

# ***CLIMAS*** ***Climate Services:*** **Drought**

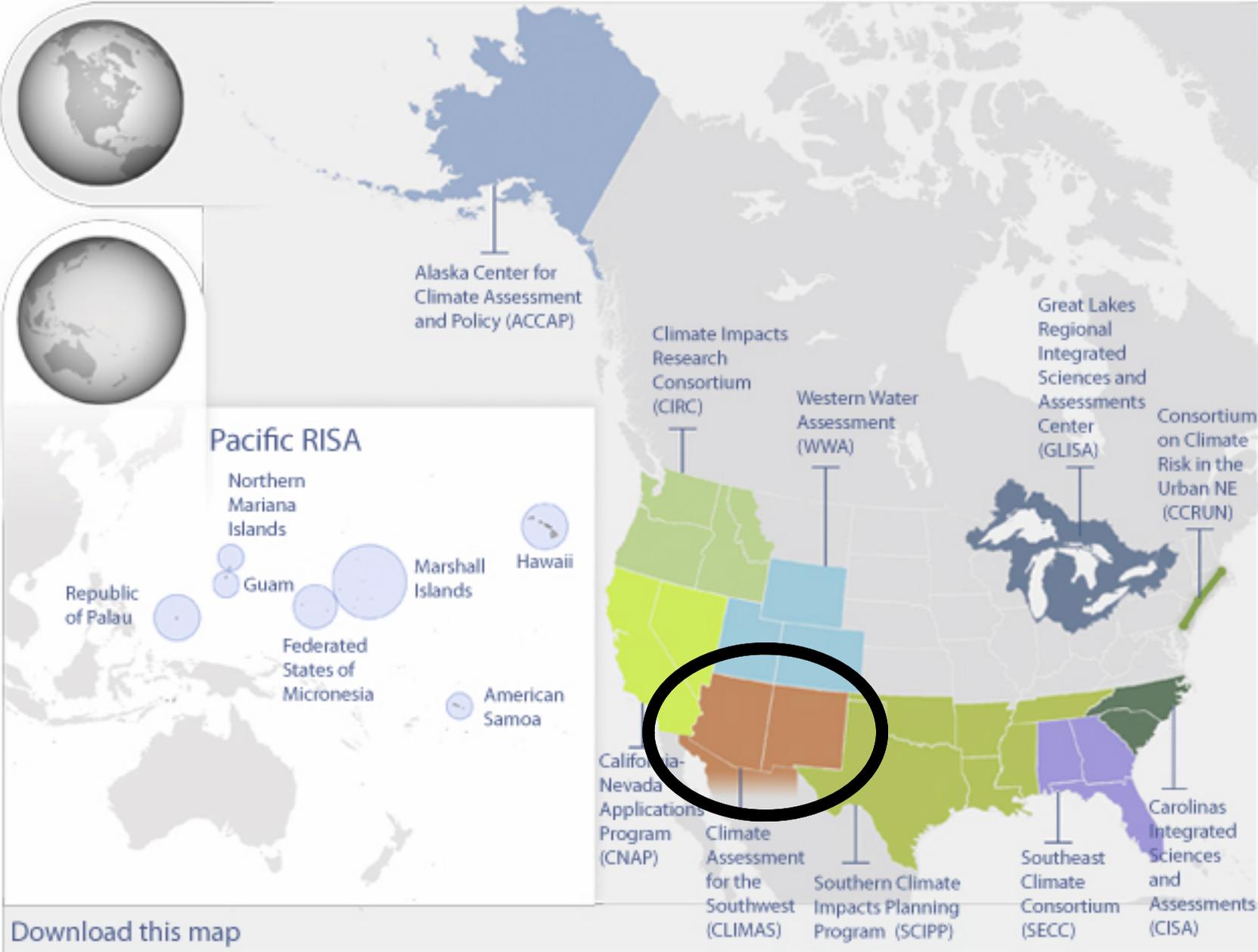
**Rio Grande – Rio Bravo**  
**Technical Scoping Workshop**  
El Paso, TX – 16 August 2012

Gregg Garfin





Click the names on the map to learn more about each RISAs



Download this map



## ABOUT AZ DROUGHTWATCH

AZ DroughtWatch is a tool designed to collect qualitative reports of drought impacts across Arizona. This impact information is used in conjunction with meteorological and hydrological data to characterize drought conditions.

## BLOG

### Welcome to the AZ DroughtWatch Blog!

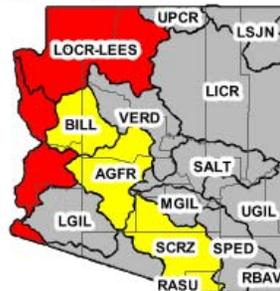
Thursday, February 03, 2011 10:35:00 AM

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## Jun-Jul/2012:



## Apr-May/2012:



## Summary Reports

[County and watershed tables](#)

[Detailed impact reports](#)

### Impacts Reported

- in 0 of 6 categories
- in 1 of 6 categories
- in 2 of 6 categories
- in 3 of 6 categories
- in 4 of 6 categories
- in 5 of 6 categories
- in 6 of 6 categories
- No reports made

### Categories

- Water
- Agriculture
- Livestock
- Society
- Tourism
- Ecology

### Watershed Abbreviations

AGFR	Agua Fria River-Lower Gila River
BILL	Bill Williams River
LGIL	Lower Gila River below Painted Rock Dam
LICR	Little Colorado River
LOCR-LEES	Lower Colorado River, Lees Ferry to Lake Mead
LOCR-MEAD	Lower Colorado River below Lake Mead
LSJN	Lower San Juan River
MGIL	Middle Gila River (Local Drainage)
RASU	Rio Asuncion
RBAV	Rio Bavispe
RSON	Rio Sonoyta
SALT	Salt River
SCRZ	Santa Cruz River
SPED	San Pedro River
UGIL	Upper Gila River
UPCR	Upper Colorado River of Lake Powell Area
USJN	Upper San Juan River
VERD	Verde River

# Arizona Drought Preparedness Plan

## OPERATIONAL DROUGHT PLAN



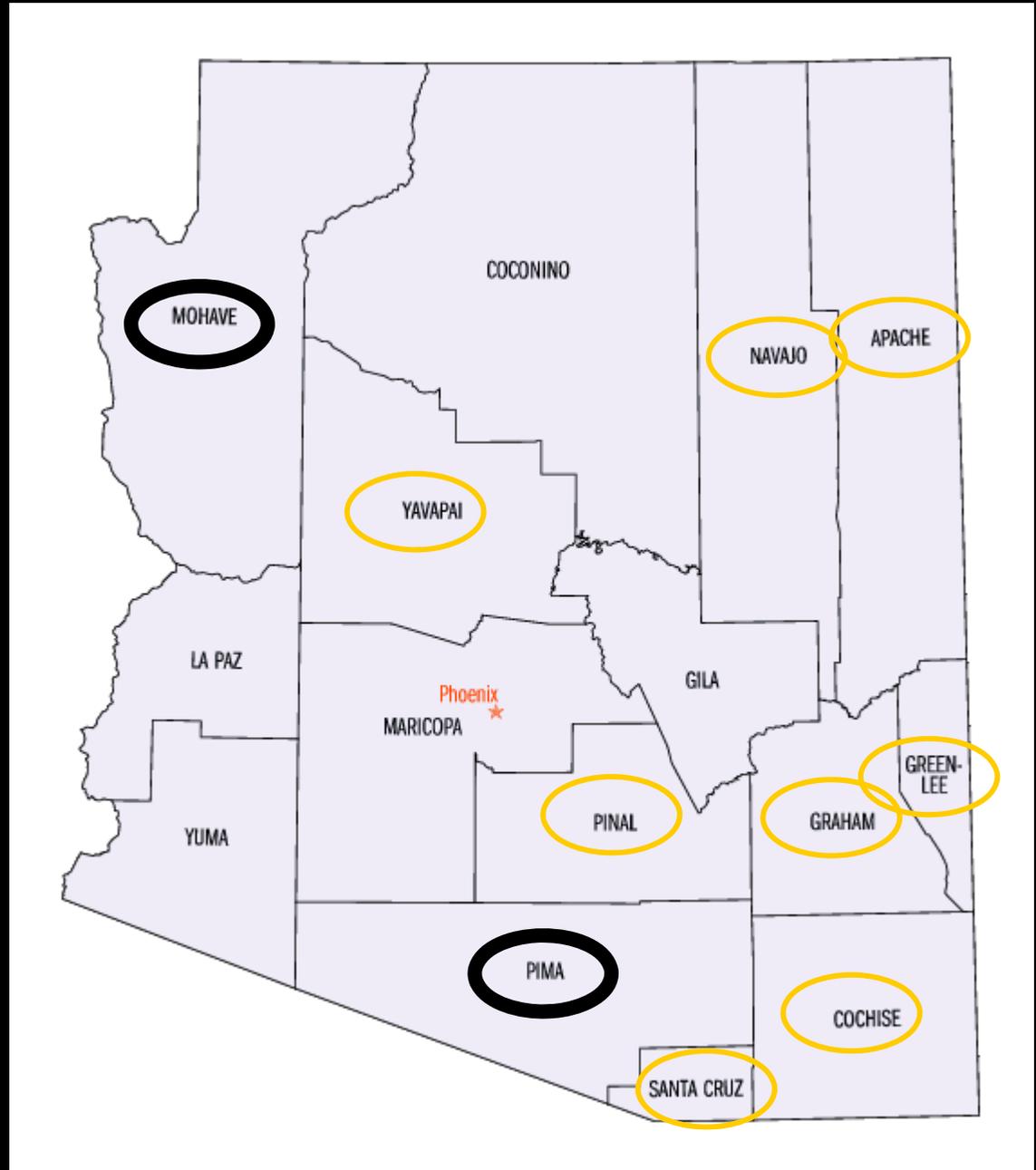
**Governor's Drought Task Force**  
Governor Janet Napolitano

October 8, 2004

# Local Drought Impact Groups

- **Counties**
- **Leadership:** Cooperative Extension and Emergency Management; oversight by ADWR
- **Membership:** Local municipal officials, natural resource managers, agricultural producers, water managers/providers, concerned citizens/watershed groups

# LDIG Development and Status





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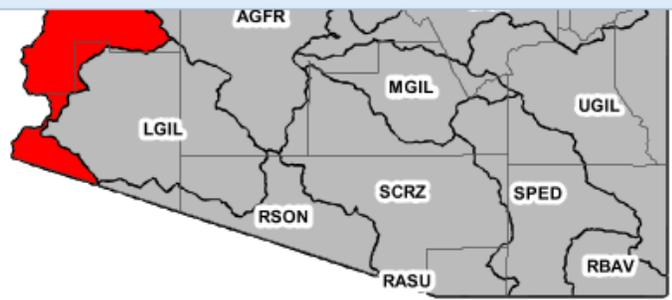
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Abbreviation	Watershed Name	water	agriculture	livestock	society	tourism	ecology	Total number of impacts	Total number of surveys	Number of unique observers
AGFR	Agua Fria River-Lower Gila River	0	0	0	0	0	0	0	0	0
BILL	Bill Williams River	0	0	0	0	0	0	0	0	0
LICR	Little Colorado River	0	0	0	0	0	0	0	0	0
LOCR-MEAD	Lower Colorado River below Lake Mead (Local Drainage)	7	8	6	0	0	11	32	3	1
LOCR-LEES	Lower Colorado River, Lees Ferry to Lake Mead	8	6	6	0	0	9	29	3	1
LGIL	Lower Gila River below Painted Rock Dam	0	0	0	0	0	0	0	0	0
LSJN	Lower San Juan River	0	0	0	0	0	0	0	0	0
MGIL	Middle Gila River (Local Drainage)	0	0	0	0	0	0	0	0	0
RASU	Rio Asuncion	0	0	0	0	0	0	0	0	0
RBAV	Rio Bavispe	0	0	0	0	0	0	0	0	0
RSON	Rio Sonoyta	0	0	0	0	0	0	0	0	0

<http://azdroughtwatch.org>

- Many impacts across multiple categories may indicate more widespread drought conditions versus many impacts in one category alone.
- A large number of surveys indicates that impacts are distributed across many geographic locations.
- A large number of unique observers indicates that surveys are being made by different people rather than many surveys submitted by one observer.
- Use the 'Observer Type' filter at the top of the page to examine potential relationships between observer type and impact totals in each category



Show Only Reports From...

County: no filter

Observer Type: no filter [Filter]

- no filter
- Citizen Volunteer/Watershed Group
- Resource Manager/Field Technician
- University Researcher
- Municipal Official
- Consultant
- Agricultural Producer
- Private Business Owner
- Community Water System Operator
- Agency Scientist
- Media
- Extension Agent
- N/A

Abbreviation		society	tourism	ecology	Total number of impacts	Total number of surveys	Number of unique observers			
AGFR	Arizona	0	0	0	0	0	0			
BILL	Bill Williams	0	0	0	0	0	0			
LICR	Little Colorado River	0	0	0	0	0	0			
LOCR-MEAD	Lower Colorado River below Lake Mead (Local Drainage)	7	8	6	0	0	11	32	3	1
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# Add Impact Reports



## AZ DroughtWatch

Arizona's Drought Impact Reporting System

*AZ DroughtWatch beta release*

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### Drought Impact Survey for September, 2008

Find the impact(s) that best describe your observations in the main categories below. Click on the "+" to expand each category or sub-category.

-  **WATER RESOURCES AND HYDROLOGY**
-  **AGRICULTURAL IMPACTS (FOOD CROPS, CASH CROPS, AND AQUACULTURE)**
-  **LIVESTOCK PRODUCTION AND GRAZING LAND IMPACTS**
-  **SOCIETAL AND COMMUNITY IMPACTS**
-  **TOURISM AND RECREATION**
-  **ECOLOGICAL IMPACTS**

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# Add Impact Reports



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Arizona's Drought Impact Reporting System

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### Drought Impact Survey for September, 2008

Find the impact(s) that best describe your observations in the main categories below. Click on the "+" to expand each category or sub-category.

 **WATER RESOURCES AND HYDROLOGY**

**Surface Water Impacts**

ID	Impact	Observed?	Comments	Images
A1	Unusually low water levels in reservoirs, lakes, and ponds	<input type="checkbox"/>	<input type="text"/>	
A2	Unusually low flows in streams, rivers, and springs	<input type="checkbox"/>	<input type="text"/>	
A3	Poor water quality due to low levels/low flows	<input type="checkbox"/>	<input type="text"/>	
A4	Impacts on hydro-electric power generation	<input type="checkbox"/>	<input type="text"/>	
A5	Need for supplemental water due to drought impacts on local surface water resources (e.g. hauling water)	<input type="checkbox"/>	<input type="text"/>	
Other	<input type="text"/>			
Other	<input type="text"/>			
Other	<input type="text"/>			

**Groundwater Impacts**

 **AGRICULTURAL IMPACTS (FOOD CROPS, CASH CROPS, AND AQUACULTURE)**

 **LIVESTOCK PRODUCTION AND GRAZING LAND IMPACTS**

Lower Colorado River Watershed	April 2010	The annuals are vigorously growing. We have the start of a good spring; All water tanks are full to the max at this time; Rain was perfect timing to continue plant growth, range looks the best it has in 5 yrs.
Rio Bavispe Watershed	April 2011	Many ponds that normally have water at this time are dry; Little to no green forage exists in the grasses or forbs.
Santa Cruz River Watershed	April 2011	For the first time (in the period 1984-2011) I have seen browsing (probably by white-tailed deer) on Agave schottii (shindagger) and Yucca schottii (Schott yucca). On agaves, leaves are eaten down to about 4"; on yuccas, younger growth in center of plants has been eaten.

# Challenges

- **Inconsistent reporting**
  - Lack of “steady” or “improved” reports
- **Attribution...to drought?**
- **Lack of support**
  - \$\$\$
- **Fatigue, overcommitment**
- **Lack of incentives**
- **Field of Dreams → Dream Team**

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