



CITY OF BEVERLY HILLS STAFF REPORT

Meeting Date: February 18, 2014
To: Honorable Mayor & City Council
From: Daniel E. Cartagena, Senior Management Analyst *DE*
Subject: Presentation by Metropolitan Water District (MWD)
Providing an update on the State Water Project, Current
Water Supply and Water Storage Plan

Attachments:

1. Metropolitan Water District Powerpoint Presentation
2. Governor Edmund G. Brown's Proclamation of State of
Emergency

INTRODUCTION

On January 17, 2014, Governor Edmund G. Brown proclaimed a State of Emergency due to current statewide drought conditions. MWD Board member representing Beverly Hills, Dr. Robert Wunderlich and MWD Engineer Demetri Polyzos, will provide an update to the City Council on the State Water Project, current water supplies and MWD's water storage plan.

DISCUSSION

In light of the recently declared drought by Governor Brown, this report details the MWD's current and ongoing water storage and delivery processes and the agency's response to the state's declaration.

FISCAL IMPACT

None

RECOMMENDATION

This item is presented for informational purposes only.


George Chavez
Approved By

Attachment 1

Water Supply and Water Storage Plan

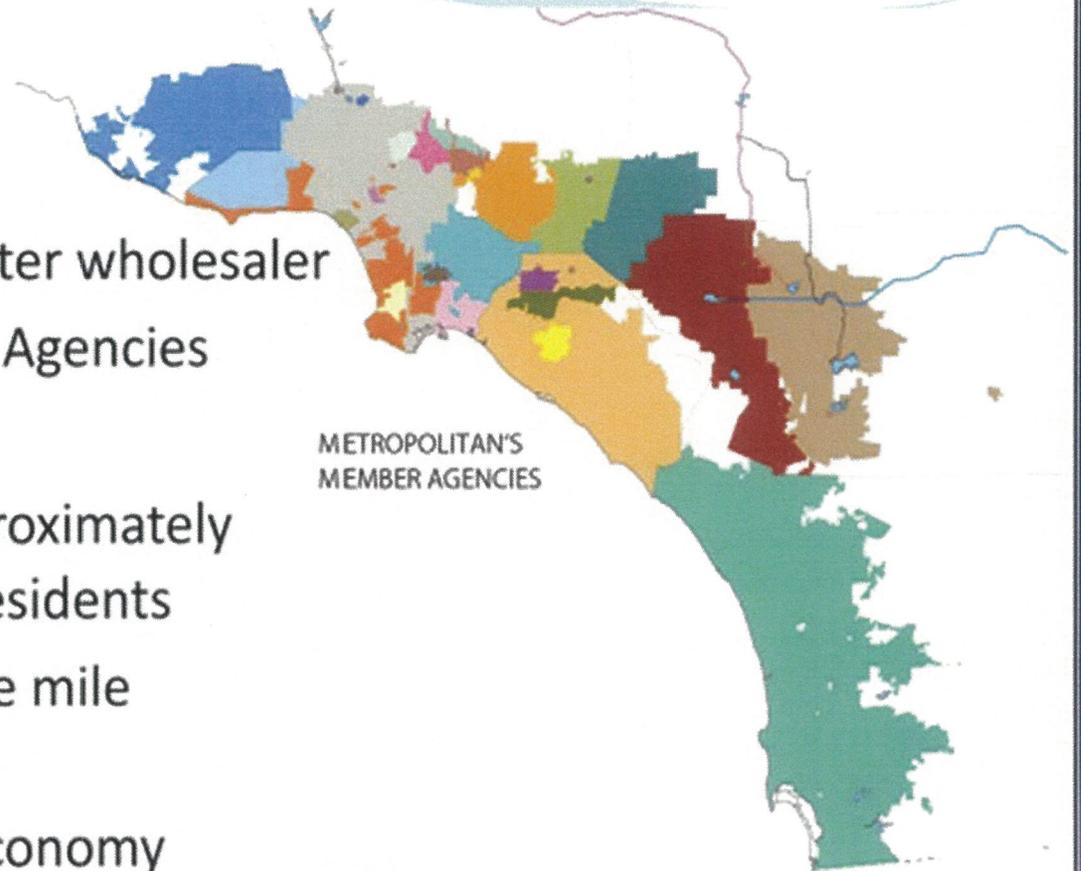
City Council Study Session
City of Beverly Hills
February 18, 2014

Metropolitan Water District

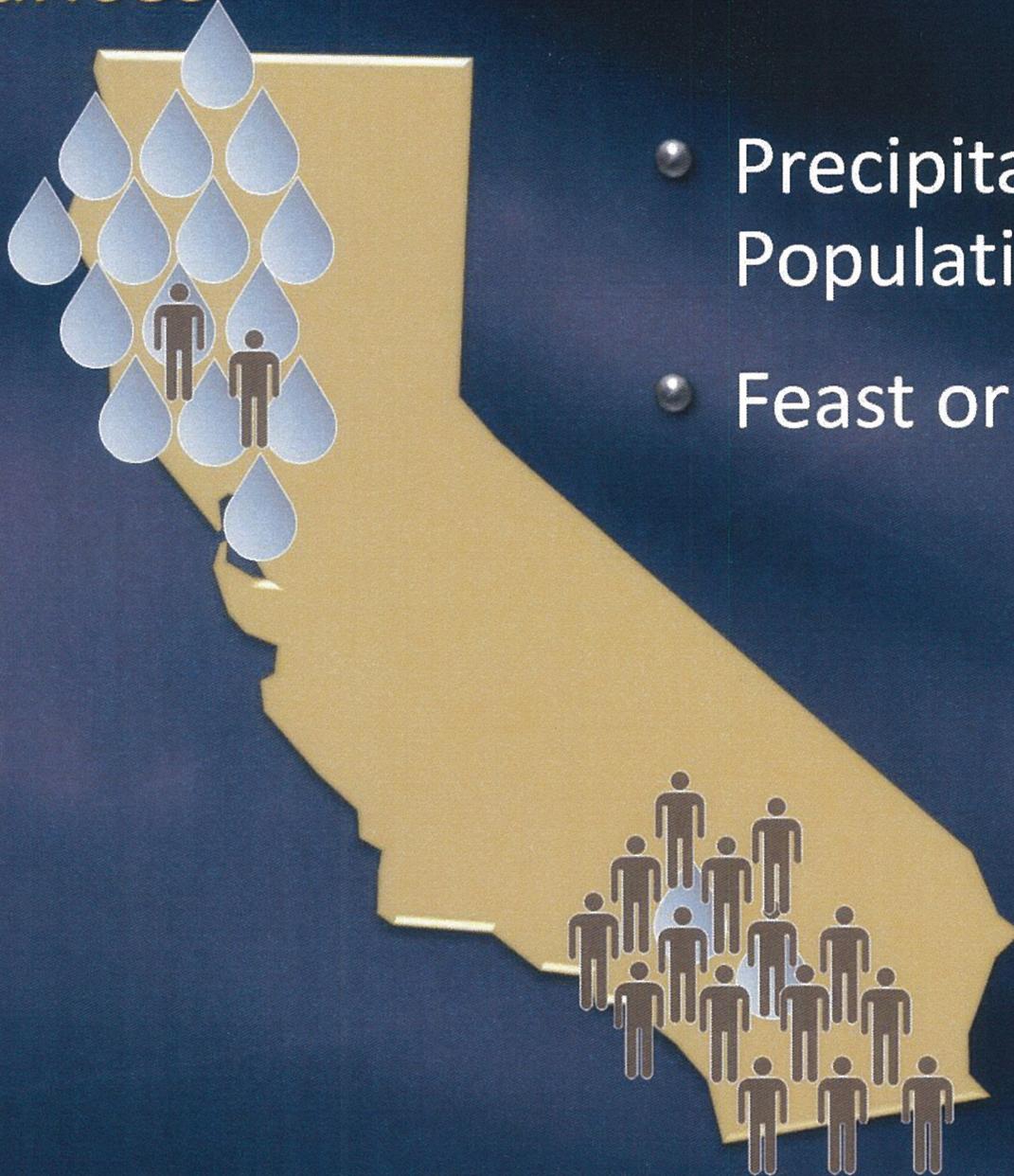


Metropolitan Water District

- Regional water wholesaler
- 26 Member Agencies
- 6 counties
- Serving approximately 19 million residents
- 5,200 square mile service area
- \$1 trillion economy



Managing Hydrologic and Geographic Imbalances



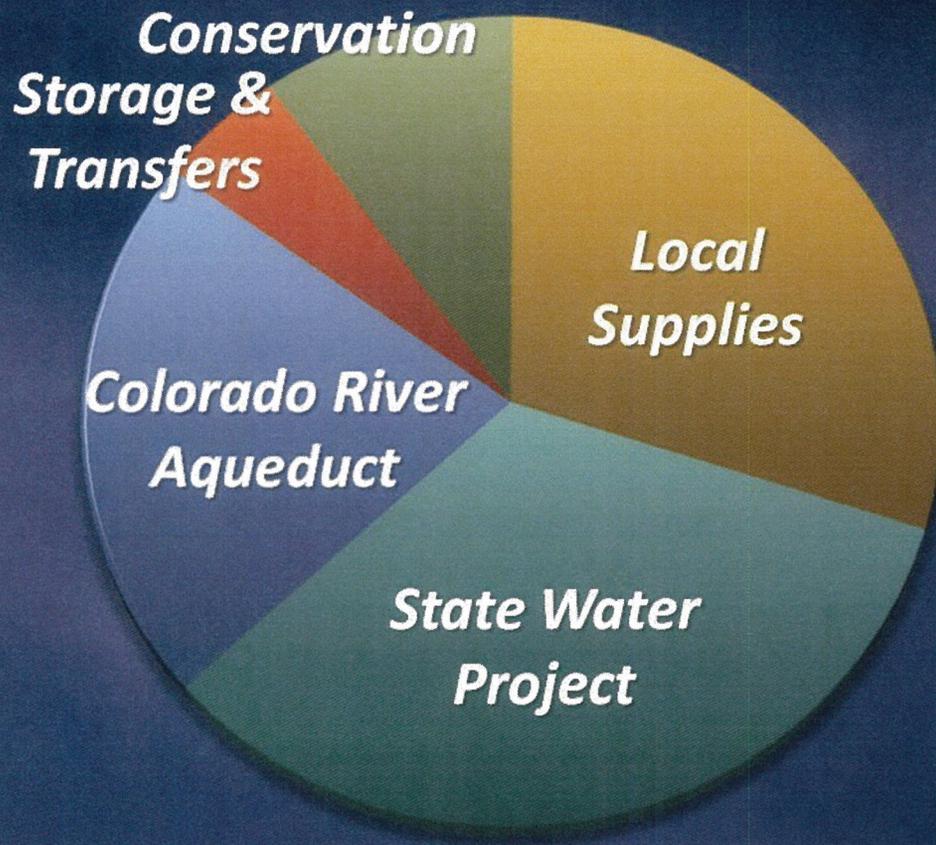
- Precipitation vs. Population
- Feast or Famine

Managing Hydrologic and Geographic Imbalances

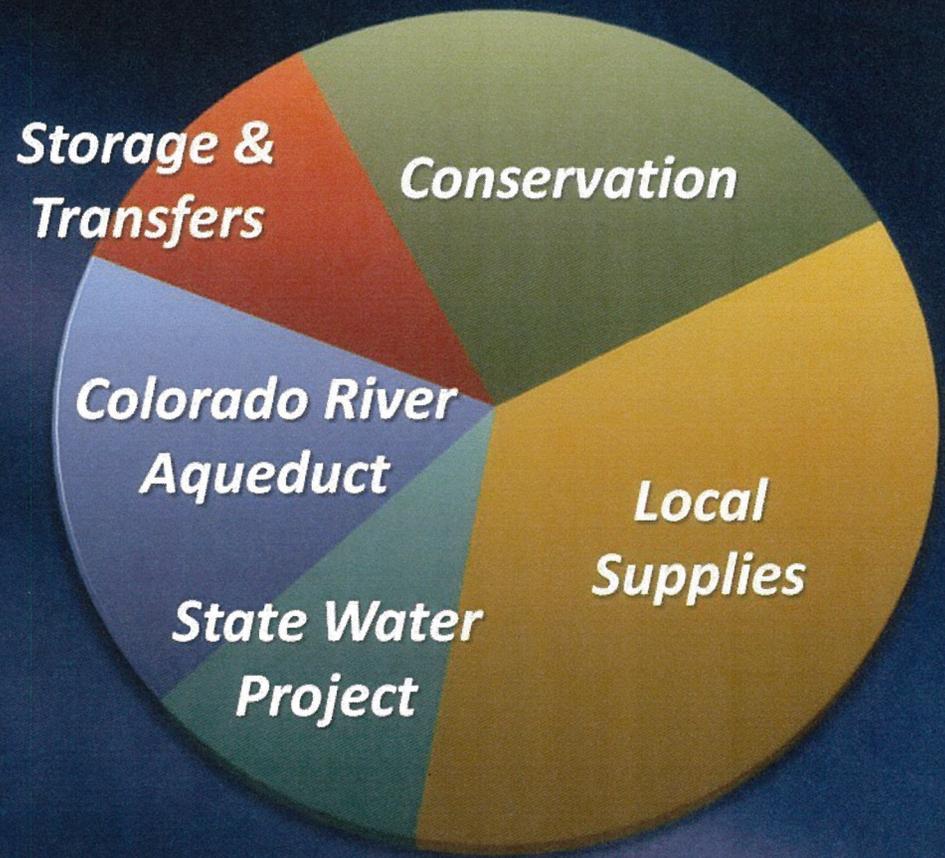
Southern California invests in large conveyance projects



Diversification of Water Portfolio (Dry-Year Supplies)

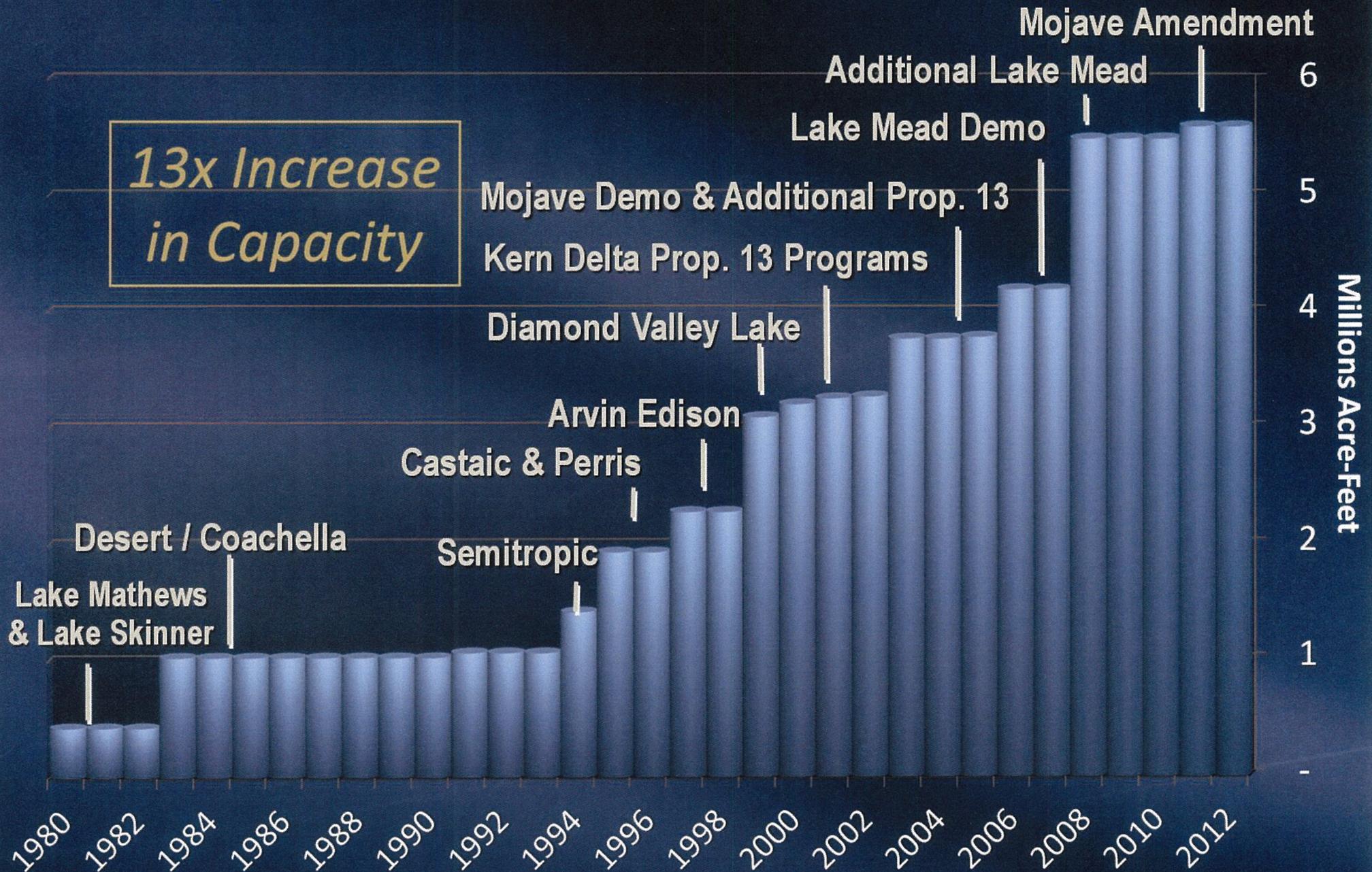


Early 1990's
Heavy dependence on imported supply and SWP Diversions

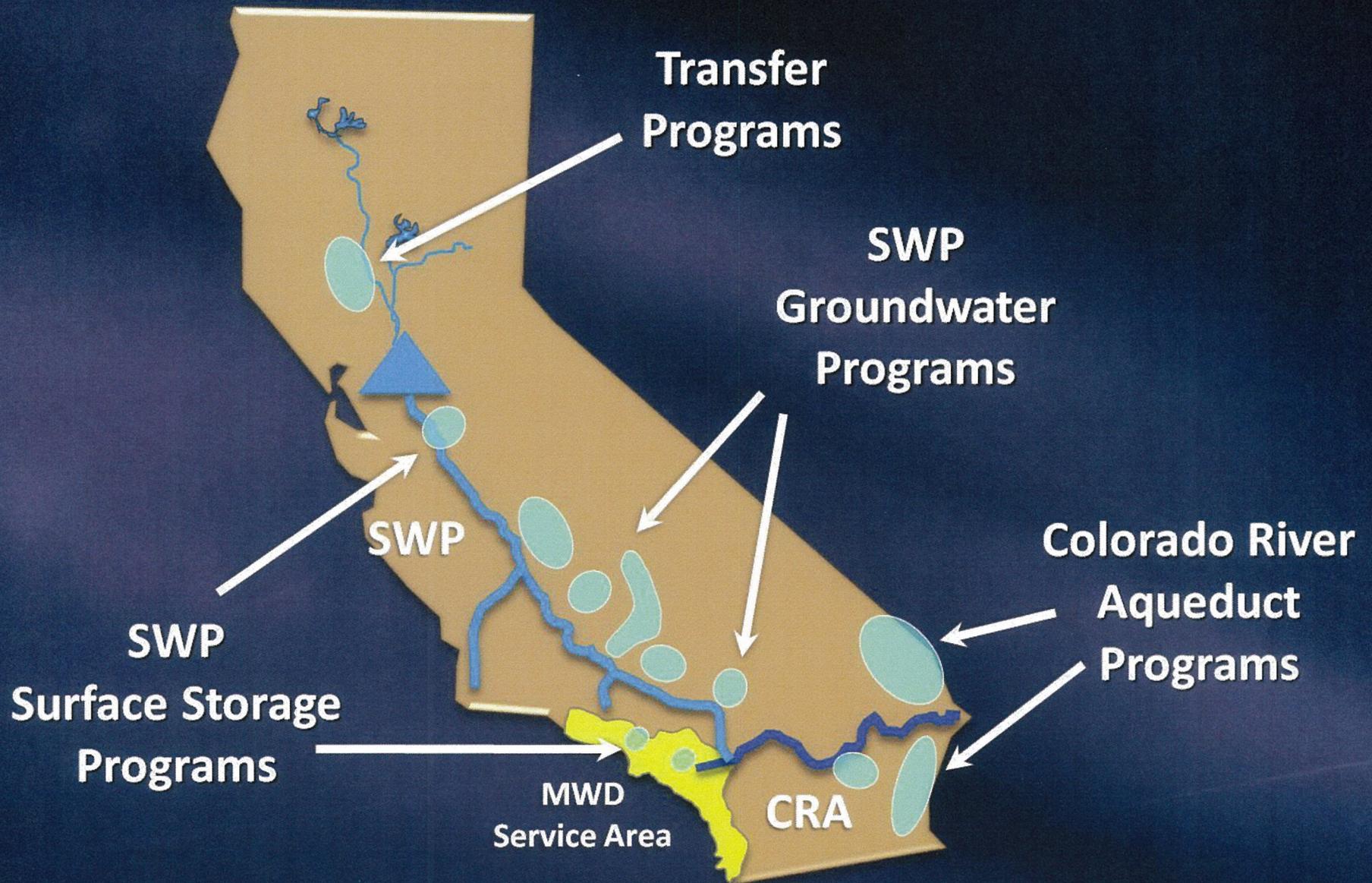


2010 IRP Strategy
Emphasis on Conservation, Local Supplies, and Storage & Transfers

Metropolitan's Storage Capacity



Managing Hydrologic and Geographic Imbalances



Local Investments

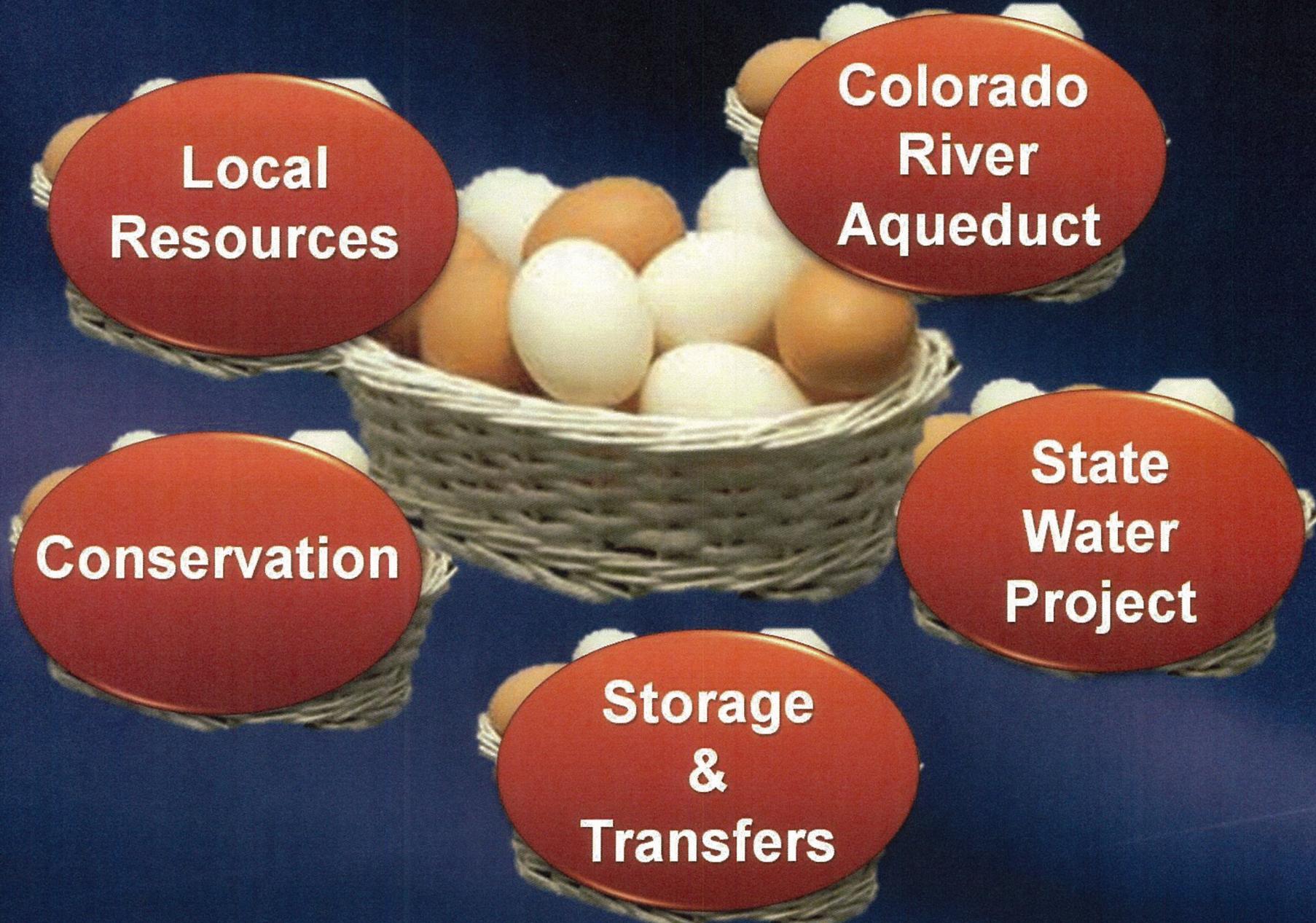
Diamond Valley Lake



Local Investments

	Cost	Benefit
Diamond Valley Lake	\$2 billion	810 TAF of storage
Inland Feeder Project	\$1 billion	Access to SWP supplies
Conservation Programs	\$333 million	1.9 MAF water savings
Local Resources Programs	\$449 million	2.5 MAF water produced

Diverse Resource Mix



**Local
Resources**

**Colorado
River
Aqueduct**

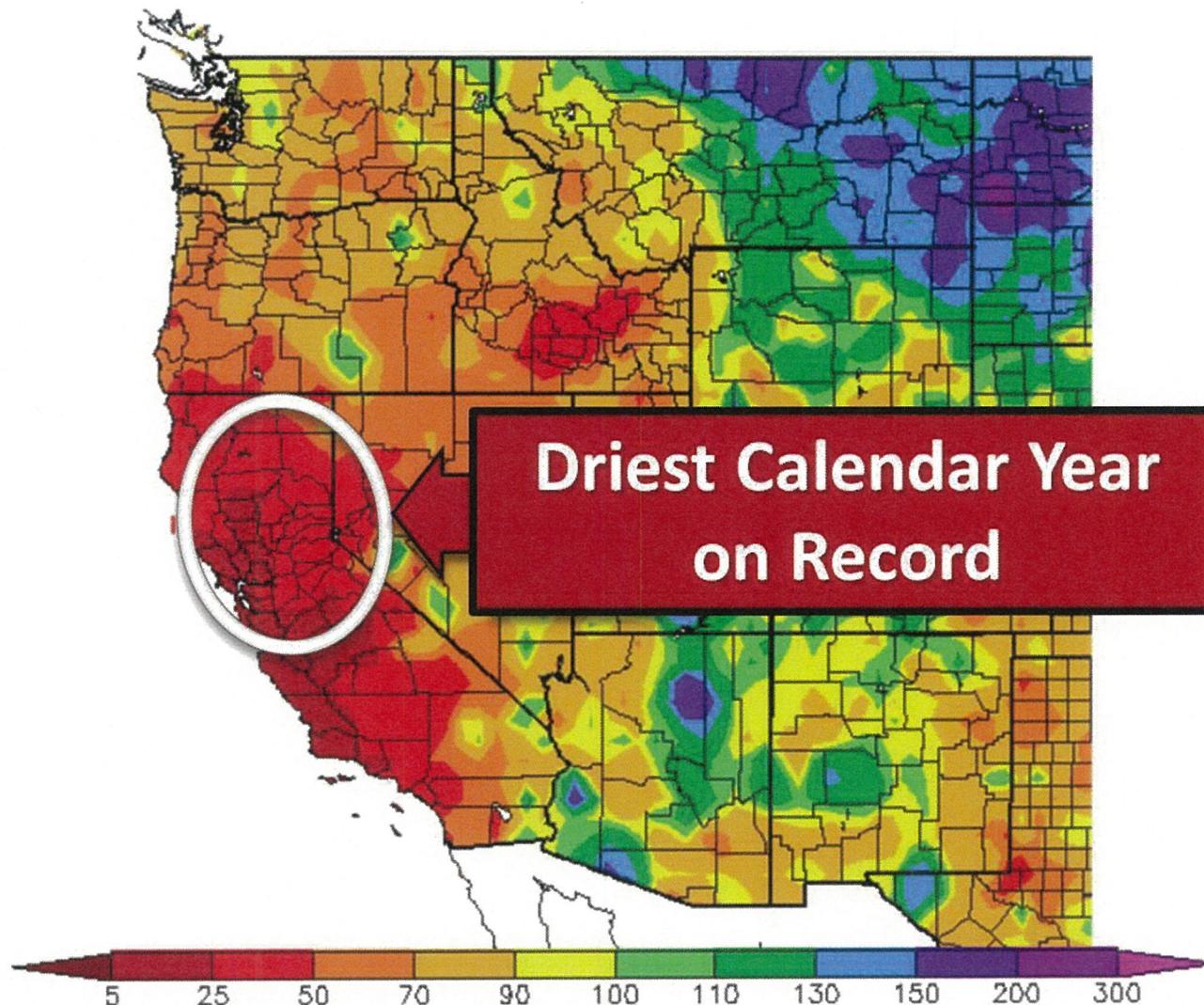
Conservation

**State
Water
Project**

**Storage
&
Transfers**

2013 Hydrologic Conditions

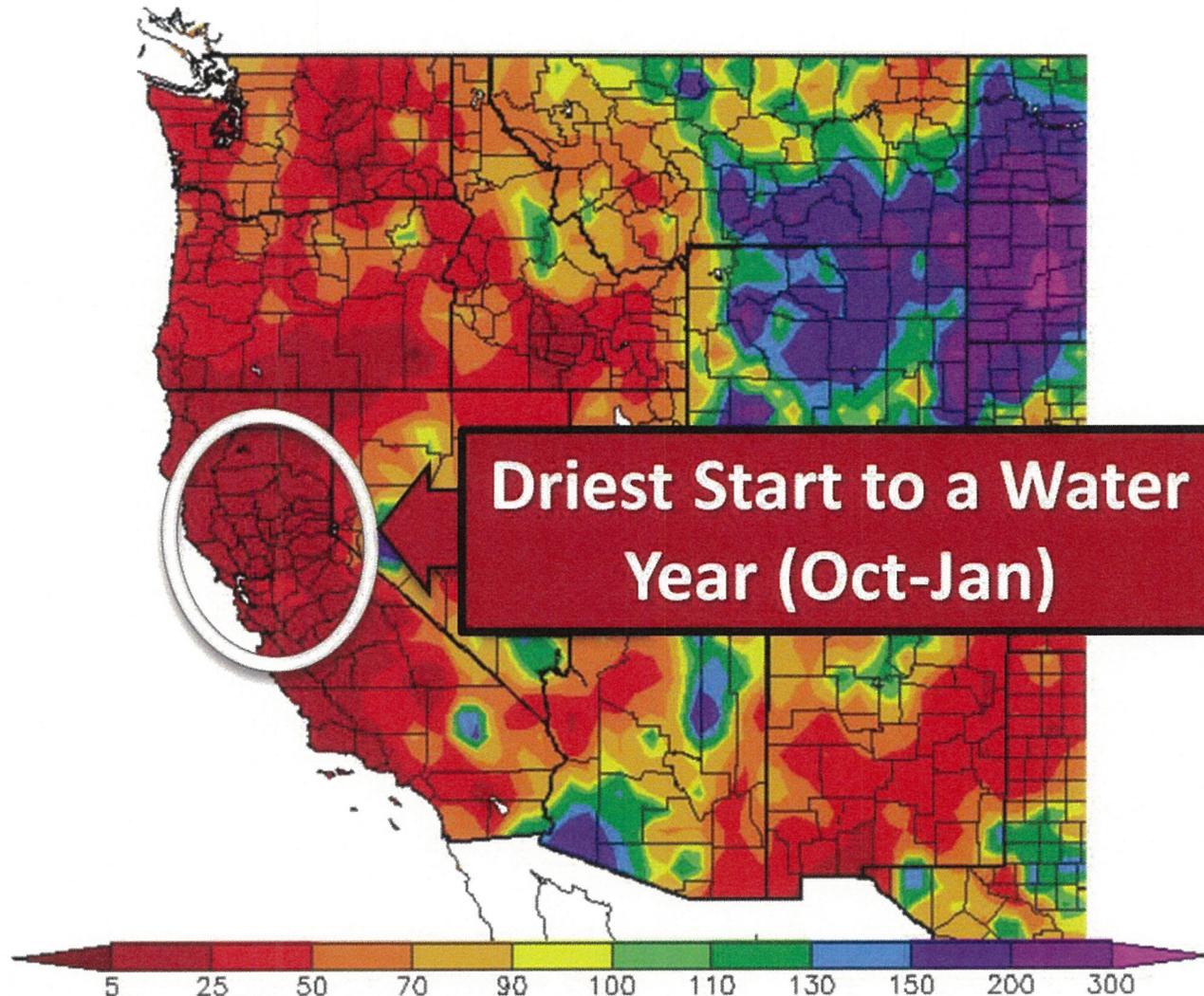
Percent of Average Precipitation (%)



Generated 1/09/2014 at WRCC using provisional data.
NOAA Regional Climate Centers

2014 Hydrologic Conditions

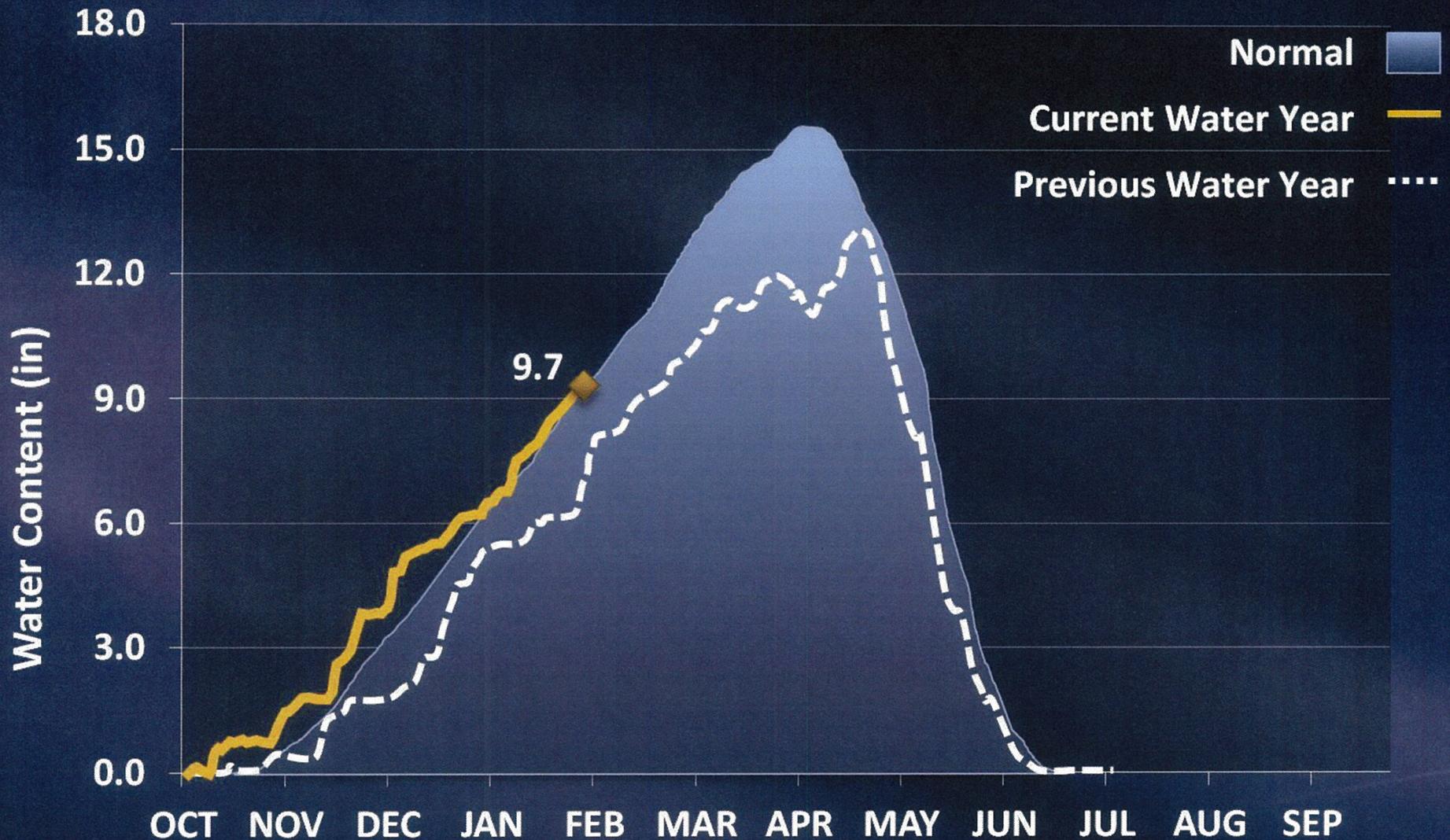
Percent of Average Precipitation (%)



Generated 1/09/2014 at WRCC using provisional data.
NOAA Regional Climate Centers

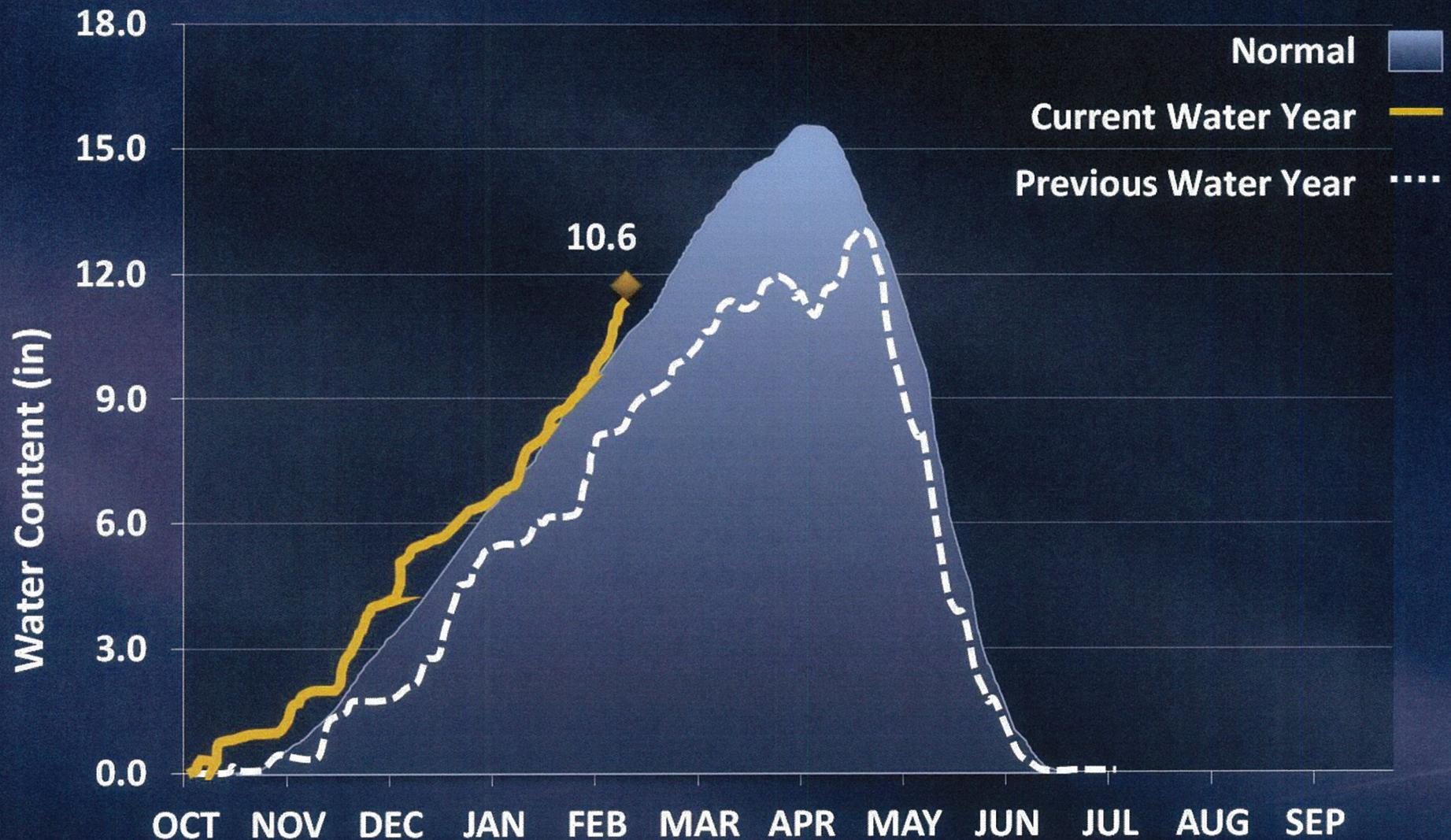
Colorado River Hydrologic Conditions

Upper Colorado Basin Snowpack



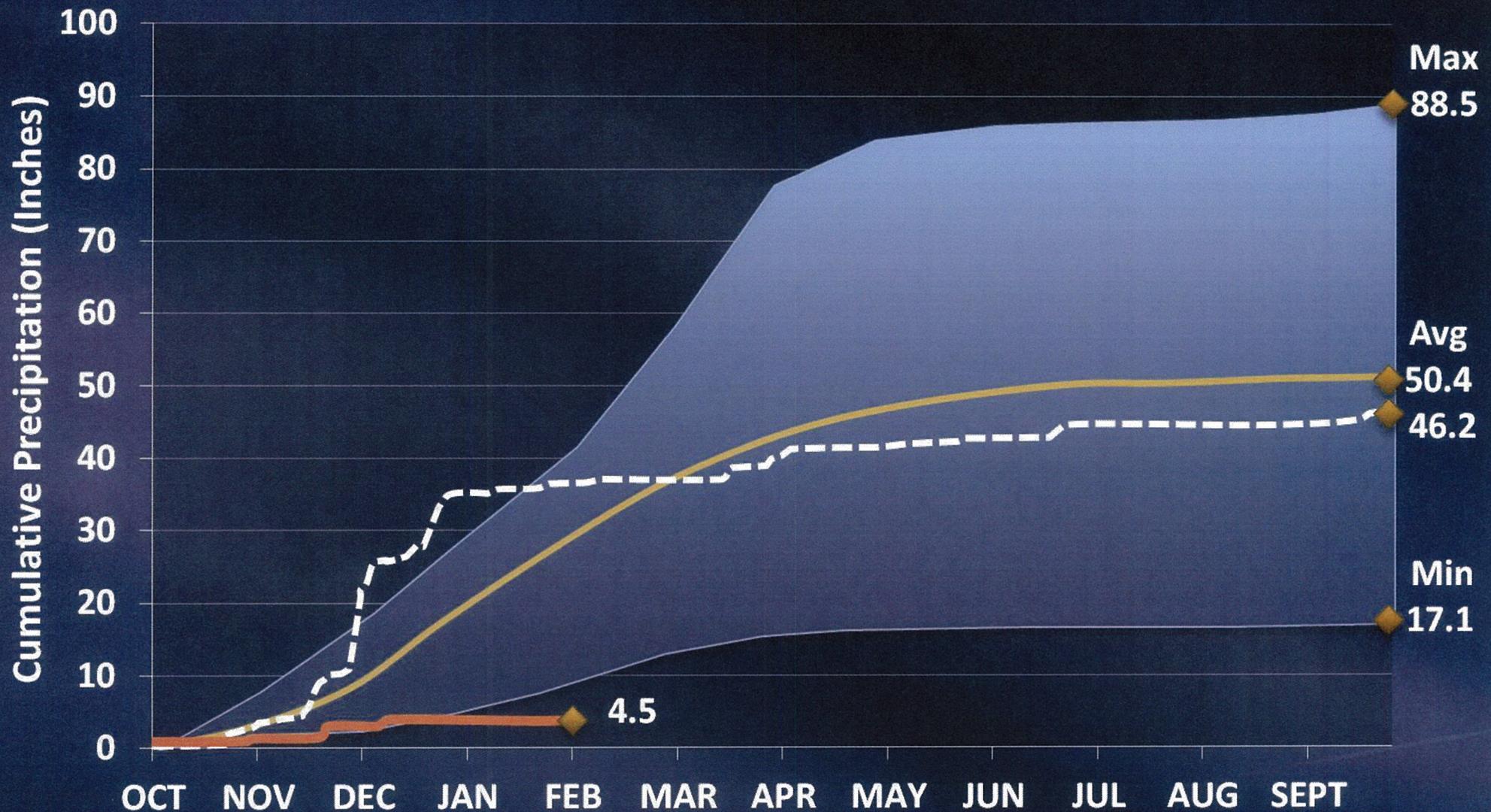
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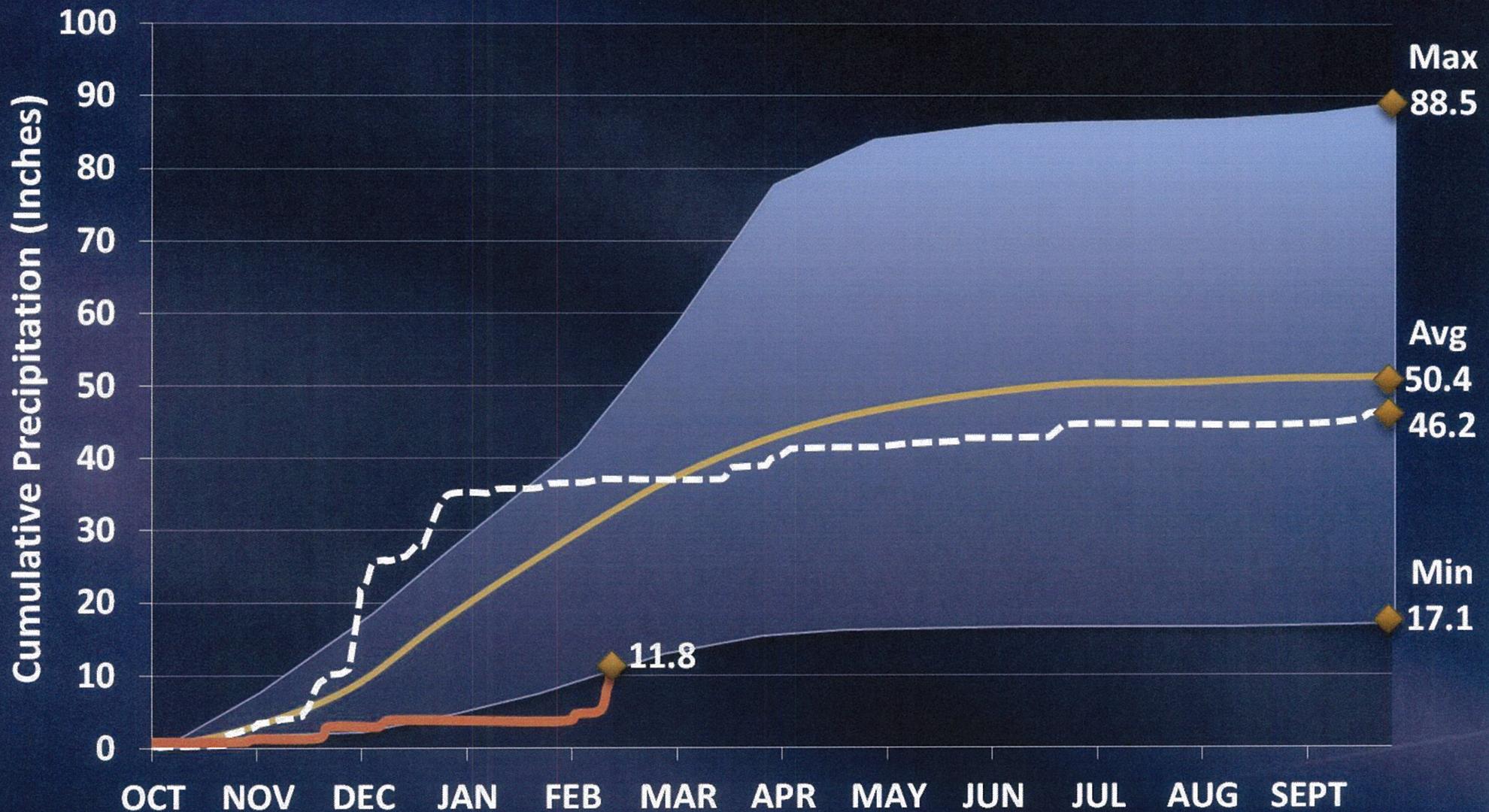
Northern Sierra Hydrologic Conditions

Eight Station Index WY 1922-2013



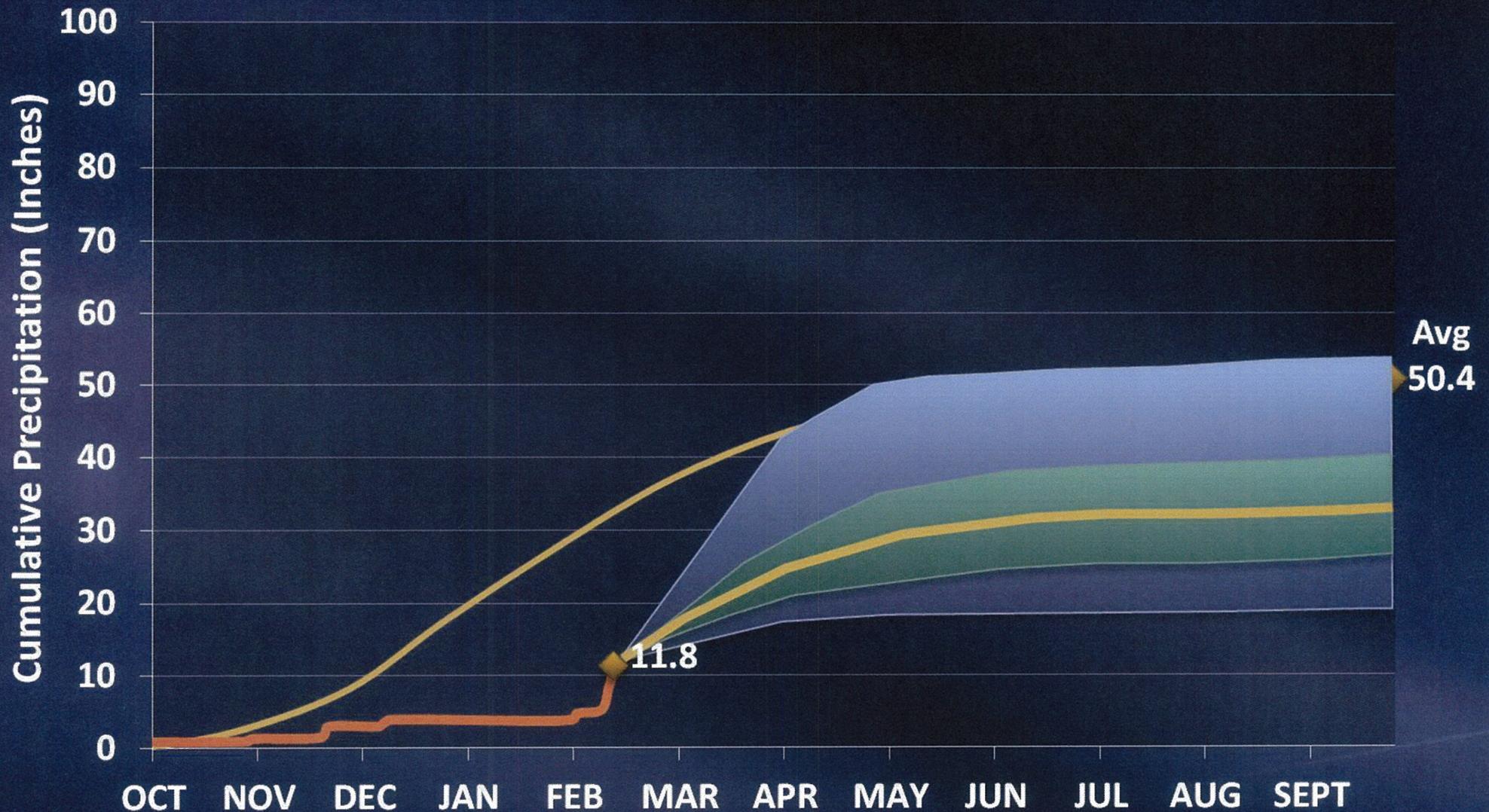
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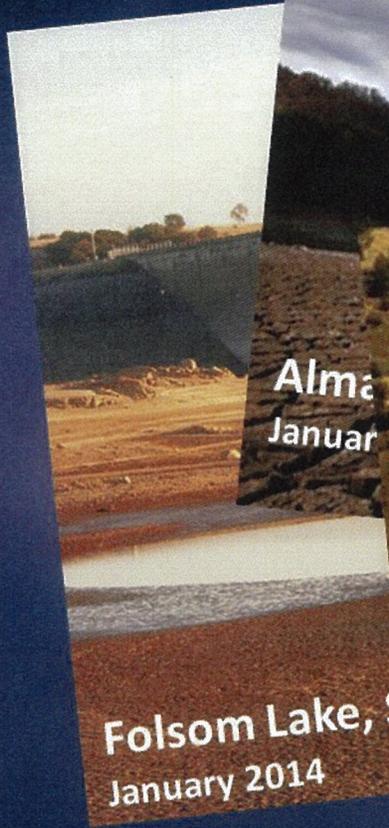


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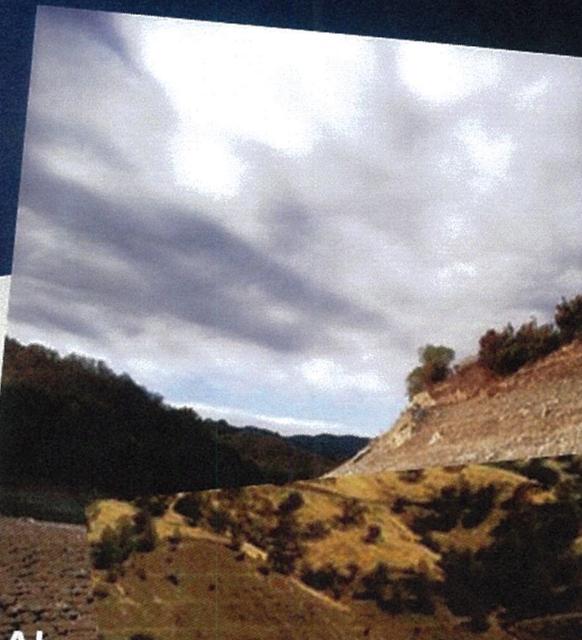


Statewide Impacts



Alma
Januar

Folsom Lake, S
January 2014



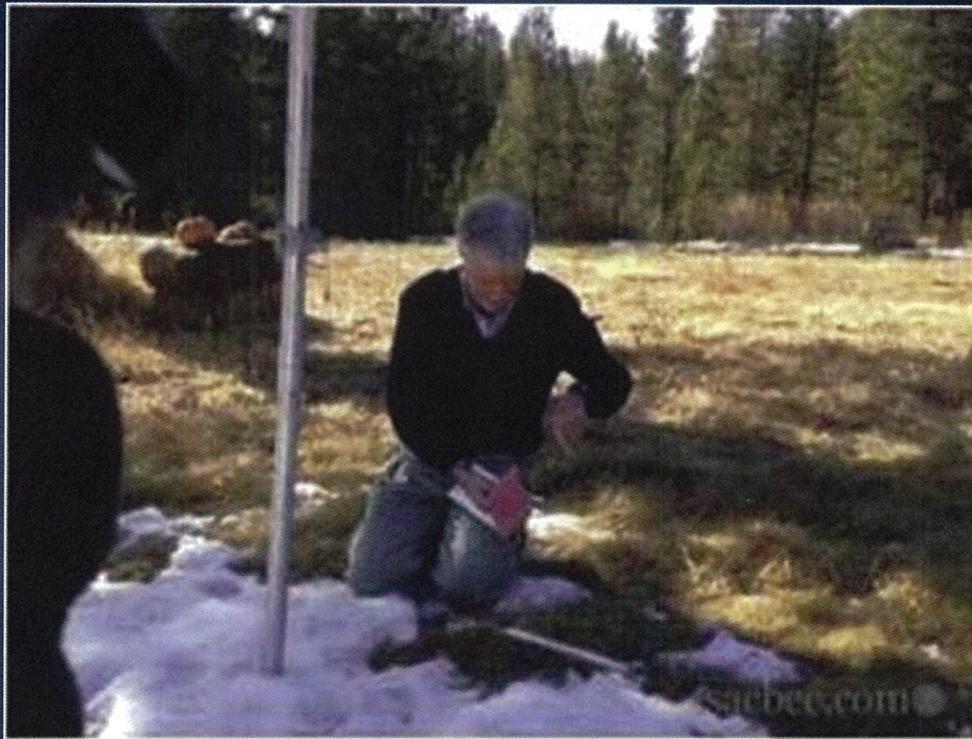
Lake Ghisolfo, Calistoga
January 2014



Lake Oroville
December 2013

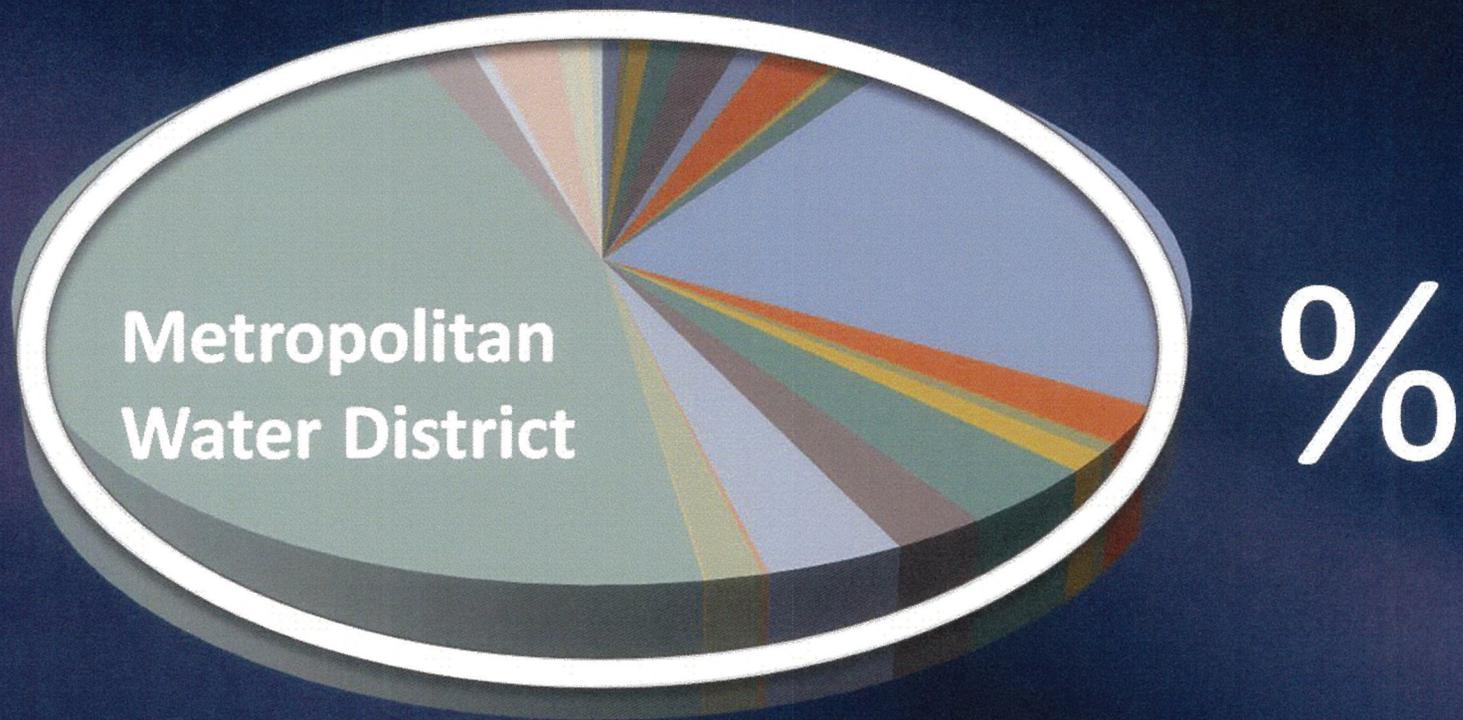
Recent Events

- Second snow survey is only 12% of normal snowpack to date



Recent Events

- DWR reduced the SWP Allocation to zero percent



Recent Events

- Governor Brown Declares a State Drought Emergency



State of California Drought Emergency

- “Perhaps the worst drought California has seen since records began being kept”
- Calls for citizens to do their part and reduce water use by 20 percent
- Looks to clear the way for water transfers and exchanges

Outcomes from Governor's Southern California Visit

- Metropolitan's response
 - Declare a Water Supply Alert to support a 20% reduction in water use
 - Double conservation budget to \$40 million
 - Explore achievable means to help address water supply challenges state-wide

2014 Available Supply

Based on Currently Allocated Supplies

- SWP: 600 TAF

- Table A Allocation: 0 TAF

- Storage & Programs: 600 TAF

- CRA: 1.2 MAF

- Basic Apportionment: 550 TAF

- Colorado System
Storage & Programs: 650 TAF

Winter
storms may
improve the
SWP
Allocation

2014 Supply and Demand Balance

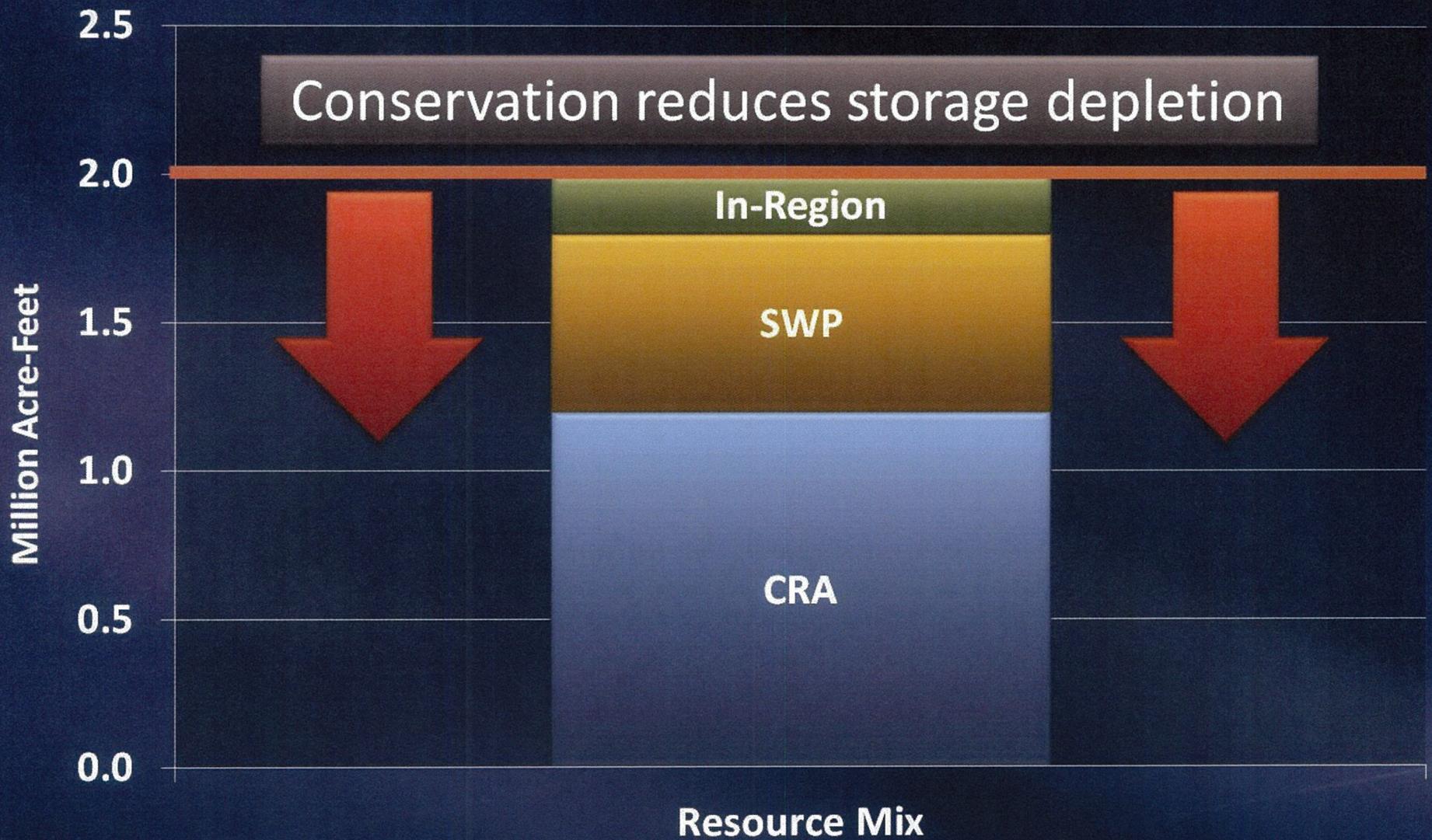
Based on Currently Allocated Supplies and Demands

Supply/Demand Balance	Acre-Feet
SWP Supply	600,000
CRA Supply	1,200,000
Total Supply	1,800,000
Total Demand	2,000,000
In-Region Storage Requirement	200,000

2014 Supply and Demand Balance



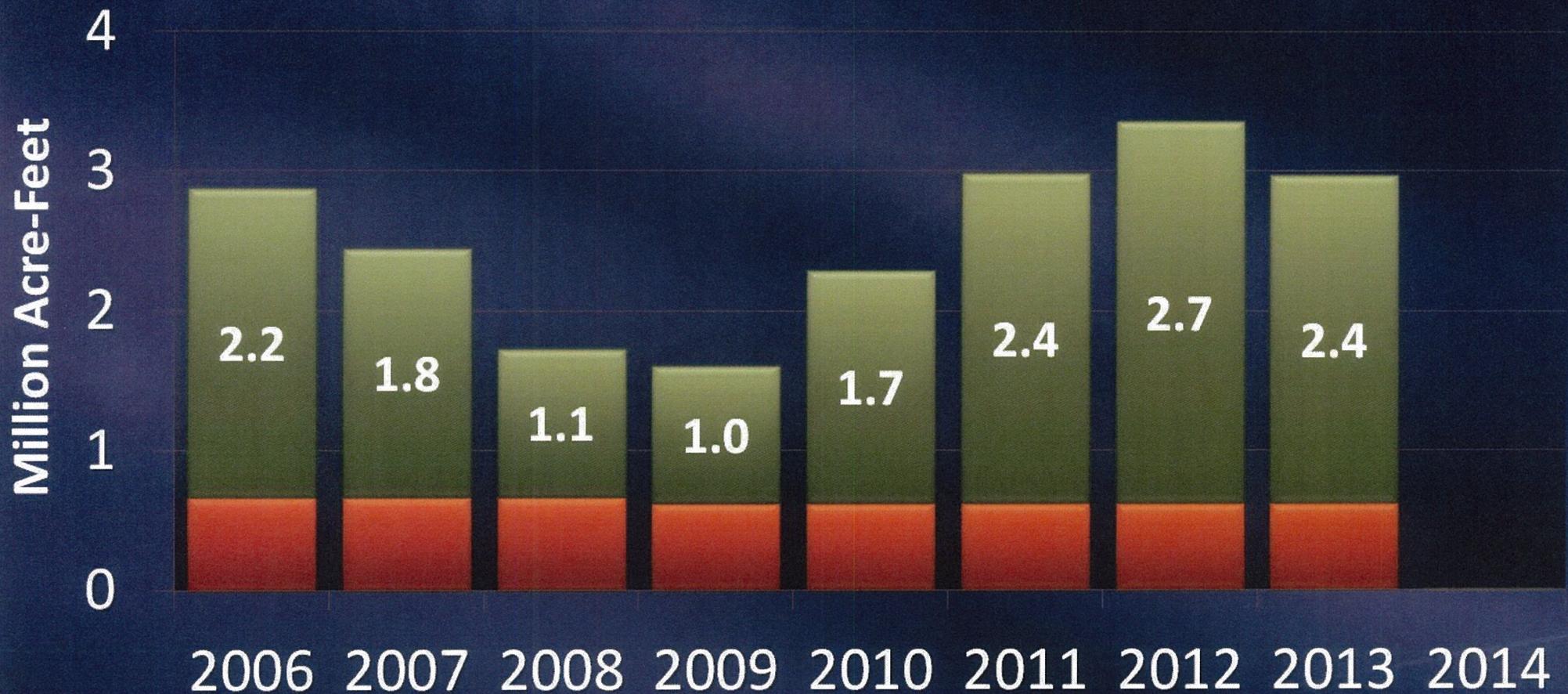
2014 Supply and Demand Balance



MWD Storage Reserves

End of Year Balances*

■ Emergency Storage ■ Dry-Year Storage



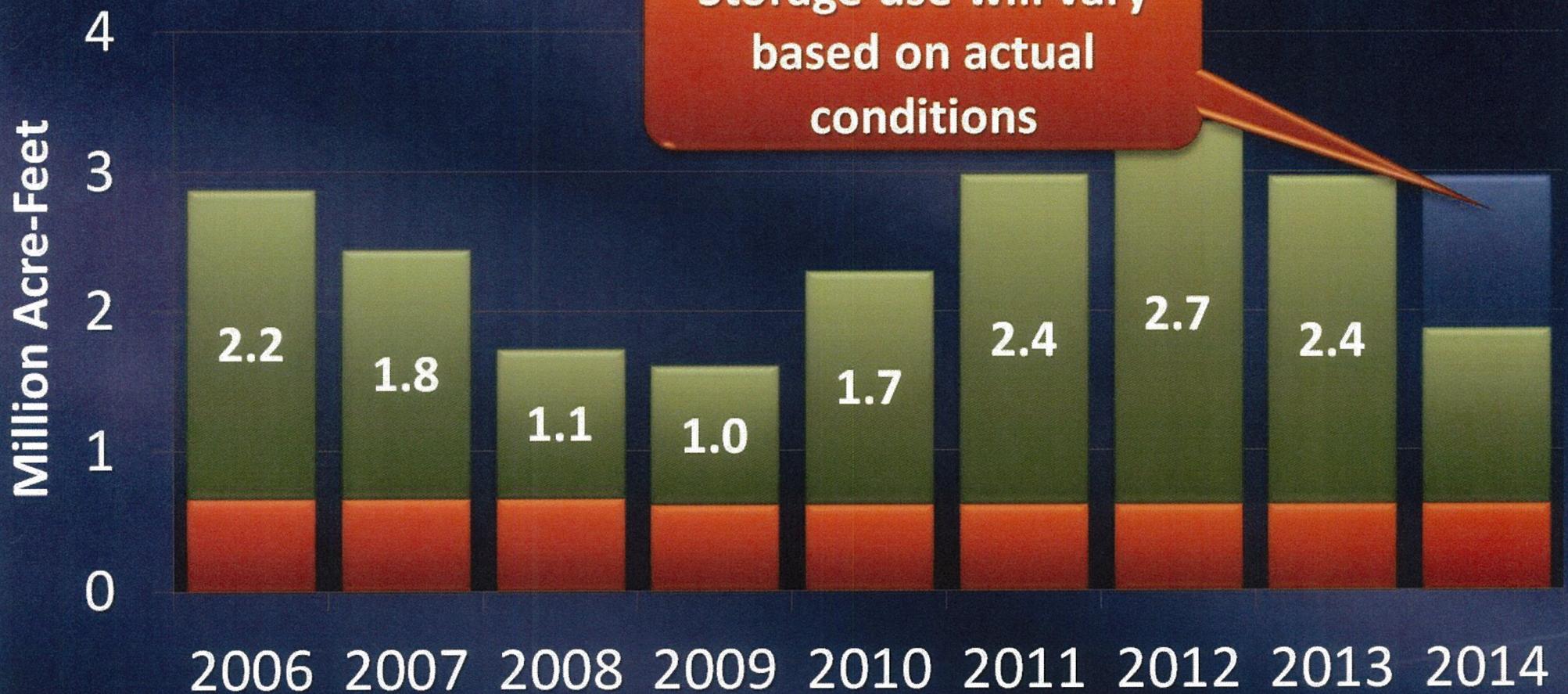
*Estimated actual storage balances, may be subject to change.

MWD Storage Reserves

End of Year Balances*

Emergency Storage

Dry-Year Storage



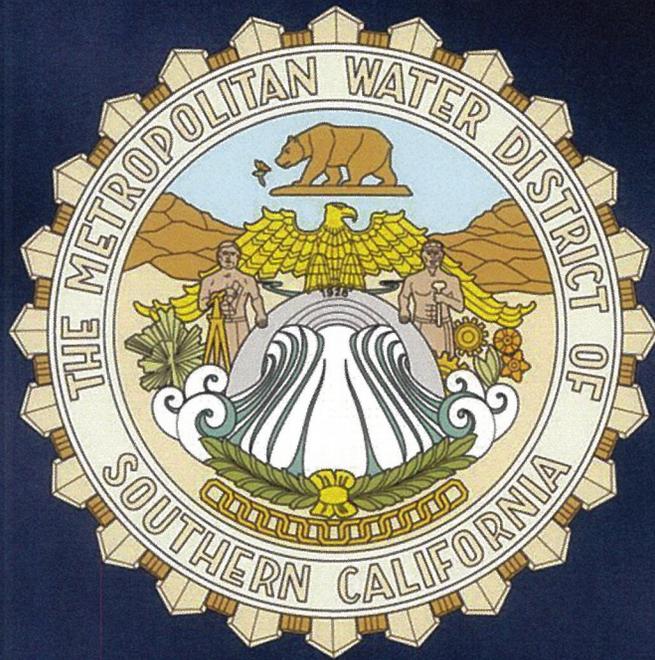
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Coordinated Drought Actions

- Water Supply Alert Resolution
- \$20 million increase for conservation incentives and outreach
- Statewide discussions
- System operations

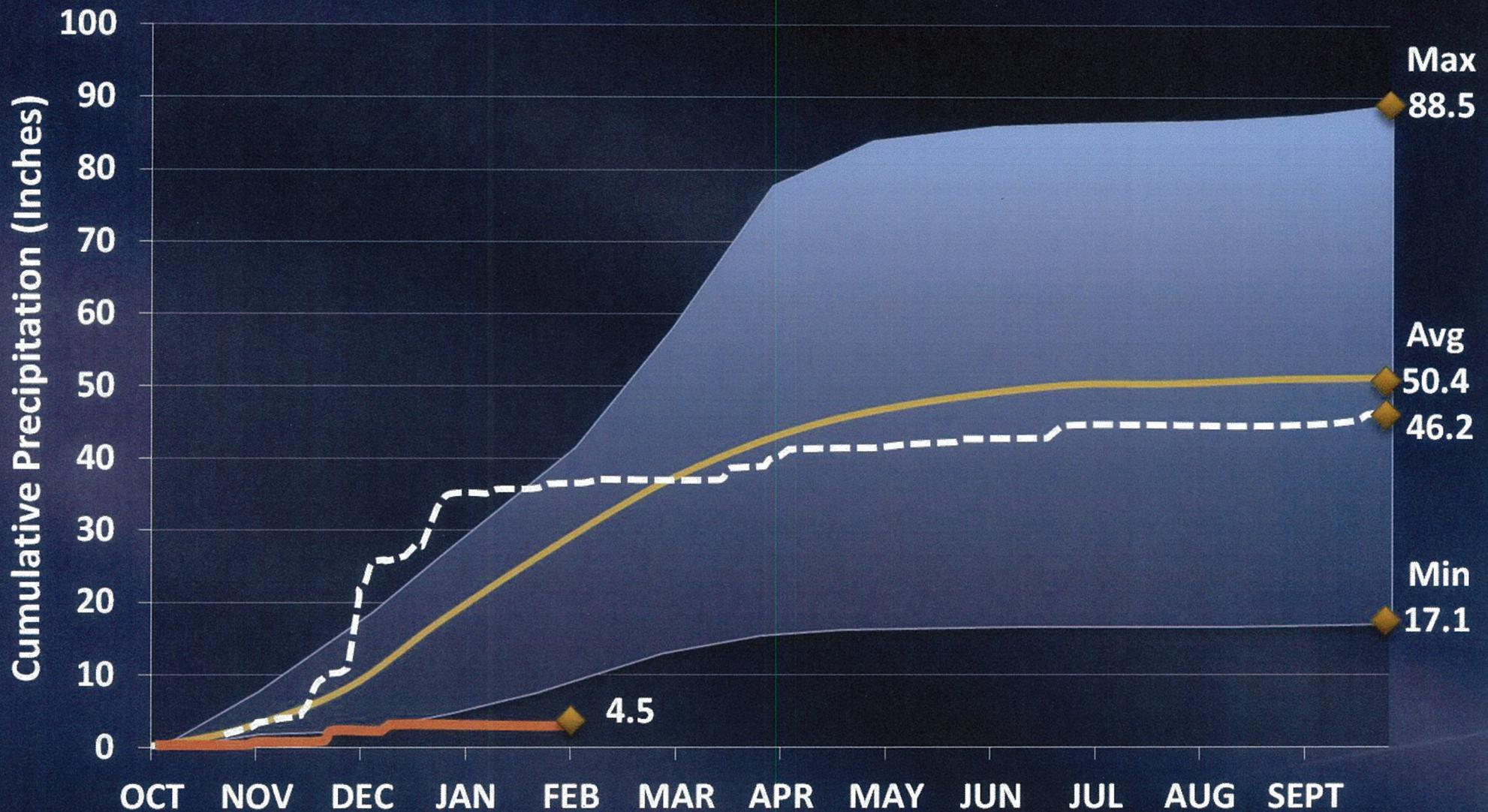
Summary

- Unprecedented supply conditions
- Prepared to use storage to meet demands
- Water use efficiency is key region-wide



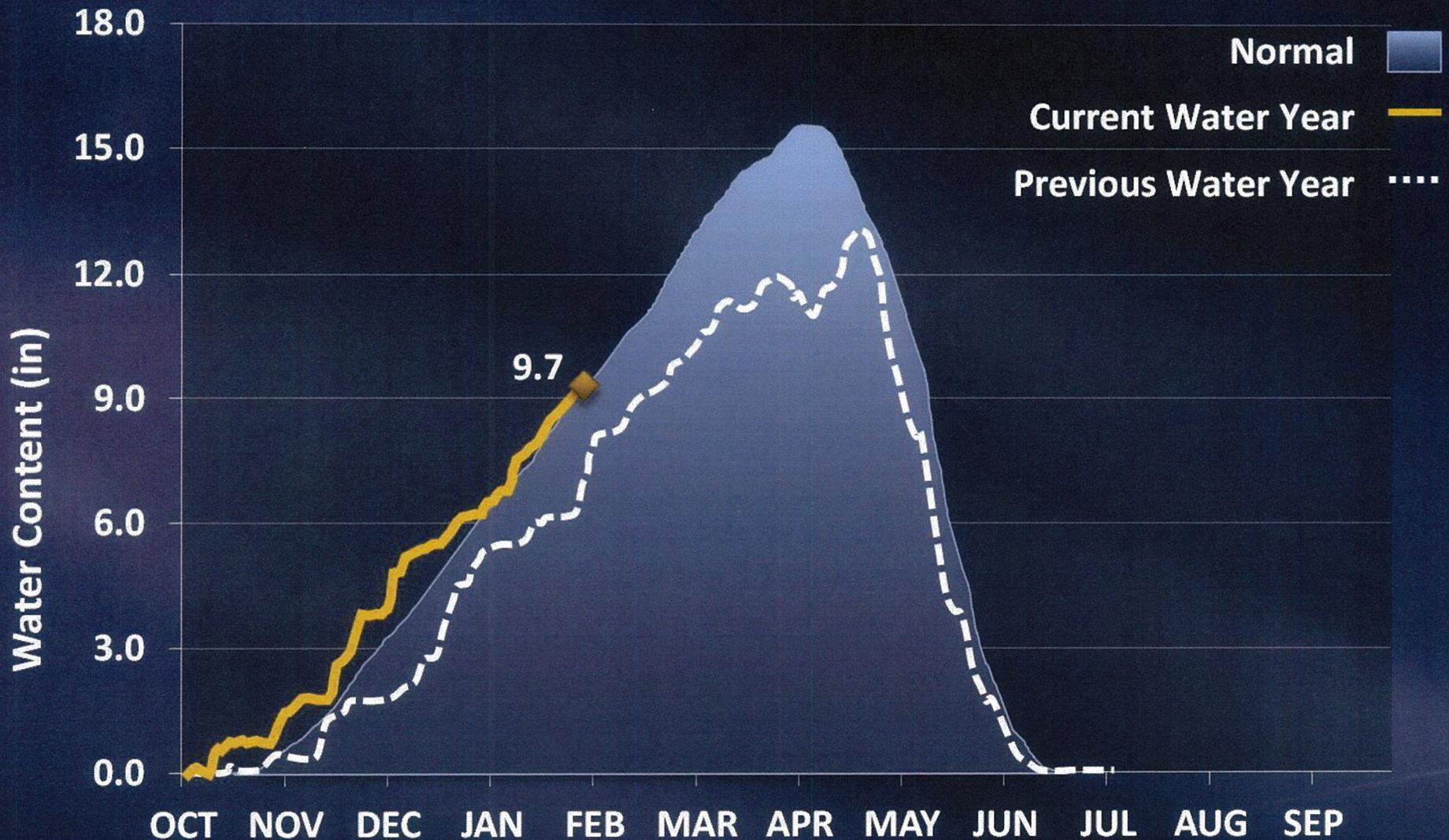
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Upper Colorado Basin Snowpack



Attachment 2

A PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS the State of California is experiencing record dry conditions, with 2014 projected to become the driest year on record; and

WHEREAS the state's water supplies have dipped to alarming levels, indicated by: snowpack in California's mountains is approximately 20 percent of the normal average for this date; California's largest water reservoirs have very low water levels for this time of year; California's major river systems, including the Sacramento and San Joaquin rivers, have significantly reduced surface water flows; and groundwater levels throughout the state have dropped significantly; and

WHEREAS dry conditions and lack of precipitation present urgent problems: drinking water supplies are at risk in many California communities; fewer crops can be cultivated and farmers' long-term investments are put at risk; low-income communities heavily dependent on agricultural employment will suffer heightened unemployment and economic hardship; animals and plants that rely on California's rivers, including many species in danger of extinction, will be threatened; and the risk of wildfires across the state is greatly increased; and

WHEREAS extremely dry conditions have persisted since 2012 and may continue beyond this year and more regularly into the future, based on scientific projections regarding the impact of climate change on California's snowpack; and

WHEREAS the magnitude of the severe drought conditions presents threats beyond the control of the services, personnel, equipment and facilities of any single local government and require the combined forces of a mutual aid region or regions to combat; and

WHEREAS under the provisions of section 8558(b) of the California Government Code, I find that conditions of extreme peril to the safety of persons and property exist in California due to water shortage and drought conditions with which local authority is unable to cope.

NOW, THEREFORE, I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the state Constitution and statutes, including the California Emergency Services Act, and in particular, section 8625 of the California Government Code **HEREBY PROCLAIM A STATE OF EMERGENCY** to exist in the State of California due to current drought conditions.

IT IS HEREBY ORDERED THAT:

1.State agencies, led by the Department of Water Resources, will execute a statewide water conservation campaign to make all Californians aware of the drought and encourage personal actions to reduce water usage. This campaign will be built on the existing Save Our Water campaign

(www.saveourh20.org) and will coordinate with local water agencies. This campaign will call on Californians to reduce their water usage by 20 percent.

2. Local urban water suppliers and municipalities are called upon to implement their local water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought season. Local water agencies should also update their legally required urban and agricultural water management plans, which help plan for extended drought conditions. The Department of Water Resources will make the status of these updates publicly available.

3. State agencies, led by the Department of General Services, will immediately implement water use reduction plans for all state facilities. These plans will include immediate water conservation actions, and a moratorium will be placed on new, non-essential landscaping projects at state facilities and on state highways and roads.

4. The Department of Water Resources and the State Water Resources Control Board (Water Board) will expedite the processing of water transfers, as called for in Executive Order B-21-13. Voluntary water transfers from one water right holder to another enables water to flow where it is needed most.

5. The Water Board will immediately consider petitions requesting consolidation of the places of use of the State Water Project and Federal Central Valley Project, which would streamline water transfers and exchanges between water users within the areas of these two major water projects.

6. The Department of Water Resources and the Water Board will accelerate funding for water supply enhancement projects that can break ground this year and will explore if any existing unspent funds can be repurposed to enable near-term water conservation projects.

7. The Water Board will put water right holders throughout the state on notice that they may be directed to cease or reduce water diversions based on water shortages.

8. The Water Board will consider modifying requirements for reservoir releases or diversion limitations, where existing requirements were established to implement a water quality control plan. These changes would enable water to be conserved upstream later in the year to protect cold water pools for salmon and steelhead, maintain water supply, and improve water quality.

9. The Department of Water Resources and the Water Board will take actions necessary to make water immediately available, and, for purposes of carrying out directives 5 and 8, Water Code section 13247 and Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are suspended on the basis that strict compliance with them will prevent, hinder, or delay the mitigation of the effects of the emergency. Department of Water Resources and the Water Board shall maintain on their websites a list of the activities or approvals for which these provisions are suspended.

10. The state's Drinking Water Program will work with local agencies to identify communities that may run out of drinking water, and will provide technical and financial assistance to help these communities address drinking water shortages. It will also identify emergency interconnections that exist among the state's public water systems that can help these threatened communities.

11. The Department of Water Resources will evaluate changing groundwater levels, land subsidence, and agricultural land fallowing as the drought persists and will provide a public update by April 30 that identifies groundwater basins with water shortages and details gaps in groundwater monitoring.

12. The Department of Water Resources will work with counties to help ensure that well drillers submit required groundwater well logs for newly constructed and deepened wells in a timely manner and the Office of Emergency Services will work with local authorities to enable early notice of areas experiencing problems with residential groundwater sources.

13. The California Department of Food and Agriculture will launch a one-stop website (www.cdffa.ca.gov/drought) that provides timely updates on the drought and connects farmers to state and federal programs that they can access during the drought.

14. The Department of Fish and Wildlife will evaluate and manage the changing impacts of drought on threatened and endangered species and species of special concern, and develop contingency plans for state Wildlife Areas and Ecological Reserves to manage reduced water resources in the public interest.

15. The Department of Fish and Wildlife will work with the Fish and Game Commission, using the best available science, to determine whether restricting fishing in certain areas will become necessary and prudent as drought conditions persist.

16. The Department of Water Resources will take necessary actions to protect water quality and water supply in the Delta, including installation of temporary barriers or temporary water supply connections as needed, and will coordinate with the Department of Fish and Wildlife to minimize impacts to affected aquatic species.

17. The Department of Water Resources will refine its seasonal climate forecasting and drought prediction by advancing new methodologies piloted in 2013.

18. The California Department of Forestry and Fire Protection will hire additional seasonal firefighters to suppress wildfires and take other needed actions to protect public safety during this time of elevated fire risk.

19. The state's Drought Task Force will immediately develop a plan that can be executed as needed to provide emergency food supplies, financial assistance, and unemployment services in communities that suffer high levels of unemployment from the drought.

20. The Drought Task Force will monitor drought impacts on a daily basis and will advise me of subsequent actions that should be taken if drought conditions worsen.

I FURTHER DIRECT that as soon as hereafter possible, this Proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Proclamation.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 17th day of January, 2014.

EDMUND G. BROWN JR.,
Governor of California

ATTEST:

DEBRA BOWEN,
Secretary of State