

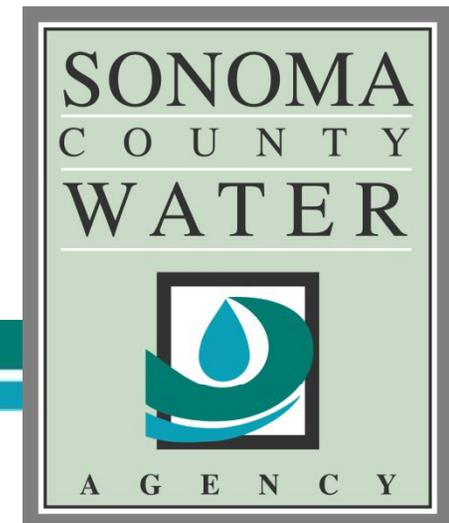
Draft Water Supply Strategies Action Plan

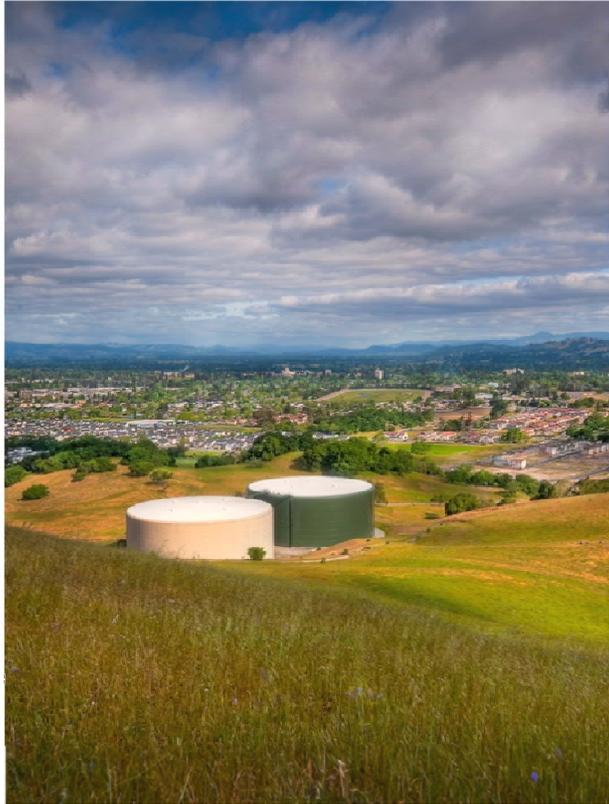
Grant Davis

Interim General Manager

Jay Jasperse

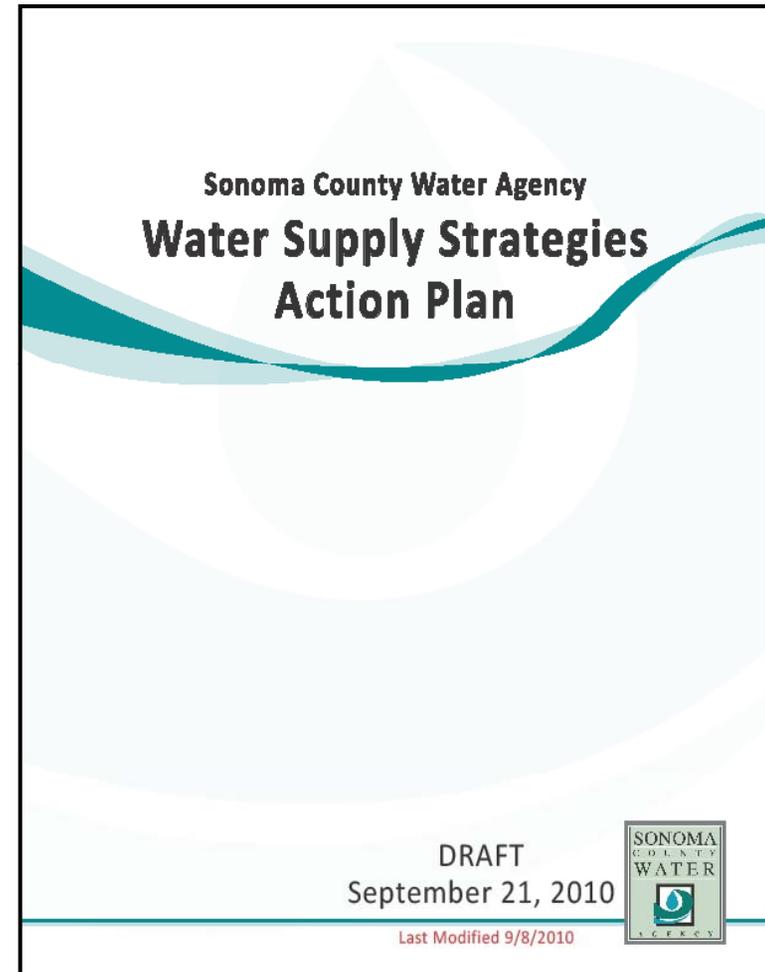
Interim Chief Engineer





Overview

- Background
- Outreach
- Draft Water Supply Strategy Action Plan
- Recommended Board actions



April 2009 Workshop

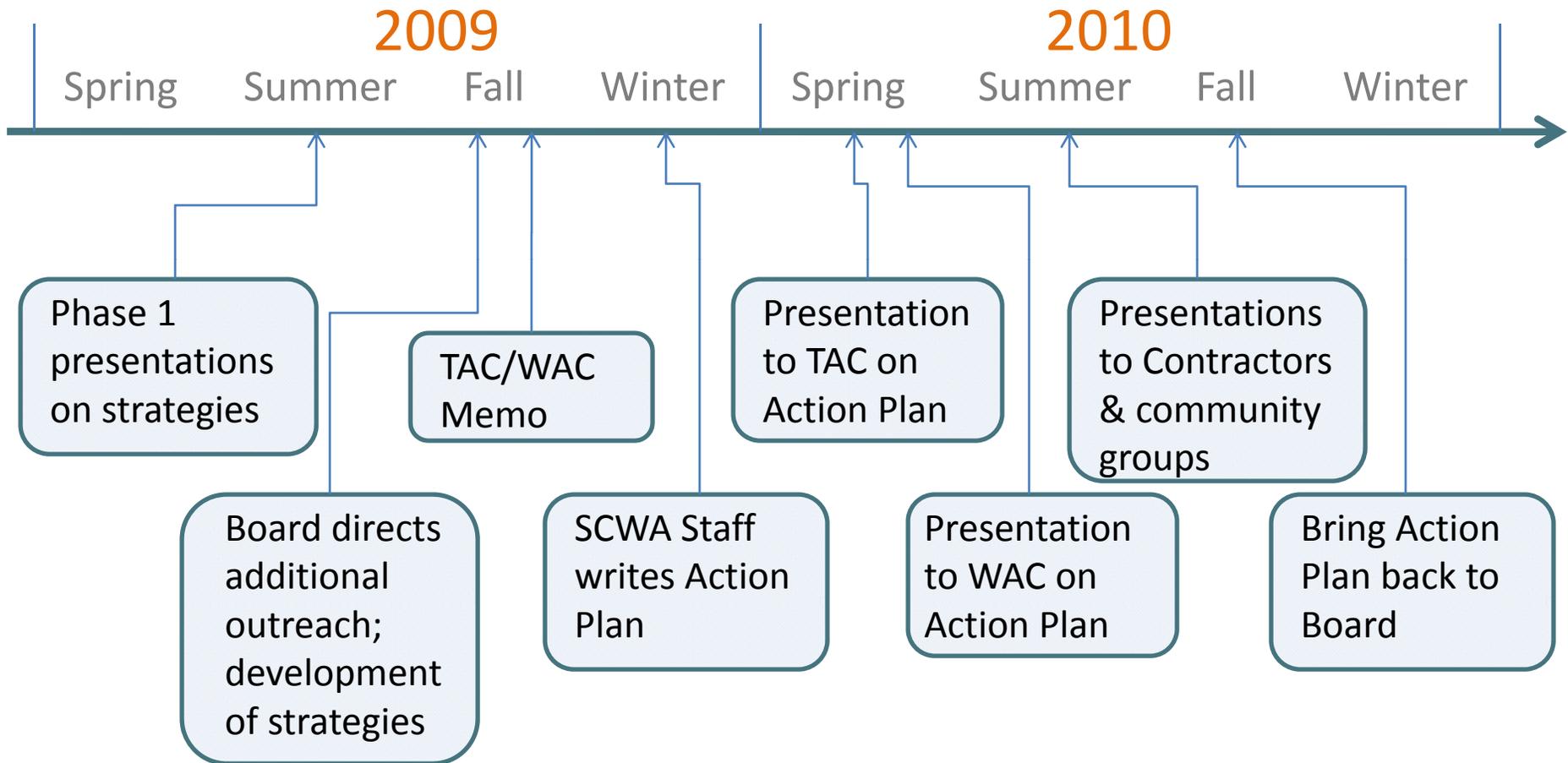
- Regional water resources picture
- Key challenges
- 12 water supply strategies



September 2009 Board Direction

- Directed staff and Board liaison to WAC to work with WAC & TAC chairs to continue development of new water supply projects, plans, and strategies to meet reasonable expected future water demands.
- Redirected Water Agency efforts toward pursuit of new water supply strategies.

Outreach



Key Issues & Challenges



- Water Supply
- Facility Reliability
- Meeting Future Demands of Customers
- Affordability and Funding Limitations
- Organizational Fragmentation

Water Agency Goals

- Improve facility reliability
- Comply with biological opinion
- Maintain current water supply and quality
- Acknowledge funding limits and ensure affordable projects
- Reduce organizational fragmentation
- Identify need and type of future water supply projects

Water Supply Strategies

1. Address Dry Creek Summer Flows
2. Modify Operation of Russian River System
3. Evaluate Potential Climate Change Impacts
4. Pursue Combined Water Supply & Flood Control Projects
5. Work with Stakeholders to Promote Sound, Information-Based Water Supply Planning Programs
6. Improve Transmission System Reliability
7. Take Advantage of Energy & Water Synergies
8. Implement Integrated Water Management
9. Overcome Organizational Fragmentation

Action Plan Format

- Each Action lists Projects and Involved Parties
- Immediate
- Near Term
- Long Term

Water Supply Strategy Three

EVALUATE POTENTIAL CLIMATE CHANGE
IMPACTS ON WATER SUPPLY & FLOOD PROTECTION

Immediate Action One:

Initiate climate change modeling for Russian River and Sonoma Valley watersheds.
A. Project: Develop Model
Develop predictive model for Sonoma Valley and Russian River watersheds that downscales large climate models to local watershed scale. Model will consider effects of fog and provide hydrology input to Agency's model (ResSim) and to Sonoma Valley and Santa Rosa Plain groundwater models.
STATUS: To be completed in Fall 2010 or Winter 2011.
Involved Parties:

- U.S. Geological Survey (USGS), Regional Climate Protection Authority

Immediate Action Two:

Support development of Hydrometeorology Test bed (HMT) for the Russian River basin.
A. Project: Support Federal Partners
Support federal agencies in installing additional weather sensors to provide more accurate forecasting. Could help reservoir operations and result in water supply benefits.
STATUS: NOAA is leading effort to secure pilot project funds in 2011 federal funding cycle.
Involved Parties:

- NOAA, USACE, USGS, National Weather Service

Near Term Action One:

Develop Adaptation Measures
A. Project: Develop Reliability Actions
Once climate change predictive modeling is complete, develop actions to increase reliability of water supply, reservoir and river management, conjunctive use, and saline water management.
Involved Parties:

- USACE, Regional Climate Protection Authority, Water Contractors

Long-Term Action One:

Update Climate change analysis.
A. Project: To be determined
Based on advances in scientific understanding of climate processes and predictive modeling.
Involved Parties:

- USGS, Regional Climate Protection Authority

Important Considerations

- No entity can do it alone
- Strategies are interconnected
- Plan is a living document
- Public education & input are critical to success



Input Received

- 118 comments from contractors.
- Contractors included water supply projects.
- Community groups provided feedback.

Water Contractors' Actions

City of Santa Rosa

A. Project: Expanded Urban Reuse

The City has identified a phased urban reuse expansion project with ultimate delivery of up to 3,000 AFY that can be built in response to water supply and discharge capacity needs.

STATUS: Feasibility studies, CEQA documents, and pre-design is complete. The first segment of approximately 1 mile of pipe is under construction. Funding is needed for additional construction.

Involved Parties:

- Santa Rosa, Rohnert Park

B. Project: Water Conservation Implementation

The City is on track and continues to implement all CUWCC Best Management Practices. The City has identified an additional 1,200 – 1,600 AFY of conservation savings through implementation of beyond Best Management Practices programs, such as Cash for Grass, Irrigation System Upgrades, Greywater Rebates, and Rainwater Harvesting Rebates.

STATUS: Currently implementing beyond Best Management Practices incentive programs

Involved Parties:

- Santa Rosa

C. Project: Expanded Local Supplies

The City completed a Well Field Study identifying the need to develop additional emergency groundwater supply.

STATUS: The City has initiated a Capital Program to identify potential groundwater sources and has conducted exploratory drilling.

Involved Parties:

- Santa Rosa

D. Project: Solar PV Systems

The City intends to continue reducing energy consumption through the installation of solar PV systems in order to assist in achieving the countywide GHG Emission Reduction Target. Within the next 10 years, possible projects include but are not limited to: solar PV shade structure at Municipal Services Center North, a roof top solar system at Municipal Services Center South funded by California Renewable Energy Bonds, and a 1+MG Watt system at the decommissioned pond at the service center. The continued effort to reduce our power consumption through the creation of renewable energy is driven by bills such as AB32 Global Warming Solutions Act of 2006 and SB375 Planning and Global Warming of 2008, as well as, the City Council Resolution 26341-GHG Emission Reduction Target, the City's General Plan of 2035 and the City Council's (Environmental) Strategic Plan.

STATUS: Feasibility studies for projects are ongoing, and some projects are awaiting funding.

Involved Parties:

- Santa Rosa

D. Project: Regional Data Management Collaboration Platform

Develop data management system collaboration platform in partnership with IBM, SCWA and other contractors that provides operational data of Water Agency's water supply and transmission system in addition to contractors' systems. (See Strategy 10, Immediate Action 1)

STATUS: This project is currently on-going in partnership with SCWA.

Involved Parties:

- City of Cotati, Santa Rosa, other contractors, SCWA

Major Changes to Action Plan

- Reduced number of strategies from 12 to nine
- Added cost/benefit for Immediate Actions
- Included additional actions/projects:
 - Contractor assistance in advocating for Biological Opinion funding
 - Inflatable dam contingency plan
 - Dry Creek pipeline contingency planning

Costs & Benefits - Attachment B

<u>Strategy</u>	<u>Action</u>	<u>Description</u>	<u>FY 10/11</u>	<u>FY 09/10</u>	<u>Water Transmission?</u>	<u>Other Source?</u>	<u>Potential Benefits</u>
One	One	Geomorphology Feasibility Study	\$176,000	\$908,700		*	Comply with BO, improve habitat for ESA-listed fish, secure existing water supply. Compliance with BO is essential if RR supplies are to be utilized to help meet future water demands of contractors.

Recommended Board Actions

- Consider staff presentation and public input.
- Approve the Water Supply Strategies and direct the General Manager to complete the Water Supply Strategies Action Plan, incorporating any changes requested by the Board.

Draft Water Supply Strategies Action Plan

Grant Davis

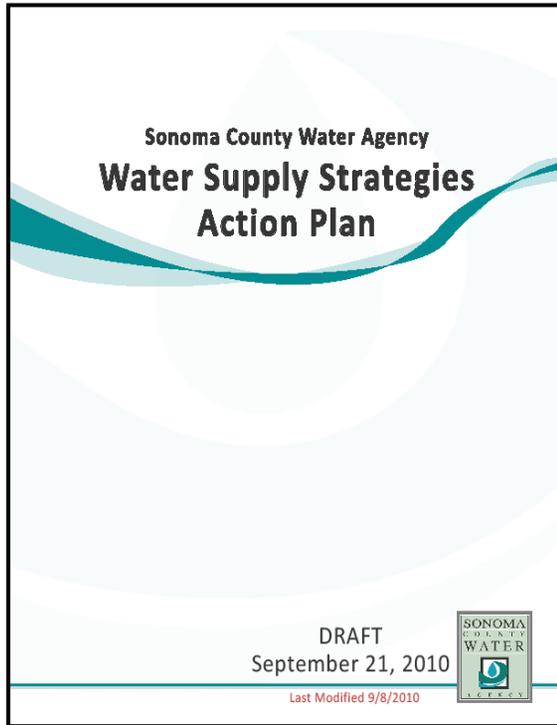
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