

Watershed Planning Subcommittee

1:30 p.m., September 28, 2009

Pima Association of Governments

177 N. Church Ave., Transamerica Building
5th Floor Main Conference Room, Suite 501

Agenda

1. Call to Order and Introductions – 5 min.

2. In-Kind Form

An in-kind form will be routed among the attendees.

3. Approval of Minutes of August 31, 2009 – 5 min.

Discussion/Action:

The Subcommittee will be asked to approve the Watershed Planning Subcommittee meeting minutes for Aug. 31, 2009.

4. Call to the Audience/Announcements/Comments – 10 min.

Committee members and PAG staff are encouraged to provide agency/program updates. The EPAC announcement list, posted on the PAG Web site, includes events, resources, grants, regulatory notices and other documents of interest.

5. Causes and Consequences of Monsoonal Flooding in Nogales, Sonora – 20 min.

Hans Huth, ADEQ Office of Border Environmental Protection, will present on the effects of flooding causes premature physical deterioration to border infrastructure projects in Ambos Nogales. The U.S. and Mexican communities, which make up Ambos Nogales, are in the Upper Santa Cruz River Watershed, approximately 65 miles south of Tucson. The rapid growth of industry and population in Mexico's northern-border region has put increased pressures on state and municipal governments to provide effective and efficient public services, particularly in the area of potable water and wastewater infrastructure. Channelization concentrates flows during periods of heavy monsoonal precipitation eroding loose alluvial sediments and disturbed soils along the banks of washes. Entrainment of alluvial

sediments impacts wastewater infrastructure buried within washes with excessive infiltration. Impacted infrastructure generates sanitary sewer overflows and potential disease vectors for the populations of Ambos Nogales. The U.S. Environmental Protection Agency (EPA) has awarded Border Environment (BEIF) grants to Ambos Nogales for projects that include the rehabilitation, upgrade and construction of wastewater-infrastructure facilities in these communities. For the projects to be successful and sustainable, Nogales, Sonora, needs to consider appropriate watershed management and land-use practices. The EPA Border 2012 Program is one venue that is assisting with this recommendation.

6. The Lower Santa Cruz River Managed Recharge Project – 20 min.

The Lower Santa Cruz Managed Recharge Project is a cooperative effort between the Cortaro-Marana Irrigation District, Town of Marana, Avra Valley Irrigation and Drainage District, Flowing Wells Irrigation District, Metropolitan Domestic Water Improvement District, Pima County, Town of Oro Valley, City of Tucson, and the U.S. Bureau of Reclamation to store treated effluent for recovery at a later time. Treated effluent produced from Pima County's Roger Road Wastewater Treatment Plant and Ina Road Water Pollution Control Facility is the source of water for the managed recharge facility. The facility is permitted to recharge a maximum 43,000 acre-feet per year (AFY). Actual recharge at the facility has ranged from about 18,300 to 26,600 AFY. The partners are currently pursuing ways to enhance recharge rates at the facility. Deborah Tosline, Reclamation, is coordinating the enhanced recharge effort and will provide a presentation to the Subcommittee. The enhanced recharge partners consists of Ms. Tosline, Asia Philbin (Tucson Water), Frank Postillion (Regional Flood Control District), Jim DuBois (Pima County Wastewater), Mike Block (Metro Water), and Dorothy O'Brien (Town of Marana).

7. Emerging Contaminants – 20 min.

Dr. John Chesle, Arizona Laboratory for Emerging Contaminants, will present the latest research and services available to the community at the Lab. The Lab is located at the University of Arizona to assist faculty, student and staff researchers working in the field of water sustainability. The Arizona Laboratory for Emerging Contaminants is working to detect, characterize, and quantify the full range of contaminants and associated dissolved and nano-particulate species impacting natural and engineered waters in the Southwestern U.S. The Lab opened in 2008 with support from NSF funds. Emerging contaminants, including pharmaceuticals & personal care products, endocrine-disrupting compounds and disinfection byproducts found in water sources throughout the U.S., are attributed to wastewater treatment that is only partially effective in their removal, prior to discharge into receiving waters. In Arizona, effluent discharge constitutes a significant fraction of surface water flux and the reclamation of wastewater for beneficial use is critical to sustained regional growth. Persistent organic pollutants (POPs) have been known for many years to enter our waterways by industrial and agricultural pathways, but little is known about their specific sources, the pathways

and rates of their degradation, and the fate of their more polar degradation intermediates and products, particularly in complex environmental systems. The intent of the Lab is to develop novel analytical methods for effective detection and quantification of trace contaminants in real-world matrices, and to apply these methods to the diversity of sample types being investigated by researchers at Arizona's three state universities.

8. Future Agenda Items / Call to the Audience – 5 min.

9. Adjournment