

Understanding the Upper Gila River

An overview of the weather and climate of Southeast Arizona

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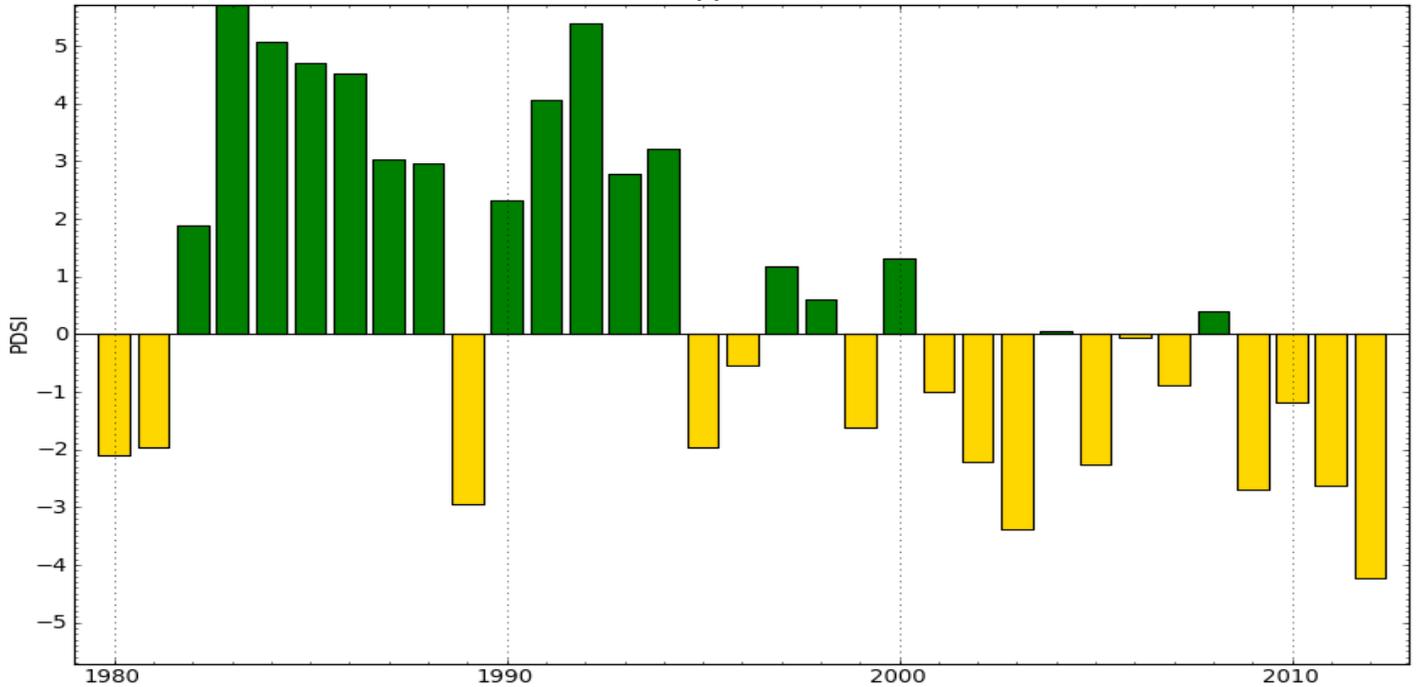
The San Simon Valley

Southeastern Arizona has been gripped by drought conditions for well over a decade with impacts being felt across many sectors and systems from water resources to wildlife and vegetation condition. Several very dry winters in the past ten years can be directly attributable to a handful of strong La Nina events occurring including a rare back-to-back event that spanned from 2011 into 2012. Summer precipitation amounts have also varied dramatically from year to year across the region over this period as well including very wet

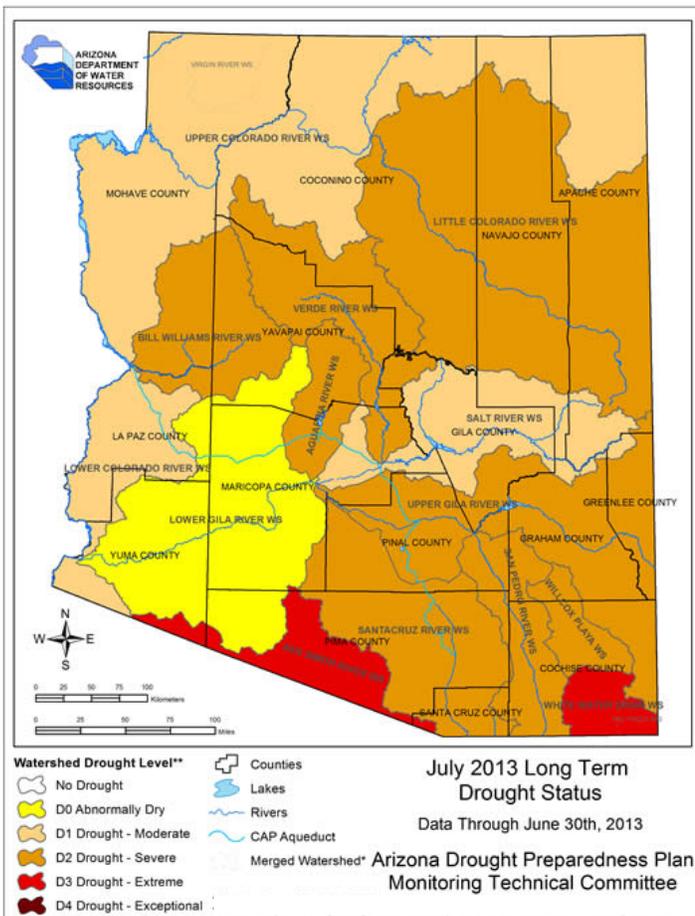
conditions in late July of 2006 and record dry conditions through much of the summer of 2009.

Temperatures were also very warm over the past decade with almost every year experiencing annual average temperatures way above the long-term average, further exacerbating drought stress on vegetation and water resources.

Palmer Drought Severity Index, 1-Months Ending in December
Upper Gila



Data Source: WRCC/UI, Created: 11-01-2013



High levels of natural, inter-annual variability in precipitation forced by the El Nino-Southern Oscillation, a strong seasonality in precipitation and warming temperatures characterize the climate of southeast Arizona, all of which create great challenges in tracking local drought impacts and trying to plan for future conditions.

This presentation will provide an overview of the main mechanisms that govern this variability and how these elements may change in the future. There will also be discussion of online tools and programs that may be helpful in tracking local weather and climate conditions as well as forecasting tools and planning resources.

Mike Crimmins will be speaking at the November 13, 2013 meeting of the Gila Watershed Partnership about drought and the climate of the Upper Gila Watershed.

Current Project Updates

FOR MORE INFORMATION, SEE WWW.GILAWATERSHEDPARTNERSHIP.COM

ONGOING GRANTS:

Apache Grove Project

...funded by the Arizona Water Protection Fund (AWPF) and the U.S. Fish and Wildlife Service (USFW)

- removed levies in order to restore optimal river flow, control erosion, and manage invasive species, while preserving agricultural land
- the new pipeline to a deeper well is complete
- in continuous monitoring, need to replace regrowing invasives

Clifton Restroom Project

...funded by the Arizona Department of Environmental Quality (ADEQ)

- will install restroom facilities in a recreational area along the San Francisco River where there are none
- we are about to order the restroom unit and start the permitting process

Eagle Creek Riparian Restoration at Filleman Crossing Project

...funded by the Arizona Water Protection Fund (AWPF) and the U.S. Fish and the USFW Partners program

- will construct a river crossing to stop frequent wash-outs, benefiting both residents and wildlife
- Implementation will begin soon!

Ely Fence Replacement

...funded by the Arizona Water Protection Fund (AWPF)

- replaced the fence between the San Carlos Apache Reservation and the U.S. Forest
- the project is complete!

Upper Gila Watershed Riparian Restoration Project

...funded by The Walton Family Foundation (WFF)

- will replace invasive tamarisk with native species to restore natural habitats
- the greenhouse has been completed and we are busy outfitting it and ordering planting

material

- the science team is almost finished with the assessment of the river, and we are looking at some possible demonstration sites

Youth Pathway Project

...from the National Fish and Wildlife Foundation (NFWF) Great American Outdoors Grant, and USFW Partners program

- to encourage careers in conservation and land management on public lands, through on-the-ground activities for school age kids high school through college
- funding for youth crews for our native plant nursery and for restoration of the Gila River
- key entities have been engaged and planning is underway

Water Conservation Project

... funded by Freeport McMoRan Copper & Gold, Inc.,

- this project will perform home and business water evaluations to help the community save water and money

NEW GRANT APPLICATIONS:

Menges Ranch Water System Maintenance

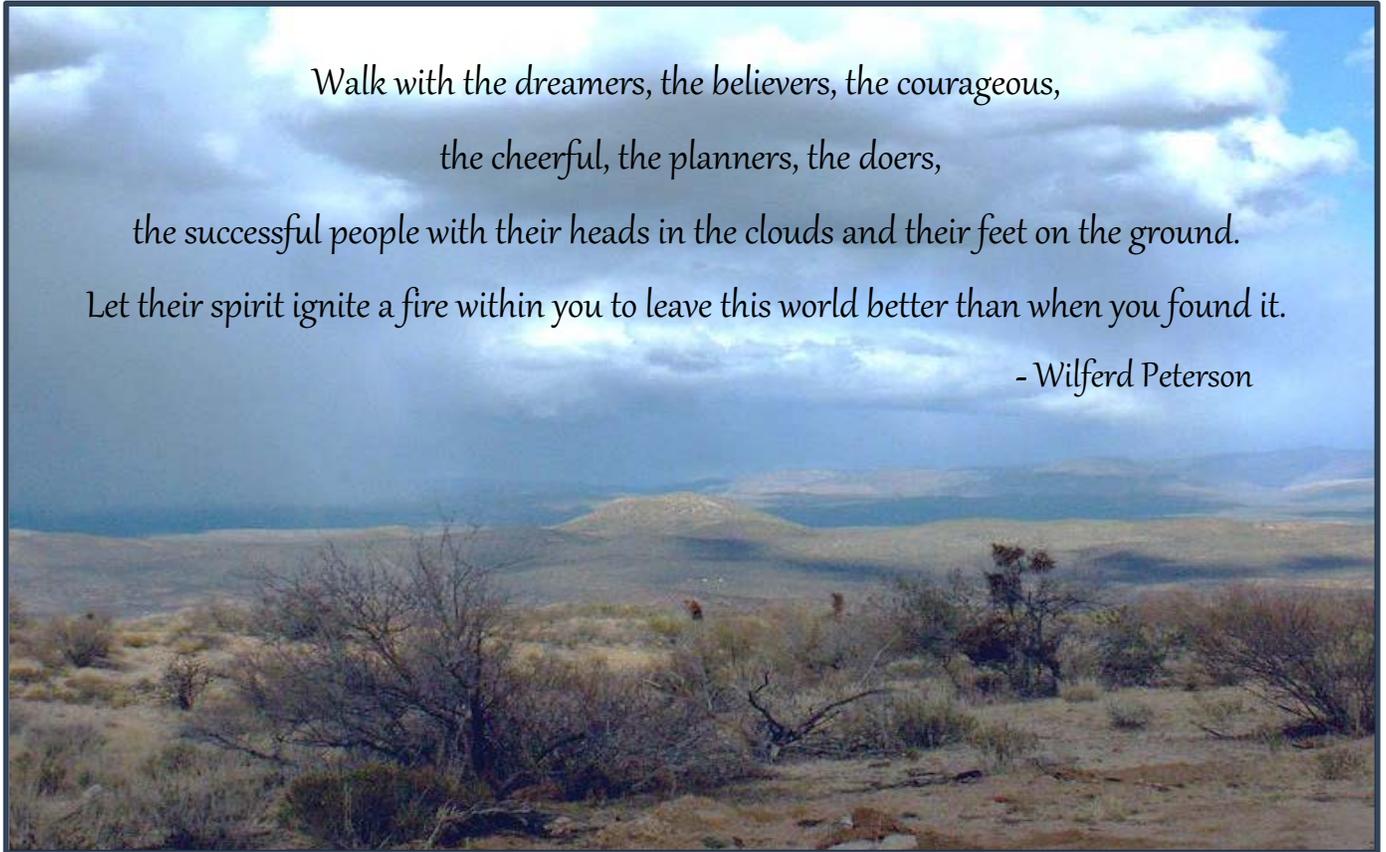
... applications pending with the Arizona Department of Environmental Quality (ADEQ) and the Arizona Water Protection Fund (AWPF)

- a project that will replace diesel pumps with solar pumps and add a telemetry system that will send a message to the landowner when the water system has a problem

San Francisco River Restroom Project

... applications pending with the Arizona Department of Environmental Quality (ADEQ) and the Arizona Water Protection Fund

- a project that will install a restroom at a heavily-used recreation site on the San Francisco River road in Greenlee County to reduce the *E.coli* levels on the river



*Walk with the dreamers, the believers, the courageous,
the cheerful, the planners, the doers,
the successful people with their heads in the clouds and their feet on the ground.
Let their spirit ignite a fire within you to leave this world better than when you found it.*

- Wilferd Peterson

Calendar of Events

Wednesday, November 13, 7 p.m.
- The Gila Watershed Partnership’s regular monthly meeting features Mike Crimmins, a climatologist with the University of Arizona, on the drought and climate of the Upper Gila Watershed in the Graham County general services building.

Wednesday, December 11, 7 p.m. –
The Gila Watershed Partnership’s regular monthly meeting features Carol Telles on the archeology of the Upper Gila Watershed in the Graham County general services building.



Our partners include:

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| Arizona Department of Agriculture | Eastern Arizona College |
| Arizona Department of Environmental Quality | Farm Bureau |
| Arizona Department of Transportation | Gila Valley NRCD |
| Arizona Game and Fish Department | Freeport McMoRan Copper and Gold Inc. |
| Arizona Geological Survey | Graham County |
| Arizona State Land Department | Greenlee County |
| Bureau of Land Management | Gila Valley Irrigation District |
| City of Safford | Natural Resource Conservation Service |
| Town of Thatcher | University of Arizona Cooperative Extension |
| Town of Pima | University of Arizona NEMO Project |
| Town of Clifton | U.S. Fish and Wildlife Service |
| Town of Duncan | U.S. Forest Service – Apache-Sitgreaves and Coronado Forests |
| | U.S. Bureau of Reclamation |
| | And many community members |

Get involved in your watershed

For more information, contact Jan Holder at the Gila Watershed Partnership, 711 S. 14th Avenue, 85546, or email gilawatershed@gmail.com
Join us on Facebook “[Facebook.com/gilawatershedpartnership](https://www.facebook.com/gilawatershedpartnership)”

www.gilawatershedpartnership.com