

PIMA COUNTY LOCAL DROUGHT IMPACT GROUP

(LDIG)

Wednesday, March 14, 2018

Pima County Public Works Building

RECAP

Attendance: Kathy Chavez (OSC), Colby Bowser (OSC), Erin Boyle (NWS), Mitch Basefsky (CAP), Chris Magirl (USGS), Marie Light (PCDEQ), Marc Singer (NWS)

1. Welcome & Introductions
2. Review January 10 LDIG meeting (KChavez, OSC)
3. ADWR Activities and Updates (KChavez, OSC)
 - a. Review Short-Term and Long Term Drought Status Report
 - i. Short Term, Pima County is in Severe drought with Extreme drought in southwestern Pima County and Santa Cruz County. The Navajo Nation has been impacted by Extreme drought.
 - ii. Long Term, Pima County is in Moderate and Severe drought.
 - b. New Gridded Long-Term Maps
 - i. The Monitoring Technical Committee is transitioning to gridded maps from watershed maps. Previous map was based on only 46 years of data with 20 years being in drought, skews maps to show it as normal condition. New maps are a blended SPI/SPIE grid.
4. Review of 2017-18 Winter Season (EBoyle, NWS-Tucson)
 - a. Winter was warmest on record with many daily temperature departures above average; rain was close to normal and few snow events brought little snow. Water year to date is below normal – dry conditions. La Nina conditions likely contributed, which will persist through the spring with transition to neutral conditions by summer.
 - b. Review of 90 day observed precipitation maps.
 - c. December was second warmest with below average rain, daily low temperatures were warm, setting some records. December observed precipitation maps.
 - d. January was warmest on record and dry. Comparing January 2018 (1st) to 1986 (2nd); large increase in record temperature. Small snowfall event. January observed precipitation maps.
 - e. February helped overall winter season with twice average rain and two snowfall events. Cooler and 10th wettest with a daily record. Sabino Creek began flowing after 2nd longest dry spell, 153 days. February observed precipitation maps. Rain helped arrest onset of increased wildfire potential.
 - f. Review of state short term drought maps December-March, worsened. Seasonal drought outlook shows no improvement. Entire basin looking at drought through the spring in Arizona and west.
 - g. 3 month outlook maps show high temperatures and below average rain. Basin has little snowpack with the upper basin getting worse in March. Some small basins in northern Arizona doing better.
 - h. State is preparing for active fire season.
5. CAP and Colorado River Update (MBasefsky, CAWCD)
 - a. Lake Powell is 20' higher than this time last year, good inflow from WY2017 winter. A 9 MAF release is still likely.

- b. Current snowpack conditions look bad, if nothing happens in March/April season may be as bad as 2000, 24% of normal. However, reservoirs were full in 2000.
 - c. SNOTEL sites show improvement further north. Pacific Northwest large snowpacks. High pressure off the coast is preventing atmospheric rivers from getting through.
 - d. Comparison of shortage probabilities, January vs March; increasing chances with probability of Tier 2 shortage ramping up. These chances do not include conservation efforts of CAP and its partners.
 - e. Discussion of conservation program. Upper basin rules do not incentivize following for conservation, compensation and BOR guarantees of water rights important to farmers. More conservation is from lower basin.
 - f. Keeping Lake Mead in 1,080-1,085' elevation triggers a larger release based on 2007 Operating Guidelines. If Mead gets too high, release is reduced by more than 700,000 AF – that is more than can conserve in a year.
 - g. Discussion of DCP. Need additional measures in place, 2020 shortage more likely. Problem of impacts to different sectors. DCP is meant to prevent system from crashing below 1,020'. Review of Ag water, DCP+ would spread impact to cities lessen blow to Ag.
 - h. Discussion of ICS and forbearance. ICS is an agreement for water user to store water in Mead with a guarantee from BOR that water isn't given to someone else, it can be used later. Forbearance is not necessarily ICS (although it could be). ICS caps would increase with DCP. Forbearance issue does not prevent the state from entering into DCP.
 - i. Review of CAP "sponge contract". CAP in its agreement with BOR has right to all unused Colorado River water from Arizona's allotment, whatever isn't used of 2.8 MAF, or forborne by other Section 5 users, CAP has access to. State does not want CAP to have this authority.
 - j. Discussion of California drought. It can affect Arizona, CA has ICS volume in Lake Mead equivalent to 5' of elevation. If CA water users get less water from state projects they would pull their ICS volume. Currently, ICS cant be accessed during shortage. DCP would change to allow ICS during shortage.
 - k. Discussion of Upper Basin impacts. Lake Powell is at downstream end of upper basin system, upstream reservoirs kept full until Powell needs elevation for power generation, important for funding operations.
6. Updates
- a. CAP is having next board meeting in Casa Grande, no streaming.
 - b. USGS could be impacted by DOI structure changes, but unknown at this time. USGS gets 70% of funding from cooperators, more insulated from budget cutting.
 - c. PCDEQ is quantifying life cycle costs of LID/GI features on County property, comparing baseline and climate change scenarios. Data show increased cost savings with LID/GI. Adaptive irrigation strategies needed during dry season.
7. Adjournment and next meeting
- a. May 9th