



PIMA COUNTY
WASTEWATER RECLAMATION

PIMA COUNTY LOCAL DROUGHT IMPACT GROUP
(LDIG)
Wednesday, January 14, 2015
Pima County Public Works Building-3rd Floor

RECAP

Attendance:

Kathy Chavez	RWRD	Erin Boyle	NWS
Colby Bowser	RWRD	Mitch Basefsky	CAP
Marie Light	PCDEQ	Chris Magril	USGS
Melanie Alvarez	PAG	Murielle Coeurdray	UA
Brian O'Neill	UA		

1. Welcome and Introductions - K Chavez welcomed everyone and introductions were made
2. Updates
 - Recap January 14 – Presentations from the Regional Flood Control District and City of Tucson on Low Impact Development, rainwater harvesting for landscape irrigation and its relationship to drought. A Low Impact Development Workshop will be held April 9.
 - Drought Status Maps – K Chavez reviewed the October-December 2014 Long Term Drought Status map and the January and February Short Term Drought Status Maps. They reflect winter precipitation and some areas show improvement in drought status
 - Institute on Science for Global Policy Water Discussion – A conference, *Living with Less Water*, was held February 20-21 to discuss issues related to climate change and drought preparedness. Marie Light will give an overview of the panel recommendations at the next LDIG meeting.
 - Cienega Creek Annual Report – Information and a link to PAG’s annual report was included in the packet. The information documents previous updates from PAG that indicate Cienega Creek continues to experience adverse impact from the ongoing drought
 - Other Updates – LID Workshop to be held April 9. The Pima County Office of Emergency Management recently held a wildfire workshop to prepare for the upcoming wildfire season
3. Winter Season Overview: How Wet Was Our Winter Season? – E Boyle, NWS, provided the following review on the 2014-15 Winter Season
 - a. Winter Season Highlights: warmest on record, 14th wettest. Late January precipitation was close to record amounts. Stream flows measured in the Rillito River at Dodge Blvd were at their highest winter flows since 2008-09
 - b. December 2014 was warm and wet: 2.17” of rainfall which is 1.24” more than average and 54.1°F average temperature which is 2.2°F warmer than average. Nighttime temperatures were warmer

- c. January 2015 was warm and wet: 2.54" of rainfall which is 1.60" more than average and 55.4°F average temperature which is 2.8°F warmer than average
 - d. February 2015 was warm: .41" rainfall which is .45" less than average and 62.1°F average temperature which is 6.8°F warmer than average
 - e. Drought conditions throughout the winter season are mostly unchanged with Eastern Pima County in moderate drought. Western Pima County improved from abnormally dry to no drought. The seasonal outlook for the Southwestern US is for persistent drought conditions through May 2015
 - f. Outlook
 - i. El Niño conditions are expected throughout the Spring, but March through May are typically dry months in Arizona
 - ii. The 3-month outlook is for temperatures to be warmer than normal in the southwest
 - iii. The Colorado Basin River Forecast Center indicates most of the Colorado River watershed has received between 25-50 percent of average snowpack. A small section of the far eastern Rocky Mountains has received 90-100 percent of average snowpack
4. CAP and Colorado River Update and Status – Mitch Basefsky, CAP provided the following update:
- a. The Colorado River Water Supply report shows Lake Powell at 45.5% capacity and Lake Mead to 41.6% capacity. The elevation of Lake Mead is 1,089' which is 14' above the Tier One shortage level
 - b. For the first time the Bureau of Reclamation estimates Lake Mead's elevation will be below 1025' within the twenty-year planning horizon
 - c. The Snow Water Equivalent (SWE) is 79% of the 30-year median which will result in reduced spring flows to Lake Powell
 - d. Current estimates indicate a release from Lake Powell to Lake Mead of 9 million acre-feet (maf) is possible later this fall, but if inflow projections to Lake Powell are less than 6 maf the release will be 8.23 maf. The releases impact the elevation at Lake Mead which is being closely watched by Arizona and Nevada. The Bureau of Reclamation currently projects a 21% probability of a Tier One shortage in 2016 and a 54% shortage in 2017
 - e. A recent agreement among Metropolitan Water of Los Angeles, Southern Nevada Water Authority, Central Arizona Project and the Bureau of Reclamation will leave 750,000 af of water in Lake Mead to offset the possibility of a shortage
 - f. The decision to declare a shortage is based on an August 24-month Bureau study that projects the elevation of Lake Mead on January 1. A Tier One shortage would be declared if the elevation in Lake Mead is projected to be below 1075' on January 1. Should a shortage be declared, Colorado River water deliveries to Arizona and Nevada will be curtailed
 - g. Under a Tier One shortage, Arizona's share of CAP water will be reduced by 320,000 af and will impact agricultural deliveries and availability of excess CAP water delivered in the CAP canal. Arizona entities that take water directly from the Colorado River will not be affected by the shortage
 - h. CAP takes orders from those with entitlements and if the entitlement is not taken, CAP typically re-markets it as excess water. Instead, CAP will now leave water not taken in Lake Mead. CAP has implemented a priority system for when shortage is declared.

- i. Under the shortage agreement approved in 2007, three tiered shortage levels are identified; 1075' 1050' and 1025' with increasing delivery reductions at each tier. If water levels in Lake Mead fall below 1000' the Bureau of Reclamation will make decisions on Colorado River water deliveries
 - j. If Arizona's Colorado River water deliveries are curtailed, CAP water rates will increase because fixed costs will have to be shared across less water delivery. Under a Tier One shortage, Tucson Water will implement Stage 2 drought restrictions
 - k. CAP has forbearance agreements with nine agricultural districts. CAP's cost over the two-year period is about \$4.3 million and is the form of a reduced energy rate on all other CAP water used by participating irrigation districts
 - l. CAP is also evaluating weather modification and climate change scenarios to project CAP water availability
5. Adjournment – The next meeting is May 13, 2015. Overview of the recommendations developed at the Institute on Science for Global Policy