

Attachment 3

Status of Groundwater Management Programs (GWMP)

Napa Groundwater Conservation Ordinance (GWMP-equivalent program) and GWMP-Related Programs

This attachment summarizes the Napa County Groundwater Conservation Ordinance, which is the County's Groundwater Management Plan (GWMP)-equivalent program. This program was adopted and implemented by Napa County in 1999 and was most recently amended in 2007. The County has also implemented or is currently beginning implementation of a number of other GWMP-related programs. Although the County does not have a formal GWMP adopted under Water Code Section 10750 and 10753 et seq., the County's GWMP-related programs contain many of the elements encompassed by the Water Code sections, including some that are directly relevant to the Water Code such as the Napa County California Statewide Groundwater Elevation Monitoring (CASGEM) Program.

This attachment summarizes the County's Groundwater Conservation Ordinance/GWMP-equivalent program and other past and ongoing County GWMP-related programs, including:

- Napa County Groundwater Conservation Ordinance (Ongoing 1999 to Present) GWMP-Equivalent Program (see Att#3_LGA12_NapaCnty_GWMP_2of5)
- Napa County Water Availability Analysis (*Ongoing, 1991 to Present*) (see Att#3_LGA12_NapaCnty_GWMP_3of5)
- U.S. Geological Survey Groundwater Studies of the Milliken-Sarco-Tulucay (MST) Area (with emphasis on 2002-2003 study and relationship to Water Availability Analysis (WAA) and County Groundwater Monitoring Program) (*1970s to 2003*)
<http://pubs.usgs.gov/wri/wri034229/>
- Napa County Participation in coordinating committees of both the San Francisco Bay Area IRWM Plan Update and Westside Sacramento River IRWM Plan Development (*Ongoing, 2005 to Present*) <http://bairwmp.org/> and <http://www.westsideirwm.com/>
- Napa County General Plan Update (2008, amended 2009) - Water Resources Goals and Policies <http://www.countyofnapa.org/GeneralPlan/>
- Napa County Comprehensive Groundwater Monitoring Program, Data Review, and Policy Recommendations for Napa County's Groundwater Resources (Comprehensive Groundwater Monitoring Program) (*2009 to 2011*)
<http://www.countyofnapa.org/bos/grac/>
- Napa County Updated Conceptualization and Characterization of Hydrogeologic Conditions (*Ongoing, 2012 to Present*) <http://www.countyofnapa.org/bos/grac/>
- Napa County Groundwater Monitoring Plan (Ongoing 2012 to Present)
<http://www.countyofnapa.org/bos/grac/>

- Formation and operation of the Napa County Groundwater Resources Advisory Committee (GRAC) (*Ongoing, 2011 to Present*) (see Att#3_LGA12_NapaCnty_GWMP_4of5)
- Napa County service as the Monitoring Entity for the California Statewide Groundwater Elevation Monitoring (CASGEM) Program (*Ongoing, 2011 to Present*) (see Att#3_LGA12_NapaCnty_GWMP_5of5)

Attachments correlated to this Attachment 3, where noted, provide additional details on the Groundwater Conservation Ordinance/GWMP-equivalent program and other GWMP-related programs.

Napa County Groundwater Conservation Ordinance (*Ongoing, 1999 to Present*) – GWMP-Equivalent Program

Although Napa County does not have a formal GWMP adopted under Water Code Section 10750 and 10753 *et seq.* the County does have a Groundwater Conservation Ordinance (first approved August 2, 1999, effective September 2, 1999, and most recently amended August 7, 2007). The ordinance fulfills the role of an alternative GWMP-equivalent program as described in the LGA application guidelines.

The purpose of the Napa County Groundwater Conservation Ordinance is to regulate the extraction and use of groundwater resources in the County and to prohibit extraction for wasteful or non beneficial use while promoting groundwater conservation and the use of Best Management Practices. The goal of the ordinance is to maximize the long-term beneficial use of the County’s groundwater resources, while enhancing environmental quality, and protecting the public health, safety, and welfare of the citizens of Napa County. The Napa County Groundwater Ordinance also includes responsibility for governing the management and extraction of water resource within the County jurisdiction in order to protect the health, safety, and welfare of its citizens (see Att#3_LGA12_NapaCnty_GWMP_2of5).

The Napa County Groundwater Conservation Ordinance implemented in 1999 includes a Groundwater Permit requirement. The Groundwater Permit applies to areas of the County that are designated as groundwater deficient, and is currently applied in the Milliken/Sarco/Tulucay (MST) area of the County, but the requirements also apply to other areas of the County. For the MST area, all types of development, not just Use Permits or Parcel/Subdivision Maps, are required to apply for a Groundwater Permit. Furthermore, in the MST area all applications must generally meet the County’s Water Availability Analysis (WAA) Phase I requirements (see below for discussion of WAA and Att#3_LGA12_NapaCnty_GWMP_3of5) to be recommended for approval. For applications that do meet the WAA Phase I requirement, metering of water use is always required. Permit holders are required to take monthly meter readings and submit their readings to the Public Works Department every six months. If the water use during any year exceeds the approved use the permit holder is required to reduce water use the following year or face penalties as written into the Groundwater Conservation Ordinance.

Since the approval of the WAA in 1991 and the subsequent approval of the Groundwater Conservation Ordinance in 1999, several conclusions can be drawn:

- Applicants that are required to complete the WAA become much more aware of water use for their project, providing a higher level of awareness and potentially leading to more

efficient use of the resource.

- Information submitted by applicants has lead to a broader database of groundwater information for future study and management.
- The area directly affected by the Groundwater Conservation Ordinance continues to decline and alternative water supplies to help relieve the stress on the aquifer are being researched.

The Groundwater Conservation Ordinance and the WAA are based upon the basic premise that each landowner has equal right to the groundwater resource below his or her property. By placing limits on the extraction of groundwater the County believes that sufficient groundwater can be available for current and future property owners.

Proof of Adopted Napa County Groundwater Ordinance/GWMP

As stated above, the Napa County Groundwater Conservation Ordinance that was passed on August 2, 1999, and most recently amended on August 7, 2007 and a Water Availability Analysis that was developed in 1991 and is still in use today, are evidence of Napa County's GWMP-equivalent programs and are attached as Att#3_LGA12_NapaCnty_GWMP_2of5 and Att#3_LGA12_NapaCnty_GWMP_3of5 as proof of fulfillment of the LGA grant GWMP-equivalent requirement.

Napa County GWMP-Related Programs

Water Availability Analysis (WAA) (Ongoing, 1991 to Present)

As mentioned earlier, another GWMP-related program, the County Water Availability Analysis (WAA program, was developed in 1991 and is currently today. The purpose of this program is to define the conditions and procedure for preparing a water availability analysis. The primary goal of the WAA program is to conserve groundwater, develop awareness of landowners and encourage the long-term conservation and protection of groundwater resources.

Review of groundwater use via the WAA program is triggered during application for new or modified land use permits. The WAA program sets location-specific limits on groundwater extraction throughout the County. Areas located in the valley floor are permitted to extract greater amounts of groundwater per acre, whereas locations in mountainous or historically groundwater-limited areas, are allowed less groundwater extraction per acre. Under the WAA program there are three phases of groundwater review.

Phase I of the WAA involves a comparison between the existing use, proposed use, and the maximum allowed use based on the location-specific limits. For applications that do not propose to exceed their maximum allowed water use, the groundwater review is complete and the application is allowed to move forward. Applications where the proposed water use exceeds the maximum allowable use, must undergo further analysis in the form of a Phase II or Phase III analysis.

The Phase II analysis involves conducting a pumping or aquifer test to monitor the immediate effects of groundwater pumping on a neighboring or monitoring well. If the Phase II analysis does not show impacts to the monitoring/neighboring wells the permit will be allowed to move

forward, but additional conditions such as installing meters or implementing other monitoring requirements may be necessary. If the Phase II analysis shows an impact to groundwater levels a Phase III analysis is required.

The Phase III analysis may include measures aimed at reducing water consumption and/or limiting the maximum pumping rate. Under these circumstances the County will require periodic monitoring of static water levels with annual submittals of well production and static water level reports. The Phase III analysis only addresses potential actions to moderate the immediate effects of groundwater pumping on neighboring wells. Such mitigation measures will be designed to reduce, but may not eliminate entirely, the immediate effects of groundwater pumping on neighboring wells.

USGS Groundwater Studies of the MST Area (with Emphasis on 2002-2003 Study and Relationship to WAA and County Groundwater Monitoring Program) (1970s to 2003)

In the MST area, the only documented groundwater deficient area in the County, two US Geological Survey (USGS) studies have been performed, one in the 1970's and one between 2000 and 2003. During the 2000-2003 study alone approximately 120 residents volunteered their wells for the USGS study. The information received from the volunteered wells contributes greatly to how groundwater is managed through the Groundwater Conservation Ordinance in the MST area. Using the information in the USGS studies, a safe groundwater extraction yield was determined and is now used as the basis for calculating each parcel's fair share groundwater use.

Additionally, with the completion of the most recent USGS study, a "no-net increase" policy was written into the WAA. All new permits for development in the MST area are required to meet the fair share, and the no-net increase policy which limits applicants to their current water use with any new project, regardless if they are using their full fair share allotment or not. All permits in the MST are conditioned with metering requirements, and their water use is monitored monthly and submitted to the Public Works department every six months.

Lastly, since the conclusion of the USGS study, 15 residents have continued to volunteer their wells for groundwater level measurements by Napa County twice per year. The static levels readings received from these wells are catalogued in a database and reviewed periodically to monitor changes in the groundwater levels in the MST basin.

Napa County's Participation in San Francisco Bay Area and Westside IRWMPs (Ongoing, 2005 to Present)

In 2005, the County formed the Napa County regional water management group (RWMG), a working group of local water agencies with the Napa County Flood Control and Water Conservation District serving as the lead agency. The Napa County RWMG worked together to draft the *Napa-Berryessa IRWMP, Functional Equivalent* (Napa-Berryessa Regional Water Management Group, 2005).

In 2009, the California Department of Water Resources (DWR) established IRWM regions that have been accepted through the Regional Acceptance Process (DWR, 2009). Currently, there are two formally accepted regions that include Napa County. These regions are: 1) the San Francisco

Bay Area Region, which covers the western part of Napa County and focuses on the Napa River and Suisun Creek watersheds and 2) the Westside Sacramento River Region, which encompasses the northern and eastern parts of Napa County and focuses on the Putah Creek/Lake Berryessa watershed

With DWR's approved Regional Acceptance Process now in place, Napa County no longer intends to develop its own IRWMP, but the County is actively contributing to two larger regional IRWMPs. Consistent with Napa County's General Plan Action Item CON WR-7 (described below), the County is actively collaborating with the San Francisco Bay and Westside RWMGs to update the IRWMP for the San Francisco Bay and to develop a new IRWMP for the Westside Region. Previous collaborations among Napa County entities identified programs and projects that would benefit local entities as well as the County. Presently, Napa County actively participates in coordination meetings and special work groups associated with the San Francisco Bay Area Region and North Bay Sub-Region and is a voting member of the Westside Sacramento River Regional Management Group. The County's participation in the San Francisco Bay and Westside IRWMPs enables further coordination and cooperation on water resources management planning programs and projects (particularly those that are a high priority for the County) and IRWMP grant funding opportunities (e.g., North Bay Water Reuse and regional water recycling programs and projects).

The County's collaboration with larger regional IRWMP efforts facilitates water management efforts in a cost-effective and environmentally responsible manner that contributes to the overall well-being of the County. Accordingly, the County has developed and implemented a planning approach outlined in the *Napa County Integrated Water Resource Management Planning Framework* (Napa IWRMPF) (West Coast Watersheds, 2010), which has four key elements, including:

1. A proposed IWRMPF local governance structure to facilitate the development of, and participation in, integrated inter- and intra-regional water resource management efforts and achieve specific stakeholder-endorsed goals and objectives;
2. Utilization of an inclusive, equitable, transparent process within an adaptable, dynamic planning framework;
3. Participate in and sustain working relationships with stakeholders, and with other organizations and agencies throughout the applicable IRWMP regions (San Francisco Bay Area and Westside Regions) and the state;
4. Share water and watershed related data and information through a database on the Watershed Information Center and Conservancy (WICC) of Napa County website (www.napawatersheds.org).

Napa County General Plan Update (2008, amended 2009) -- Water Resources Goals and Policies

As recognized in the County's General Plan (adopted in 2008, amended June 23, 2009), "water is one of the most complex issues related to land use planning, development, and conservation; it is governed and affected by hundreds of federal, state, regional, and local mandates pertaining to pollution, land use, mineral resources, flood protection, soil erosion, reclamation, etc. Every year, the state legislature considers hundreds of bills relating to water issues, and in Napa

County, more than two dozen agencies have some say in decisions and regulations affecting water quality and water use.”

As part of the General Plan update in 2008, the Conservation Element establishes six goals relating to the County’s water resources, and specifically includes surface water and groundwater. Complementing these goals are twenty-eight policies and ten water resources action items. The County’s six water resources goals are included below (the entire group of water resources goals, policies, and action items can be found in the Plan under the Conservation Element at <http://www.countyofnapa.org/GeneralPlan/>).

Goal CON-8: Reduce or eliminate groundwater and surface water contamination from known sources (e.g., underground tanks, chemical spills, landfills, livestock grazing, and other dispersed sources such as septic systems).

Goal CON-9: Control urban and rural storm water runoff and related non-point source pollutants, reducing to acceptable levels pollutant discharges from land-based activities throughout the county.

Goal CON-10: Conserve, enhance and manage water resources on a sustainable basis to attempt to ensure that sufficient amounts of water will be available for the uses allowed by this General Plan, for the natural environment, and for future generations.

Goal CON-11: Prioritize the use of available groundwater for agricultural and rural residential uses rather than for urbanized areas and ensure that land use decisions recognize the long-term availability and value of water resources in Napa County.

Goal CON-12: Proactively collect information about the status of the County’s surface and groundwater resources to provide for improved forecasting of future supplies and effective management of the resources in each of the County’s watersheds.

Goal CON-13: Promote the development of additional water resources to improve water supply reliability and sustainability in Napa County, including imported water supplies and recycled water projects.

Key General Plan Action Items related to the County’s six water resources goals include:

Action Item CON WR-1: Develop basin-level watershed management plans for each of the three major watersheds in Napa County (Napa River, Putah Creek, and Suisun Creek). Support each basin-level plan with focused sub-basin (drainage-level) or evaluation area-level implementation strategies, specifically adapted and scaled to address identified water resource problems and restoration opportunities. Plan development and implementation shall utilize a flexible watershed approach to manage surface water and groundwater quality and quantity. The watershed planning process should be an iterative, holistic, and collaborative approach, identifying specific drainage areas or watersheds, eliciting stakeholder involvement, and developing management actions supported by sound science that can be effectively implemented. [Implements

Policies 42 and 44]

Action Item CON WR-4: Implement a countywide watershed monitoring program to assess the health of the County's watersheds and track the effectiveness of management activities and related restoration efforts. Information from the monitoring program should be used to inform the development of basin-level watershed management plans as well as focused sub-basin (drainage-level) implementation strategies intended to address targeted water resource problems and facilitate restoration opportunities. Over time, the monitoring data will be used to develop overall watershed health indicators and as a basis of employing adaptive watershed management planning. [Implements Policies 42, 44, 47, 49, 63, and 64]

Action Item CON WR-6: Establish and disseminate standards for well pump testing and reporting and include as a condition of discretionary projects that well owners provide to the County upon request information regarding the locations, depths, yields, drilling and well construction logs, soil data, water levels and general mineral quality of any new wells. [Implements Policy 52 and 55]

Action Item CON WR-7: The County, in cooperation with local municipalities and districts, shall perform surface water and groundwater resources studies and analyses and work toward the development and implementation of an integrated water resources management plan (IRWMP) that covers the entirety of Napa County and addresses local and state water resource goals, including the identification of surface water protection and restoration projects, establishment of countywide groundwater management objectives and programs for the purpose of meeting those objectives, funding, and implementation. [Implements Policy 42, 44, 61 and 63]

Action Item CON WR-8: The County shall monitor groundwater and interrelated surface water resources, using County-owned monitoring wells and stream and precipitation gauges, data obtained from private property owners on a voluntary basis, data obtained via conditions of approval associated with discretionary projects, data from the State Department of Water Resources, other agencies and organizations. Monitoring data shall be used to determine baseline water quality conditions, track groundwater levels, and identify where problems may exist. Where there is a demonstrated need for additional management actions to address groundwater problems, the County shall work collaboratively with property owners and other stakeholders to prepare a plan for managing groundwater supplies pursuant to State Water Code Sections 10750-10755.4 or other applicable legal authorities. [Implements Policy 57, 63 and 64]

Action Item CON WR-9.5: The County shall work with the SWRCB, DWR, DPH, CalEPA, and applicable County and City agencies to seek and secure funding sources for the County to develop and expand its groundwater monitoring and assessment and undertake community-based planning efforts aimed at developing necessary management programs and enhancements.

Guidance to effectively implement the above goals and policies can be found in "Groundwater

Planning Considerations and Review of Napa County Groundwater Ordinance and Permit Process” (Technical Memorandum 5 - LSCE, 2011) is available on <http://www.countyofnapa.org/bos/grac/>. The document not only contains recommendations aimed at achieving the goals and action items contained in the County’s General Plan update, but also includes potential revisions to the County’s Groundwater Conservation Ordinance to more clearly link the ordinance to conservation policies and goals of the General Plan.

Napa County’s Comprehensive Groundwater Monitoring Program, Data Review, and Policy Recommendations for Napa County’s Groundwater Resources (Comprehensive Groundwater Monitoring Program) (2009 - 2011)

Groundwater and surface water are highly important natural resources in Napa County. In 2009, Napa County started a countywide project referred to as “Comprehensive Groundwater Monitoring Program, Data Review, and Policy Recommendations for Napa County’s Groundwater Resources” (Comprehensive Groundwater Monitoring Program) to meet identified action items in the 2008 General Plan update (Napa County, 2008). The program emphasizes developing a sound understanding of groundwater conditions and implementing an expanded groundwater monitoring and data management program as a foundation for future water resources planning efforts. Documents and results from the Comprehensive Groundwater Monitoring Program can be found at <http://www.countyofnapa.org/bos/grac/>.

To date products completed for the Comprehensive Groundwater Monitoring Program include a comprehensive report entitled *Napa County Groundwater Conditions and Groundwater Monitoring Recommendations* (LSCE, 2011a), a stand-alone Executive Summary, and five supporting technical memoranda listed below.

Documents Produced for Napa County Comprehensive Groundwater Monitoring Program (available at: http://www.countyofnapa.org/bos/grac/)	
Task Number and Document Title	Reference
Task 1, <i>Napa County Data Management System</i> . TM.	LSCE, 2010
Task 2, <i>Review and Evaluation of Data Collection Procedures and Recommendations for Improvement</i> . TM.	LSCE, 2010
Task 3.2, <i>Conceptual Model Review of Napa Valley Groundwater Model</i> . TM.	LSCE, 2010
Task 3.3, <i>Guidance on Precipitation and Streamflow Monitoring Activities, Napa County, CA</i> . TM.	LSCE, 2010
Task 4, <i>Napa County Groundwater Conditions and Groundwater Monitoring Recommendations</i> . Report.	LSCE, 2011
Task 5, <i>Groundwater Planning Considerations and Review of Napa County Ordinance and Permit Process</i> . TM.	LSCE, 2011

The Comprehensive Groundwater Monitoring Program Task 4 report on groundwater conditions and data availability recommended the Napa County expand countywide groundwater monitoring and programs that facilitate integrated water resources management and planning and help enable the coordinated protection of groundwater and surface water resources.

Formation and Operation of the Napa County Groundwater Resources Advisory Committee (Ongoing, 2011 to Present)

On June 28, 2011, the Napa County Board of Supervisors adopted a resolution establishing a Groundwater Resources Advisory Committee (GRAC) (see Att#3_LGA12_NapaCnty_GWMP_4of5). The GRAC is charged with the following tasks:

- a. Synthesis of existing groundwater information and identification of critical data needs;
- b. Development and implementation of an ongoing groundwater monitoring program;
- c. Development of revised well pump test protocols and related revisions to the County's groundwater ordinance;
- d. Conceptualization of hydrogeologic conditions in various areas of the County and an assessment of groundwater resources as data become available;
- e. Development of groundwater sustainability objectives that can be achieved through voluntary means and incentives; and
- f. Building community support for these activities and next steps.

The GRAC consists of a geographically diverse group of 15 members who applied for three-year terms. Members of the GRAC and County staff involved with the Comprehensive Groundwater Monitoring Program meet every other month for three hours. The GRAC plays a key role in the successful implementation of the County's Comprehensive Groundwater Monitoring Program described earlier. Since October 2011, the GRAC has also assembled subcommittees to work on key tasks or issues. Documents related to the GRAC background and activities are available to the public at <http://www.countyofnapa.org/bos/grac/>.

Napa County Service as the Monitoring Entity for the California Statewide Groundwater Elevation Monitoring (CASGEM) Program (Ongoing, 2011 to Present)

On December 29, 2010, the County applied to become the local countywide Monitoring Entity responsible for designating wells to be included in the DWR CASGEM program and for reporting groundwater elevation data for the CASGEM program (see Att#3_LGA12_NapaCnty_GWMP_5of5). The wells selected by the County for the CASGEM program are chosen from a larger population of wells monitored as part of the countywide groundwater level monitoring network. As the Monitoring Entity, the County initially identified 14 select wells to be included in the CASGEM network and prepared a CASGEM Network Plan as required by DWR (LSCE, 2011b). The number of CASGEM wells in Napa County is 19 as of July 2012. The County's participation in the CASGEM program complements other pre-existing groundwater monitoring that has been ongoing in Napa County for decades (the overall historical monitoring record began in 1918).

Napa County Groundwater Monitoring Plan 2012 (Ongoing, 2012 to Present)

Napa County is currently in the process of preparing a Groundwater Monitoring Plan 2012 to implement recommendations provided in the Comprehensive Groundwater Monitoring Program report and also the Napa County CASGEM Plan. The purpose of this Napa County Groundwater Monitoring Plan 2012 is to formalize and augment current groundwater monitoring efforts

(levels and quality) to better understand the groundwater resources of the County and to help the secure funding support administered by DWR. The Groundwater Monitoring Plan is intended as an evolving document that will be updated based upon the data collected and needs of the County and community. The plan will emphasize the need for ongoing efforts to further understand groundwater conditions and enable integrated water resources planning, dissemination of water resources information, and long-term protection of the groundwater and surface water resources in Napa County. It is envisioned that this plan would include reporting groundwater conditions and recommended modifications to the County's Comprehensive Groundwater Monitoring Program every three years or as needed.

The Groundwater Monitoring Plan formalizes recommendations provided in the County's Comprehensive Groundwater Monitoring Program described above by outlining steps to augment countywide groundwater level and quality monitoring. Recent studies by Napa County have found that there are many areas in the County where the understanding of groundwater resource conditions and availability can be improved with greater groundwater monitoring. The Groundwater Monitoring Plan will summarize groundwater monitoring objectives and priorities defined by the County and the GRAC and outline recommendations to address these priorities. During preparation of the Groundwater Monitoring Plan, input from the GRAC is being coordinated to ensure that additional groundwater monitoring locations serve to meet the objectives of the County's Comprehensive Groundwater Monitoring Program and the County's CASGEM program.

Napa County Updated Conceptualization and Characterization of Hydrogeologic Conditions (Ongoing, 2012 to Present)

In January 2012, the County authorized a contract with the team of Luhdorff & Scalmanini, Consulting Engineers (LSCE) and MBK Engineers for work composed of four tasks that will contribute to the successful updated conceptualization of the hydrology of Napa County and characterization of hydrogeologic conditions. These tasks include:

- **Task 1** – Updated Hydrogeologic Characterization and Conceptualization
- **Task 2** – Supplemental Groundwater Monitoring in High Priority Subareas
- **Task 3** – Further Characterization of Areas of Greatest Recharge Potential
- **Task 4** – Develop Guidance to Assist County with Review of Discretionary Projects Pursuant to CEQA with focus on Potential Effect of Groundwater Pumping on Surface Water Courses, Neighboring Wells, and Ecologic Factors

To date, most of Tasks 1, 2, and 3 of this work are complete.

The scope of this effort and completed tasks provide the groundwork and basis for this LGA project application to install dedicated monitoring facilities to evaluate groundwater/surface water interactions along the main stem of the Napa River and a major tributary. The key goals of the proposed LGA project are fundamentally aligned with the Napa County General Plan Update Goals CON-10 and CON-12. Furthermore, key objectives of the project involve implementing groundwater and interrelated surface water monitoring to accomplish Napa County's General

Plan update Action Item CON WR-4 and WR-8.

Goal CON-10: *Conserve, enhance and manage water resources on a sustainable basis to attempt to ensure that sufficient amounts of water will be available for the uses allowed by this General Plan, for the natural environment, and for future generations.*

Goal CON-12: *Proactively collect information about the status of the County's surface and groundwater resources to provide for improved forecasting of future supplies and effective management of the resources in each of the County's watersheds.*

Action Item CON WR-4: *Implement a countywide watershed monitoring program to assess the health of the County's watersheds and track the effectiveness of management activities and related restoration efforts. Information from the monitoring program should be used to inform the development of basin-level watershed management plans as well as focused sub-basin (drainage-level) implementation strategies intended to address targeted water resource problems and facilitate restoration opportunities. Over time, the monitoring data will be used to develop overall watershed health indicators and as a basis of employing adaptive watershed management planning. [Implements Policies 42, 44, 47, 49, 63, and 64]*

Action Item CON WR-8: *The County shall monitor groundwater and interrelated surface water resources, using County-owned monitoring wells and stream and precipitation gauges, data obtained from private property owners on a voluntary basis, data obtained via conditions of approval associated with discretionary projects, data from the State Department of Water Resources, other agencies and organizations. Monitoring data shall be used to determine baseline water quality conditions, track groundwater levels, and identify where problems may exist. Where there is a demonstrated need for additional management actions to address groundwater problems, the County shall work collaboratively with property owners and other stakeholders to prepare a plan for managing groundwater supplies pursuant to State Water Code Sections 10750-10755.4 or other applicable legal authorities. [Implements Policy 57, 63 and 64]*

The proposed LGA project will facilitate improved understanding of groundwater/surface water interactions and responses to utilization of the County's water resources and potential effects of climate change. The proposed water resources monitoring facilities and the instrumentation will help characterize and quantify the exchange of water between the alluvial aquifer and surface waterways.