



Butte County Groundwater Pumpers Advisory Committee Meeting Agenda

Meeting Date: February 25, 2019

Time: 8:30AM

Place: Chico State University Farm, 311 Nicholas C. Shouten Lane, Room A009 & 0010, Chico, CA

Agenda Items

1. Welcome – Chair Rice
2. Roll Call – Chair Rice
3. Election of Chair and Vice-Chair
4. *Review and approval of the November 5, 2018 GPAC minutes
5. Overview and discussion of the agenda (Paul Gosselin, DWRC)
6. Update on statewide SGMA issues (Debbie Spangler, DWR)
7. *Update on the status of governance (Paul Gosselin, DWRC)
 - a. Wyandotte Creek GSA
 - b. Butte
 - c. Vina
8. Update on the basin setting project of the Groundwater Sustainability Plans (Christina Buck, DWRC)
9. Presentation of the 2018 Groundwater Status Report (Kelly Peterson, DWRC)

10. *Update of other SGMA issues – Staff & GPAC
11. Discussion and possible recommendation to the Board of Supervisors regarding the future role of GPAC (Chair Rice)
12. GPAC members wishing to address items not listed on the agenda. (The GPAC is prohibited by state law from taking action on any item presented if it is not listed on the agenda).
13. Public members wishing to address the Commission on items not listed on the agenda. (The GPAC is prohibited by State law from taking action on any item presented if it is not listed on the agenda. Comments will be limited to five minutes per person)
14. Next meeting – TBD
15. Adjournment

*Materials attached



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Butte County
Groundwater Pumpers Advisory Committee
Meeting Minutes
November 5, 2018

Time: 8:30AM

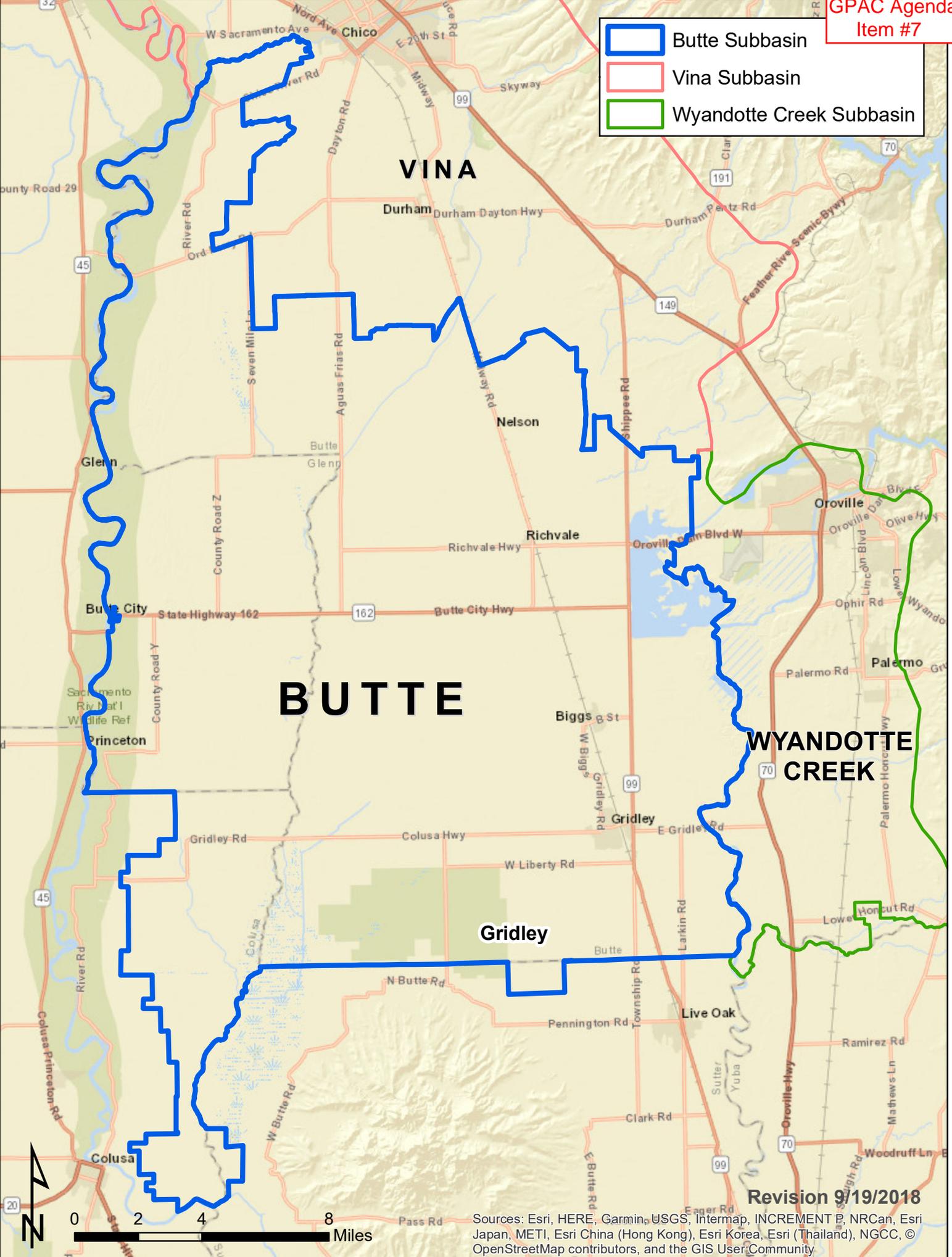
Place: Chico State University Farm, 311 Nicholas C. Shouten Lane, Room A009 & 0010,
Chico, CA

Agenda Items

1. Welcome – Chair Rice
2. Roll Call
Members Present: Rice, Schooling, Heringer, Cole, Sohnrey, Lavy, Daley and Carter
Member Absent: Mendes
3. Review and approval of the September 17, 2018 GPAC minutes
Motion by Heringer and seconded by Sohnrey. Passed 7-0 with the correction that Heringer was in attendance.
4. Overview and discussion of the agenda
Paul Gosselin provided an overview of the agenda. The GPAC decided to discuss item 11 first.
5. Discussion and possible recommendation to the Board of Supervisors regarding the future role of GPAC (Moved from Item 11)
The GPAC discussed whether recommend to the Board of Supervisors to disband the GPAC. Since the governance for the Butte subbasin has not been finalized, the GPAC decided not to make any recommendations to the Board. The GPAC directed staff to provide the Board with a status of the discussion about the future of GPAC after governance structures are set.

6. Presentation of the Summer 2018 Groundwater Elevation Measurements
Kelly Peterson gave an overview of the summer 2018 groundwater elevation measurements.
Kelly made presentation to the GPAC on summer groundwater elevation measurements
7. Update on statewide SGMA issues
Debbie Spangler, DWR, gave an update on DWR SGMA implementation
8. Update on the basin setting project of the Groundwater Sustainability Plans **Christina informed the GPAC that Davids Engineering has been contracted to assist with the basin setting project. A local experts group has been formed to provide input.**
9. Update on Basin Boundary Modifications
Christina informed the GPAC that DWR is still planning to make basin boundary modification decisions by February 2019.
10. Update on the status of governance
Paul informed the GPAC that the Wyandotte Creek GSA is being implemented. The Vina JPA is being revised due to Rock Creek deciding not to join. Meetings are being scheduled for the Butte subbasin.
11. Update of other SGMA issues
None.
12. GPAC members wishing to address items not listed on the agenda. (The GPAC is prohibited by state law from taking action on any item presented if it is not listed on the agenda).
None
13. Public members wishing to address the Commission on items not listed on the agenda. (The GPAC is prohibited by State law from taking action on any item presented if it is not listed on the agenda. Comments will be limited to five minutes per person)
None
14. Next meeting – TBD
15. Adjournment

- Butte Subbasin
- Vina Subbasin
- Wyandotte Creek Subbasin



Revision 9/19/2018

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community



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MEMORANDUM

DATE: January 15, 2019

TO: Butte County Board of Supervisors

FROM: Paul Gosselin, Director

RE: Status of the Sustainable Groundwater Management Act (SGMA)

Action Requested

Information only.

Background

On January 1, 2015, the Sustainable Groundwater Management Act (SGMA) went into effect. SGMA provides local public agencies with land use, water management or water supply the opportunity to be Groundwater Sustainability Agencies (GSAs) with the responsibility of developing and implementing Groundwater Sustainability Plans (GSPs). GSPs must evaluate the sustainability of the basin and identify projects and actions that will be implemented to achieve sustainability over a 20 year period. Each subbasin must be covered by one or more GSPs by January 30, 2022. SGMA allows for more than one GSP for each subbasin, subject to Coordination Agreements and other requirements. Failure to meet the deadline would subject the subbasin to intervention by the State Water Resources Control Board.

Basin Boundary Modifications

Currently, Butte County overlies portions of four subbasins. In 2018, the Department of Water Resources (DWR) opened the process for eligible agencies to request basin boundary modifications. Butte County and other eligible agencies submitted requests that would modify basin boundaries and, in one case, combine two subbasins (East Butte and West Butte). The modifications will result in an expanded Vina subbasin bounded at the Tehama county line; the combination of the East and West Butte subbasins creating the Butte subbasin, and; modification of the Wyandotte Creek subbasin to include Thermalito Water and Sewer District and the entirety of the City of Oroville. The proposed modifications (Attachment 1) are jurisdictional modifications that improve the ability of the GSAs to implement SGMA in the three resulting subbasins.

DWR staff has reviewed the proposed modifications and recommended that they be approved. Final decisions by DWR are expected in February, 2019.

Groundwater Sustainability Plan Development

All but one of the GSAs have committed to develop and implement one GSP in each of the subbasins. Rock Creek Reclamation District, in the Vina subbasin, has decided to remain an independent GSA. They have the option to develop their own GSP or coordinate with the Vina GSA on a single GSP. That decision will be made later in 2019. Although the governance structures on how that would be accomplished are in varying stages, the effort to develop the GSPs has begun. In an effort to meet the January 30, 2022 deadline, Butte County applied for a Proposition 1 grant on behalf of the GSAs in the three subbasins. By utilizing the \$1.49 million dollar grant, existing data, programs and in-kind staff support, the GSPs are expected to be developed and implemented without the need to impose fees- provided that one GSP is developed per subbasin and coordination is maximized among the agencies.

The GSP development began with the initiation of the basin setting project. The basin setting project is developing the required scientific and technical components of the GSP, such as the groundwater model, water budgets, assessment of monitoring programs, background on hydrogeology and a summary of groundwater conditions. The basin setting project is expected to be completed by the middle of 2020. An appraisal of current and projected groundwater conditions will be prepared and early discussions on sustainability will begin in winter 2019.

Governance

Vina – In the summer of 2018, the GSAs in the Vina subbasin (Butte County, City of Chico, Rock Creek Reclamation District and Durham Irrigation District) reached agreement on a draft Joint Powers Agreement (JPA) for consideration by the respective governing boards. The Vina JPA was passed unanimously by the Butte County Board of Supervisors on September 11, 2018 and by the Durham Irrigation District on September 25, 2018. The City of Chico was prepared to consider adopting the JPA on October 16, 2018, but on October 2, 2018, the Rock Creek Reclamation District decided to retain its GSA status and not join the JPA. The decision of Rock Creek Reclamation District did not change the resolve of the other agencies to join the Vina JPA. The decision of Rock Creek Reclamation District to remain a GSA will result in the Vina subbasin having two GSAs; the Vina GSA and the Rock Creek Reclamation District GSA.

During the redrafting of the Vina JPA, two issues emerged. First, the original draft Vina JPA provided that the two Stakeholder Director seats on the Vina GSA Board would be appointed by the Member Agency Directors on the Vina GSA Board. After examination

during legal review, it was found that this process is not well supported by the Joint Powers Act. The well-established process for seating non-government members to a JPA board is through providing additional seat(s) to one of the Member Agencies that would be delegated to a non-government member. Based on the legal review, the Vina GSA Managers agreed to change the Vina JPA to have the Stakeholder Directors appointed by the Butte County Board of Supervisors since the two Stakeholder Directors (an Agricultural and Domestic stakeholder) would likely come from the Butte County area. All other criteria related to the Stakeholder Directors remain the same.

Second, discussions with the Mechoopda Tribe resolved concerns about their joining the Vina JPA as a Member Agency. Under the terms of the draft JPA, the Mechoopda Tribe would join the JPA as a Member Agency and have a seat on the Board. The Mechoopda trust land would be subject to the SGMA authority of the Vina GSA.

The revised Vina JPA is expected to be submitted to the Butte County Board of Supervisors and the other Member Agencies by March 2019.

Butte - The governance discussions for the Butte subbasin have been delayed due to resolving Basin Boundary Modifications and State Water Resources Control Board (SWRCB) proceedings on the Bay Delta Water Quality Plan. Many of the GSAs in the Butte subbasin are part of the SWRCB proceedings that may impact their water rights. The Butte subbasin includes the remaining portions of the East Butte and West Butte subbasins based on proposed basin boundary modifications. The eleven (11) GSAs in the Butte subbasin include Butte County, Glenn County, Colusa County, RD1004, RD 2106, City of Gridley, City of Biggs, Butte Water District, Biggs West Gridley Water District, Richvale Irrigation District and Western Canal Water District. Facilitation services have been secured with the Consensus Building Institute to assist the GSAs in developing mutually agreeable governance structure(s). The Butte GSA managers held an initial meeting at the end of 2018. The GSAs expect to develop mutually agreeable governance structures by June 30, 2019.

Wyandotte Creek - The Wyandotte Creek GSA was officially created on September 18, 2018 through the Wyandotte Creek Joint Powers Agreement (JPA) adopted by Butte County, the City of Oroville and the Thermalito Water and Sewer District. The Wyandotte Creek GSA is the exclusive agency responsible for implementing SGMA and developing the GSP for the Wyandotte Creek subbasin. Butte County, the City of Oroville and Thermalito Water and Sewer District have withdrawn their individual GSA status to make way for the Wyandotte Creek GSA. The Wyandotte Creek GSA Board has two Stakeholder Directors. The executed Wyandotte Creek JPA provides for the appointment of the Stakeholder Directors by the Member Agency Directors of the Wyandotte Creek GSA Board. Based on the legal review of the draft Vina JPA, the Wyandotte Creek JPA will require an amendment to reflect that the two Stakeholder

Directors will be appointed by the Butte County Board of Supervisors. The Wyandotte Creek Management Committee is drafting an amendment to the Wyandotte Creek JPA.

The seating of the Wyandotte Creek GSA Board has begun. The Butte County Board of Supervisors appointed Supervisor Connelly as the primary Director and Supervisor Lambert as the alternate Director. The other agencies are in the process of selecting governing board members and alternates. The Wyandotte Creek GSA Board is expected to have their initial meeting in the first quarter of 2019. The Wyandotte Creek Management Committee has begun identifying lead assignments for various functions of the Wyandotte Creek GSA. Lastly, the process for selecting advisory committee members will begin soon after the seating of the Wyandotte Creek GSA board.

Groundwater Pumper Advisory Committee

The Groundwater Pumpers Advisory Committee (GPAC) was created by the Board of Supervisors in 2016 to advise the Board of Supervisors on SGMA implementation. The GPAC has actively participated in SGMA issues and has made a number of recommendations to the Board of Supervisors. At their meeting on November 5, 2018, the GPAC discussed whether to recommend that the Board of Supervisors disband the GPAC. The reason that the GPAC discussed disbanding GPAC was due to the emerging governance structures in the Wyandotte and Vina subbasins. The governance structures have agricultural and domestic groundwater users on the respective GSA Boards and Stakeholder Advisory Committees. The GPAC members are likely to seek opportunities to serve on the Wyandotte or Vina GSA board or committees. Additionally, under the terms of the Wyandotte and Vina JPAs, Butte County would no longer be a GSA in these two subbasins. This would negate the role of the GPAC in advising the Board of Supervisors on SGMA issues. However, since the governance structure for the Butte subbasin has not been established, the GPAC decided to continue to meet on an as needed basis. It is anticipated that once the governance structure for the Butte subbasin is established, the GPAC will consider their recommendation that the Board of Supervisors disband the GPAC.

Conclusion

The implementation of the SGMA is on track to have the required Groundwater Sustainability Plans submitted by the statutory deadline of January 30, 2022. Over the next few months a number of items will be brought to the Board of Supervisors for consideration including the Vina JPA, amendment to the Wyandotte Creek JPA and GPAC recommendations.

ATTACHMENT 1

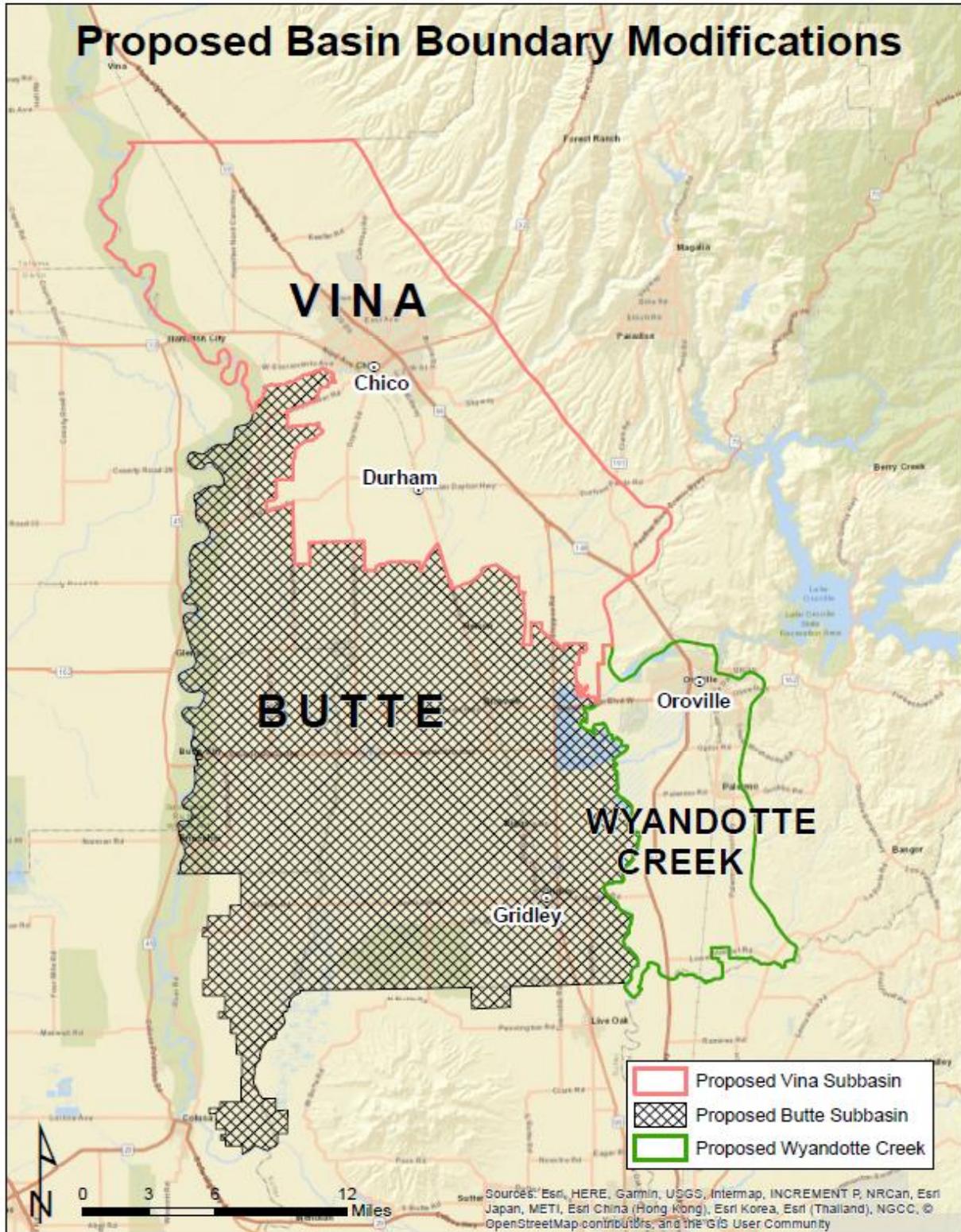
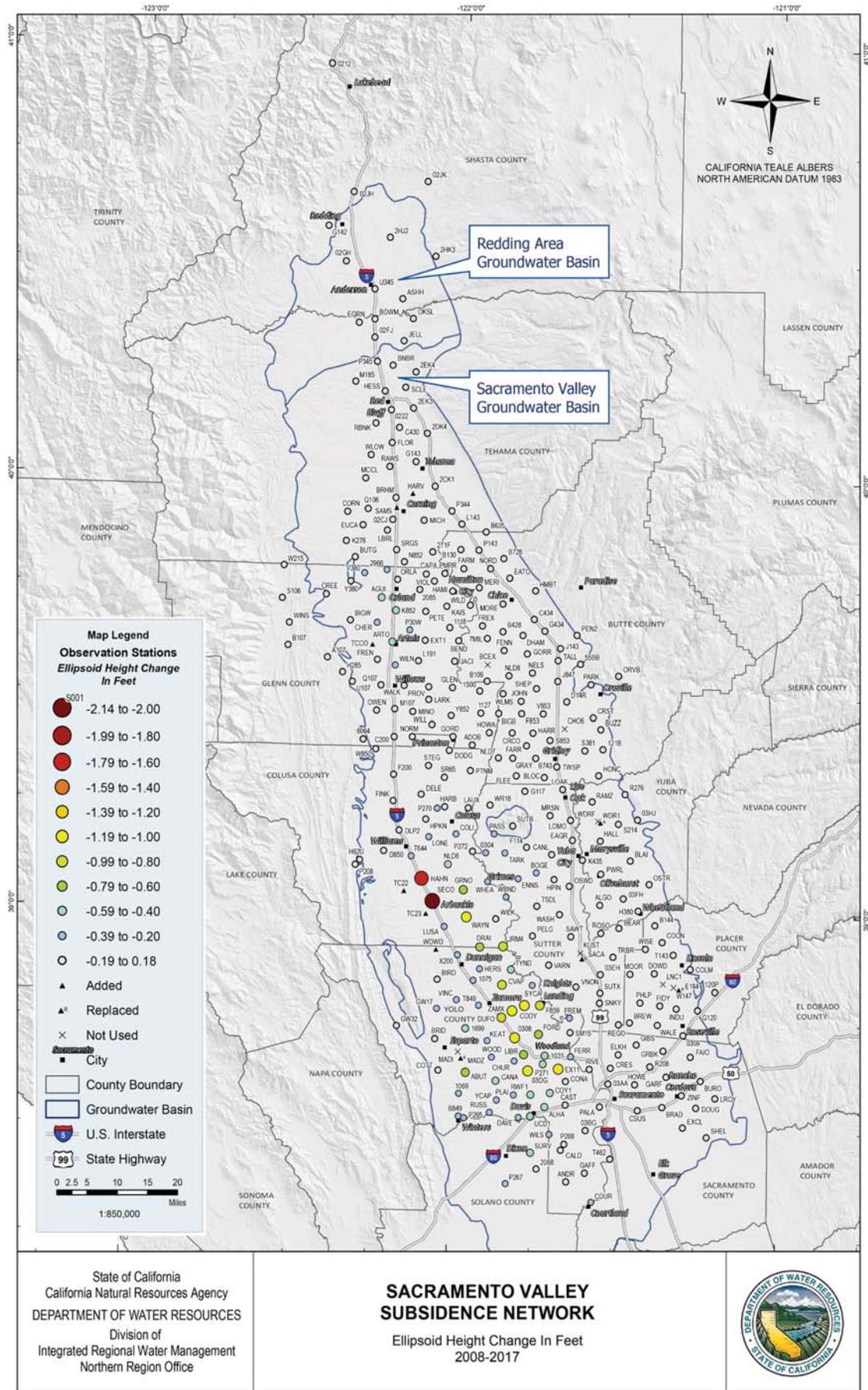


Figure ES-1 Height Change at Monuments between 2008 and 2017



2017 Sacramento Valley GPS Survey Project Fact Sheet

Background

- In 2008, DWR contracted a private consultant to establish a network of over 300 survey monuments, spaced about four miles apart, in the Sacramento Valley and partnered with 25 local, state, and federal agencies to take initial baseline GPS survey measurements at each location.
- The monument network spans 11 counties from Shasta County in the north, to Solano and Sacramento counties in the south.

Reasons for DWR Participation

- The understanding and monitoring of subsidence is an important part of sustainable groundwater management which is why the SGMP supported this survey effort as part of its technical assistance role.
- GSAs can utilize the survey results to support their GSP development.

What's New: The 2017 Resurvey

- In 2017, DWR resurveyed over 300 of the same monuments that were surveyed in 2008 to determine the change in land surface elevation over the nine-year period.
- The 2017 resurvey was led and funded by DWR in coordination with 18 local, state, and federal agencies and a private company.
- For the purposes of the 2017 resurvey, land surface elevation decreases greater than, or equal to, 0.17 feet (about 2 inches) are considered statistically significant.

Key Findings of the 2017 Resurvey

- Colusa County: The Arbuckle area experienced the most subsidence with a maximum change of -2.14 ft.
- Yolo County: The largest spatial extent of subsidence ranged from -0.3 to -1.1 feet at 31 monuments.
- Glenn County: Three monuments showed subsidence ranging from -0.44 to -0.59 feet.
- Sutter County: Five monuments displayed -0.20 to -0.36 feet of subsidence.
- The remainder of the Sacramento Valley showed little to no statistically significant land subsidence.

Groundwater Conditions Related to Subsidence

- During the 2017 resurvey, groundwater levels had recovered an average of seven feet from the severe drought of 2012-2016.
- During the drought, groundwater levels reached historic lows in many wells in the Sacramento Valley. Compared with 2011 pre-drought groundwater levels, maximum decreases were observed in Glenn and Colusa counties at 58 to 43 feet, respectively.

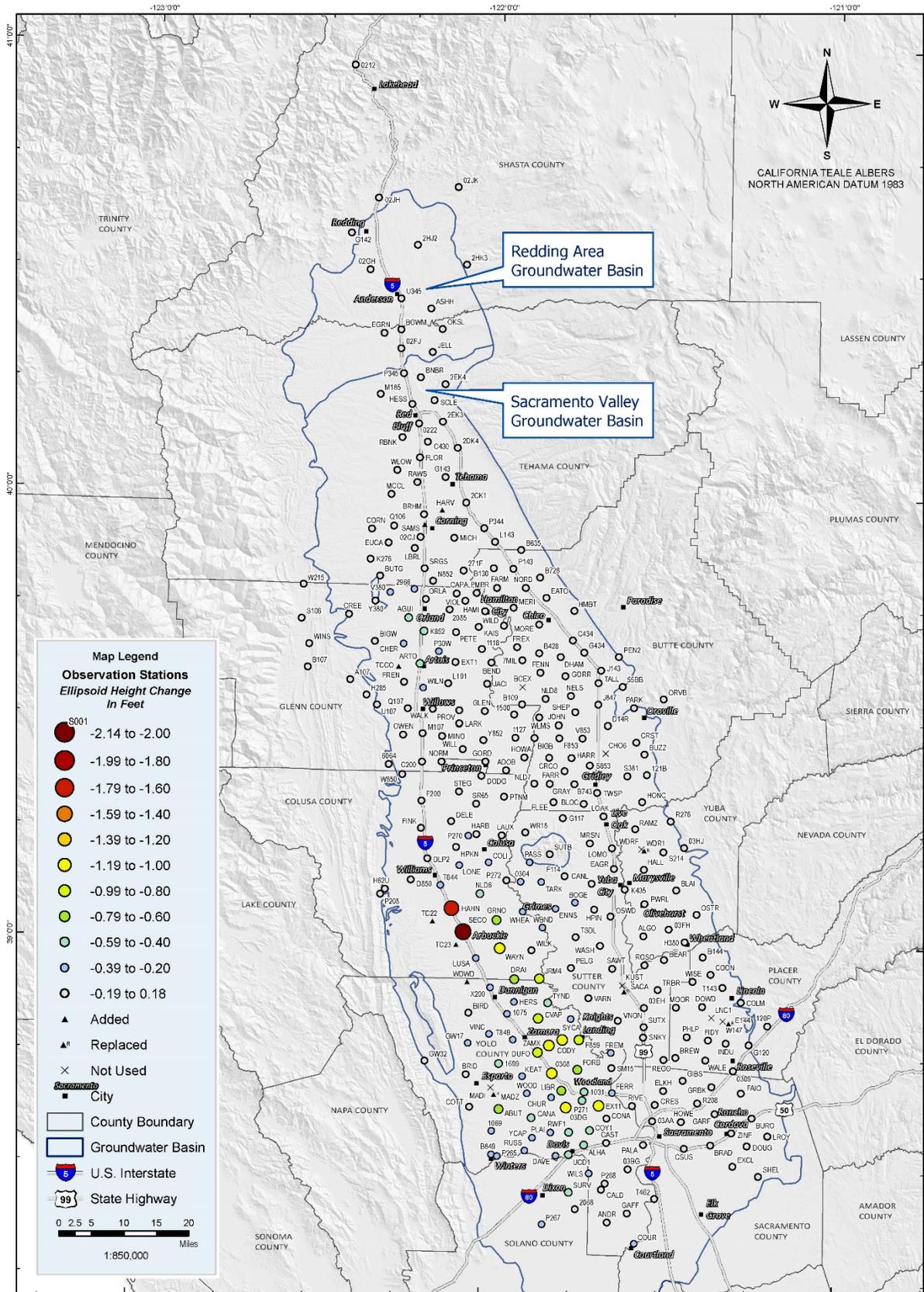
Recommendations for Continued Subsidence Monitoring

- DWR and Partners: Conduct GPS network resurveys at a more frequent interval such as every three to five years to better capture when changes occur.
- DWR: Integrate continuous GPS sites, groundwater levels, and InSAR data into the subsidence monitoring program.

DWR SGMP Assistance to Address Subsidence

The SGMP is providing technical, planning, and financial assistance that will help local agencies further investigate and address subsidence in the Sacramento Valley.

- [Technical Support Services](#), which provide GSA's an opportunity to request DWR install monitoring sites.
- [Facilitation Support Services](#), which help local agencies work through challenging water management situations.
- [Proposition 1 – Sustainable Groundwater Planning Grants](#), which provides funding for developing Groundwater Sustainability Plans.



State of California
 California Natural Resources Agency
 DEPARTMENT OF WATER RESOURCES
 Division of
 Integrated Regional Water Management
 Northern Region Office

**SACRAMENTO VALLEY
 SUBSIDENCE NETWORK**
 Ellipsoid Height Change In Feet
 2008-2017



California Must Enhance Groundwater Recharge and Storage



Population growth has stressed California’s water supplies and climate change is making the situation worse. Droughts are growing more severe. Rainfall increasingly comes in heavy storms that cause floods, overwhelming our water collection infrastructure. We need better means to capture and store this precious water.

New technologies and analyses, developed by the University of California (UC) and other researchers, are helping to identify sites where soil characteristics and hydrogeology allow water to percolate readily from the surface into an aquifer. Growers, land managers and water agencies have begun to use this information to develop projects that deliberately store floodwater underground, taking advantage of the vast storage capacity under our feet.

In September 2018, UC Agriculture and Natural Resources and the California Economic Summit convened 60 leaders and innovators from diverse sectors — land use, water supply, flood management, agriculture, environmental and social equity interests — to identify actions that could significantly increase implementation of groundwater recharge projects in California. The group achieved consensus on three action areas:

❖ PRESERVE GROUNDWATER RECHARGE SITES

Most county and city general plans and zoning guidelines do not identify or protect important groundwater recharge sites from development. As a result, some prime sites have been lost to urbanization. SB 379, enacted in 2015, requires that revisions of general plans and local hazard mitigation plans update the safety element to address climate adaptation and resiliency as appropriate for the city or county. However, the list of relevant measures specified in the law does not include preserving potential groundwater recharge sites.

Proposed Action: *Because groundwater recharge is critical to climate resiliency, amend SB 379 to add a requirement that the preservation of groundwater recharge sites identified in relevant groundwater sustainability plans (GSPs) be added to the general plan upon the next revision.*

The California Environmental Quality Act (CEQA) generally requires state and local government agencies to inform decision-makers and the public about the potential environmental impacts of proposed projects and to reduce those environmental impacts to the extent feasible. However, impairment of groundwater recharge is not currently on the CEQA checklist of potential impacts that must be reviewed.

Proposed Action: *Modify the CEQA checklist to include impacts to groundwater recharge sites identified by applicable GSPs.*



❖ DEFINE GROUNDWATER STORAGE AS A BENEFICIAL USE

In many cases, adding water to aquifers provides benefits other than simply storing water for future extraction. These benefits may include preventing saltwater intrusion into aquifers, preventing or reversing land subsidence, maintaining base flows in streams, protecting groundwater-dependent ecosystems, ensuring that community water-supply wells do not go dry, and protecting or enhancing water quality by diluting contamination to safe levels. However, California Water Code Section 1242 currently leaves open to debate the question of whether recharging groundwater for such purposes qualifies as a beneficial use of water. This lack of policy guidance creates uncertainty and risk for developers of groundwater recharge projects.

Proposed Action: Encourage the State Water Resources Control Board to provide guidance concerning conditions under which recharge for reasons other than storage followed by active withdrawal can be a beneficial use of water. Further request that water rights applications and petition forms reflect this broader interpretation of beneficial use.



❖ PROVIDE STATE LEADERSHIP AND TECHNICAL ASSISTANCE FOR GROUNDWATER RECHARGE

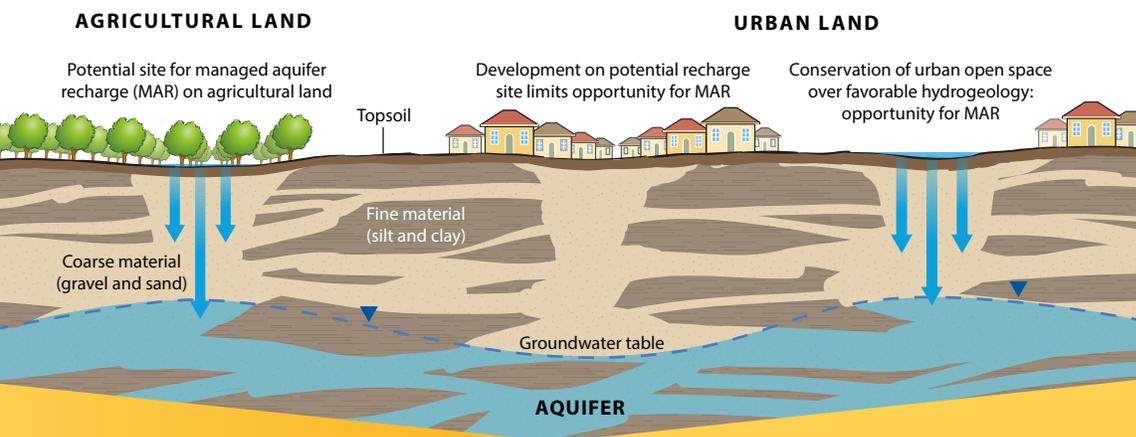
The California Department of Water Resources (DWR) has initiated a pilot program, Flood-MAR, that provides guidance and information to support a diverse array of projects that use floodwater for managed aquifer recharge (MAR) on agricultural and other working lands. Flood-MAR can be implemented at multiple scales, from individual landowners diverting floodwater to flood management, irrigation, and water districts creating multi-acre detention/recharge projects.

Through the Flood-MAR program, DWR is working with other state, federal, tribal and local entities; academia; and landowners to build on the knowledge and lessons from earlier work, pursue expanded implementation of Flood-MAR projects, and make the Flood-MAR approach an integral part of California's water portfolio. Additional support for research and technical assistance on groundwater recharge is needed at both the state and the national level.

Proposed Action: Direct the following recommendations to the California Governor and Legislature:

Continue the pilot Flood-MAR program. Allocate \$5 million annually over a period of 5 to 10 years for this effort that supports the use of floodwater for managed aquifer recharge and contributes to sustainable water resource management. The program should develop local partnerships, study opportunities to better integrate aquifer recharge projects on a statewide basis, and support innovation in technology, planning, management and government for leading and managing overall recharge efforts.

Allocate an additional \$1 million annually over a period of five years to fund research and improve data analysis to support Flood-MAR implementation. An advisory committee should be established to identify priority research and data needs, facilitate a centralized repository for information related to Flood-MAR, and support training, education programs, and technical/scientific information and tools.



Many factors determine the suitability of sites for managed aquifer recharge through shallow flooding. One key to producing regional benefit is that subsurface geology must allow water to percolate readily to aquifers. A second important element is land cover. Urban open space and certain types of cropland may allow for shallow flooding, while developed areas generally don't.

For more information contact the Chair of the Groundwater/Land Use Work Group:

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