

Attachment 3

Status of Groundwater Management Plan

3.1 *Proof of Adopted GWMP*

The GWMP was adopted on November 6, 2007 by the Sonoma County Water Agency (Water Agency) Board of Directors. The GWMP was prepared under the authority of the Groundwater Management Act, California Water Code (Water Code) § 10750 et seq, originally enacted as Assembly Bill (AB) 3030 in 1992 to encourage voluntary, non-regulatory groundwater management at the local level.

The Sonoma Valley Groundwater Management Plan (GWMP) was developed in coordination with the Water Agency, the Valley of the Moon Water District (VOMWD) and the City of Sonoma (City) under a collaborative and cooperative process that included a broad range of 20 stakeholders participating on the Basin Advisory Panel (Panel). The Panel consists of representatives from local agriculture, dairies, government, private business enterprises, environmental groups, and domestic well users. The GWMP was adopted by the Water Agency, City, VOMWD, and the Sonoma Valley County Sanitation District in late 2007.

The Water Agency Resolution of Adoption is included as Figure 3-1 on the next pages. A complete report on the progress of the implementation of the GWMP from 2008 to date follows Figure 3-1.

Figure 3-1. Resolution Adopting the Sonoma Valley Groundwater Management Plan

THE WITHIN INSTRUMENT IS A CORRECT COPY
OF THE ORIGINAL ON FILE IN THIS OFFICE.

ATTEST: NOV - 7 2007

ROBERT DEIS, Clerk of the Board of Directors of
the SONOMA COUNTY WATER AGENCY
BY: [Signature]
DEPUTY CLERK

#51
Resolution No. 07-0932
County Administration Bldg.
Santa Rosa, CA

Date: November 6, 2007

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SONOMA COUNTY
WATER AGENCY ADOPTING A GROUNDWATER MANAGEMENT PLAN FOR THE
SONOMA VALLEY BASIN OF SONOMA COUNTY.

WHEREAS, on June 20, 2006, the Sonoma County Water Agency's Board directed staff to initiate a non-regulatory groundwater management planning process in the Sonoma Valley Basin; and

WHEREAS, active public participation is critical to the success of development of any groundwater planning effort; and

WHEREAS, as part of initiating a groundwater management planning process in Sonoma Valley, a Basin Advisory Panel (BAP) was formed to act as the groundwater management plan stakeholder group for the Sonoma Valley Basin; and

WHEREAS, the BAP includes stakeholders from throughout the Sonoma Valley representing agricultural interests, local citizen groups, environmental groups, business interests, local well owners and government interests; and

WHEREAS, the BAP has been meeting since August 2006 to discuss and recommend on the groundwater management planning process in the Sonoma Valley; and

WHEREAS, on January 30, 2007, after a noticed public hearing, this Board adopted Resolution 07-0081, declaring its intent to prepare a groundwater management plan; and

WHEREAS, the BAP developed a Groundwater Management Plan for the Sonoma Valley Basin that contains the following components in accordance with the California Water Code:

- a) Basin Management Objectives;
- b) Components relating to the monitoring and management of groundwater levels, groundwater banking, groundwater quality, inelastic land surface subsidence, and changes in surface flow and surface water quality that directly affect groundwater levels or quality or are caused by groundwater pumping;
- c) Monitoring protocols to track changes in conditions related to components in paragraph (b) and to generate information for the purpose of meeting Basin Management Objectives and establishing effective management of groundwater;

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Figure 3-1. Resolution Adopting the Sonoma Valley Groundwater Management Plan
(continued)

- d) A plan to involve other local agencies, water purveyors, and private well owners in the implementation of the Groundwater Management Plan; and
- e) A map depicting the Sonoma Valley Basin, as defined by the California Department of Water Resources Bulletin No. 118 and other local agencies, and water purveyors in the Sonoma Valley.

WHEREAS, the groundwater management plan would provide for the effective management of groundwater resources in the Sonoma Valley Basin; and

WHEREAS, the California Water Code (10753 et seq.) requires that before a groundwater management plan can be adopted, a local public agency must provide notice and hold a second hearing to consider adoption of the Groundwater Management Plan; and

WHEREAS, the Agency provided notice in local newspapers regarding the intention of the Agency to adopt the Groundwater Management Plan, as required by law; and

WHEREAS, the Sonoma County Water Agency (Agency) was formed in 1949 by a special legislative act of the State of California ("Agency Act") and is a stakeholder of the Basin Advisory Panel; and

WHEREAS, under the Agency Act, the Agency may provide for the protection and preservation of groundwater resources in Sonoma County for current and future beneficial uses and may develop, adopt, and implement a plan to manage groundwater resources in the Sonoma Valley; and

WHEREAS, by adopting a Groundwater Management Plan, existing and future State funding may be available for plan implementation.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Sonoma County Water Agency hereby finds, determines, and declares as follows:

1. All of the above recitals are true and correct.
2. The Groundwater Management Plan for the Sonoma Valley Basin of Sonoma County is adopted, in accordance with the process required by law.
3. The General Manager/Chief Engineer is directed to publish a copy of this Resolution and submit it to the California Department of Water Resources as required by law.
4. The General Manager/Chief Engineer is authorized and directed to take such steps as are necessary to implement the Groundwater Management Plan for the Sonoma Valley Basin.
5. The General Manager/Chief Engineer shall report back to the Board periodically on implementation activities.

DIRECTORS:

KERNS Absent SMITH Aye KELLEY Aye REILLY Aye BROWN Aye

Ayes 4 Noes _____ Absent 1 Abstain _____ SO ORDERED.

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FILE:WC/40-3-1.SONOMA VALLEY GROUNDWATER MANAGEMENT PLAN

3.2 Summary of the Sonoma Valley Groundwater Management Plan

Groundwater resources have long played a significant role in the development, growth and sustainability of the Sonoma Valley, with more than half the water demand in a given year met by local groundwater resources. With increasing demand on finite local groundwater supplies, overall groundwater storage in the Sonoma Valley has been and will continue to be depleted, without appropriate actions being taken in the near future. To help balance the increasing demand with finite supplies, the Sonoma Valley Groundwater Management Program (GWMP) identifies a range of water management options, including groundwater recharge projects, and increasing water conservation and water use efficiency. The overall goal of the GWMP is stated below:

“...to locally manage, protect, and enhance groundwater resources for all beneficial uses, in a sustainable, environmentally sound, economical, and equitable manner for generations to come.”

A Collaborative and Cooperative Process

The GWMP is implemented under the Sonoma Valley Groundwater Management Plan. The plan was developed in 2007 in coordination with the Water Agency, the Valley of the Moon Water District (VOMWD), and City of Sonoma (City) through a collaborative and cooperative process that included a broad range of local stakeholders, comprising representatives from the agricultural community, dairies, government, business, environmental stewardship groups, and private well owners. These stakeholders have continued their involvement in the GWMP through ongoing participation on the Basin Advisory Panel, which meets quarterly, and a Technical Advisory Committee, which meets monthly, providing guidance on the implementation of the GWMP. Implementation of the GWMP has been structured to encourage an open, collaborative and cooperative process for groundwater management activities and to maximize coordination of the many actions envisioned by the Basin Advisory Panel.

Purpose and Goals of the Basin Advisory Panel

The purpose of the Basin Advisory Panel is to develop and oversee implementation of a Groundwater Management Program for the Sonoma Valley. To this end, the goals of the group are as follows:

- Goal 1 Work collaboratively with other Panel members who represent groundwater users and interests from throughout the entire Sonoma Valley.
- Goal 2 Develop a common understanding on current and future water needs and resources in the Sonoma Valley.
- Goal 3 Support development of basin management objectives to protect resources in a sustainable manner, ensure local control, address current and future local water needs, and support the economy and environment.
- Goal 4 Negotiate in good faith to achieve consensus on how Sonoma Valley groundwater will be managed into the future

Basin Advisory Panel Members

The following community members and stakeholders comprise the current (2012) Basin Advisory Panel:

Mark Bramfitt; Chair of Basin Advisory Panel	Sonoma Valley Citizen's Advisory Commission and Valley of the Moon Water District
Milenka Bates	City of Sonoma
Al Bandur	Community member
Rochelle Campana	Sonoma Valley Citizens Advisory Commission
Richard Dale	Sonoma Ecology Center
Norm Goldstein	Sonoma Valley Vintners and Growers Alliance
David Goodison	Sonoma Planning and Community Development Administrator
Vicki Hill	Community member
Jay Jasperse	Sonoma County Water Agency
Clarence Jenkins	Madrone Vineyard Management
Bill Keene	Sonoma County Agricultural Preservation and Open Space District
Krishna Kumar	Valley of the Moon Water District
John Macleod	Indian Springs Ranch
Vickie Mulas	Mulas Dairy
Ed Nelson	Community member
Kathy Pons	Valley of the Moon Alliance
John Robb	Mission Highlands Water Company
Tito Sasaki	North Bay Agricultural Alliance
Kara Heckert	Southern Sonoma RCD
Maggie Salenger	Community member

Technical Advisory Committee Members

Staff and Technical Support to the Panel include the following:

Marcus Trotta	Sonoma County Water Agency
Tim Parker	Parker Groundwater
Mark Nordberg	California Department of Water Resources

3.3 Implementation of the Groundwater Management Plan

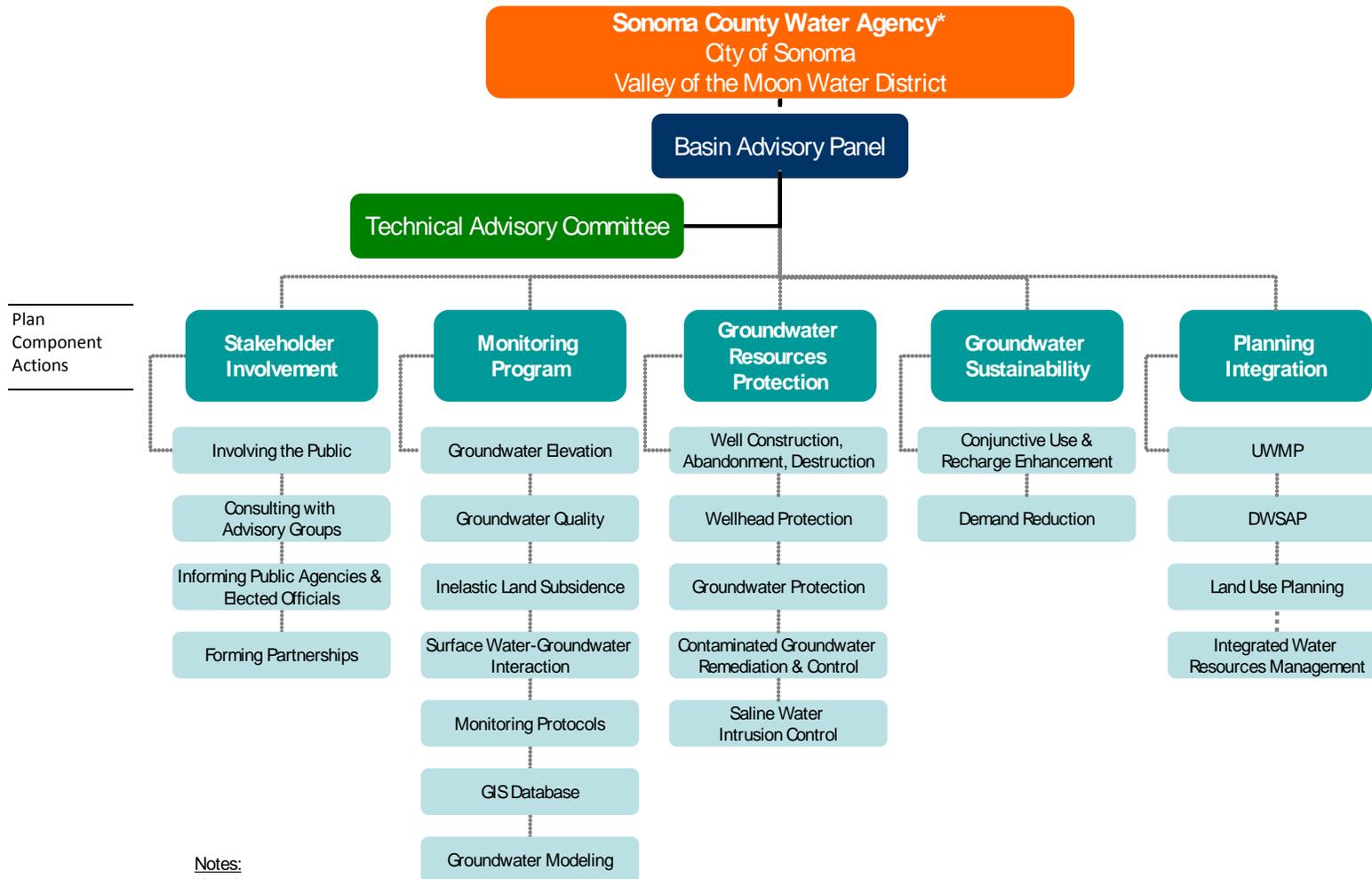
The Basin Advisory Panel meets quarterly or as necessary to oversee Groundwater Management Plan implementation and the public is welcome to attend meetings. In addition, staff and panel members are available to provide presentations to local and regional organizations about the Groundwater Management Plan. The Basin Advisory Panel welcomes members of the public to its meetings. In addition, staff and panel members are available to provide presentations to local and regional organizations about the groundwater management planning process.

The vision of the Groundwater Management Plan is to identify and implement a series of actions using modern technology and sound science to increase the quantity and quality of Sonoma Valley groundwater resources over the next decade and protect groundwater resources for future generations. The plan is a living document, intended to be continuously edited and updated as needed. Progress in implementing the plan will be periodically reviewed with the current understanding of groundwater levels, quality and trends.

As summarized in Figure 3-1 on the following page, the five key elements of the Groundwater Management Plan are:

1. Stakeholder involvement
2. A monitoring program
3. Groundwater quality protection
4. Groundwater sustainability
5. Integration of planning functions

Figure 3-1. GWMP Implementation Organizational Chart and Plan Component Actions



Notes:

*Lead agency

UWMP – Urban Water Management Plan

DWSAP – Drinking Water Source Assessment and Protection

The Technical Advisory Committee (TAC) includes members from the Basin Advisory Panel (Panel) and other entities and reports to the Panel.

3.4 Progress of the GWMP Implementation

Substantial progress has been achieved during the first years of implementation of the GWMP. Activities performed in support of the GWMP since its adoption in 2007 have addressed each of the five Plan Component Actions identified above in Figure 3-1, and are summarized in the following sections.

Plan Component 1: Stakeholder Involvement

Developed and implemented a public outreach plan for GWMP implementation;

- Conducted outreach and briefings including quarterly Panel meetings, monthly Technical Advisory Committee meetings, targeted briefings, focused outreach for expanding the monitoring network with additional volunteer wells, and initiated outreach for an expanded volunteer precipitation monitoring network;
- Communicated meeting announcements and supporting materials in advance to stakeholders, provided periodic informational newsletters and progress reports, developed and distributed fact sheets, maintained email distribution lists of stakeholders, and developed a project website (<http://sonomacountywater.org/projects/svgroundwater/>);
- Produced a video highlighting the Sonoma Valley GWMP and featuring many Panel members;
- Sponsored two public meetings on the Stormwater Management/Groundwater Recharge Scoping Study;
- Discussed possible recharge projects for Sonoma Valley, including onsite Stormwater/rainfall and runoff capture, detention ,infiltration, storage, and recharge elements;
- Developed media relationships and worked with local media to provide press releases on key events and milestones for the GWMP; and
- Coordinated with local media to provide press releases on key events and milestones for the GWMP, including publication of the 2008 Annual Report, solicitation for additional groundwater level measurement volunteers, announcement of the First Annual Sonoma Valley GWMP Water Conservation Award Winners, and description of groundwater recharge efforts being undertaken through the GWMP.

Plan Component 2: Monitoring Program

- Developed a sampling and analysis plan for groundwater monitoring;
- Performed coordinated groundwater level monitoring in the spring and fall of years 2008-2012;
- Installed two new dedicated multi-depth monitoring wells and collected initial groundwater data under a \$250,000 AB303 grant;
- Expanded the groundwater level monitoring network to approximately 140 wells in Sonoma Valley with the addition of approximately 80 additional volunteer wells;
- Instrumented select wells for the collection of continuous groundwater-level measurements;
- Incorporated available groundwater-level data from the State Water Resources Control Board's Geotracker website for 22 locations in Sonoma Valley;
- Performed additional evaluation of available well construction and location information for wells included in the monitoring program to better account for vertical variations in groundwater conditions within the basin;
- Developed California Statewide Groundwater Elevation Monitoring (CASGEM) monitoring plan and submitted plan and monitoring data to DWR;
- Conducted additional seepage runs in Sonoma Creek and tributaries to better understand surface water-groundwater interaction;
- Installed a new stream gauge on Sonoma Creek in the north end of Sonoma Valley, and continued monitoring and evaluation of the Kenwood and Aqua Caliente stream gages on Sonoma Creek;
- Adopted WebH2O as the GWMP data management system and enhanced system to streamline the data entry process and increase its use; and
- Assisted Lawrence Livermore National Laboratory (LLNL) scientists in conducting a stable isotope study to investigate groundwater recharge in the El Verano area of Sonoma Valley.

Plan Component 3: Groundwater Quality Protection

- Developed plans for a long-term water quality monitoring program comprised of 12 wells previously monitored by DWR and 6 to 8 additional wells in southern Sonoma Valley coupled with available water quality data from public water systems;
- Conducted additional water quality analysis in southern Sonoma Valley for salinity distribution;
- Incorporated groundwater quality data from public supply wells; and

- Prepared and distributed a private well owner’s guide, which includes well owner responsibilities, information on well construction and well maintenance, water quality protection, water quality sampling and treatment, and resources for well owners.

Plan Component 4: Improve Groundwater Sustainability

- Obtained a total of \$250,000 in AB303 grant funds, a portion of which will be used to develop an updated map of groundwater recharge areas in Sonoma Valley;
- Obtained \$25,000 in grant funds from North Bay Watershed Association for a pilot program to evaluate water use and conservation in areas in Sonoma Valley outside of the VOMWD and City service areas.
- Initiated a stormwater capture/groundwater recharge study for the Sonoma Valley;
- Initiated a joint Sonoma Valley-Santa Rosa Plain feasibility study to assess groundwater banking with Russian River water;
- Received an update to the Sonoma Valley Groundwater Flow Model completed by a graduate student at Stanford University, which included development of a soil moisture budget model and extension of the area of recharge to the MODFLOW model to encompass entire Sonoma Creek Watershed;
- The “Slow It, Spread It, Sink It” guidebook was prepared by the Southern Sonoma County Resource Conservation District with input from the Basin Advisory Panel and Technical Advisory Committee, and distributed to serve as a resource guide for property owners to implement projects that promote stormwater retention and groundwater recharge;
- The Sonoma Valley recharge mapping project was completed by the Sonoma Ecology Center as part of a grant awarded for AB303 funds through the California Department of Water Resources;
- Completed a pilot program to evaluate unincorporated area water conservation programs for areas within the Sonoma Valley that currently do not have formal conservation programs under a \$25,000 grant obtained by the Agency from NBWA;
- Developed an Annual Water Conservation Awards Program that recognized members and groups from Sonoma Valley for extraordinary levels of water conservation; and
- Sonoma Valley Recycled Water Project (SVRWP) included construction of a 100 acre-foot storage pond, booster station and pipeline to begin providing recycled water in areas experiencing declining groundwater levels and possible saline water issues. Increased use of recycled water is one of the primary strategies identified in the GWMP for sustaining groundwater supplies in Sonoma Valley.

Plan Component 5: Planning Integration

- The regular meetings of local stakeholders and government agencies associated with implementing the GWMP have been used for forums for planning and program integration.
- Prepared GWMP Annual Reports for 2008, 2009, 2010 summarizing progress in the Sonoma Valley. (Preparation of the summary report for 2011 is currently underway.)

3.5 Summary

The above list of activities and accomplishments demonstrate the ability of the Water Agency and its local partners, under the guidance of the Basin Advisory Panel, to achieve sustained progress in implementing the GWMP. Plans for 2012 include development of an expanded precipitation monitoring network using the volunteer approach of the Community Collaborative Rain, Hail and Snow Network combined with the development of a separate database for growers' high resolution data, updating of the hydrogeological conceptual model, begin initiation of an updated groundwater flow model, development of a subsidence monitoring network, continued input on the development of a salt and nutrient management plan, continued groundwater level and groundwater quality monitoring and reporting. These planned activities will continue to be conducted by GWMP staff, with stakeholder involvement and input through quarterly meetings of the Basin Advisory Panel, monthly meetings of the Technical Advisory Committee, and constituent briefings and special meetings as necessary.