



**Stanislaus County
Water Advisory Committee**

Agenda

November 18, 2015

9:00 a.m.

Kirk Lindsey Alliance Center
1020 Tenth Street, Modesto, California

AGENDAS AND MINUTES: Committee agendas, Minutes, and copies of items to be considered by the Committee are typically posted on the internet on Friday afternoons preceding the meeting at the following website: www.stancounty.com/er/groundwater-resources.shtm.

Materials related to an item on this Agenda submitted to the Committee after distribution of the agenda packet are available for public inspection in the Department of Environmental Resources, 3800 Cornucopia Way, Suite C, Modesto, CA, during normal business hours. Such documents will be available online, subject to staff's ability to post the documents before the meeting, at the following website: www.stancounty.com/er/groundwater-resources.shtm.

NOTICE REGARDING NON-ENGLISH SPEAKERS: Water Advisory Committee meetings are conducted in English and transition to other languages is not provided. Please make arrangements for an interpreter if necessary.

REASONABLE ACCOMMODATIONS: In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administrative Secretary, Anette Arias, at 209-525-6782. Notification 72 hours prior to the meeting will enable the County to make reasonable arrangements to ensure accessibility to this meeting.

- I. Call to Order
- II. Pledge of Allegiance

PUBLIC COMMENT PERIOD: Matters under the jurisdiction of the Committee, and not on the posted agenda, may be addressed by the general public at the beginning of the regular agenda and any off-agenda matter before the Committee for consideration. However, California law prohibits the Committee from taking action on any matter, which is not on the posted agenda unless it is determined to be an emergency by the Committee Directors. Any member of the public wishing to address the Committee during the Public Comment period will be limited to a maximum of 5 minutes. Please complete a Public Comment Form and give it to the Administrative Secretary.

- III. Public Comment
- IV. Roll Call

Action Items (subject to formal vote):

- V. Approval of September 30, 2015 Meeting Minutes - Attachment 1
- VI. Recommendation to move forward with Storm Water Capture/Groundwater Recharge Project & Grant Funding (Matt Machado, Director, Stanislaus County Public Works Department) – Attachment 2
- VII. Recommendation to move forward with Proposition 1 Grant Funding for County-wide Programmatic Environmental Impact Report related to Groundwater Sustainability Planning (Ward) – Attachment 3

Informational Items (not subject to a formal vote):

- VIII. Sustainable Groundwater Management Act (SGMA) Implementation Update (Ward)
- IX. State Water Resources Control Board In-Stream Flow Proposal – Discussion and Direction (Ward/All)
- X. Meeting Adjournment

Briefing Sheet

Stanislaus County Regional Flood Control and Groundwater Recharge Master Plan October 2015

Purpose Statement:

Stanislaus County is requesting funding assistance to identify, prioritize and study locations within the County where storm water flows can be diverted and used to augment groundwater recharge, resulting in enhanced protection of areas of historical flooding and developing storm water as a resource to recharge groundwater supplies. The projects developed and prioritized as a result of the study will result in multi-beneficial uses including improved flood control, enhanced groundwater recharge, conjunctive use, benefits to disadvantaged communities, and potential benefits to water quality and ecosystems.

Background:

Currently Stanislaus County is experiencing annual groundwater over drafting on the eastside of the County. Rainfall is not currently managed to the benefit of water supply needs. Pending requirements of the Sustainable Groundwater Management Act will limit the availability of groundwater resources at the same time as unimpaired flow requirements for the Stanislaus, Tuolumne and Merced Rivers will decrease the availability of surface water. Below are some basic numbers in support of this briefing:

- Overdraft of groundwater on the east side of Stanislaus County, to be confirmed in the proposed Programmatic EIR for implementation of the County's Groundwater Ordinance, is estimated to range from 10's of thousands of acre-feet per year to more than 100,000 acre-feet per year.
- Hundreds of thousands of acre-feet of storm water flood flows are conveyed downstream out of the County each year for flood control purposes.

Based on the above, there is potential to remedy the current overdraft problem with existing rainfall through increased recharge, while providing improved flood control and enhanced conjunctive use.

Project Highlights:

- Ideal projects would be those in which the County has a unique ability to provide land access and implementation as the lead agency.
- Projects would be designed to benefit the general population in terms of flood control and water supply.
- The intent of this study would be to identify, study and prioritize appropriate sites with geological characteristics and natural runoff patterns to promote groundwater recharge using flood flow diversion as a water source.
- The study would look at state and federal flood mapping, soil and geology characteristics, hydrogeology and groundwater flow, and conveyance infrastructure to identify areas of opportunity, and then develop an analysis for multiple sites including percolation rates, average annual flow and estimated peak flows during the 1-year, 5-year, 25-year, 50-year and 100-year storm events.
- Up to 12 sites will be analyzed and ranked based on desk-top analysis and field reconnaissance. The evaluation will be based on the Benefit Metrics contained in the Draft Storm Water Resource Plan Guidelines (Water Quality, Water Supply, Flood

Management, Environmental, and Community), Cost/Benefit, Implementability, Permitting Requirements, and Environmental Constraints. Analysis should include a preliminary benefit to cost ratio for each potential site.

- Up to three sites will be further investigated based on field investigation and/or more detailed desk top analysis and modeling based on the criteria listed above.
- A report will be prepared for incorporation into the IRWMP; this report will describe the background, methods and results of the study and include a prioritized list of projects ready to be implemented.

Alignment with Other Projects

- Projects that were identified in the Mid San Joaquin River Regional Flood Management Plan (RFMP) that may be appropriate to further study for this effort are Little Salado Creek and Dry Creek Watershed Detention Reconnaissance Study.
- Other projects recommended through this study can be added to the RFMP 2 effort currently underway.
- The analysis will be integrated with planned Storm Water Resource Planning being conducted by the East Stanislaus IRWM Group and will be incorporated into a Storm Water Resource Plan added to the ESIRWMP.
- The work will be coordinated and integrated with groundwater and hydrologic studies to be conducted in support of preparation of a Programmatic EIR prepared pursuant to implementation of the Stanislaus County Groundwater Ordinance.

Project Cost

- Estimated Cost: \$350,000 consultant – Staff time covered under RFMP grant

Groundwater Recharge

Up to 100,000 AFY of new groundwater recharge to arrest overdraft from stressed basins in the eastern county providing additional water supply resiliency.

Disadvantaged Communities

The project will provide improved flood protection and water supply resilience for those disadvantaged communities most vulnerable to flood damage in the County.

Flood Control

Divert stormwater flows to decrease peak river levels and reduce flooding in downstream areas historically damaged by floods; alignment with Regional Flood Management Plan.

Stanislaus County

Regional Flood Control & Groundwater Recharge

Master Plan

IRWM Coordination

Coordinate with IRWM group and Plan to improve regional water supply management and promote conjunctive use, producing regional solutions to current and anticipated groundwater water shortages.

Water Quality Benefits

Evaluate potential to decrease turbidity and industrial/agricultural runoff to help address TMDLs for the Stanislaus and Tuolumne Rivers.

Environmental Benefits

Evaluate potential for projects to benefit Groundwater-Dependent Ecosystems and enhance riparian corridors.

FUNDING REQUESTS

STANISLAUS COUNTY

October 2015

1. REGIONAL GROUNDWATER MANAGEMENT AND WELL PERMITTING PROGRAMMATIC EIR DEVELOPMENT,-DWR

Funding assistance to develop implementation guidelines and complete a Programmatic Environmental Impact Report (PEIR) for implementation of our revised Groundwater Ordinance – resulting in integration of the region's groundwater sustainability planning, permitting and land use planning processes. **\$250,000 grant (plus 50% local match from the County and 15 additional stakeholders)**

2. REGIONAL FLOOD WATER DIVERSION AND GROUNDWATER RECHARGE MASTER PLANNING,-SWRCB

Funding assistance to identify, prioritize and study target areas where storm water flows during floods can be diverted and used to recharge groundwater resources; resulting in enhanced protection of areas subject to historical flooding and use of storm water as a resource to recharge groundwater. The solutions developed will provide multi-beneficial uses that are integrated into the Eastside Regional IRWMP and benefit Disadvantaged Communities in the County. **\$175,000 grant (plus 50% local match from the County and potential additional IRWM stakeholders)**

LEVERAGING OF FUNDS: TOTAL REQUEST: \$425,000 [based upon 50% local match requirements]: The projects will be integrated to address groundwater sustainability planning and management, land use planning, flood management, and multi-benefit recharge projects, while promoting a collaborative environment for water resources planning that integrates and benefits a large number of stakeholders and disadvantaged communities.

Briefing Sheet

Programmatic Environmental Impact Report (PEIR) for Implementation of Stanislaus County Groundwater Ordinance

October 2015

Purpose Statement:

Stanislaus County is requesting funding assistance to conduct a PEIR that will assess the potential environmental impacts associated with implementation of its updated Groundwater Ordinance over a planning horizon that is consistent with requirements under the Sustainable Groundwater Management Act (SGMA) for the County to achieve sustainability of its groundwater basins. The PEIR will integrate and evaluate the impacts associated with existing water and groundwater management efforts throughout the County in light of forecasted water supply and demand, land use trends, and well permitting activities. The studies performed to support the PEIR will benefit current efforts to form Groundwater Sustainability Agencies (GSAs), engage stakeholders in groundwater supply planning, and develop the technical framework necessary for successful preparation and implementation of Groundwater Sustainability Plans (GSPs).

Background:

Stanislaus County is underlain by four groundwater basins and has adopted a water management strategy that is heavily dependent on conjunctive use of surface and groundwater. One of the groundwater basins in the County is designated by the Department of Water Resources as being in a condition of critical overdraft and another one has been proposed to be designated as critically overdrafted. The remaining two basins are stressed and show signs of overdraft in the eastern portion of the County. In response to these challenges, Stanislaus County adopted a Groundwater Ordinance in November 2014 that is aligned with the requirements of SGMA for sustainable groundwater management. In 2015, the County developed implementation guidelines for well permitting that comply with the Ordinance, are forward looking to the development of a GSP under SGMA, and fulfill the requirements of the California Environmental Quality Act. A PEIR is proposed to further integrate groundwater management, regulation and planning efforts in the County and to refine the technical basis for future well permitting and groundwater management. The following specific points support this view.

- The County considers alignment of groundwater management with the planning and well permitting processes to be a key step in the integrated advancement of groundwater management planning.
- Under a PEIR, potential impacts to groundwater resources are evaluated on a regional and programmatic scale pulling together a spectrum of diverse water management issues as well as land use planning, socio-economics and natural resources impacts.
- Groundwater resource evaluation under a PEIR provides a robust technical basis for evaluation of water and groundwater management alternatives in preparation of GSPs. Improved regional knowledge will help the County refine resource management requirements, identify potential problem areas, and resolve concerns where groundwater data and resource evaluations are not yet available.
- Knowing what limitations may apply to groundwater resources in the future provides a reliable long-term outlook regarding the availability of groundwater supplies.

Project Highlights:

- The scoping process for the PEIR will engage aspiring GSAs and other water management stakeholders in a collaborative process of establishing the scope of studies needed to evaluate groundwater resource management throughout the County.
- The PEIR will compile key data regarding the current and projected future affected environment, including land use, populations and socio-economics, soils and geology, hydrology and water quality, biological resources, cultural resources, air quality and other important resource areas.
- The PEIR will compile current and future information regarding water supply and demand, as well as water resource management. The PEIR will identify and integrate the requirements of a diverse set of existing plans (including IRWMPs, UWMPs, AWMPs and GWMPs); current requirements (mandated flow requirements, FERC licensing and reservoir operations); future plans (GSPs); and future requirements (e.g., unimpaired flow requirements for San Joaquin River tributaries).
- Central to the PEIR will be the development of a county-wide groundwater flow model that builds on the existing USGS MERSTAN and CVHM models and incorporates surface and groundwater flow, the existing and forecasted trends in land use and water management, and groundwater supply and demand. The model will be used to forecast groundwater and surface water responses to future management activities under a variety of scenarios.
- In addition to evaluating potential impacts to water resources, the PEIR will evaluate potential impacts of water management strategies to other important resources such as biology, cultural resources, air quality, land use and socio-economics
- The results of the PEIR impact analysis will be used to develop general requirements for Mitigation, Monitoring and Reporting Programs to inform future project proposals and water management efforts that will be considered in the development of GSPs and in potential revisions to the Groundwater Ordinance.

Alignment with Other Projects

- The water resources evaluation of the PEIR would evaluate potential changes to flood control and conjunctive use under the County's proposed regional Flood Control and Groundwater Recharge Master Plan.
- The PEIR would inform the development of GSPs for the four groundwater basins underlying the County.

Project Cost

- Estimated Cost: \$500,000 consultant – Staff time to support the project, and staff time and consultant time from November 2014 through December 2015 constitute additional project expenses (matching funds) that are not included in this total.

Groundwater Model Development
Central to the PEIR will be development of a County-wide surface water-groundwater model based on the USGS MERSTAN and CVHM models that can be used for evaluation of future projects and management scenarios.

Water Supply Resilience Benefits
The analysis in the PEIR will consider both surface and groundwater management and impacts, providing a robust basis for IRWM and conjunctive use analysis and planning.

Water Resources Planning Benefits
The PEIR will evaluate effects associated with implementation of existing water management plans (IRWMPs, UWMPs, AWMPs, GWMPs) and future scenarios, identifying areas for improvement.

Programmatic EIR for Implementation of the Stanislaus County Groundwater Ordinance

Integration of Land Use and Water Resources Planning
The evaluation of impacts associated with existing and future water management, and development of an MMRP will integrate land use and water resources planning.

GSA Formation Benefits
The PEIR scoping and implementation process will engage potential GSAs and other stakeholders, promoting collaboration and helping to contribute to successful GSA formation.

GSP Development Benefits
The integrated evaluation of existing water management plans and future water management actions, coupled with a broad environmental impact analysis, will provide a robust basis for GSP development.

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