



# Napa County Water Availability Analysis Update

## Public Workshop

November 5, 2014



A Tradition of Stewardship  
A Commitment to Service

WAA Public Workshop  
November 5, 2014 6:30PM  
Napa County Library



# Groundwater Overview

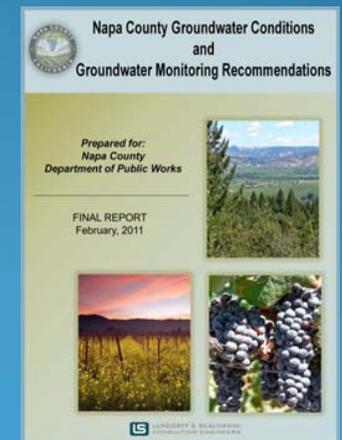
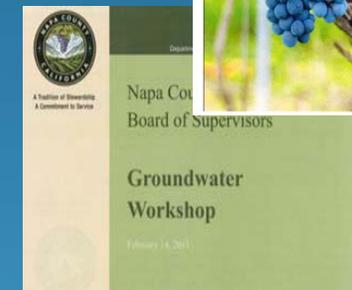
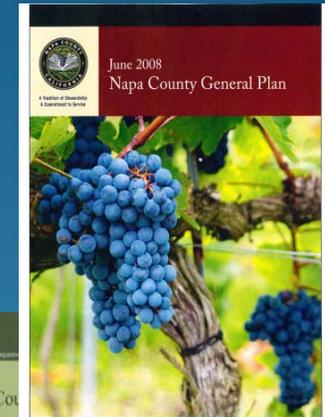
- Background
- What We Know
- What We're Trying to Learn
- Voluntary GW Monitoring Program
- Groundwater Resources Advisory Committee (GRAC)
- Next Steps
- Groundwater Sustainability





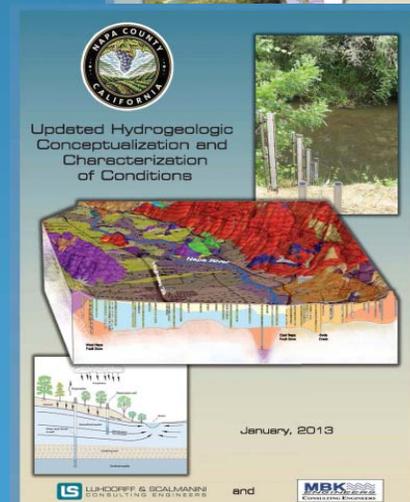
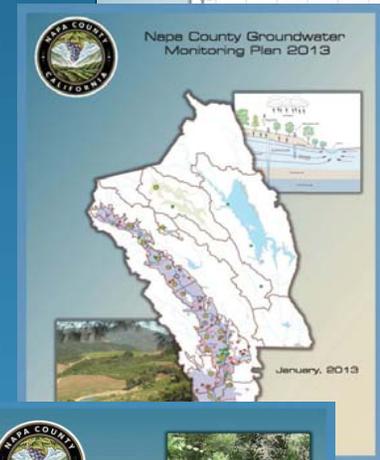
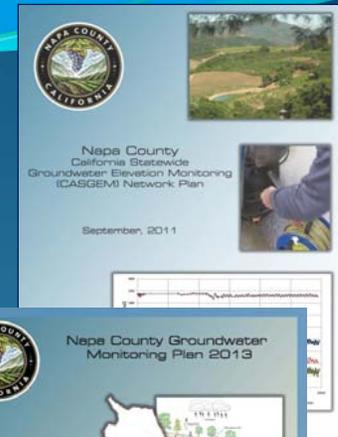
# Groundwater Background

- Comprehensive Groundwater Resources Study to meet General Plan goals/actions (2009)
- BOS GW Workshop - February 14, 2011
  - Napa County GW Conditions & GW Monitoring Recommendations (LSCE Feb. 2011)
  - Assessment of the Feasibility of a Collaborative GW Data Gathering Effort in Napa County (CCP/CSUS Aug. 2010)
- Groundwater Resources Advisory Committee
  - Both studies identified need for collaborative data gathering and community advisory committee to guide effort
  - GRA Committee appointed by BOS on Sept. 20, 2011



# Working to Improve Our Understanding of Groundwater

- Groundwater Monitoring Plan (Jan 2013) and CASGEM Plan (Sept 2011)
  - Addressing Long-term Monitoring Needs
- Updated Hydrogeologic Conceptualization & Characterization of Conditions (Jan 2013)
  - Report Addressing GW Data Gaps
- Groundwater Data Management and Disclosure Guidance Document (Jan 2013)



# Groundwater: *What we know*

Napa County and other public agencies have been monitoring groundwater resources since mid-1900's

## Groundwater Levels

- The Napa Valley Floor shows stable long-term trends and shallow depth to water

### Milliken, Sarco & Tulucay (MST) creek watersheds

- Northern MST shows historical declines but it has stabilized in last 30 years
- Central MST shows long-term declines, increasing since 1990 with recent stabilizing
- Southern MST is historically stable with shallow depth to water, some decline in mid-1990's to mid-2000's with recent stabilizing



# Groundwater: *What we know*



## Groundwater Quality

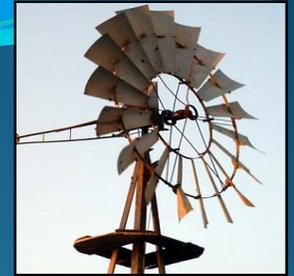
- Quality generally good on Napa Valley Floor
- Higher levels of salt and other constituents in northern Napa Valley Floor/Calistoga
- Salts, iron and other constituents are higher in southern Napa Valley Floor



## Groundwater Recharge

- Most recharge occurs in the Napa River watershed
- Almost 43% of the watershed has geology/soils with the greatest potential for recharge

# What Are We Trying to Learn about Groundwater?



- How does GW move through our aquifer?
- What is the overall status of our aquifers in Napa County?
- What are the groundwater conditions & trends?
- How do groundwater and surface water connect?
- Questions led to development of the Groundwater Monitoring Program

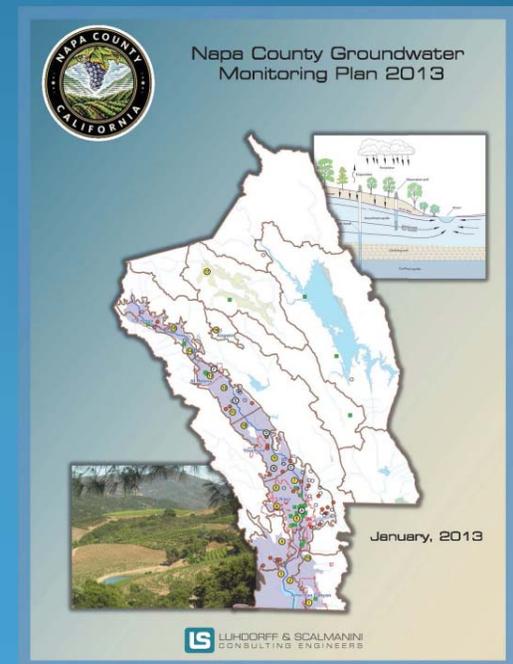


# Napa County Groundwater Monitoring Plan 2013

## Purpose:

Formalize and expand monitoring efforts to better understand our groundwater resources, regularly evaluate trends to identify changes, and ensure sustainable water resources

- **4 GW Basins/2 Sub-Basins(DWR)**
  - **17 GW Subareas Countywide**
    - Napa Valley Floor includes 5 Subareas
  - **7 GW Level & Quality Priority Subareas**
- **18 GW Monitoring Areas of Interest (AOI)**



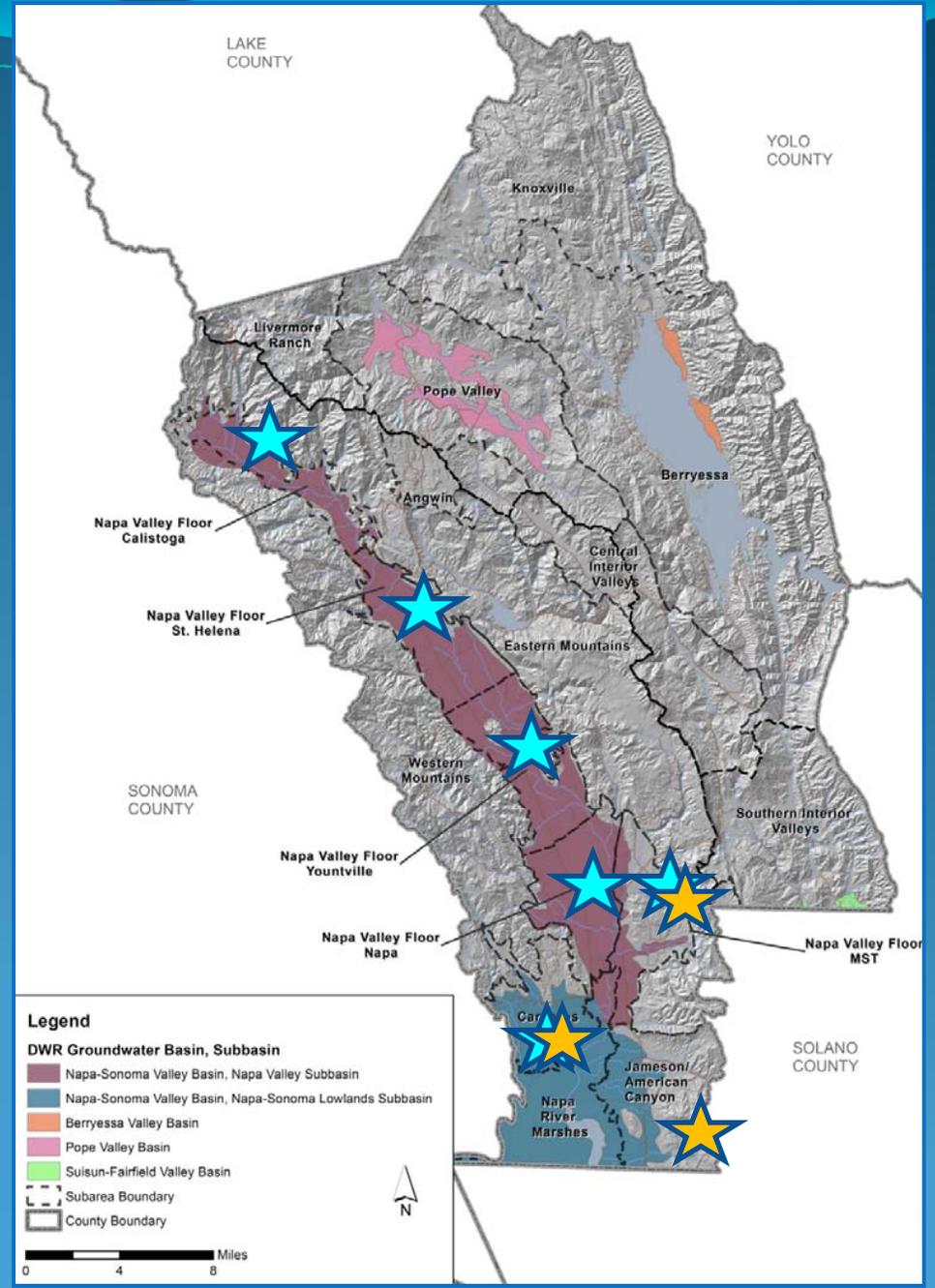
# 4 Groundwater Basins/ 2 Sub-Basins (DWR)

17 Groundwater Subareas  
Countywide

## 7 GW Priority Subareas

- Calistoga ★
- St. Helena ★
- Yountville ★
- Napa ★
- MST ★ ★
- Carneros ★ ★
- Jameson/  
American Cyn ★

GW Levels ★    GW Quality ★





# Groundwater Resources Advisory Committee (GRAC)

- Advisory Committee to Board of Supervisors created in 2011 - 15 Members
- Diverse community representation
  - Farming/Agriculture Industry
  - Environmental Interest Groups
  - Business/Wine Industry
- Purpose was to assist County staff and GW technical consultants with GW recommendations
- Final Report to the Board of Supervisors on GRAC's Conclusions & Recommendations (April 2014)



# Next Steps:

- Annual Groundwater Monitoring Report
  - Expanded monitoring program (levels/quality/SW-GW)
- Update of County's Water Availability Analysis (WAA)



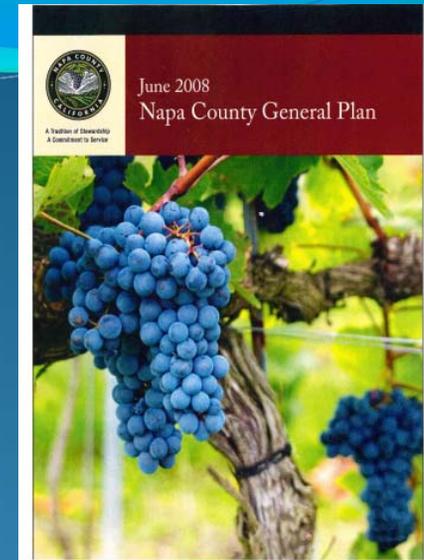
- Recycled Water to MST and Carneros
- Groundwater Outreach/Education
  - Expanded Water Conservation Program
- Begin Implementation of Sustainable Groundwater Management Legislation

# Groundwater Sustainability

Napa County General Plan and Groundwater Sustainability Objectives provide foundation

## General Plan: Water Resources Goals

- **Goal - CON-12:** Collect information about status of Surface and Groundwater resources for improved forecasting of supplies and effective management
  - **Action Item - CON WR-4:** Implement a countywide watershed monitoring program to assess health of County's watersheds
  - **Action Item - CON WR-8:** Monitor Surface and Groundwater interrelationships using County-owned wells and stream and precipitation gauges, data from private property owners on a voluntary basis, data via conditions of land-use approvals, data from DWR and other agencies/organizations



# Groundwater Sustainability Objectives 2014

## Groundwater Sustainability (definition)

*Groundwater sustainability depends on the development and use of groundwater in a manner that can be maintained indefinitely without causing unacceptable economic, environmental, or social consequences, while protecting economic, environmental, and social benefits.*

- As such, groundwater sustainability is both a goal and a process.
- Groundwater sustainability is a shared responsibility of everyone that lives and works in the County.





A Tradition of Stewardship  
A Commitment to Service



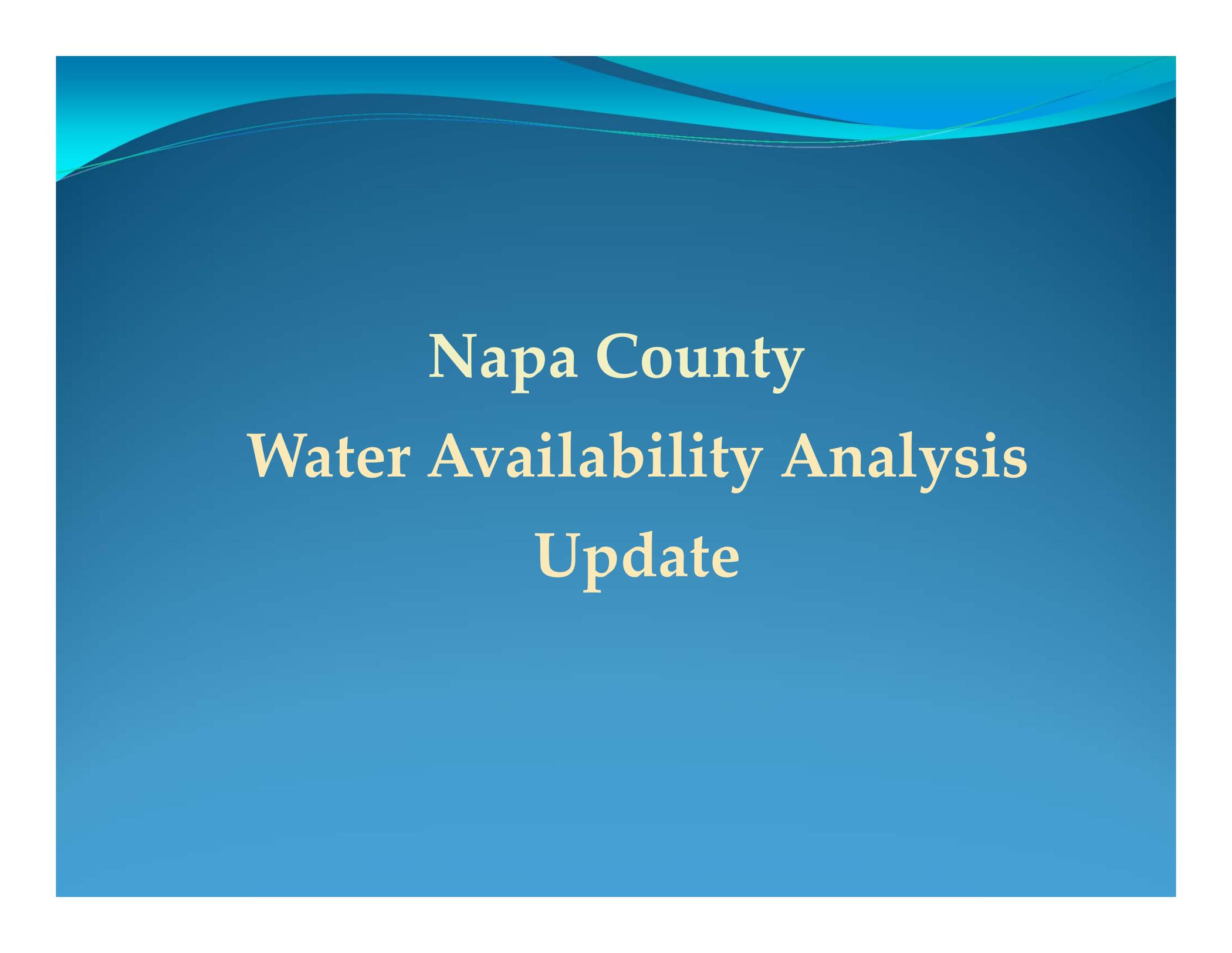
For Additional Information:

GW/GRAC Website: [www.countyofnapa.org/bos/grac](http://www.countyofnapa.org/bos/grac)

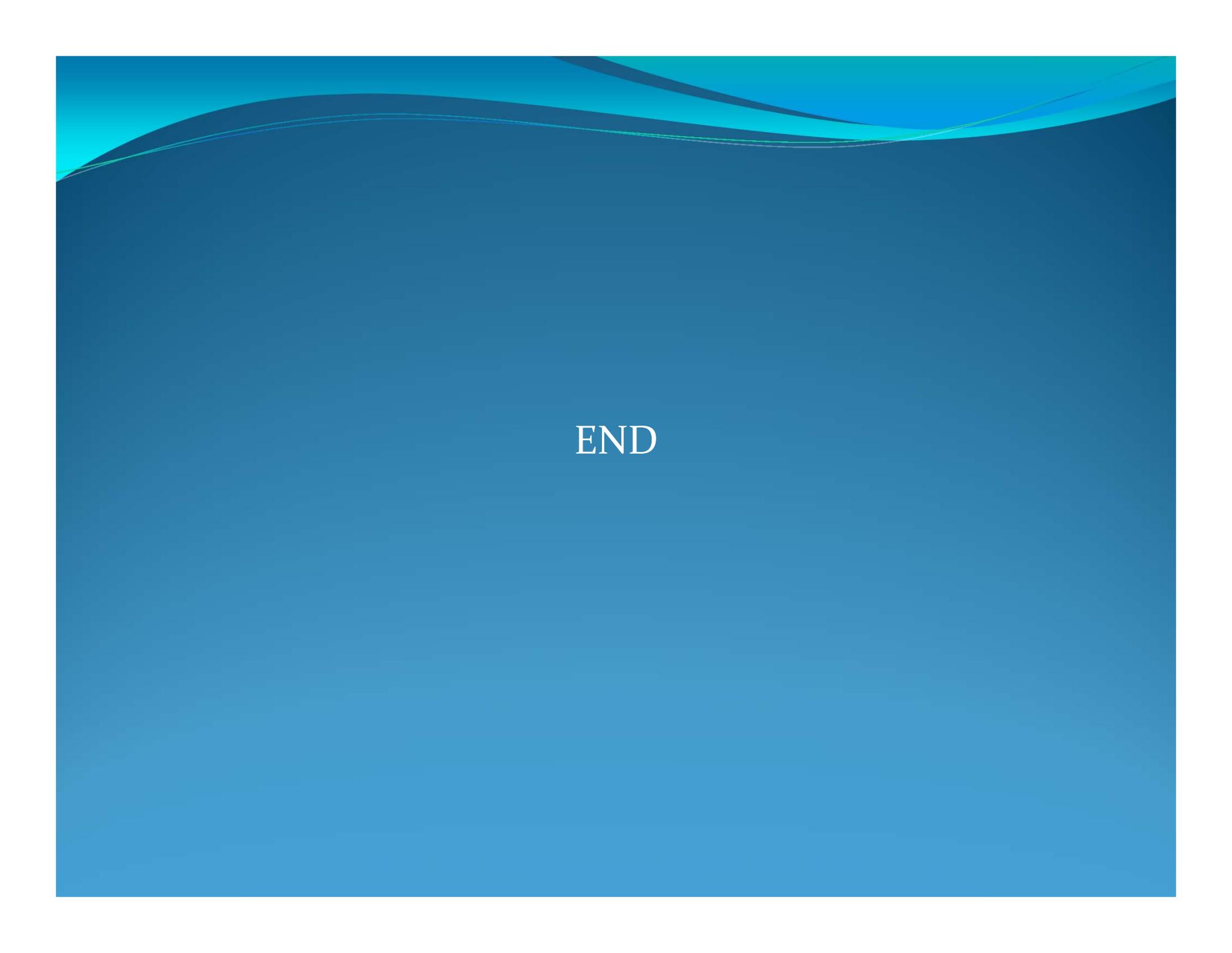
WICC Website: [www.napawatersheds.org](http://www.napawatersheds.org)

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Natural Resources Conservation  
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[patrick.lowe@countyofnapa.org](mailto:patrick.lowe@countyofnapa.org)





**Napa County**  
**Water Availability Analysis**  
**Update**

The background is a solid blue gradient, transitioning from a lighter blue at the top to a darker blue at the bottom. There are several wavy, horizontal lines in shades of blue and cyan that sweep across the top of the image, creating a sense of movement and depth.

END



# Education & Outreach

- Partner with RCD for Ag Industry and Community outreach efforts
- WICC Board **Meetings**
  - Hosting Public Meetings/Forums
- WICC **Watershed Symposium**
- Participation in Community Events
  - Earthday, River Fest, others
- Public Speaking
  - Organizations, Groups, others...

