winged sparrow, to name a few. There is a high likelihood for several plants to call the Black Wash region home, including the Tumamoc globeberry and the Thornber fishhook cactus.

Much has changed in the Black Wash over the years. Invasive species, including buffel grass and other non-native grasses, have established a foot-hold in the area. Many local and state agencies are working diligently to identify areas that have been affected by invasive species as well as conducting eradication efforts through clubs, agencies, and other groups of concerned residents.

Management

Managing the area in the Black Wash is challenging. Much of the land in the Black Wash is government-owned. Management issues the County faces include off-road vehicle use, wildcat dumping, amateur target shooting and other undesirable activities. Large parcels of land belong to the County, the State of Arizona, Tohono O'odham Nation, Pascua Yaqui Tribe, and the City of Tucson. The location of the Avra Valley Wastewater Treatment Plant within the Black Wash, with a ready supply of treated effluent, could provide a rare opportunity to enhance the riparian nature of the area.

Recreation and Other Activities

Establishing connections between Black Wash and the planned CAP Trail and Sarasota Trailhead would provide access to the Tucson Mountain Park trail system. This may well lead to eventual pairing of public river parks, public preserves, utility rights-of-way, etc. for use by the public.

The area near the Avra Valley Wastewater Treatment Facility percolation ponds has become a destination for local birders with many bird species stopping over in their migratory patterns. Encouraging this activity, along with hiking and equestrian trails, would introduce some favorable passive recreation opportunities to the area.



The nearby Avra Valley Wastewater Treatment Facility has become a popular site for birders. Photo by Rick Wright, WINGS.



Blach Wash flooding roadways, 1990



Sheet flooding near Blach Wash, 1990

