



Pima County Local Drought Impact Group
(Drought Monitoring Committee)
Wednesday, March 14, 2012
2:30 p.m.
Pima County Public Works Building
201 N Stone Avenue
3rd Floor Conference Room

Attendance:	Kathy Chavez	RWRD	Karen Wilson	RWRD
	Marie Light	PCDEQ	Roberta Lopez-Suter	Tucson Water
	Chris Smith	USGS	Erin Boyle	NWS
	Julia Fonseca	OCS	Lillian von Rago	RWRD
Speakers:	Zack Guido	CLIMAS	Mitch Basefsky	CAP

1. Introductions and Updates – Introductions were made.
2. Recap of January 11, 2012 meeting – K Chavez summarized the January 11, 2012 meeting.

At the January meeting, Saeid Tadayon, USGS and Patrick Bray, Arizona Cattlemen's Association were the featured speakers.

Nancy Selover, State Climatologist, attended the meeting and an interview with her talking about Arizona's drought and the Pima county LDIG was broadcast the next day on the local NPR station.

Kathy Chavez and Karen Wilson attended ADWR's January Monitoring Technical Meeting in Phoenix. As part of the discussion, the short and long-term outlooks were discussed. Because of the heavy rains in November and December, the short-term drought outlook has improved but the long-term outlook has not, since those were the only months we had significant winter rains.

3. La Niña's Heavy Hand: Variability that Matters in the Southwest – Zack Guido, CLIMAS

Zack Guido's engaging and fact-filled presentation maintained that ENSO (El Niño Southern Oscillation) is not the only weather factor that affects Southern Arizona's climate – variability from other patterns are just as important.

- o AO – Arctic Oscillation is an influential natural climate fluctuation that affects the weather in the Northern Hemisphere
- o MJO – Madden-Julian Oscillations are a 30 – 60 day pulse of convective activity that begins in the Indian Ocean. The weaker La Niña system make conditions ripe for more frequent MJOs and help to moderate the dry effects of a La Niña year.
- o PDO – Pacific Decadal Oscillation, not discussed

- El Niño or ENSO is the “granddaddy.” A warming of the Pacific Ocean sea temperatures in the tropics coupled with the westerly jet stream pulls in El Niño and the weather is wetter in the Southwest.

La Niña conditions occur approximately every three to seven years. From 1950 – 2001, Arizona’s climate has been 50% drier and from November through March, Arizona received less than 25% normal precipitation. Due to the dry conditions, 2011 was a record-setting fire year for Arizona and New Mexico.

Trends:

- Winter Trends – less snow, more rain
- Earlier seasonal streamflow

Extremes:

- Intensification of hot extremes
- Big storms get bigger
- In a warmer world, winters dry out
- Hot means drier

What might a hotter, drier southwest that is more susceptible to extreme events look like and how can we plan for it?

- Water Supply
- Water Infrastructure
- Agricultural Systems
- Forests
- Built Environment
- Social Conditions

Marie Light reminded the group that the *2012 Arid LID Conference: Green Infrastructure and Low Impact Development in Arid Climates*, March 27 – 29, at the Hotel Tucson, will endeavor to answer this question.

CAP and the Colorado River – How are We Doing? – Mitch Basefsky, CAP

The CAP (Central Arizona Project) is a 336-mile aqueduct that brings Colorado River water from Lake Havasu to Tucson. CAP delivers 1.6 million AF (acre-feet) of river water per year.

In 2011, CAP was divided among M&I (municipal/industrial) – 456,000 AF; Agriculture – 521,000 AF; Native Americans – 502,000 AF and Recharge Projects – 7 million AF since 1997.

Due to the phenomenal snowfall in Colorado, Northern New Mexico and Northern Arizona in 2010, in some places 600% above normal and most places 150% above normal, both Lake Mead and Lake Powell are in an equalization mode.

Lake Powell has storage for the Upper Colorado Basin states (Colorado, Utah, New Mexico and Wyoming) and Lake Mead, provides storage for water for the Lower Colorado Basin States (Arizona, California and Nevada).

Overall reservoir storage in the Colorado River Basin has increased by nearly 10 million acre feet (maf) since the beginning of the 2005 Water Year. This is a significant improvement over the drought conditions during water years 2000 through 2004.

On October 1, 2004, the beginning of water year 2005, the total reservoir storage in the Colorado River Basin was 29.84 maf (50.2% of capacity). As of January 30, 2012 the total reservoir storage in the Colorado River Basin was 38.35 maf (64.3% of capacity).

In 2007 the seven basin states approved an agreement that details how the states will manage and share the Colorado River water during years when shortages are declared. No such shortage is expected before 2016.

Lake Mead is expected to remain at an elevation above 1110 feet for the next two years. A water shortage can be declared on the Colorado River when the water elevation in Lake Mead is less than 1075 feet.

4. Drought Impacts and Public Awareness Message
 - o April is Water Awareness Month – information regarding activities was distributed <http://www.waterawarenessmonth.com/>
 - o Tucson Water and RWRD will participate in upcoming activities including the Water Festival, Cyclovia, Earth Day celebrations and Fiesta Grande. At these events, information regarding the drought and water conservation will be available.
 - o Promotional magnets from RWRD regarding drought were handed out
5. Next LDIG Meeting – Wednesday, May 9, 2012
6. Adjournment

Links to the PowerPoint presentations and other LDIG and Drought news may be found on the County's Drought website http://www.pima.gov/drought/LDIG/index_LDIG.html