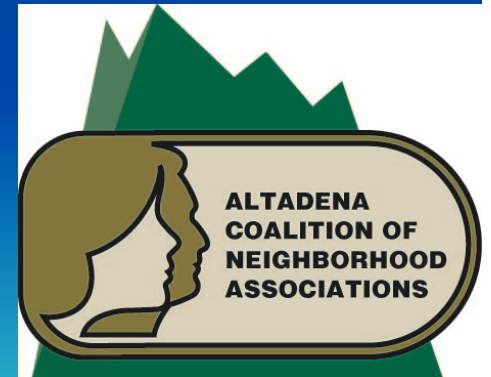


Altadena Coalition of Neighborhood Associations (ACONA)

Let's keep Altadena
*"The best neighborhood in LA
County"!*

May 22, 2018



Agenda for Tonight's Meeting

7:00 PM – 8:30 PM

- **7:00 PM – 7:05 PM Quick introductions and welcome**
- **7:05 PM – 7:25 PM Update on the drought — Rain this season to date & Reservoir levels**
 - Demitri Polyzos, Senior Engineer Metropolitan Water District of Southern California
- **7:25 PM – 7:45 PM Capturing and conserving water in Altadena**
 - Nicki Sherman, Implementations & Outreach, The River Project
- **7:45 PM – 8:05 PM Pruning/removal of trees by So. Cal Edison on public and private property**
 - David Guzman, Manager Vegetation Management Southern California Edison
- **8:05 PM – 8:30 PM Open discussion Q&A**
- **8:30 PM Meeting end**



Your ACONA Team

- Elliot Gold
- Nina Ehlig
- Melody Comfort
- Sussy Nemer
- Captain Vicki Stuckey
- Holly Rundberg
- Carlotta Martin
- Dale Comfort
- Ellen Walton



Quick Introduction!

New Altadena Sheriff's Lt.

- Lieutenant Alex Canchola new Operations Lieutenant



7:05 PM – 7:25 PM Update on the drought — Rain this season to date & Reservoir levels

**– Demitri Polyzos, Senior Engineer
Metropolitan Water District of Southern
California**





Water Supply Update

Altadena Coalition of
Neighborhood Associations

May 22, 2018

Metropolitan Water District



Northern
Sierra
Nevada

Regional
Wholesaler

Upper
Colorado
River
Basin



State Water Project
1.9 MAF Supply
Contract (*subject to*

Colorado River Aqueduct
1.2 MAF Capacity
(550 TAF Basic

Metropolitan Water District



26

**Member
Agencies**



Metropolitan Water District

15

Retail Agencies



11

Wholesale Agencies

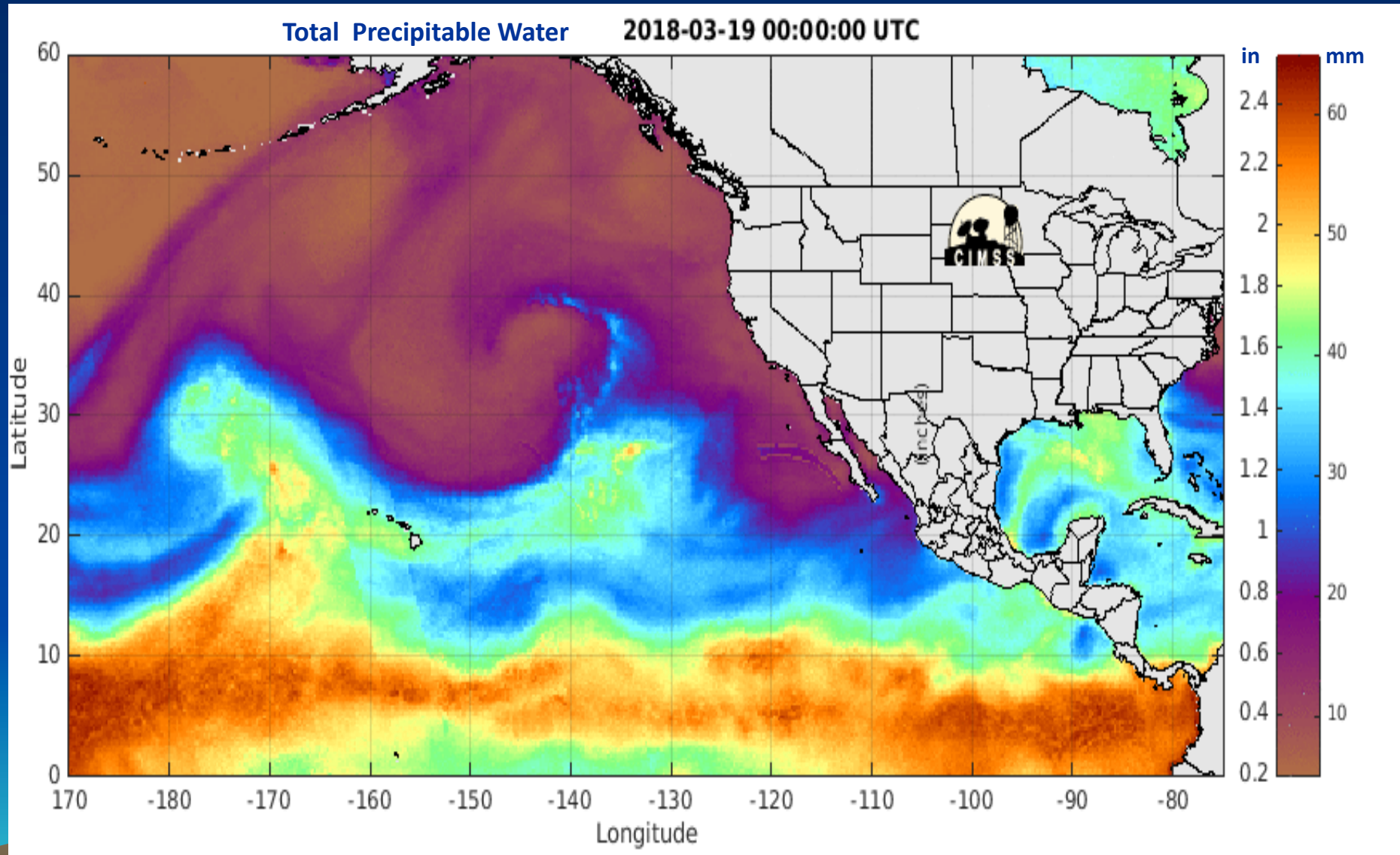


~140 Retail Agencies



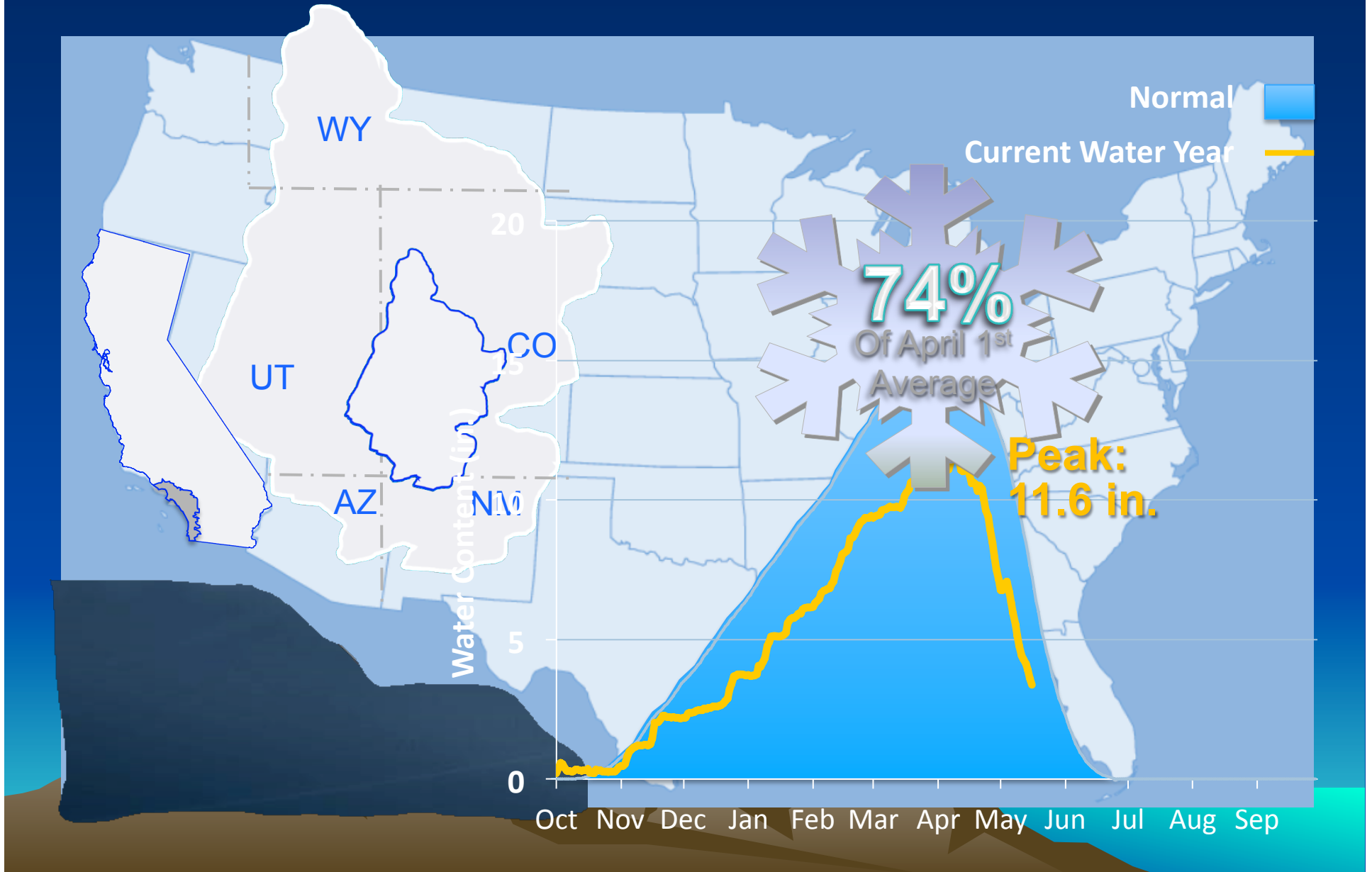
19 Million People

Atmospheric Rivers Return in March and April...



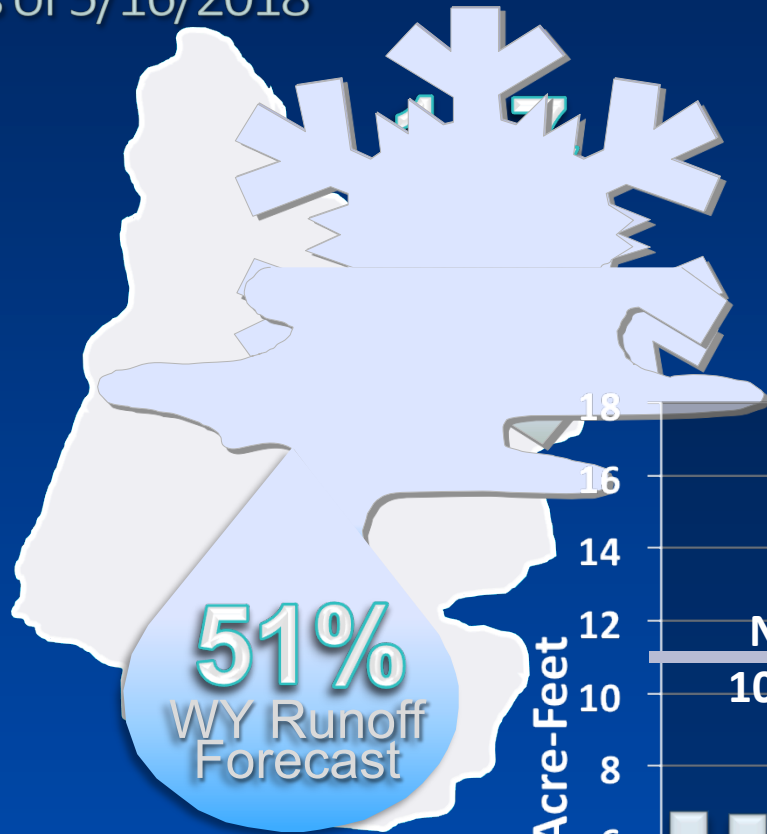
Upper Colorado River Hydrologic Conditions

As of 5/16/2018

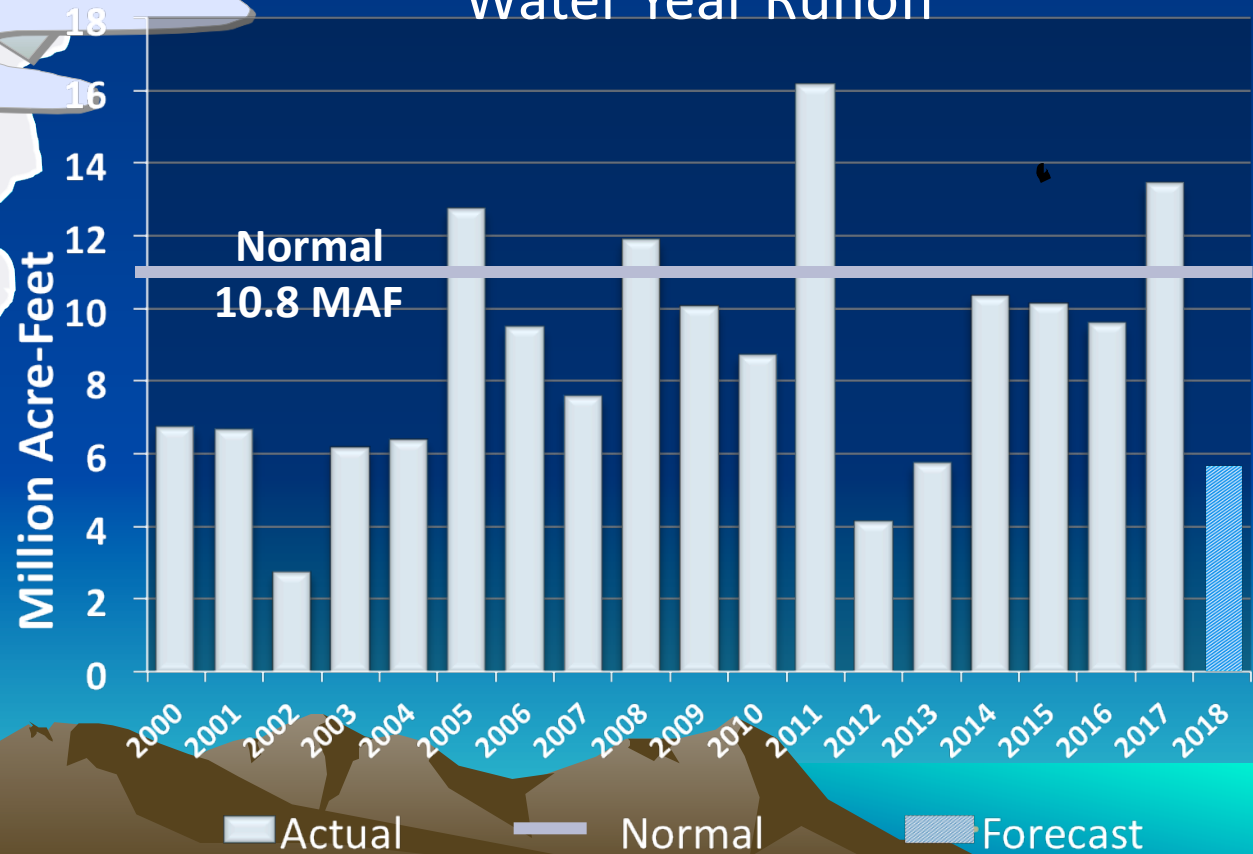


Upper Colorado River Hydrologic Conditions

As of 5/16/2018



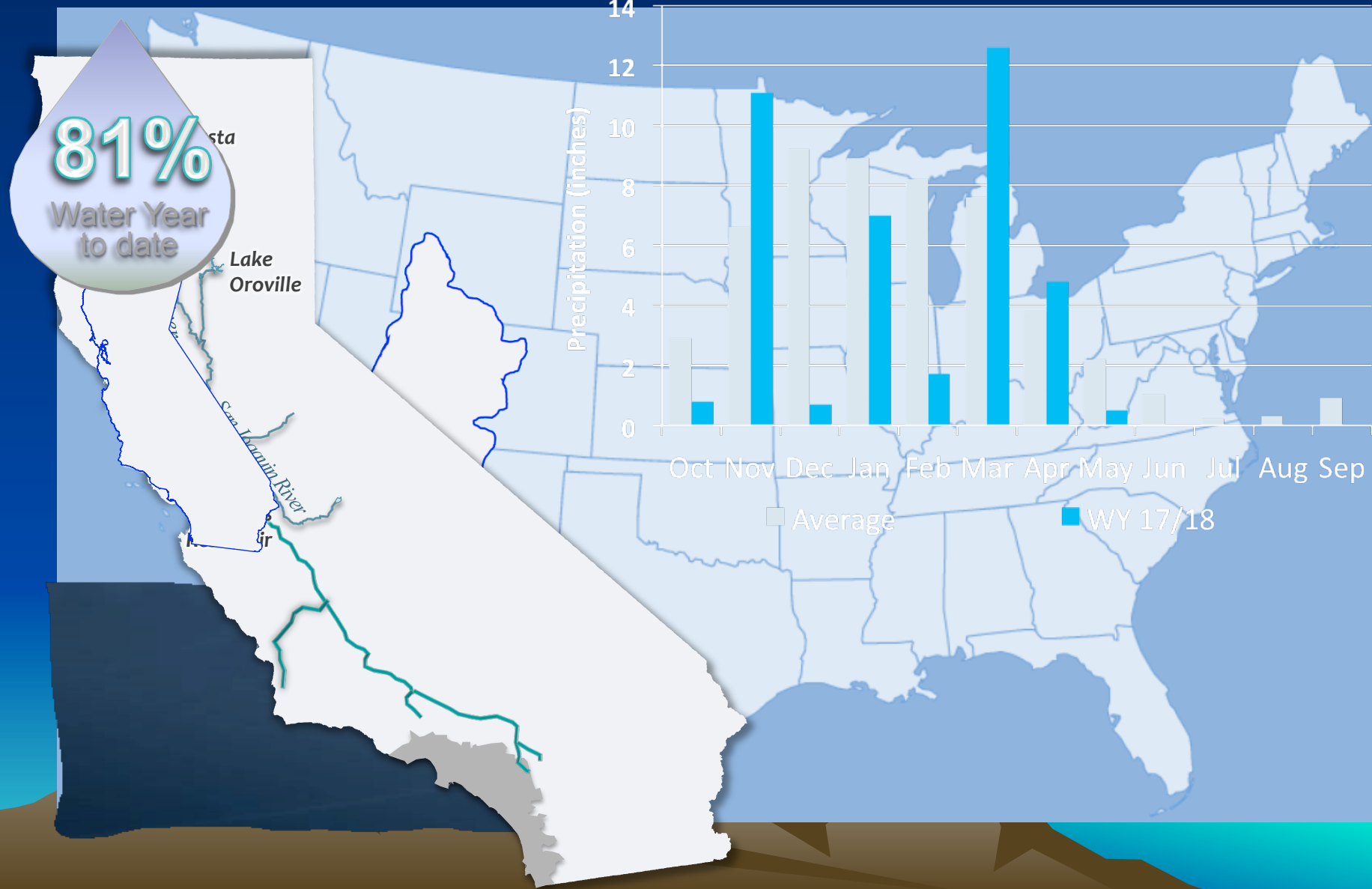
Water Year Runoff



Northern California Hydrologic Conditions

As of 5/16/2018

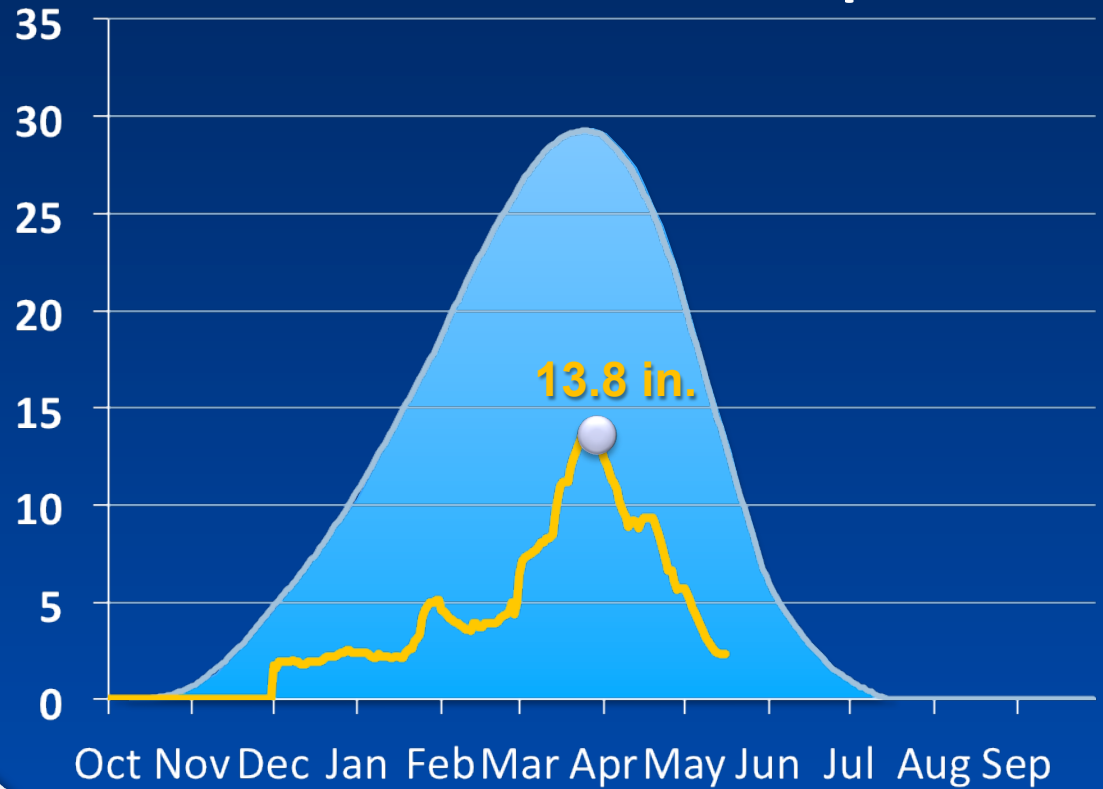
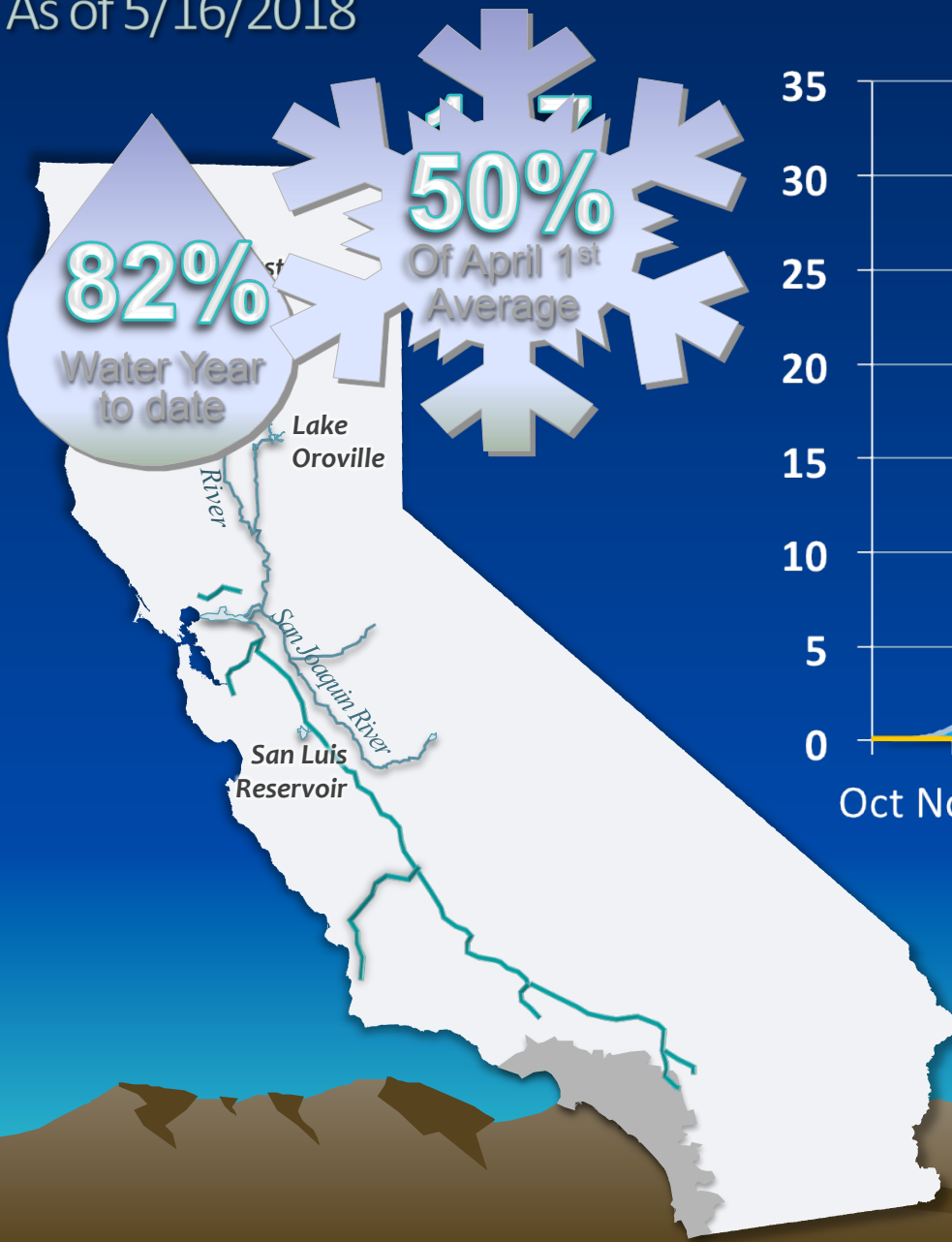
8-Station Index



Northern California Hydrologic Conditions

As of 5/16/2018

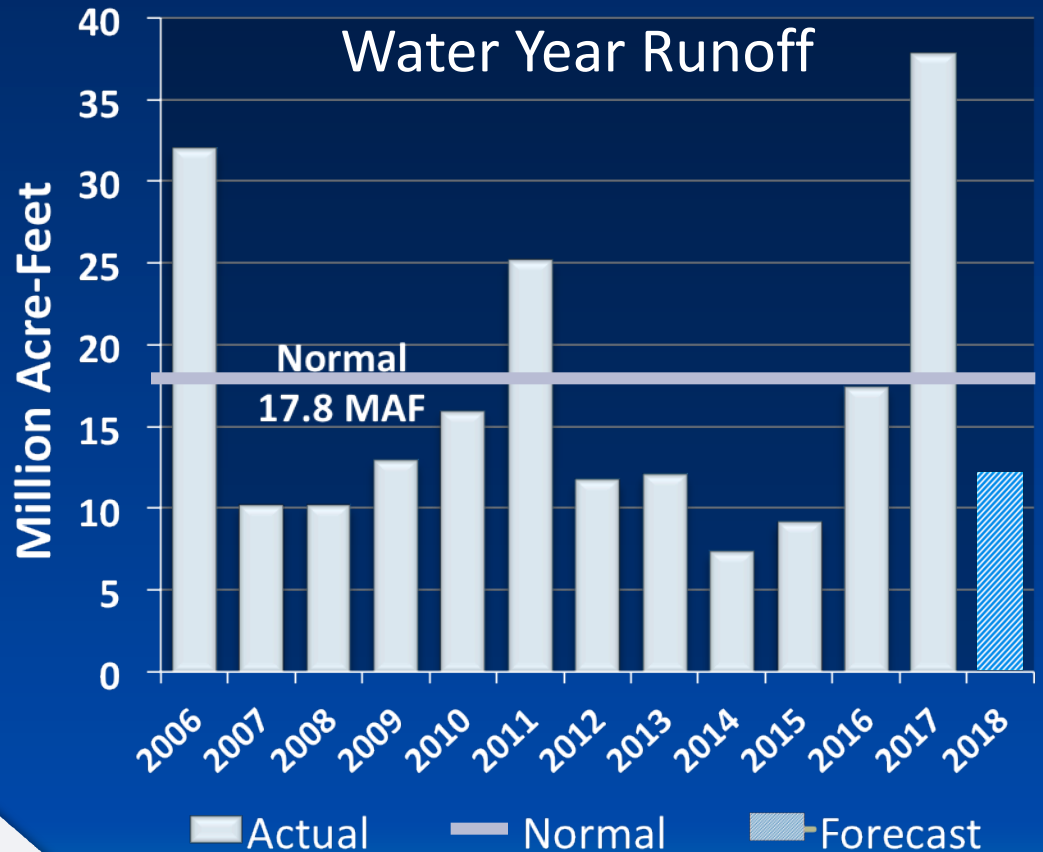
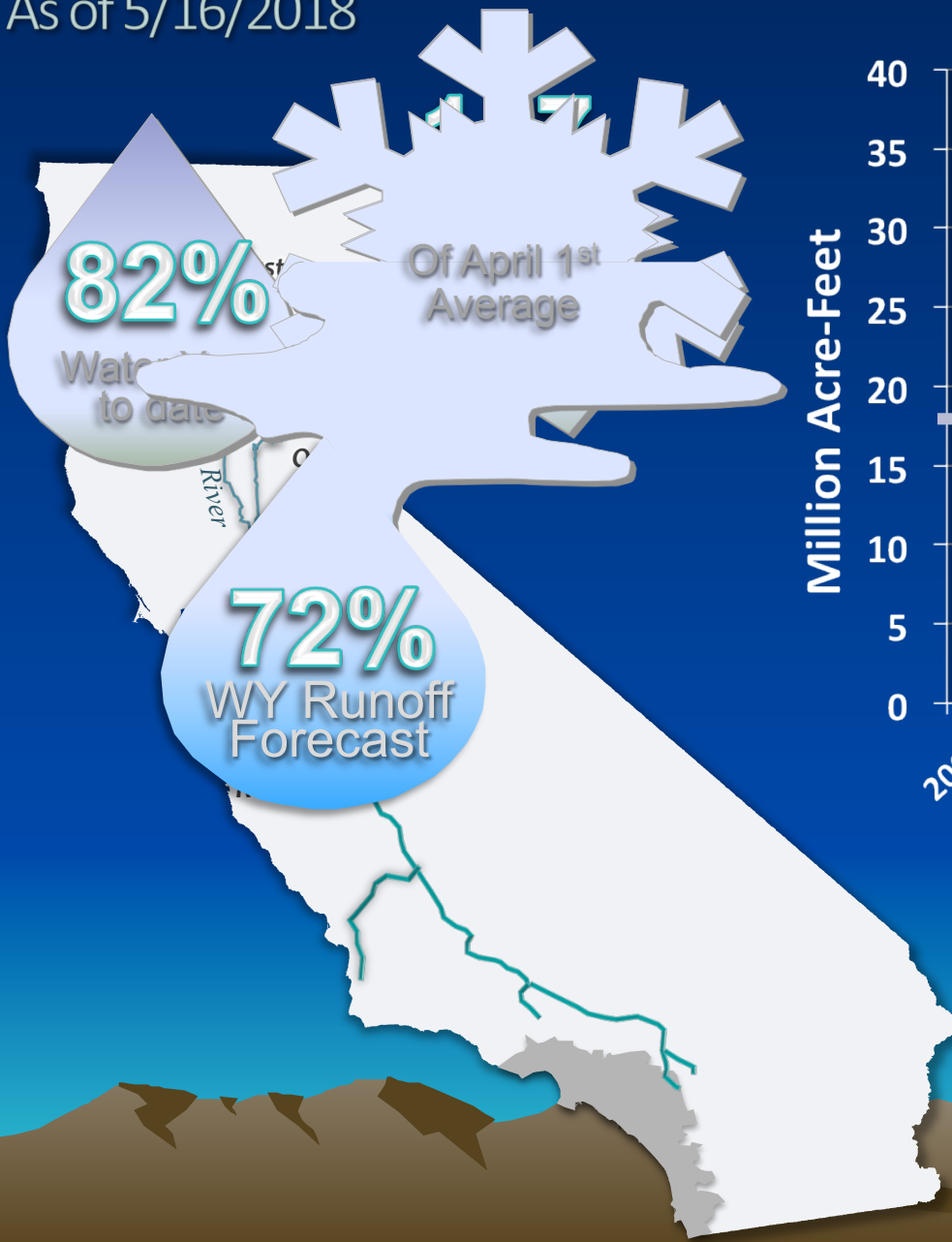
Northern Sierra Snowpack



Normal  Current Water Year 

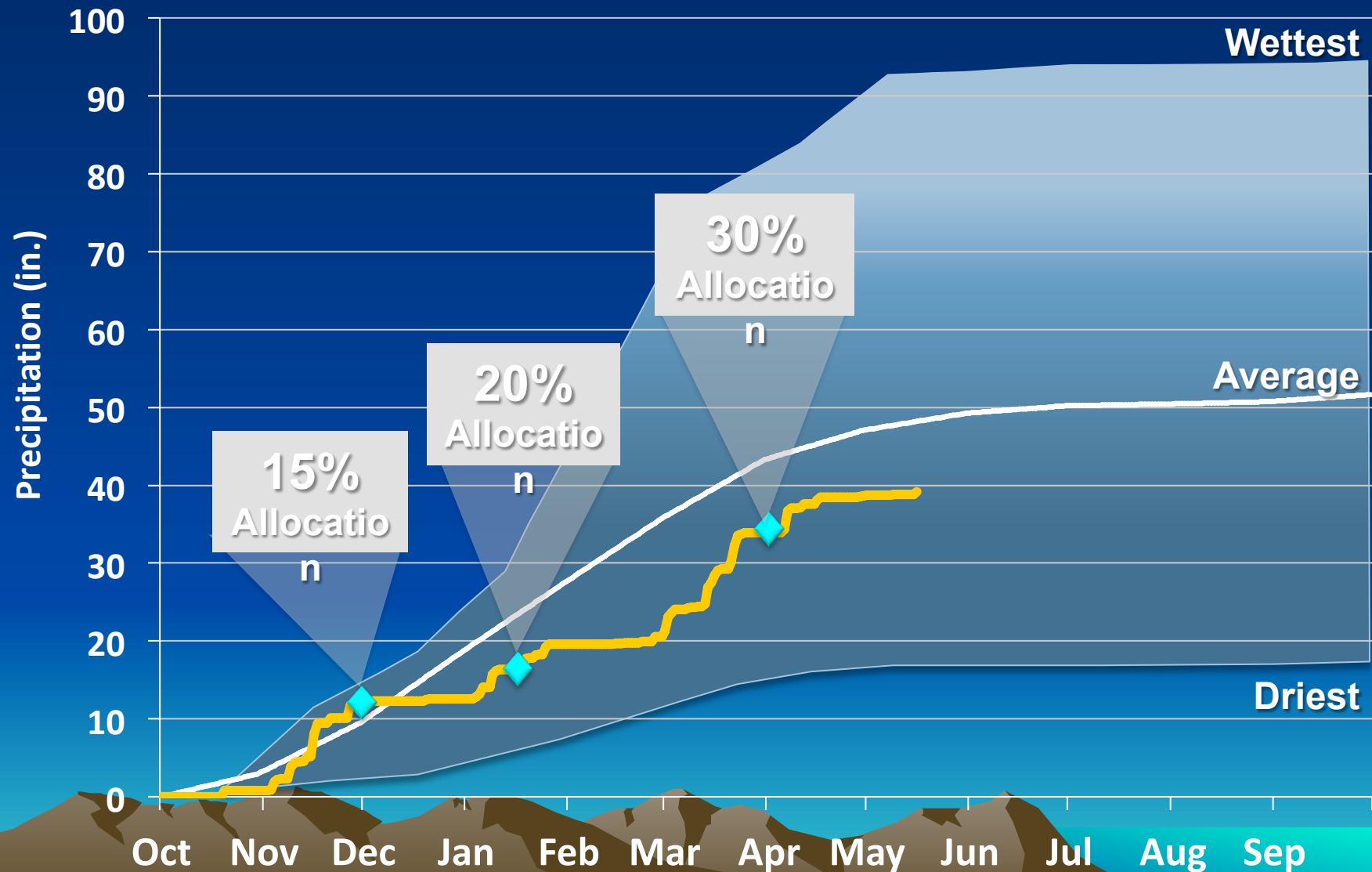
Northern California Hydrologic Conditions

As of 5/16/2018

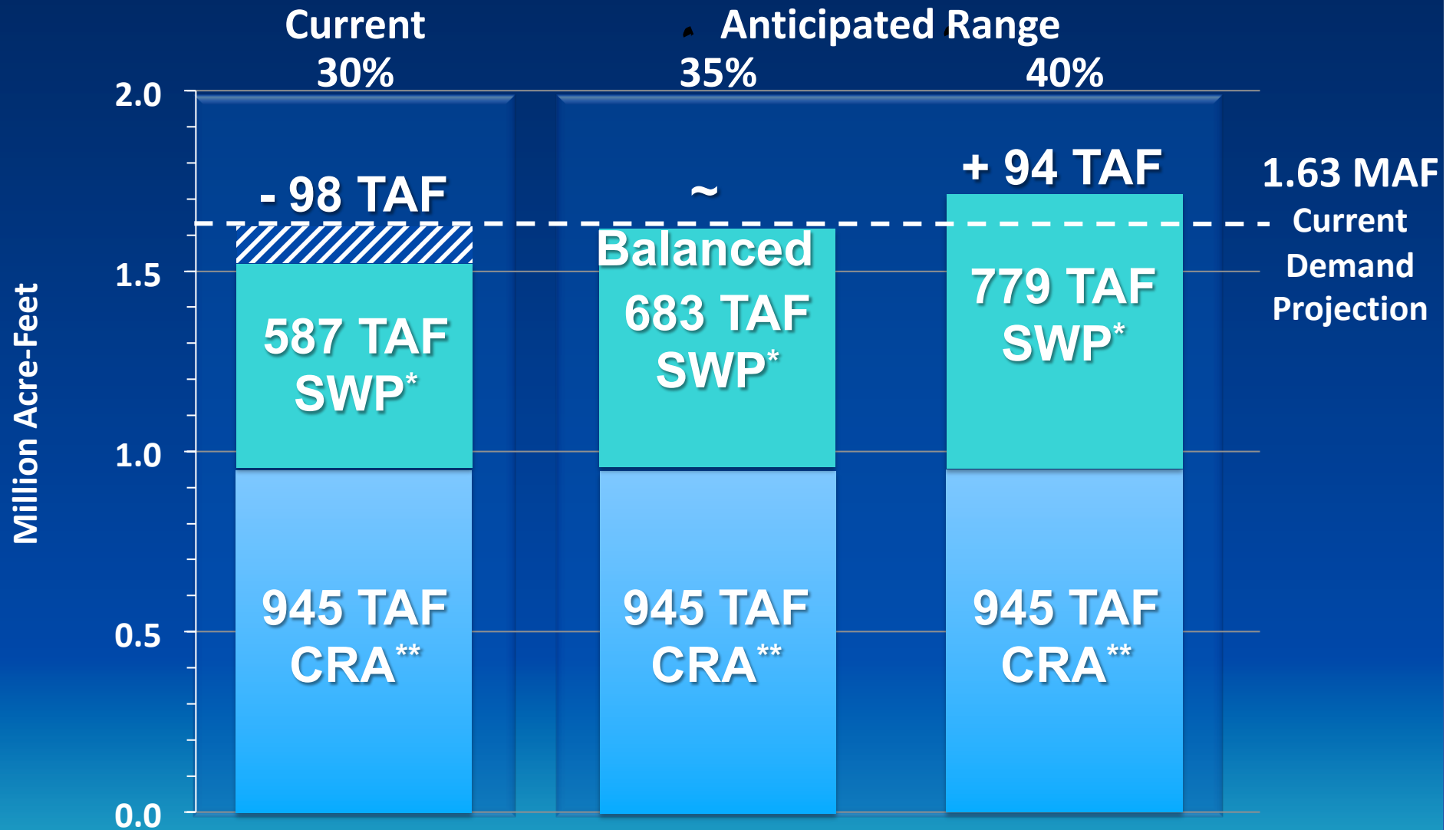


SWP Allocation Continues to Increase

8-Station Index Cumulative



2018 Supply Demand Balances

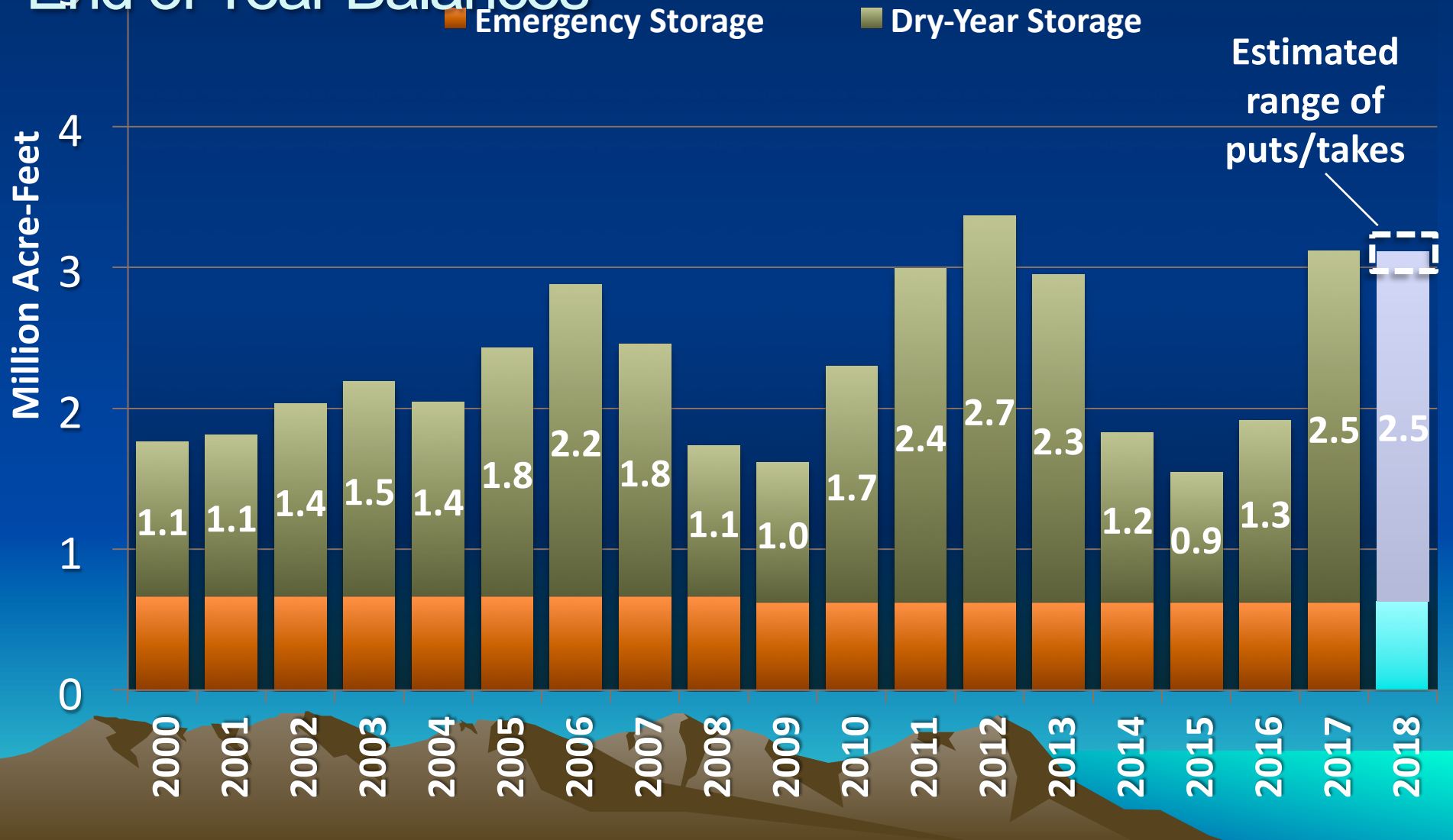


* Table A and Yuba Transfers (surface supplies)

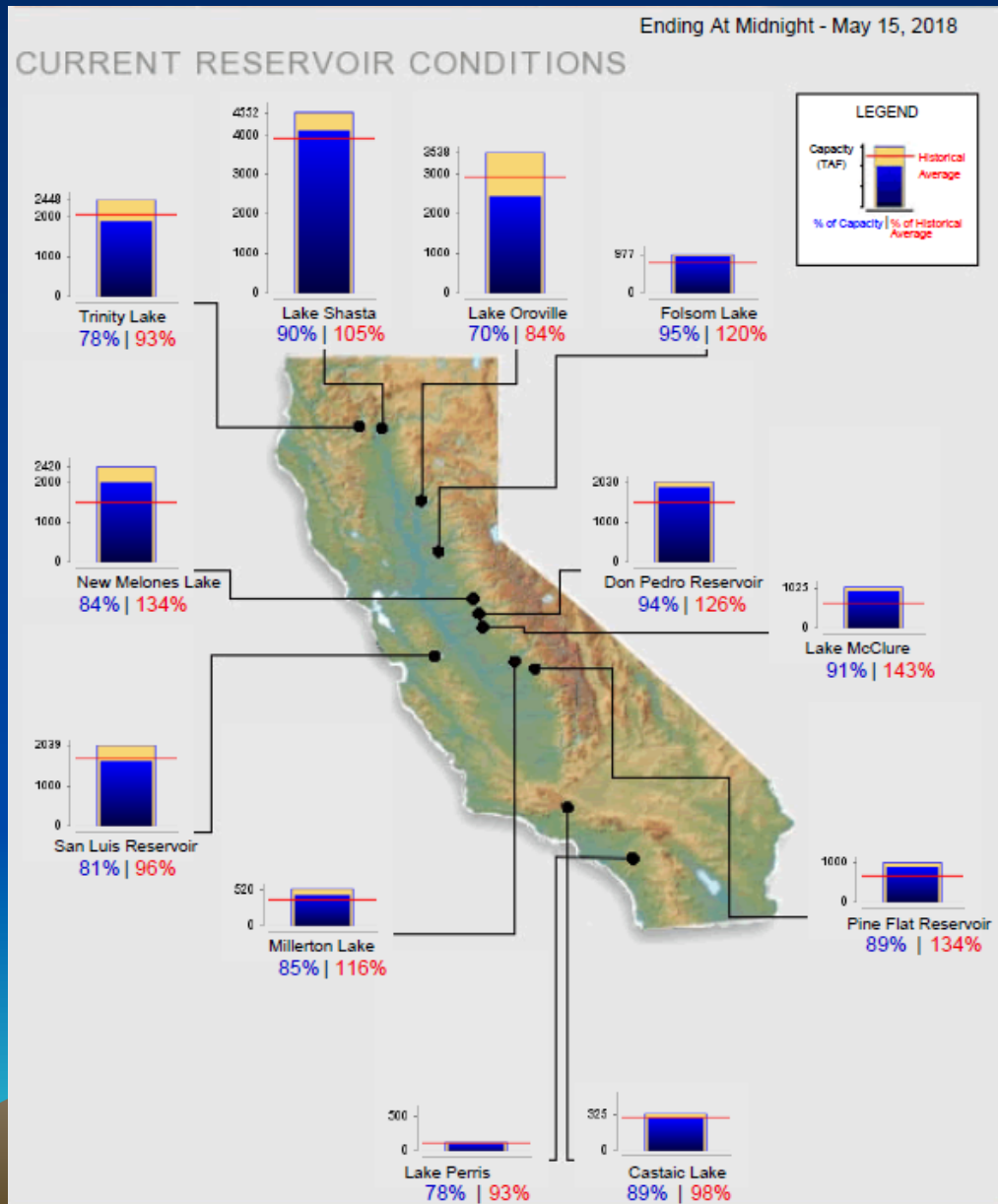
** Basic Apportionment and long-term supply programs

Metropolitan's Dry-Year Storage Reserves

End of Year Balances



Statewide Reservoir Conditions



Most reservoirs
at or above their
historic average
for this time of
year

Drought Monitor

U.S. Drought Monitor California

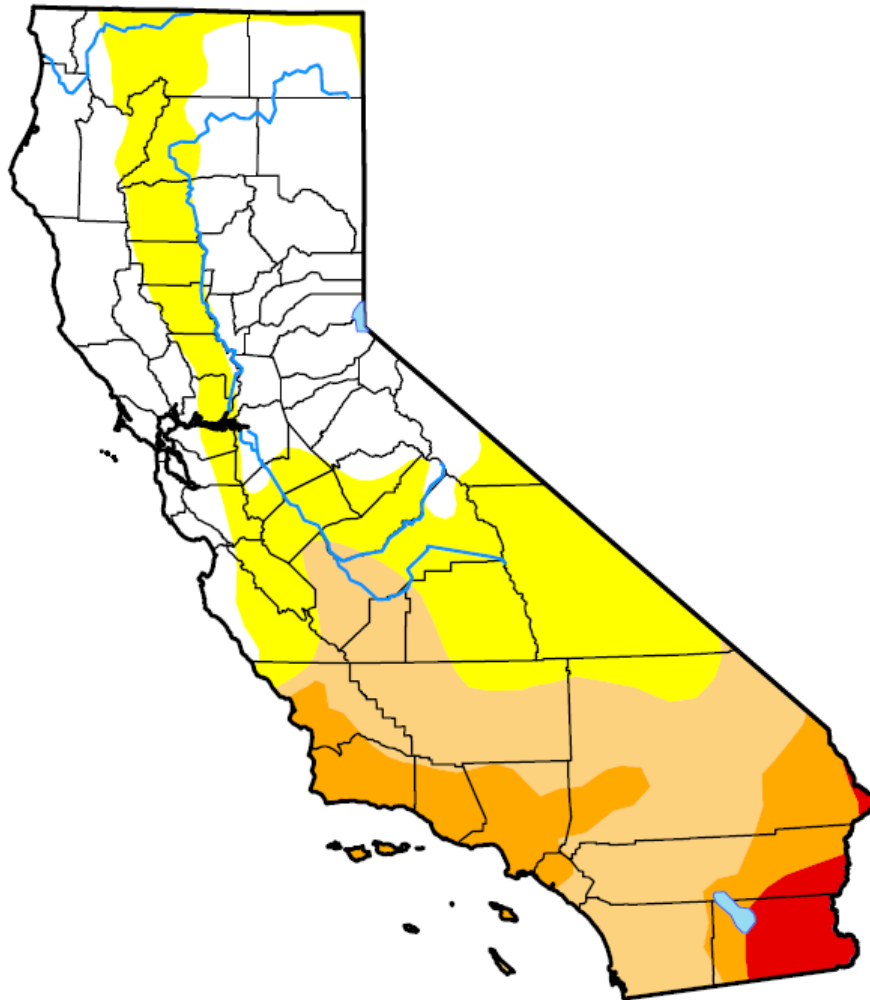
May 8, 2018

(Released Thursday, May. 10, 2018)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|--|-------|-------|-------|-------|-------|------|
| Current | 34.19 | 65.81 | 37.10 | 13.99 | 2.80 | 0.00 |
| Last Week <i>05-01-2018</i> | 34.10 | 65.90 | 37.10 | 13.99 | 2.80 | 0.00 |
| 3 Months Ago <i>02-06-2018</i> | 18.27 | 81.73 | 45.60 | 6.39 | 0.00 | 0.00 |
| Start of Calendar Year <i>01-02-2018</i> | 55.70 | 44.30 | 12.69 | 0.00 | 0.00 | 0.00 |
| Start of Water Year <i>09-26-2017</i> | 77.88 | 22.12 | 8.24 | 0.00 | 0.00 | 0.00 |
| One Year Ago <i>05-09-2017</i> | 76.47 | 23.53 | 8.24 | 1.06 | 0.00 | 0.00 |



Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

David Simeral
Western Regional Climate Center

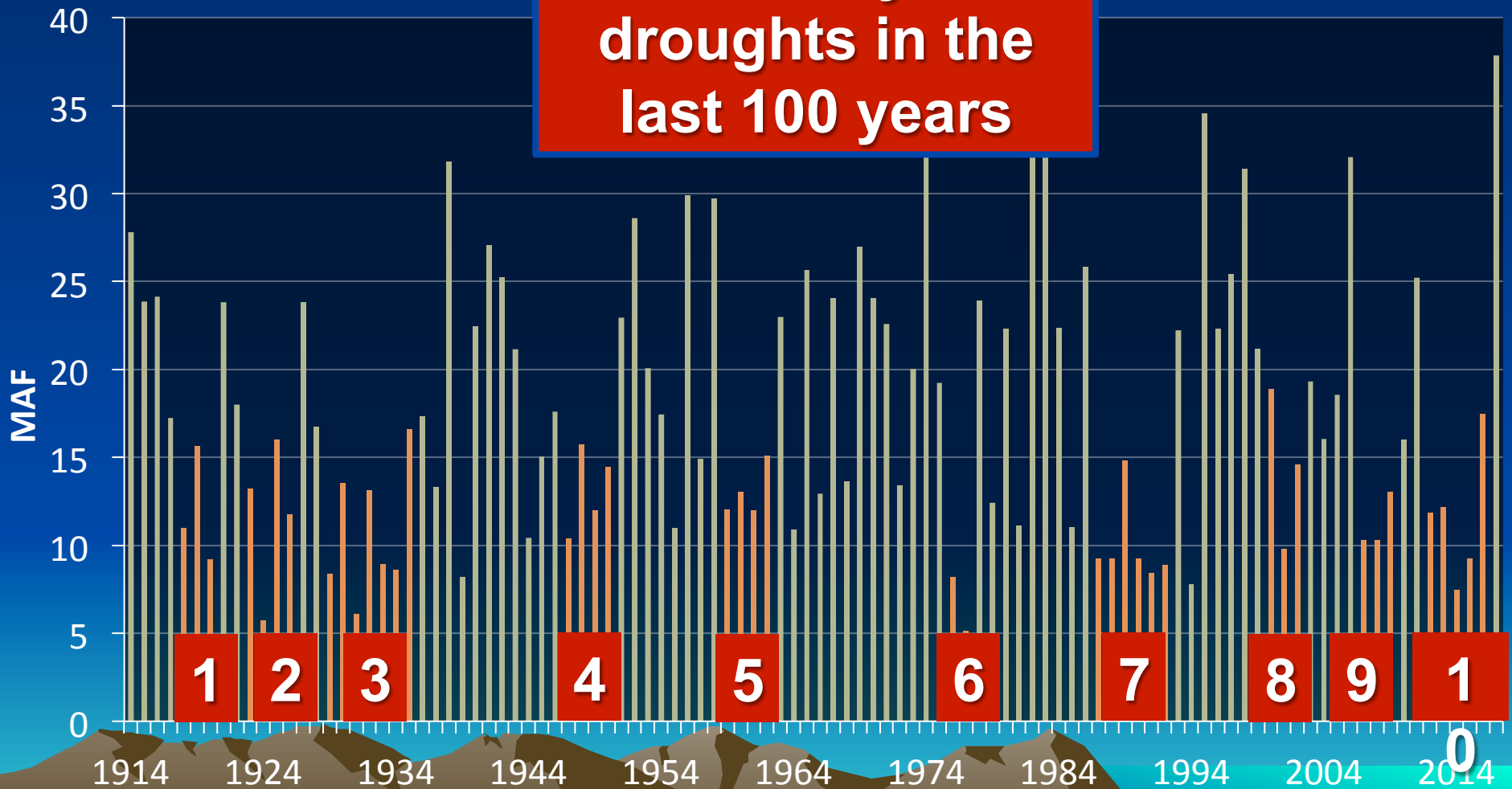


<http://droughtmonitor.unl.edu/>

Drought is Common in California

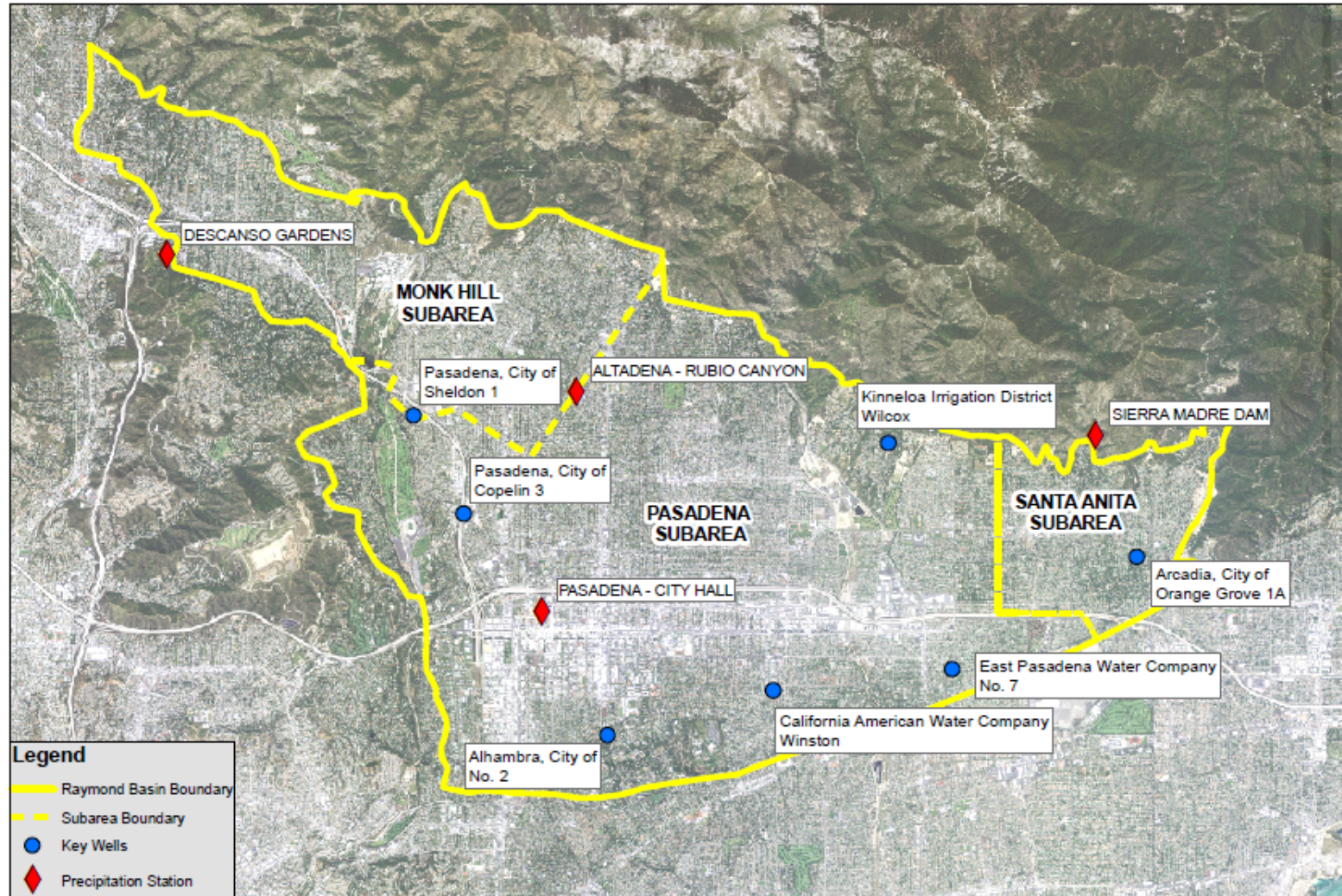
Historical Runoff

10 multi-year droughts in the last 100 years



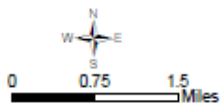
Groundwater Basins

Location of Groundwater Supplies for the City of La Cañada Flintridge & Altadena: MONK HILL SUBAREA



Legend

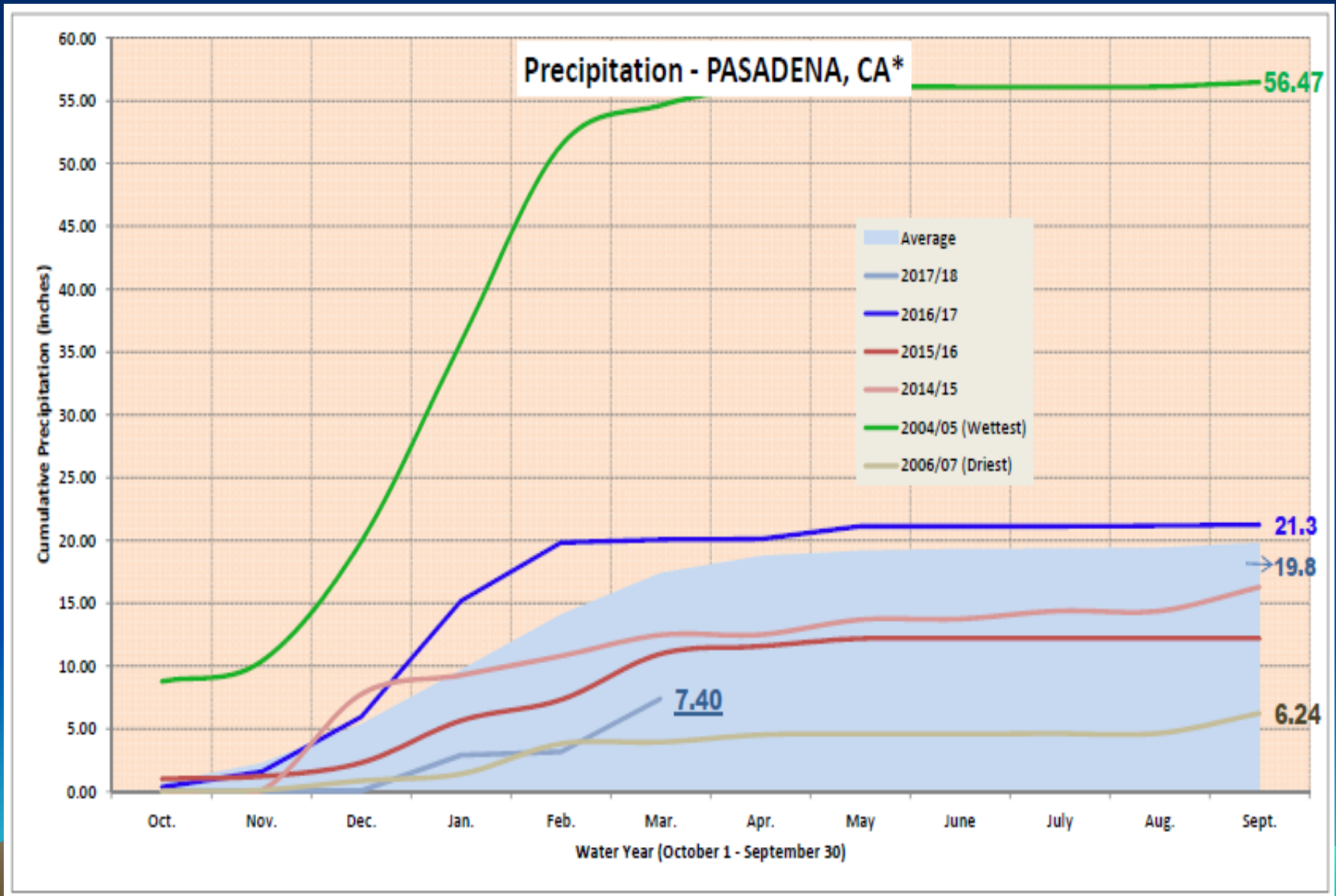
- Raymond Basin Boundary
- Subarea Boundary
- Key Wells
- Precipitation Station



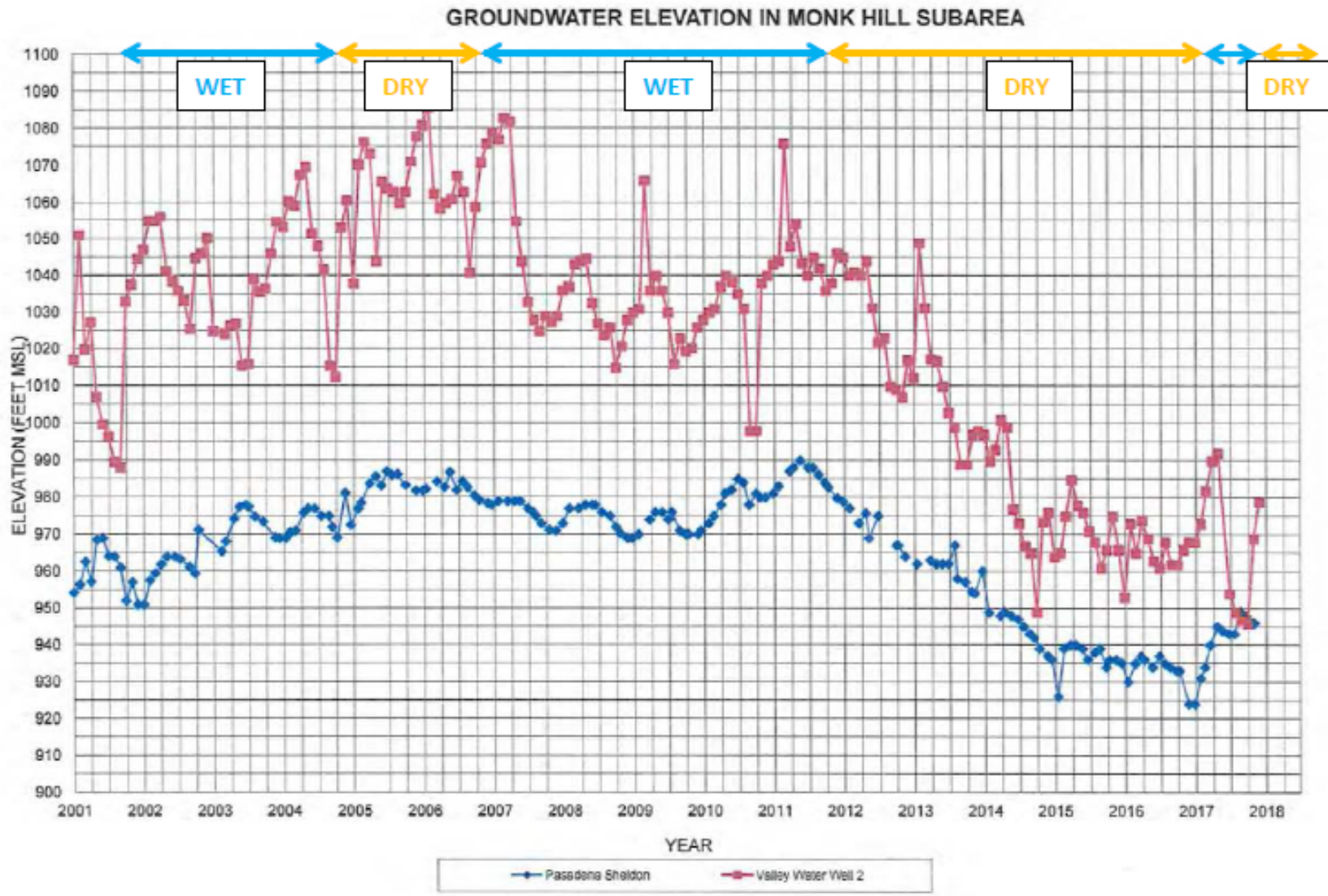
RAYMOND BASIN MANAGEMENT BOARD

LOCATION OF "KEY" WELLS AND PRECIPITATION STATIONS

Local Precipitation



Groundwater Elevation



Parting Thoughts

- Metropolitan is well positioned to manage through the next multi-year dry period
- The region continues to recover from the drought
- Make conservation a way of life



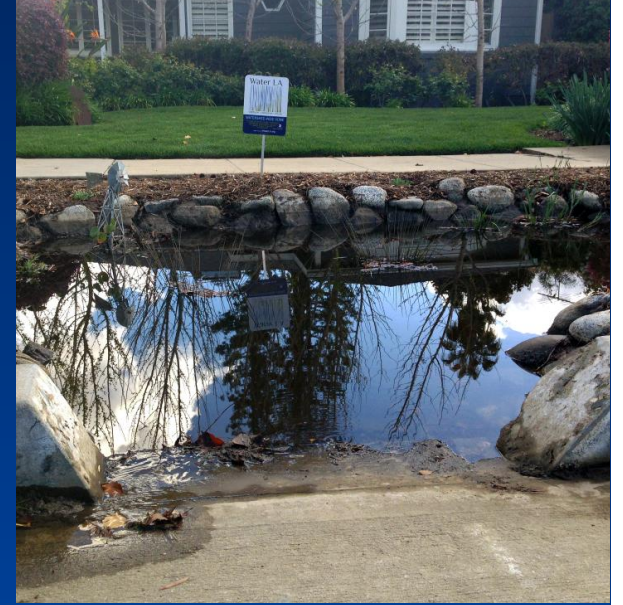
7:25 PM –7:45 PM Capturing and conserving water in Altadena

- **Nicki Sherman**
 - **Implementations & Outreach, The River Project/ Water LA**

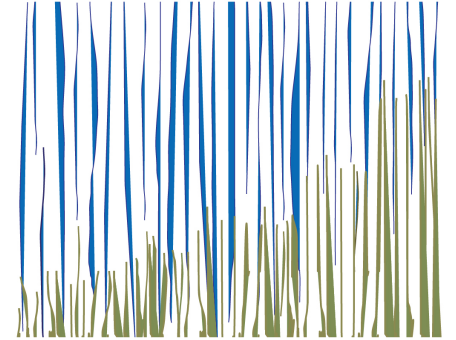




WATERLA.ORG



Water LA

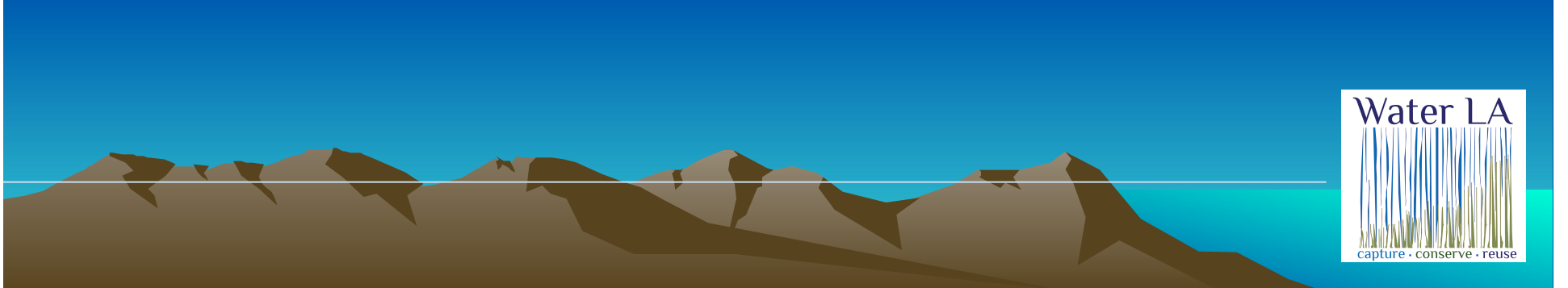


capture • conserve • reuse



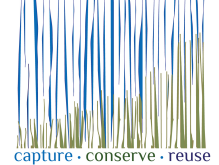


Photo: Michael Owns Baker for the Times





Water LA



capture · conserve · reuse



Photo: Los Angeles Times



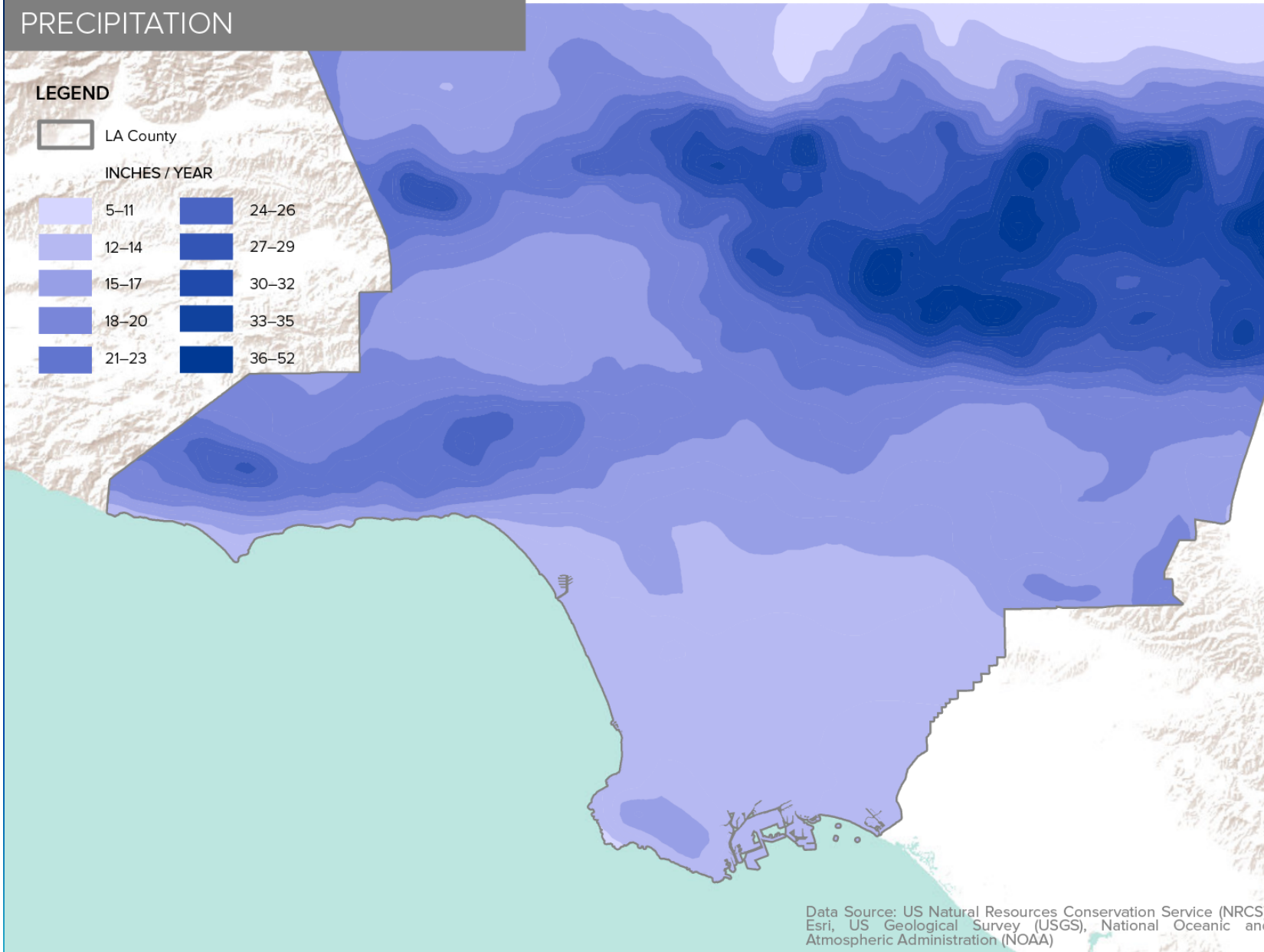
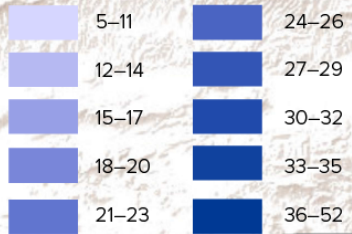


PRECIPITATION

LEGEND

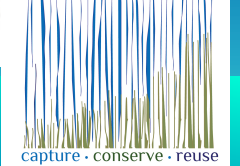
 LA County

INCHES / YEAR



Data Source: US Natural Resources Conservation Service (NRCS), Esri, US Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA)

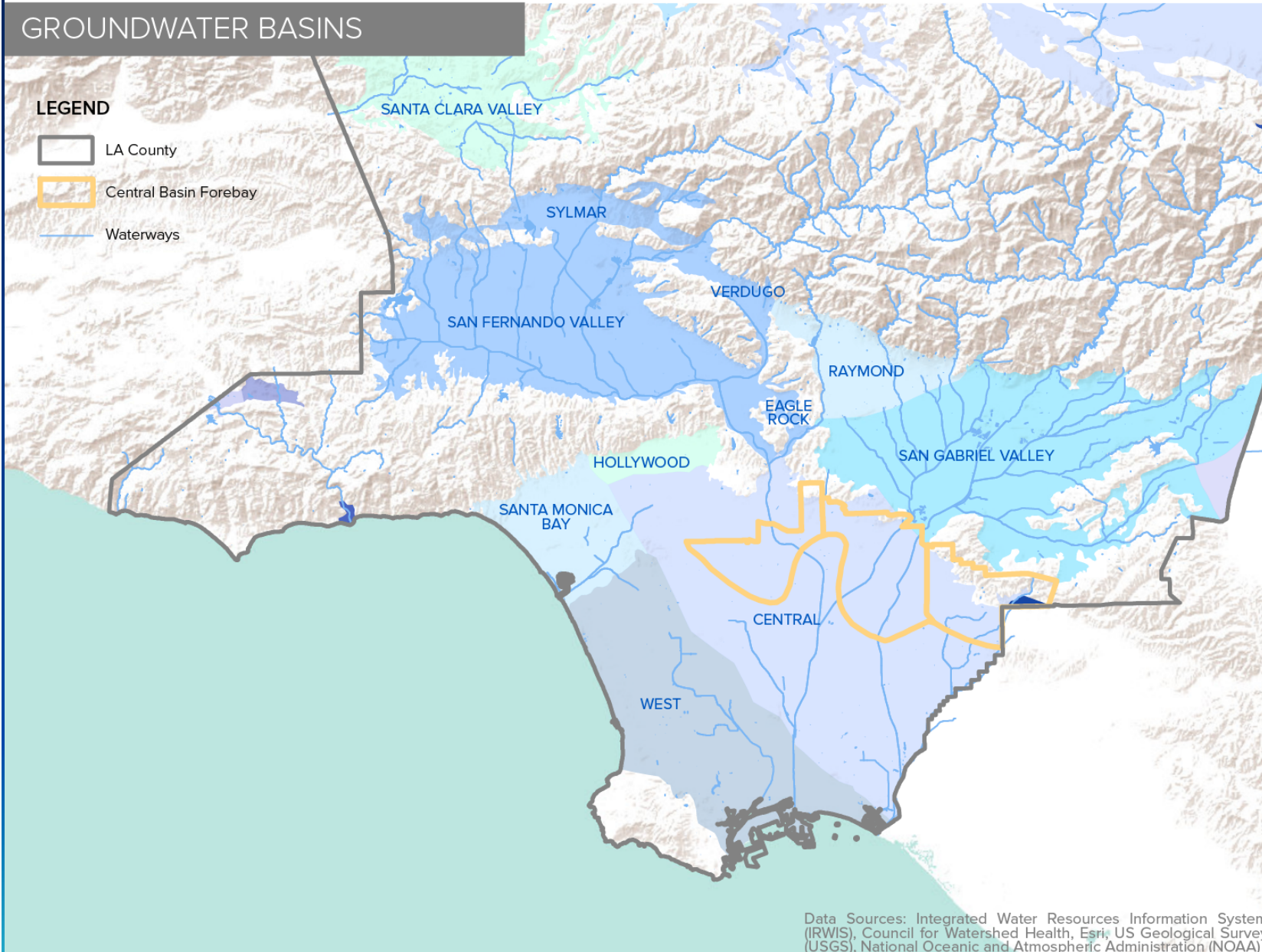
Water LA



GROUNDWATER BASINS

LEGEND

- LA County
- Central Basin Forebay
- Waterways

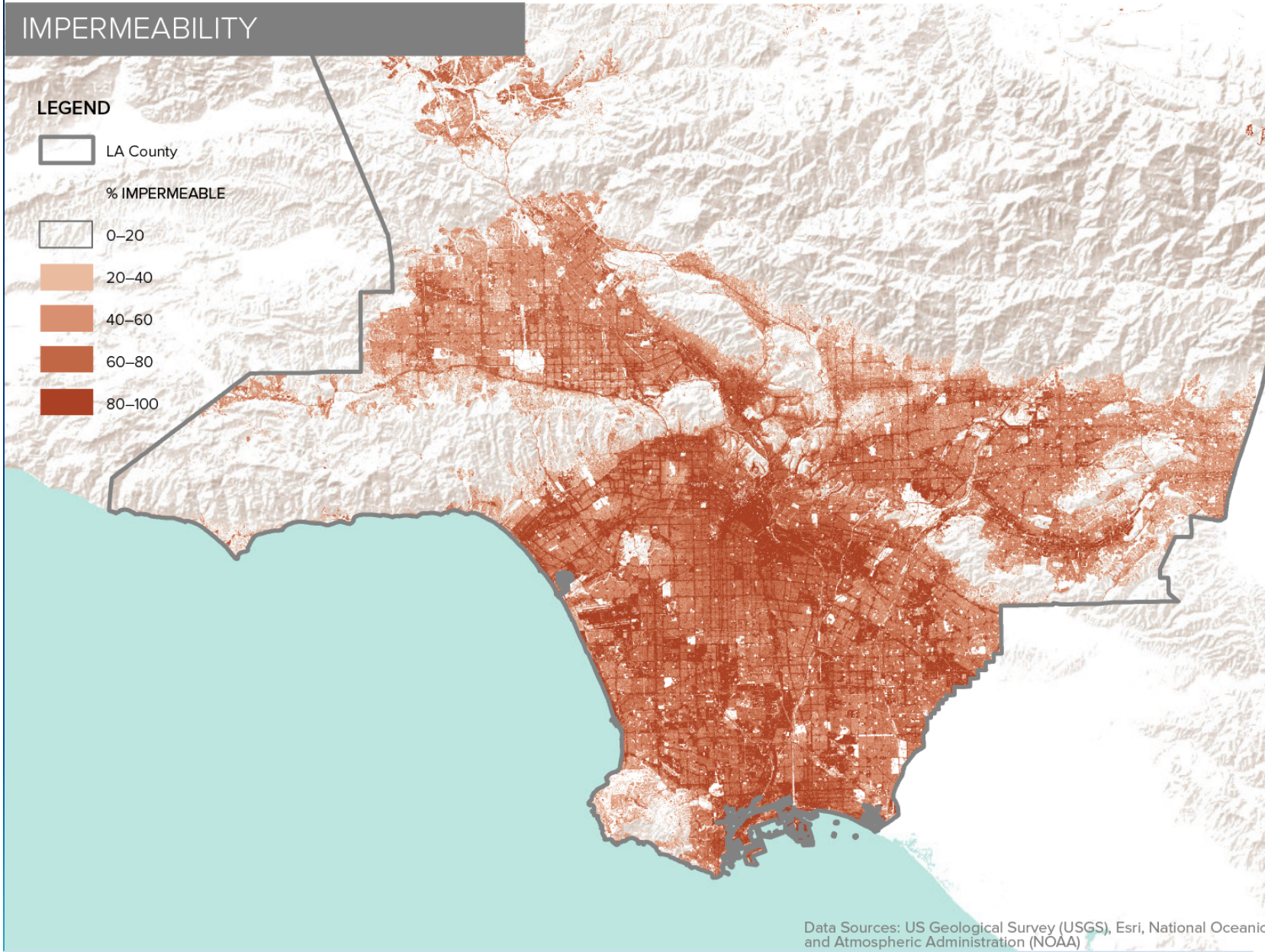
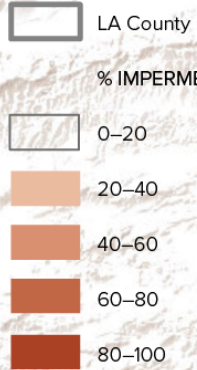


Data Sources: Integrated Water Resources Information System (IRWIS), Council for Watershed Health, Esri, US Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA)



IMPERMEABILITY

LEGEND

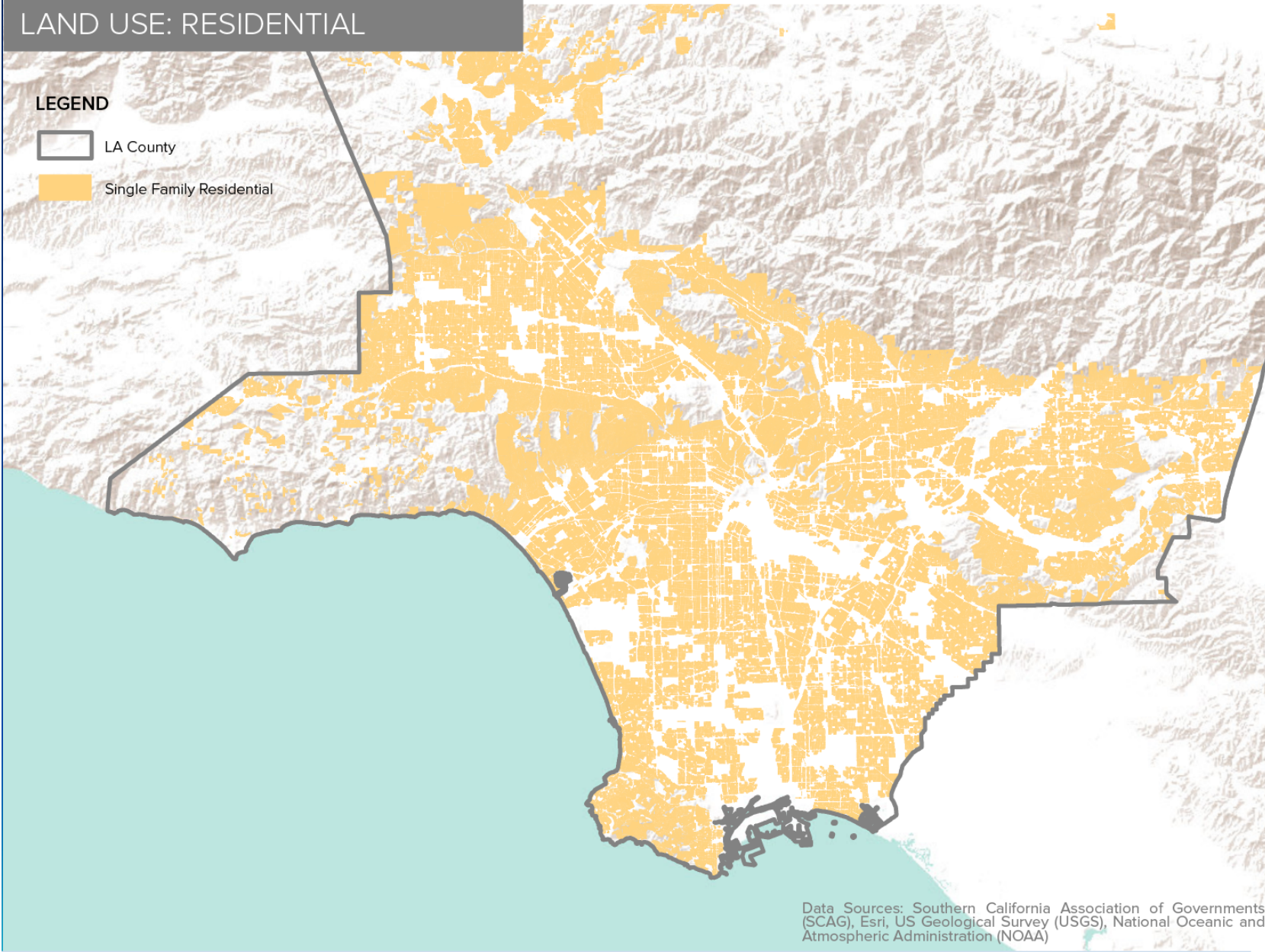


Data Sources: US Geological Survey (USGS), Esri, National Oceanic and Atmospheric Administration (NOAA)

LAND USE: RESIDENTIAL

LEGEND

-  LA County
-  Single Family Residential



Data Sources: Southern California Association of Governments (SCAG), Esri, US Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA)



Watersheds and Waterways

LEGEND

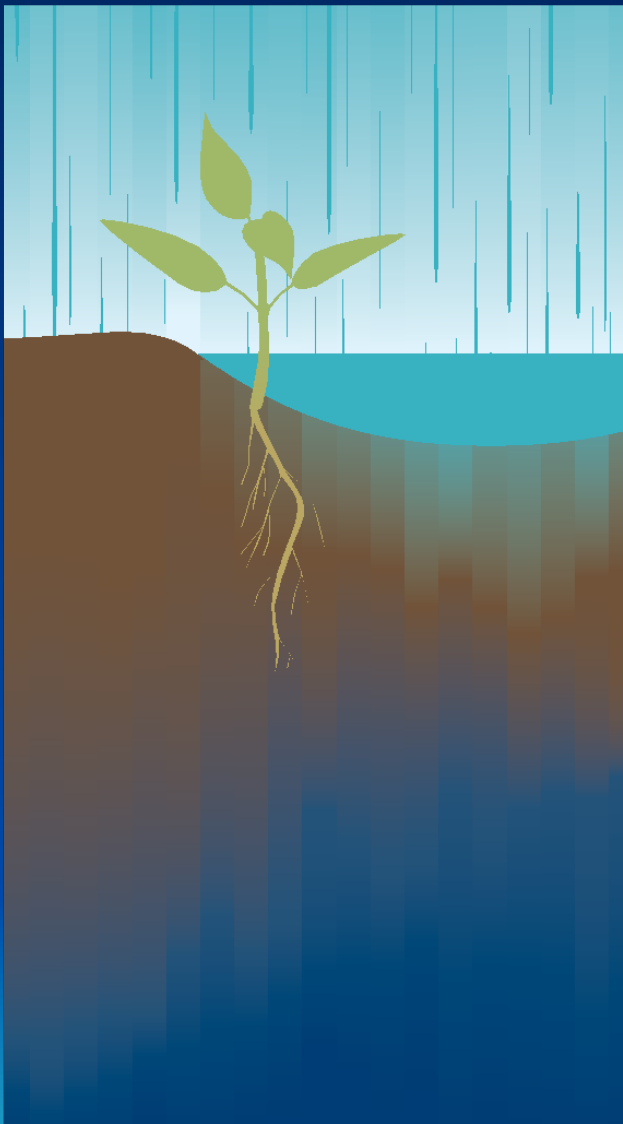
- LA County
- Watershed Boundaries
- Waterways and Water Bodies



Data Sources: US Geological Survey (USGS), Esri, National Oceanic and Atmospheric Administration (NOAA)



NATURE-BASED SOLUTIONS



Stormwater is captured and absorbed into the ground, reducing flows into storm drains.



Contact with organic matter cleans the water before it enters groundwater basins and local waterways.



Natural aquifers are replenished, facilitating biodiversity, tree canopy and carbon sequestration.

6 Water LA Strategies



Rain Tanks



Rain Grading



Parkway Basins



Greywater Systems



Permeable Paving



Infiltration Trenches





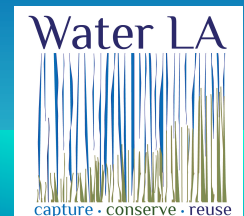




HOMES RETROFITTED BY WATER LA:

- **Reduced water use by an average 25%**
- **In a year with average rainfall, they capture and treat an estimated 1.2 million gallons of water**
- **Provide 18,175 square feet of native plants and trees for habitat, shade, air quality enhancements, carbon sequestration, and aesthetic benefits**
- **Cost an average \$5,200 per household in labor and materials**

**Read the full report at theriverproject.org or bit.ly/2lKpqQJ



QUICK STATS

Property size 8,600 square feet

Strategies employed Greywater system
Infiltration trench
Parkway retrofit
Curb cut

Material and installation costs \$3,500

Water savings 37,000 gallons/year

Annual savings \$230/year



HOMES RETROFITTED BY WATER LA:

KEY POLLUTANTS REMOVED BY WATER LA PILOT

Estimated based on 85th percentile storm

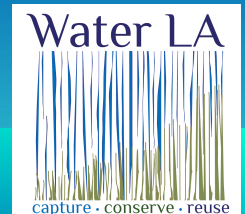
| TRASH | NITRATE | COPPER | LEAD | ZINC | FECAL COLIFORM |
|---------|---------|---------|---------|---------|----------------|
| 36.00 | 0.32 | 30.08 | 20.48 | 232.96 | 660,992,000.00 |
| cf/year | Kg/year | Kg/year | Kg/year | Kg/year | MPN/year |

HOMES RETROFITTED BY WATER LA:



HOW TO GET INVOLVED

1. Attend an Introductory Class
2. Submit an Application
3. Once you have been approved, you will be required to:
 - a. Commit to attend a number of implementation classes and events
 - b. Commit to maintain Water LA strategies for 3 years
 - c. Sign a liability and photo release for implementation classes
4. Initial Site Assessment
5. Participate in Implementation Classes and Hands–On Workshops
6. Design
7. Implementation
8. Complete Stewardship





WATERLA.ORG

waterla.org/transform/join-a-pilot
info@waterla.org
(818) 980-9660



**7:45 PM – 8:05 PM Pruning/
removal of trees by So. Cal
Edison on public and private
property**

**– David Guzman Manager Vegetation
Management- Southern California Edison**



Questions Raised by ACONA

1. When does SCE cut down trees in anticipation of storms which would bring down power lines?
2. How does SCE decide on what trees?
3. Does SCE have the "right" to go onto private property to cut the trees?
4. If SCE wants to go on private property to cut trees, do they ask/contact the property owner first?
5. Who do we call?



THE NEW NORMAL

WILDFIRE RISK IN THE FACE OF CLIMATE CHANGE

A VICIOUS CYCLE: CLIMATE CHANGE AND WILD FIRES

The 2017 wildfire season demonstrated the increasing threat of wildfires to all Californians. Wildfires threaten not only our homes, our lives and our economy, but also our fight against climate change.

Without action, things will only get worse: A hotter, drier California. A year-round fire season. A vicious cycle of increased climate change emissions. A new normal.



CLIMATE CHANGE IS INCREASING THE SEVERITY AND DURATION OF HEAT WAVES AND OTHER EXTREME WEATHER EVENTS

- By mid-century, average temperatures in the Los Angeles region could rise by 4.3°F from the average recorded between 1981–2000
- In that same timeframe, the acreage burned in Los Angeles area wildfires could increase 64%–77% from the average of 1981–2000
- Decreased humidity means drier air and more dangerous Santa Ana winds. In December 2017 relative humidity near Southern California beaches fell as low as 1 to 9 percent - at or near record lows for many recording stations!

"This is the new normal."

• Governor Jerry Brown, Ventura, California, December 4, 2017

HAZARDOUS FUEL IS BUILDING UP IN OUR NEIGHBORHOODS AND WILDERNESS AREAS

- Vegetation is drying out during summer heat waves and increasingly prolonged droughts
- Nine million acres of land contain ready-to-burn kindling from nearly 130 million trees that have been killed or weakened by drought and bark beetle infestation
- Forest floors are deep in flammable groundcover left by fire suppression efforts
- Climate models predict increased fire risk from greater swings between wet and dry years: Wet years lead to the vegetation build-up that fuels fires in dry years.

8 OF THE 20 MOST DESTRUCTIVE CALIFORNIA WILDFIRES HAVE HAPPENED SINCE 2015*



Year-Round Fire Season: Changes to California's climate mean that the traditional notion of a fire "season" is out of date. The catastrophic 2017 Thomas Fire occurred in December, which had not previously been a destructive month for fires.

WILDFIRES UNDERMINE CALIFORNIA'S FIGHT AGAINST CLIMATE CHANGE

In California, we've worked hard to set meaningful environmental goals. These goals call for a 40 percent reduction in greenhouse gas emissions from 1990 levels by 2030 and an 80 percent reduction by 2050. Air quality goals include a 90 percent reduction in emissions of nitrogen oxides and other health-harming pollutants in areas of the state with the highest levels of air pollution.

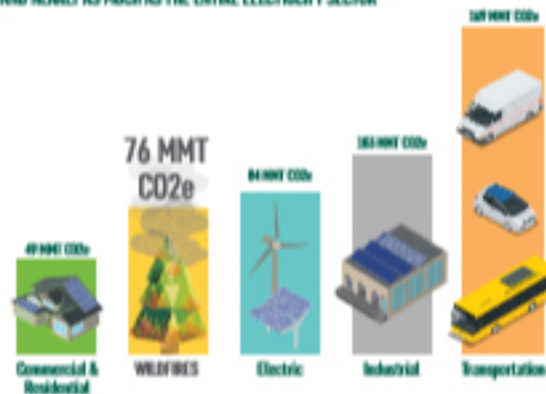
SCG is a key partner in helping the state meet these key goals. Today, 40 percent of SCG's electricity comes from carbon-free resources, and we have more solar and storage on our grid than any other utility nationwide. We're working toward an electric grid with even more carbon-free energy, which is used to clean other sectors of the economy. As the electric supply becomes cleaner, so do these other sectors, which accelerates an efficient and affordable transformation that will also generate highly paying jobs.

But the progress that we are making toward delivering cleaner energy to California is being undermined. Even as homeowners, businesses, farmers and electric utilities work hard to cut carbon emissions in the world's sixth largest economy, wildfires are poised to set us back—posing a significant drag on California's efforts to reduce greenhouse gas emissions.

IN 2017, CALIFORNIA WILDFIRES RELEASED MORE GREENHOUSE GASES THAN BOTH THE RESIDENTIAL AND COMMERCIAL SECTORS COMBINED, AND NEARLY AS MUCH AS THE ENTIRE ELECTRICITY SECTOR*

CALIFORNIA WILDFIRE GHG EMISSIONS IN 2017

A COMPARISON VS. OTHER GHG EMITTING SECTORS





WE CANNOT—AND MUST NOT—ACCEPT THE NEW NORMAL.

With the inestimable costs in loss of life and property already so apparent—and the predictable threat of climate change looming—the time to act is now. We cannot ignore the threat posed to our lives, our property and our environment. SCE is committed to fighting climate change and reducing the risk of wildfires.

There are workable solutions to prevent and reduce the destruction caused by wildfires. It is imperative that we improve fire safety for all Californians by taking immediate action to implement clear state standards for critical infrastructure, to develop smarter policies around building structures in high-risk fire areas, and that we execute a state-coordinated funding strategy to effectively address fire prevention and fire suppression. When wildfires do occur, the State needs a new approach to allocating costs so that the risk is appropriately shared and insurance coverage remains affordable.

To move forward, California needs immediate leadership from state government that is supported by a broad coalition of stakeholders. Together we can deliver those solutions to save lives and protect our homes, our businesses, our environment and our economy.

“California’s costliest wildfire season on record has sent air quality plummeting in highly populated urban areas and pumped massive quantities of carbon dioxide and other greenhouse gasses in the air, experts say.”

- Wall Street Journal,
December 26, 2017

REFERENCES

- i. "Climate Change in the Los Angeles Region," Center for Climate Science Faculty Director Alex Hall, Institute of the Environment and Sustainability, UCLA. <https://www.ices.ucla.edu/project/climate-change-in-the-los-angeles-region>
- ii. Yufang Jin et al, "Identification of two distinct fire regimes in Southern California: Implications for economic impact and future change," Environmental Research Letters, Sept. 8, 2018, last accessed Feb. 20, 2018. Link: http://iopscience.iop.org/article/10.1088/1748-9326/13/9/094003/meta;jsessionid=847882C403F00389C15436586486A3D1_c1?wt=at&st
- iii. Daniel Swain, "Strikingly Dry Conditions Persist; Thomas Fire Now Largest California Wildfire," The California Weather Blog, Dec 24, 2017, last accessed Feb. 20, 2018. <http://weatherwest.com/archives/8030>; See also: <https://twitter.com/NWSLosAngeles/status/94033098838808016>
- iv. "Record 129 Million Dead Trees in California," U.S. Forest Service, Dec 11, 2017, accessed Feb 20, 2018. <http://calfire.ca.gov/communications/downloads/newsreleases/2017/CAL%20FIREandU.S%20Forest%20announce129millionDeadTrees.pdf>
- v. "Top 20 Most Destructive California Wildfires," Cal Fire, Jan 12, 2018, accessed Feb 28, 2018. http://www.fire.ca.gov/communications/downloads/fact_sheets/Top20_Destruction.pdf
- vi. "The Clean Power and Electrification Pathway," Southern California Edison, November 2017, accessed Feb. 20, 2018. <http://www.sce.com/pathwayto2030>
- vii. Forest Carbon and Emissions Model, Greenhouse Gas Emissions from Four California Wildfires <http://www.idahoforests.org/img/pdf/FCEM/Report2Final-8-08.pdf>, https://www.arb.ca.gov/cc/inventory/data/tables/gbg_inventory_sector_sum_2000-18.pdf



WILDFIRE MITIGATION

ENSURING SAFETY AND MAINTAINING RELIABILITY

Southern California Edison's employees work vigilantly year-round to strengthen our system and protect against a variety of natural and manmade threats, from cyberattacks to wildfires.

Roughly a quarter of SCE's service territory, covering about 9 million acres, is considered high fire-risk areas. We have taken substantial steps to reduce the risk of wildfires in our territory and continue to look for ways to improve our operational practices and enhance our infrastructure to address the increased threat of wildfires.

We apply robust design and construction standards, aggressive vegetation management activities, various operational practices, and collaborative partnerships with fire agencies to maintain fire safety. In addition, SCE is evaluating a variety of new tools and technologies to advance fire safety throughout our system, including the use of drones, weather stations to supplement our current capabilities and real-time cameras to monitor high-fire risk areas.

OPERATIONAL PRACTICES

SCE has operational practices in place to reduce fire risk during extreme weather conditions. When the National Weather Service declares Red Flag warnings, the company will not automatically re-energize distribution electric circuits in high-fire areas after a circuit interruption. Most electric circuit interruptions, or "faults," are momentary, like when a bird or squirrel makes contact with a power line. Under normal conditions the grid automatically tests the circuit and, if the fault condition no longer exists, the circuit is quickly re-energized. During Red Flag conditions, circuits are not automatically re-energized and SCE crews must physically inspect the lines before they are re-energized. In cases where a fault is caused by physical damage to a wire, such as a tree falling into the line during high winds, the crew will find and correct that condition before re-energizing the circuit.

Another SCE operational practice that reduces fire risk is called a Public Safety Power Shutoff, which shuts down power preemptively in limited, high-risk areas only during the most extreme weather conditions. SCE applied this practice during a Red Flag event in December 2017 with unusually high winds. The company coordinated with County Emergency Management personnel, notified customers (with special attention paid to critical care customers), and provided other assistance to impacted customers.



VEGETATION MANAGEMENT

Trees, shrubs and other vegetation can cause safety hazards and power outages if they grow into or near power lines. We go beyond state requirements and conduct more frequent vegetation patrols in the most severe high-fire areas to scout for hazards. SCE inspects approximately 900,000 trees annually and trims nearly 690,000 of them per year. The company also inspects another 2 million trees outside trimming zones that could potentially fall into lines to determine whether they are dead or dying – which is happening more frequently due to drought and bark beetle infestations. We remove nearly 40,000 of these dead and dying trees annually.

SCE uses LIDAR technology, an advanced laser surveying method, to enhance vegetation management in remote areas of our service territory. This technology allows us to precisely and efficiently assess vegetation near power lines in difficult to access areas, further reducing fire risk.



Updated: 3/8/2018

POLE INSPECTIONS AND UPGRADES

SCE's system serves 50,000 square miles of Southern, Central and Coastal California and includes more than 1.4 million power poles, with approximately a quarter (320,000 poles) located in high fire-risk areas. In 2013, SCE completed a system-wide meteorological study and used the updated wind speed data from the study to implement its own pole design and construction standards. SCE then launched a comprehensive pole replacement program in 2014, which included an assessment of poles against the updated wind standards. Combined, SCE's pole loading and deteriorated pole replacement programs replace up to 30,000 poles annually, resulting in a stronger, more resilient system overall. Since 2014, 39,000 pole replacements have been made in high fire-risk areas, resulting in stronger poles.



PARTNERSHIPS WITH FIRE AGENCIES

SCE actively participates in wildfire response planning with fire agencies throughout our service territory. These partnerships improve service reliability during critical incidents, support public and firefighter safety, and foster relationships that improve response time. This effort is led by SCE's fire management team, which serves as our single point of contact for all fire agencies in the service territory. During wildfire incidents, members of this team are normally on-scene working closely with fire agencies to advise them on any issues related to our electrical system. Members of SCE's fire management team serve on the board of directors of the California Fire Safe Council and on the board of the Southern California Association of Foresters and Fire Wardens, which has representatives from every county, state and federal fire agency in our service territory.



• QUESTIONS?



**Please be sure you
signed in**

(if we already have your email
address, we just need your name)



Schedule for remaining ACONA Meetings 2018

- Sept 25th
- Nov 27th



Thank you!
Questions?