Our Groundwater Resources in Napa County
Monitoring for Sustainability

Outreach Presentation
July 2013

www.countyofnapa.org/bos/grac
Overview

- Background
- What We Know
- Importance of Groundwater (GW)
- What We’re Trying to Learn
- Voluntary GW Monitoring Program
- Groundwater Resources Advisory Committee (GRAC)
- Next Steps
- Education & Outreach
- Sustainability
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
Importance of Groundwater in Napa County

Vital source of water supply

- Relied upon by: residents, businesses, agriculture, fish, wildlife, and the natural environments
- Used for drinking, irrigation, the environment, others

These and other water demands make it essential that we:

- Preserve GW quality and availability for the long term
- Be able to meet water needs during drought conditions
- Prevent potential negative environmental effects due to groundwater use
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
Voluntary Groundwater Monitoring Program

- Expands voluntary monitoring well network to help answer remaining questions
- Supports County water resources goals
- Addresses identified data needs
- Coordinates data collection with State/Federal agencies
- Incorporates data into a locally maintained system
Napa County Groundwater Monitoring Plan 2013

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)
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Next Steps....

- Public Outreach & Education
- Review of draft Groundwater (GW) Ordinance and Permit Process Updates
- Development of GW Sustainability Objectives
- Provide Final GW Recommendations to the Board of Supervisors (2014)
Education & Outreach

- Ag Industry, Environmental, others
- GRAC- WICC Board Joint Meetings
  - Hosting Public Meetings/Forums
- Participation in Community Events
  - Earthday, River Fest, others
- Public Speaking
  - Organizations, Groups, others…
- WICC Watershed Symposium
Groundwater Sustainability

GW Monitoring Program and GRAC Efforts Consistent with Napa County General Plan

Water Resources Goals/Actions

- **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

- Ongoing monitoring of groundwater conditions to ensure stable long-term supply
- Build partnerships and expand collaborative efforts to improve supply reliability, protect water quality, and sustain habitats
- Seek funding to further our understanding of surface and groundwater resources conditions and trends
For Additional Information:

GRAC Website:  www.countyofnapa.org/bos/grac

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Thank You