

This presentation premiered at WaterSmart Innovations

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Consensus through Collaboration: A Shared Vision Approach to Drought Preparedness

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AWWA Water Smart

Las Vegas, NV

October 10, 2008

LAKE LANIER

Georgia plea for water goes to Supreme Court

By BEN EVANS

Associated Press

Published on: 08/14/08

WASHINGTON — Georgia asked the U.S. Supreme Court on Wednesday to overturn a February ruling that said the state needs congressional approval to use more water from area.

A shallow Lake Lanier can be hazardous



...some Perspective

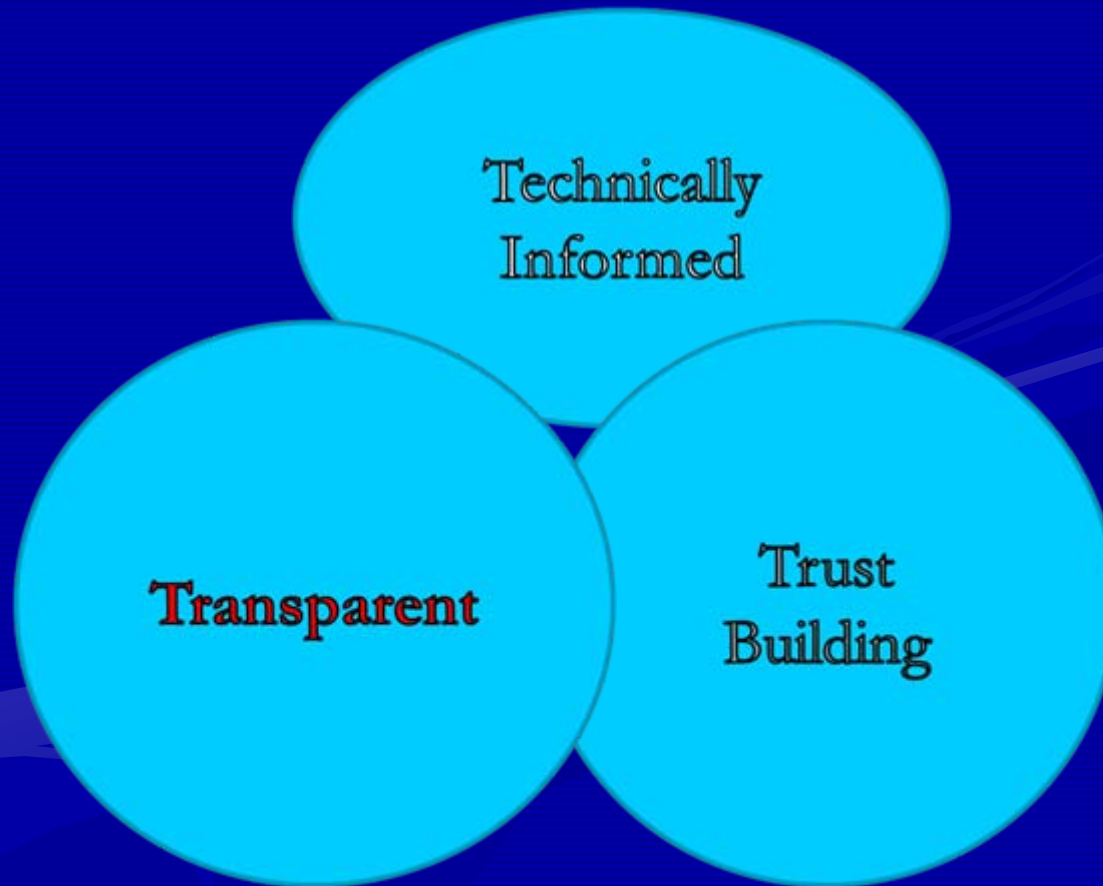
	Drought	Flood	Hurricane
Annual Average	\$7 B	\$2.4 B	\$3.5 B
Worst Recent	\$40 B (1988-1989)	\$20 (1993)	\$28 B (Andrew, 1993)
		\$81 B (Katrina, 2005)	

Source: NDMC website; National Drought Policy Commission report

Water Resources Challenges

- Social
- Political
- Environmental

Shared Vision Planning



Shared Vision Planning

- Informs all stakeholders of the technical-basis of decisions
- Fosters the development of trust between stakeholders
- Involves the development of a technical modeling tool that is user-friendly and transparent
- Creates a more informed and engaged public
- Achieves stakeholder consensus

Start with the end in mind...

“The drought preparedness plan is adopted.
What’s it say?”

“You’re in a drought. What’s your Plan doing for
you?”

Foothill Life / B-1

No more green lawns in El Dorado Hills



Sports/Recreation

B-3

Fish numbers at record low due to dry conditions



TV Guide / B-8

Look here for all your favorite programs

Wednesday
June 13, 2009

No. 8 * 16 pages
2 Sections * 1 Supplement

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HERALD

50 cents



Jenkinson Lake is at the second lowest level since records began in the 1950s. Photo: FH staff photographer Cindy Karwascky

Utilities can't meet ag irrigation demand

Apple and grape growers fear for crops

By Phil Jones
Foothill Herald staff reporter

Placerville, CA.... In a joint appearance, officials from two El Dorado County water utilities announced they are not able to meet agriculture customer demands for water, and farmers say their crops may fail this year as a result.

At a meeting held Tuesday evening by the County Board of Supervisors, the general managers of Georgetown Municipal Water and El Dorado Water Utility said the drought means that they cannot deli-

ver the amount of water needed by apple and grape growers.

"This is true even though we have seen significant cutbacks in water use by residential, landscape and commercial customers," stated Doreen Kelis, general manager of EDWU.

"This drought is the worst we've had since 1988," added GMW general manager Thomas Jones. "We are not going to be able to send enough (see p. A-5)

Foothill Life / B-1

No more green lawns in El Dorado Hills



Sports/Recreation

B-3
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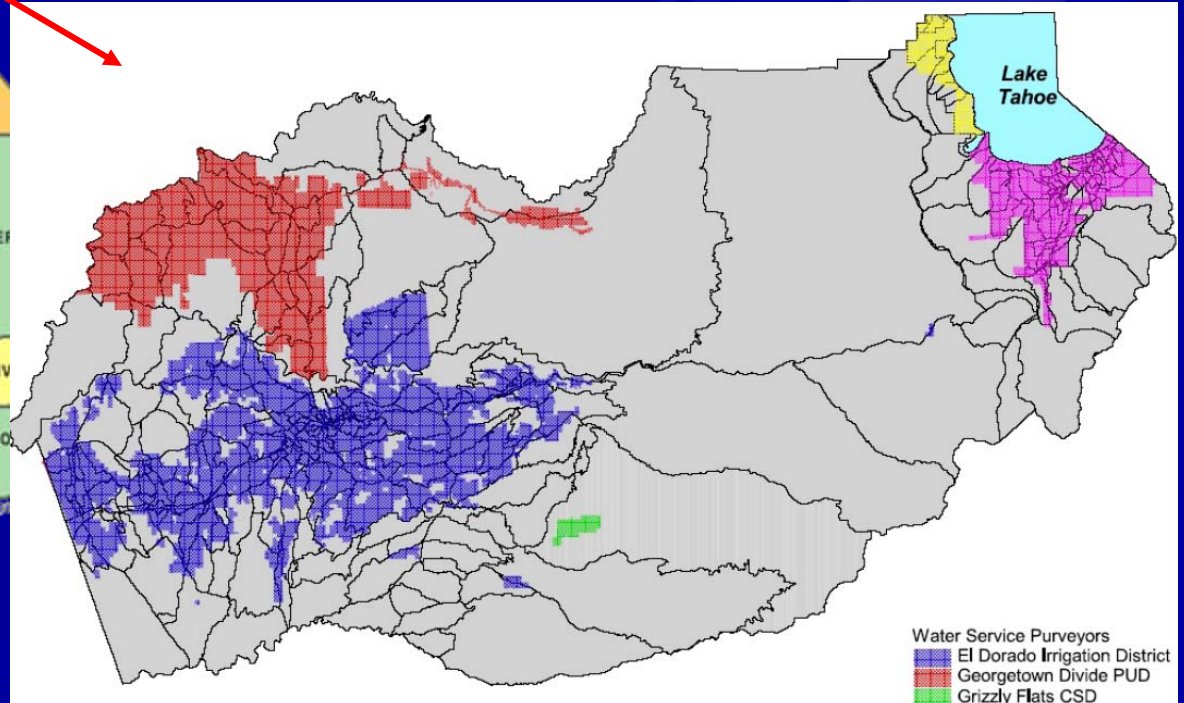
www.fh.net

50 cents



Local water agency faces regional drought with NO problems!

El Dorado County, CA



Water Service Purveyors
El Dorado Irrigation District
Georgetown Divide PUD
Grizzly Flats CSD

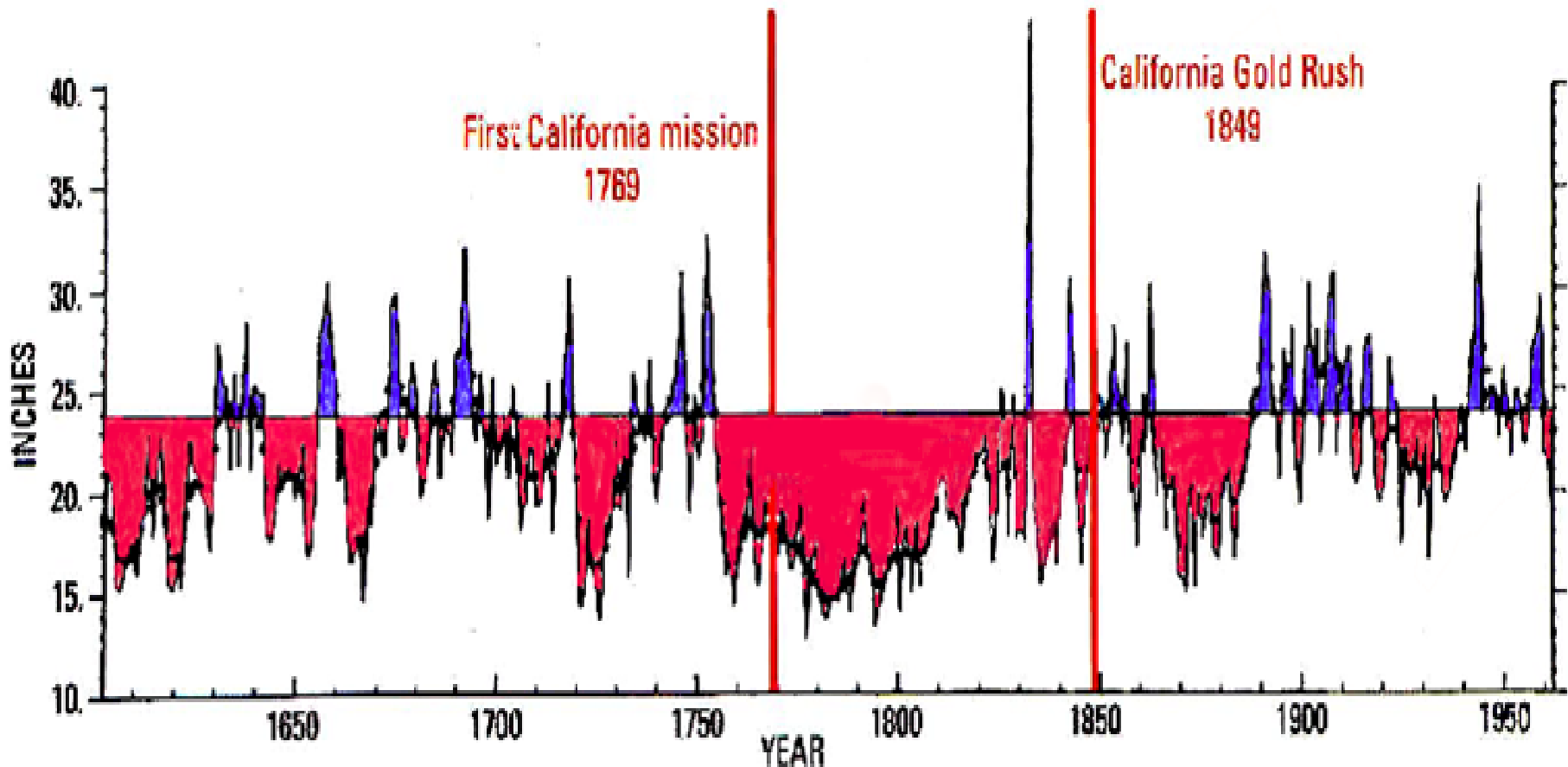
Why we started drought preparedness in 2004

- 1976-1977 (short and critically dry)
- 1987-1992 (long and dry)
- Historically – emergency response to drought



Climate Change

AVERAGE ANNUAL PRECIPITATION
(RECONSTRUCTED FROM 52 WESTERN TREE-RING CHRONOLOGIES)



Tree Ring Reconstruction of Annual California Precipitation, 1600-1961

The Project

Goal: Understand drought vulnerability and develop a community-based shared vision strategy to mitigate drought impacts.

- Stakeholder participation
- Technical tool (Shared Vision Model)
- Drought stages
- Drought mitigation measures

Drought Advisory Committee

- Local Representatives
- Water Agency Staff
- Scientific perspectives by key experts



Shared Vision Model as a tool to gain consensus

- Reliable indicators and triggers
- Climate change factors over long-term
- Agency-specific
- Drought mitigation alternatives
- User-friendly
- Transparent

Microsoft Excel - SVM_091105.xls

File Edit View Insert Format Tools Data Window Help Adobe PDF

Type a question for help

A37


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El Dorado County West Slope Shared Vision Drought Model

Updated August 31, 2006.


Please see "Model Help" folder on CD for helpful PowerPoint tutorials for this system.

click to link to home page


El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Single Springs, CA 95682
(530) 621-5392
<http://www.co.el-dorado.ca.us/water/>

Grizzly Flats Community Services District
P.O. Box 250
Grizzly Flats, CA 95636
(530) 622-9626

click to link to home page




Georgetown Divide Public Utility District
6425 Main Street
Georgetown, CA 95634
(530) 333-4356

El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667
(530) 622-4513

Click to link to [Quick Tour](#)

Click to link to [Table of Contents](#)

Click to link to [Model Reference Guide](#)



WARNING Home Quick Tour Contents Sources Model Reference Guide Summary County Schematic Placerville Precip EID Demands EID Design Drought Demands

Ready NUM

Drought Stages and Mitigation Measures



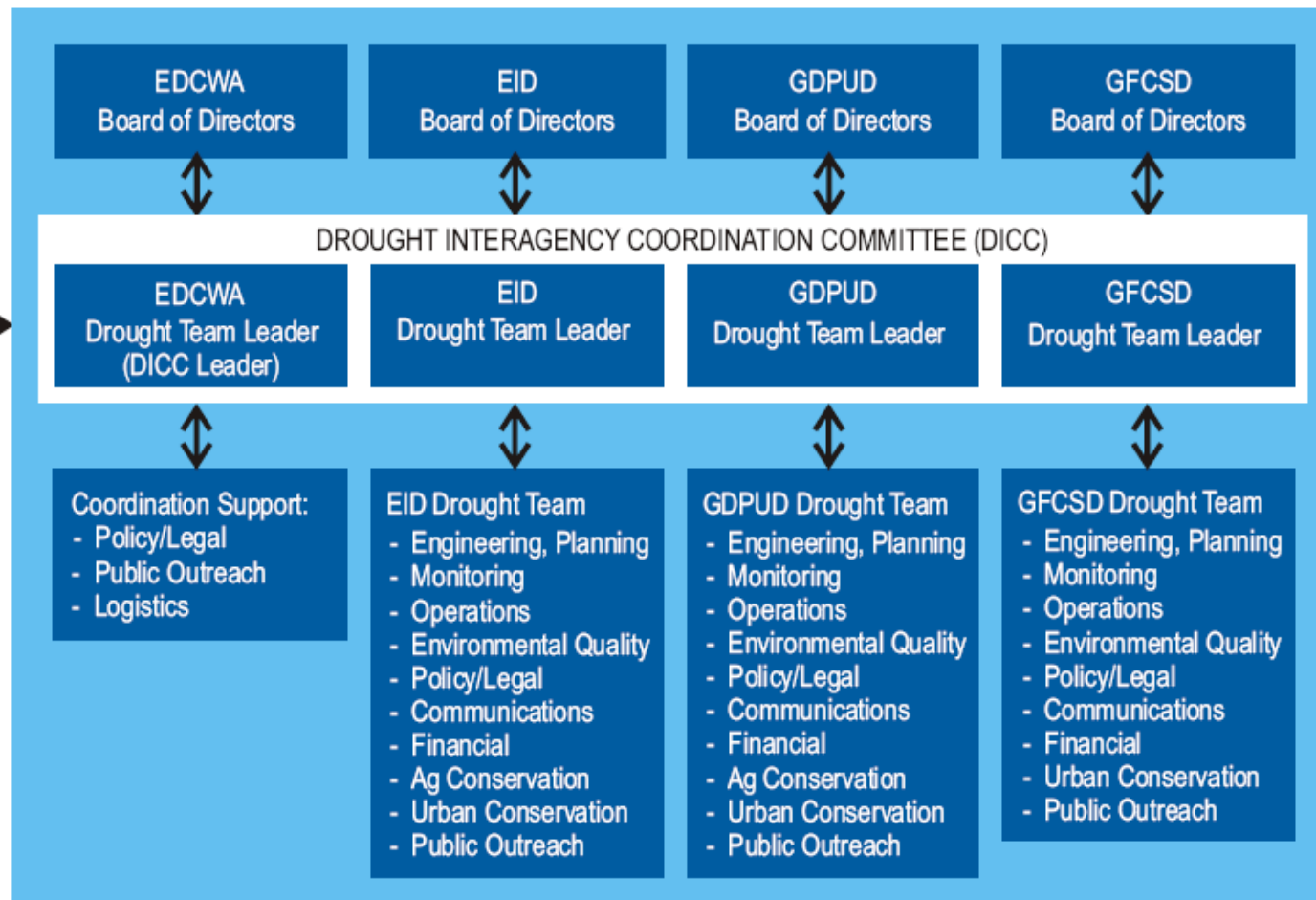
“So you can water your tomatoes!”

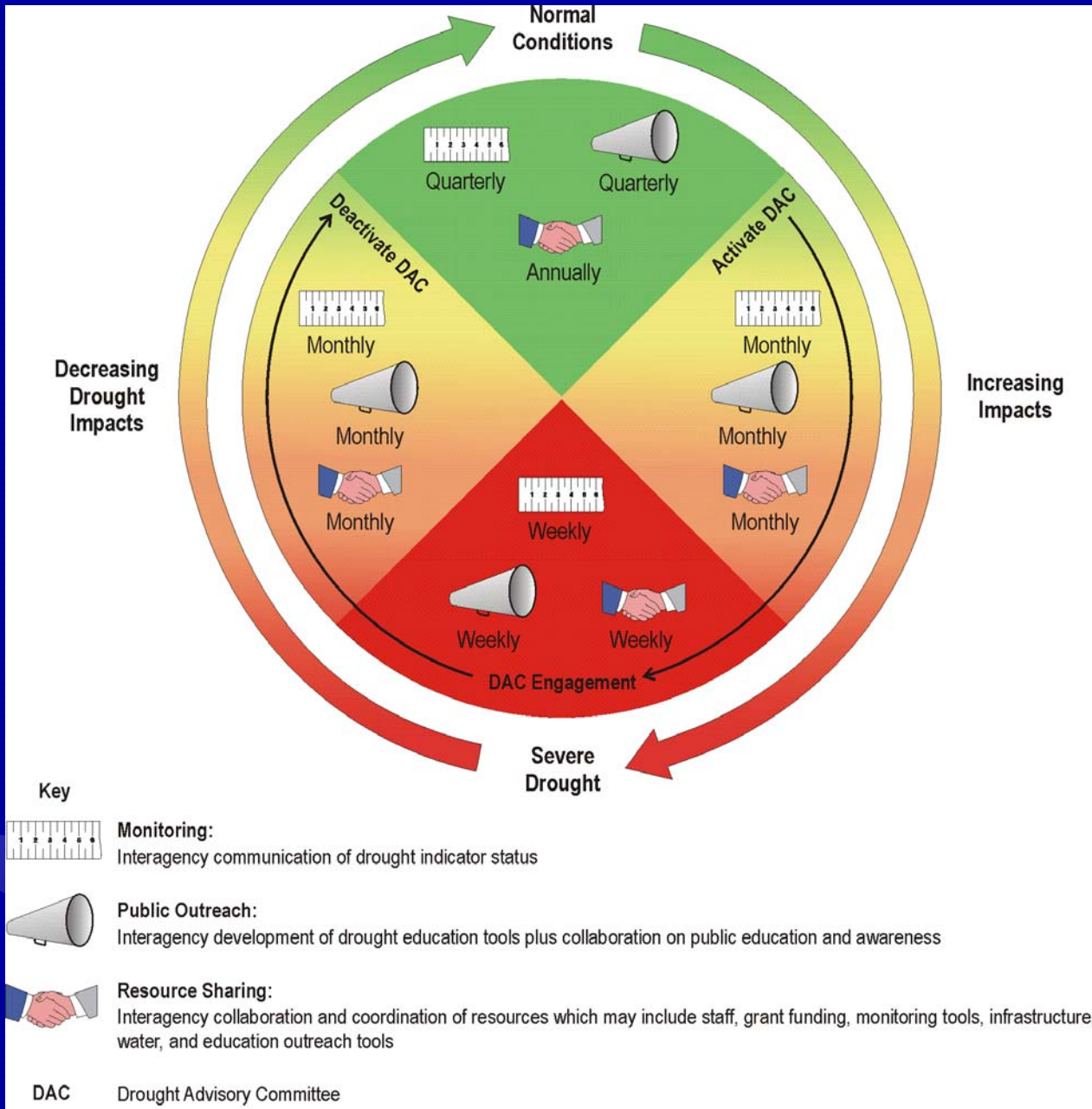
- Coordination among water agencies on the number and definition of drought stages
- Focus on voluntary compliance with an aggressive outreach approach
- Develop mitigation measures that meet local agency needs and maximize opportunities for interagency cooperation

Drought Interagency Coordination Committee

Drought Advisory Committee (DAC)

- Customer Group Representatives (e.g. Ag, Urban, Recreation, Chamber of Commerce)
- USBR
- El Dorado County Environmental Management
- CA Dept of Water Resources
- CA Dept of Fish and Game
- El Dorado County Agricultural Commissioner
- USFS
- CA Dept of Forestry
- El Dorado County Fire
- El Dorado County Conservationist
- Natural Resource Conservation Service
- SMUD

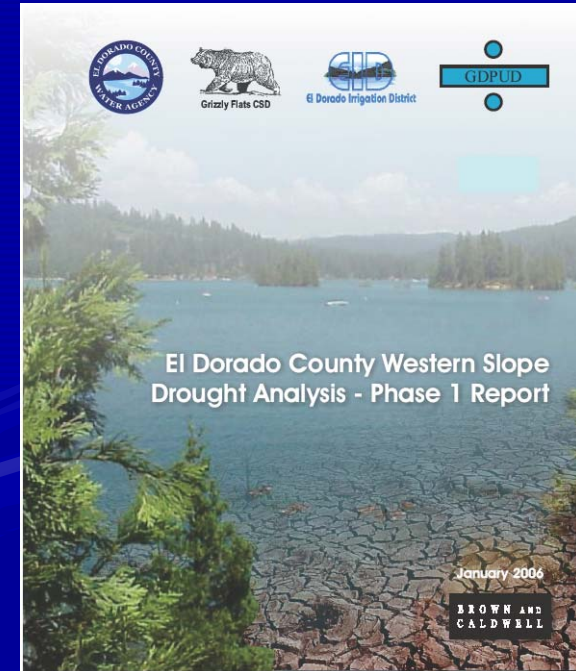




Project summary

Drought Preparedness Project

- Intensive drought analysis
- Shared Vision Model
- Stakeholder participation
- El Dorado County
 - Better prepared for next drought
 - Public assured expectations
 - Stakeholder concerns are valued





... and then there was drought



...and the Plan is tested

The New York Times

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Governor Declares Drought in California



David McNew/Getty Images

With water being diverted upstream, the Kern River in Bakersfield, Calif., is expected to remain dry. Reserve wells were opened this week in Kern County.

By JENNIFER STEINHAUER

Published: June 5, 2008

NY Times, June 5, 2008

Drought in California NOW!

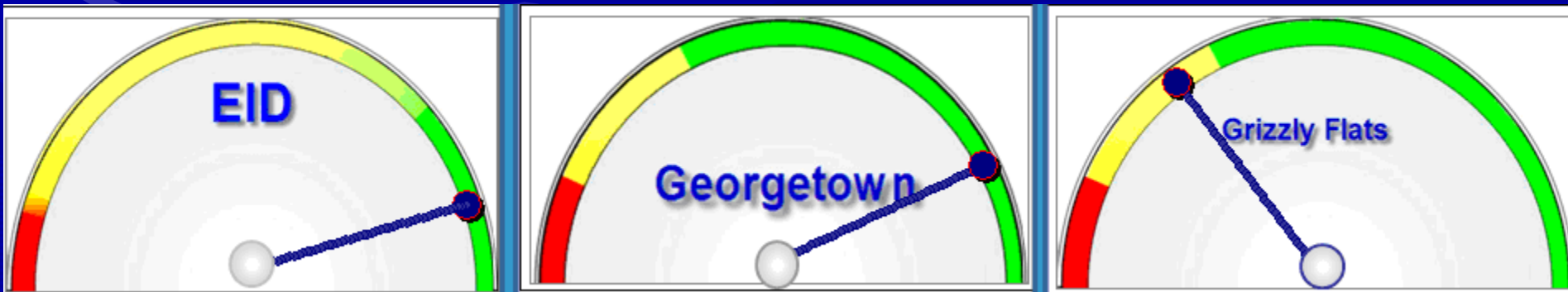
- March-June - driest four-month period on record
- April-May-June - sixth driest in 114 years of record keeping
- Rainfall for 07/08 is approx. 75% of average



Bakersfield, CA
Source: NY Times, 6/5/08

October '08 Drought Status

- EID – Stage 0, but enforcing wastewater ordinance
- GDPUD – Stage 0 , just monitoring
- GFCSD – Stage 1, 10% cutbacks
- EDCWA – Countywide public outreach



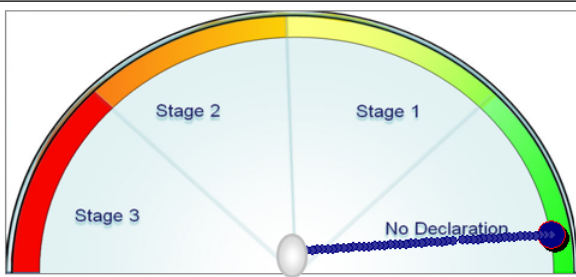
October '08 Drought Status

Today's Drought Status in EID

Type in date
(XX/XX/XXXX):

10/7/2008

[Help](#)



Under the terms of the Drought Status SRI plan, EID is not currently in drought. The current supply remaining index (SRI) is 0.9. Based on the simulation of the SRI plan using 1922-2002 supplies, there is a 0% chance that EID will go into a drought next month, and a 0% chance that EID will go into a drought sometime during the next five months.

Drought Stage and Supply Remaining Index for November .

Drought Stage NOW:

No Drought

Enter last month's stage:

0

[More details](#)

SRI: 0.90

*SRI ranges from 0-1 and is based on days supply remaining as a function of current storage, worst-case expected supplies, and normal (unconstrained) demand in the coming months.
(go to HELP sheet for more info)*

Climate Cycle Episode El Nino Southern Oscillation (ENSO) and DWR Water Year Type Data

ENSO

-0.4

Warm (positive value) and cold (negative value) episodes are based on a threshold of +/- 0.5 degrees Celcius for the Oceanic Niño Index (ONI), based on the 1971-2000 base period.

Current Water Year Type (1-5):

[click to link to DWR website](#)

5

Water Year Type is Critical. Water Year obtained from DWR Sacramento Valley Water Year Type Index. Final determination is based on the May 1 50% exceedence forecast.

Snow water content is not an indicator because analysis shows no consistent correlation with historical drought occurrences.

Enter Current Reservoir Storage (acre-feet): *(click on underlined Lake name to link to online data source and update data manually)*

Sly Park

30,000

Sly Park is 73% full.



Check if the Board decides to add one stage to the SRI

How's the Plan's working...

- 3 for 4 - agencies are using the Plan
- Drought Interagency Committee Coordination meetings
- Plan revisions are being made as tools and procedures are tested in real-time drought
- Pursuing long-term mitigation alternatives
- Media involvement

How's the Plan's working...

- GFCSD – called early, recalled, and called again.
- EID – tested the trigger plan; developing operational procedures
- GDPUD – testing the new plan; gaining comfort; urban vs ag
- EDCWA – coordinating DICC meetings; facilitating new water sources (short and long-term); outreach

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In wet year, EDID prepares for drought down the road

By Cathy Locke - clocke@sacbee.com
 Last Updated 11:56 am PST Tuesday, February 12, 2008

Print | E-Mail | Comments (0) | | SHARE

Recent storms have lessened concerns about 2008 water supplies, but the El Dorado Irrigation District is preparing for years when Mother Nature proves less generous.

Announcements

Save water, save \$\$

Complimentary water surveys will help you save money and save water. The surveys are available to all EID customers, residential or commercial. Schedule one today! [More >>](#)



El Dorado County Water Agency

Helen K. Baumann <i>Board of Supervisors</i>	John P. Fraser <i>El Dorado Irrigation District</i>	James R. Jones <i>South Tahoe P.U.D.</i>	Norma Santiago <i>Board of Supervisors</i>	James R. "Jack" Sweeney <i>Board of Supervisors</i>	William T. Hetland, P.E. <i>General Manager</i>
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NEWS RELEASE
**Drought Interagency Coordination Committee
 Holds First Meeting**

(EL DORADO COUNTY, June 12, 2008) — Staff members from water agencies along El Dorado County's west slope held their first joint committee meeting July 11 to review drought preparedness realities and possible initiatives.

Lessons

- Cooperation between large and small agencies
- Inter/intra relationship development
- Office of Emergency Services contact
- Develop a better understanding of each Agency's existing program
- Customer trust is important
- Sometimes you'll find your original plan works – and that OK

Questions?

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