



Yavapai County Flood Control District



Newsletter

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WWW.YCFLOOD.COM

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Websites for other related organizations:

AZ Dept of Water Resources
www.azwater.gov

AZ Dept of Environmental Quality
www.azdeq.gov

AZ Division of Emergency Management
www.dem.azdema.gov

CORPS of Engineers
www.usace.army.mil

Federal Emergency Management Agency
www.fema
www.floodsmart.gov

National Weather Service
www.weather.gov

National Resource Conservation Service
www.nrcs.usda.gov

US Environmental Protection Agency Region IX
www.epa.gov/aboutepa/region9

The Success of Pioneer Park

While celebrating Earth Day, we take a look back at our joint stormwater management project at Pioneer Park.

Pioneer Park is a 24-acre regional, multi-recreational park. Due to the urban runoff and habitat degradation of the area, the park was a major contributor of hydrocarbon pollutants and sediments entering our dynamic system of watercourses. The County decided to implement stormwater best quality management practices to create an example of how development can not only minimize its impact on our environment, but can improve it.

Originally, the entire site drained to the Pioneer Park watercourse. The water continued on for three miles to Granite Creek approximately 1.7 miles downstream of

the creek's confluence with Wil-low Creek. This portion of Granite Creek had been classified as an impaired river by the State of Arizona. Pioneer Park alone had been contributing petroleum pollutants as well as sediments to the Creek.

The intent of the design at the Park was to hold, filter, and re-use the stormwater that falls on the site in an attractive, educational manner.

The Pioneer Park Stormwater Quality Improvement Project has included construction of detention basins designed to capture and detain most storm events. It includes channel filtration trenches complete with vegetation improvements to slow down, filter, and remove solids and oils from the first-flush run-

off at the beginning of each rain event. The basins filter sediment prior to recharging the Prescott AMA Aquifer.

By pre-treating the runoff, the downstream watersheds are protected from contamination, even in the large events that are not detained on site. Check dams and diversion dikes are utilized throughout the project to ensure that sediment is separated out and infiltration is protected from clogging caused by a build-up of silt.

To prevent further sediment transport in areas of extreme erosion, slopes were terraced, rip-rapped and landscaped. The landscaping included the addition of native and drought-resistant grasses, shrubs and trees.

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Pioneer Park, Continued from Page One

Our favorite feature of the Park is the pervious pavement in the parking area. Conventional impervious paving surfaces collect and retain pollutants such as oil, anti-freeze and other vehicle fluids. Pervious pavement eliminates water pollution through a natural biological process. In addition, Pioneer Park

serves as an educational tool to stormwater treatment items such as the pervious pavement.

The result of the project is that ninety-five percent (95%) of all hydrocarbon pollutants and all sediment pollutants are contained on site, improving the water quality down-

stream.

The City of Prescott's Parks and Recreation Department works in conjunction with the District to monitor the success of the Park. The City then maintains the stormwater facilities.



The photographs on the left side of the page show the park before the project was complete.



The photographs on the right side of the page show the same areas after completion of the stormwater project.



Natural and Beneficial Functions

The National Flood Insurance Program (NFIP) recently reviewed its goals in order to refocus the program. One component of the new focus is the natural and beneficial functions of floodplains. Development that alters the floodplain can have a negative impact on the natural waterway and the people that live along it.

Floodwaters allowed to spread over a large area reduce the flood peak velocities, reducing property damage during a flood. When the width of the



waterway is constricted, velocities increase allowing more damage during a flood event. Increased velocities also increase the likelihood of scour along the banks.

Vegetation along the banks of natural waterways stabilizes soil during a flood event. It minimizes erosion of property and keeps the soils from washing downstream.

Floodplains act as recharge areas for groundwater, filtering impurities from runoff. Keeping the waterways pure and natural aids in this process.

Floodplains also provide a healthy habitat for wildlife and an attractive open space for neighborhoods. Natural waterways are much more enjoyable than man-made channels.

To show how important this has become to FEMA, the changes to the Community Rating System expected this year include new credit for creating and implementing plans that protect the natural functions of floodplains. The Community Rating System is a system that gives a community discounts on flood



insurance rates based on the efforts the community makes to go above and beyond the basic requirements of the National Flood Insurance Program.

It is important that we keep our floodplains open and clean for the wildlife that depends on the waterways, but also for the communities along their banks. Never dump waste, trash or place unauthorized fill in a waterway or floodplain. Take care of our waterways and they will be better able to protect you during a flood event.

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The Yavapai County Board of Supervisors also serve as The Board of Directors for the District.

The initial floodplain ordinance was adopted December 1981, and has been revised over the years.

The Drainage Criteria Manual, was first adopted November 1998, and revised August 2005. The current Ordinance and Drainage Criteria Manual are available on line at the County website or may be purchased at the Prescott and Cottonwood District offices.

Services Performed

The District is available for assistance or technical advice on the following topics:

- National Flood Insurance Program
- District ALERT System
- Flood Insurance Rate Maps
- Flood Status Information on a Parcel of Land
- Flood Protection & Safety
- Local Flood Hazard
- Development & Permitting within the 100 year floodplain
- Construction in or adjacent to a significant watercourse
- Storm Water Quality and Pollution Control

Flood protection information and links to other agencies are available on the County website. Go to www.ycflood.com for archived issues of this newsletter.

Please visit the County website for more information:

- Applications, Forms and Instructions
- Building Codes
- Community Plans
- Drainage Criteria Manual
- Fees/Impact Fees
- Flood Hazard Status Reports
- Flood Protection Information
- General Plan
- Ordinances
- Regulations
- Storm Water Management Program
- Related Links & More

<http://www.yavapai.us>

COUNTY TOLL FREE TELEPHONE NUMBERS

Ash Fork, Bagdad, Seligman, Yarnell 800.771.2797
Black Canyon City and Phoenix Area 602.495.8800

COUNTY SWITCHBOARD NUMBERS

Prescott 928.771.3100 - Verde Valley 928.639.8100