NOTICE AND AGENDA OF SPECIAL MEETING

GROUNDWATER SUSTAINABILITY AGENCY
FOR THE CENTRAL MANAGEMENT AREA
IN THE SANTA YNEZ RIVER GROUNDWATER BASIN

SPECIAL MEETING WILL BE HELD
AT **10:00 A.M.**, MONDAY, JULY 26, 2021

TELECONFERENCE MEETING ONLY – NO PHYSICAL MEETING LOCATION
PUBLIC PARTICIPATION DIAL-IN NUMBER: 1-267-866-0999
MEETING ID / PASSCODE: 2582 87 8923

Public participants can view presentation materials and live video on their device

Website: app.chime.aws (or download *Amazon Chime* app),
"Join a meeting without an account"
Meeting ID: 2582 87 8923

You do NOT need to create an Amazon Chime account or login with email for meeting participation.

Public participant phones and microphones will be muted, and webcams disabled.
Live Chat Text (online users only) will be enabled for questions.

If your device does not have a microphone or speakers, you can also call Phone Number & log in with Meeting ID listed above to listen while viewing the live presentation online.

Teleconference Meeting During Coronavirus (COVID-19) Emergency: As a result of the COVID-19 emergency and Governor Newsom's Executive Orders to protect public health by issuing shelter-in-home standards, limiting public gatherings, and requiring social distancing, this meeting will occur solely via teleconference as authorized by and in furtherance of Executive Order Nos. N-29-20 and N-33-20.

Important Notice Regarding Public Participation in Teleconference Meeting: Those who wish to provide public comment on an Agenda Item, or who otherwise are making a presentation to the GSA Committee, may participate in the meeting using the dial-in number and passcode above. **Those wishing to submit written comments instead, please submit any and all comments and materials to the GSA via electronic mail at bbuelow@syrwcd.com.** All submittals of written comments must be received by the GSA no later than **Friday, July 23, 2021**, and should indicate **"July 26, 2021 GSA Meeting"** in the subject line. To the extent practicable, public comments and materials received in advance pursuant to this timeframe will be read into the public record during the meeting. Public comments and materials not read into the record will become part of the post-meeting materials available to the public and posted on the SGMA website.

In the interest of clear reception and efficient administration of the meeting, all persons participating in this teleconference are respectfully requested to mute their phones after dialing-in and at all times unless speaking.

AGENDA ON NEXT PAGE

GROUNDWATER SUSTAINABILITY AGENCY
FOR THE CENTRAL MANAGEMENT AREA
IN THE SANTA YNEZ RIVER GROUNDWATER BASIN

MONDAY, JULY 26, 2021, 10:00 A.M.

AGENDA OF SPECIAL MEETING

I. Call to Order and Roll Call

II. Introductions and review of SGMA in the Santa Ynez River Valley Basin

III. Additions or Deletions to the Agenda

IV. Public Comment (Any member of the public may address the Committee relating to any non-agenda matter within the Committee's jurisdiction. The total time for all public participation shall not exceed fifteen minutes and the time allotted for each individual shall not exceed five minutes. No action will be taken by the Committee at this meeting on any public item.)

V. Receive update on GSP comments and correspondence received.

VI. Receive update from Citizen Advisory Committee meeting of June 17, 2021 on the Draft Numeric Groundwater Model Technical Memorandum

VII. Receive Presentation from Stetson Team on "Sustainable Management Criteria and Projects and Management Actions for the CMA"

VIII. Next "Regular" CMA GSA Meeting: Monday, August 23, 2021, 10:00 AM

IX. CMA GSA Committee requests and comments

X. Adjournment

[This agenda was posted 72 hours prior to the scheduled special meeting at 3669 Sagunto Street, Suite 101, Santa Ynez, California, and https://www.santaynezwater.org in accordance with Government Code Section 54954. In compliance with the Americans with Disabilities Act, if you need special assistance to review agenda materials or participate in this meeting, please contact the Santa Ynez River Water Conservation District at (805) 693-1156. Notification 72 hours prior to the meeting will enable the GSA to make reasonable arrangements to ensure accessibility to this meeting.]

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

July 7, 2021

Bill Buelow, Water Resources Manager
Santa Ynez River Valley Groundwater Basin
Eastern Management Area
Groundwater Sustainability Agency
P.O. Box 719
Santa Ynez, California 93460

Re: Santa Ynez River Valley Groundwater Basin – Eastern Management Area Groundwater Sustainability Plan Section 5 – Sustainable Management Criteria (June 18, 2021)

Dear Mr. Buelow:

Enclosed with this letter are NOAA's National Marine Fisheries Service's (NMFS) comments on the Draft Santa Ynez River Valley Groundwater Basin – Eastern Management Area Groundwater Sustainability Plan – Sustainable Management Criteria.

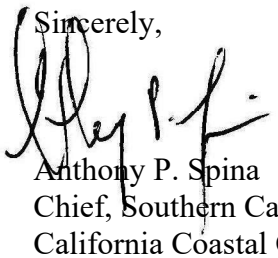
The Draft Sustainable Management Criteria are intended to meet the requirement of the California Sustainability Groundwater Management Act (SGMA). The SMGA includes specific sustainable criteria to address impacts to Groundwater Dependent Ecosystems (GDE) that have significant and unreasonable adverse impacts on all recognized beneficial uses of groundwater and related surface waters. (*See* Cal. Water Code §§ 10720.1, 10721, 10727.2)

As explained more fully in the enclosure, the Draft Sustainable Management Criteria do not adequately address the recognized instream beneficial uses of the Santa Ynez River, or other GDE, potentially affected by the management of groundwater within the Eastern Management Area. In particular, the Draft Sustainable Management Criteria do not adequately recognize or analyze important GDE, including the federally endangered steelhead (*Oncorhynchus mykiss*) that rely on groundwater supported surface flows.

The reasons for these conclusions are set forth in the enclosure. NMFS recommends that the revised Draft Sustainable Management Criteria be re-circulated to give interested parties an opportunity to review and comment on the Draft Sustainable Management Criteria before they are finalized.

NMFS appreciates the opportunity to comment on the Draft Sustainable Management Criteria. If you have a question regarding this letter or enclosure, please contact Mr. Mark H. Capelli in our Santa Barbara Office (805) 963-6478 or mark.capelli@noaa.gov.

Sincerely,



Anthony P. Spina
Chief, Southern California Branch
California Coastal Office

cc:
Darren Brumback, NMFS, California Coastal Office
Rick Rogers, NMFS, California Coastal Office
Ed Pert, CDFW, Region 5
Angela Murvine, CDFW, Water Brach
Annette Tennebaum, CDFW, Fresno Office
Mary Larson, CDFW, Region 5
Robert Holmes, CDFW, Sacramento
Steve Slack, CDFW, Region 5
Chris Diel, USFWS, Ventura Field Office
Chris Dellith, USFWS, Ventura Field Office
Kristie Klose, USFS, Los Padres National Forest

NOAA's National Marine Fisheries Service's Comments on Draft Eastern Management Area Sustainable Management Criteria for the Santa Ynez River, Santa Barbara County

July 7, 2021

Introduction

NOAA's National Marine Fisheries Service (NMFS) previously commented on the February 2021 draft Eastern Management Area (EMA) Groundwater – Basin Setting: Groundwater Budget (April 28, 2021). NMFS incorporates those comments herein, including those dealing with the status, recovery needs, and life history and habitat requirements of the federally listed endangered southern California steelhead (*Oncorhynchus mykiss*).

General Comments

Groundwater inputs to surface flows can perform a number of functions important to the maintenance of Groundwater Dependent Ecosystems (GDE); for example, they can buffer daily temperature fluctuations in a stream (Heath 1983, Brunke *et al*. 1996, Barlow and Leake 2012, Hebert 2016). Artificially reducing the groundwater inputs can also shrink the amount of habitat and feeding opportunities for rearing juvenile steelhead (Fetter 1997, Sophocleous 2002, Glasser *et al*. 2007, Croyle 2009), and reduce opportunities for juveniles to successfully emigrate to the estuary and the ocean (Bond 2006, Hayes *et al*. 2008, Hayes *et al.* 2011). Low summer baseflow, likely caused by both surface water diversions and pumping hydraulically connected groundwater, is recognized as a significant stress to steelhead survival in the Santa Ynez River and tributaries (NMFS 2012, p. 9-15, Table 9-2).

Specific Comments

The following specific comments on the Draft Sustainable Management Criteria (Draft Criteria) are arranged by section and page number.

5.1 Definitions

Undesirable result refers to the definition provided in § 10721(x) of SGMA

Pages 8-9

The Draft Criteria defines an undesirable result as:

> Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods. (p. 9)

However, as noted below, this definition do not recognize the adverse effects of *periodic* reduction of groundwater on GDE, including the use by spawning and rearing steelhead. The effects of periodic groundwater reductions on out-of-stream beneficial uses (*e.g*., domestic or agricultural water supplies) may be addressed with alternative water sources. Nevertheless, instream beneficial uses such as GDE may be more vulnerable to such groundwater reductions, for which there is no alternative water source to sustain the GDE.

5.2 Sustainability Goals

Page 10

The sustainable goals are expressed explicitly and exclusively in terms of groundwater levels, and do not recognize the important relationship between groundwater levels and the surface flows (particularly base flows) that contribute to the maintenance of GDE. This is an important omission that should be corrected in the revised document because GDE for the EMA basin includes the use of surface flow by the federally listed endangered southern California steelhead for migration, spawning and rearing.

5.2.1 Qualitative Objectives for Meeting Sustainability Goals

Page 11

The sustainable objectives includes avoiding chronic reduction of groundwater, but not the adverse effects of periodic reduction of groundwater on GDE, including the use by spawning and rearing steelhead. The effects of periodic groundwater reductions on out-of-stream beneficial uses (*e.g*., domestic or agricultural water supplies) may be addressed with alternative water sources. However, instream uses such as GDE are more vulnerable to such groundwater reductions, because there is generally no alternative water source to sustain the GDE.

5.3 Process for Establishing Sustainable Management Criteria [Section 354.26(a)

Pages 11-12

The Draft Criteria describes the public process of receiving comments on the various draft components of the GSP; however, the Draft Criteria does not appear to, but should, reflect the comments that NMFS has previously provided on the February 2021 draft EMA Groundwater – Basin Setting: Groundwater Budget (April 28, 2021). There are no specific criteria in the Draft Criteria that deal with the GDE associated with the federally listed species (or the designated critical habitat) which utilize portion of the EMA. In fact, the word "steelhead", "trout", or even "fish" do not appear in the Draft Criteria. The revised document should correct this deficiency and include a description of the extensiveness of designated critical habitat for endangered steelhead that exists in the project area, as well as identify the intrinsic potential habitat (*See* Figures 1 and 2 below).

5.3.2. Criteria for Defining Undesirable Results [Sections 354.26(1) and (d)]

Pages 12 -13

The criteria for defining undesirable results do not, but should, provide meaningful guidance. Some deal with causes not effects, and the effects are expressed in terms that are simply re-statements of goals, not criteria or objectives for meeting identified goals. As a result, there is no way of knowing with a reasonable level of assurance whether identified goals have been truly attained, and whether changes in operations would be necessary to achieve the goals.

5.3.3 Information and Methodology Used to Establish Minimum Thresholds and Measurable Objectives [Sections 354.28(b)(1), (c)(1)(A)(B), and (e)]

Pages 13 -16

In reviewing the methods used to establish thresholds and objectives, it appears that all of the metrics were physical or chemical, lacking any biological metrics. As NMFS has indicated in its previous comment letter, it is essential to determine what flows adequately supports the freshwater life history phases of steelhead. Without an understanding of these hydrologic/biotic relationships, a Groundwater Sustainability Plan (GSP) cannot ensure that significant and unreasonable adverse impacts from groundwater depletion (and in the case of the Santa Ynez River, the integrally related surface water diversion/groundwater recharge program) are avoided (Heath 1983, California Department of Water Resources 2016).

5.3.3.5 Avoid Depletion on Interconnected Surface Water

Page 15

The Draft Criteria indicates that it relies on "Published documents and independent analysis that identify the extent and distribution of potential GDEs." However the Draft Criteria, as well as the Basin Setting: Groundwater Budget appear to rely on methodology that uses vegetation as the principal means of identifying GDE (*e.g.*, The Nature Conservancy 2019). While this method may be useful for identifying select GDE, it is not adequate to identify GDE that are not defined by vegetation alone. For steelhead, the GSP should also consider the information provided in NMFS' designated critical habitat for this species as well as in NMFS identification of intrinsic potential habitat (Boughton and Goslin 2006; *see* also Boughton *et al.* 2009) (*See* Figures 1 and 2 below for graphical presentation of this information).

5.3.4 Relationship between Individual Minimum Thresholds and Other Sustainability Indicators (Section 354.28(b)(23))

Page 16

The Draft Criteria should also include Individual Minimum Thresholds that address GDE other than those defined by the presence of riparian vegetation. See additional comments below.

5.5 Chronic Lowering of Groundwater Levels Sustainable Management Criterion

5.5.1. Undesirable Results [Section 345.26(a)(2), (c) and (d)]

Pages 17-18

The Draft Criteria analyzes lowering groundwater levels primarily in terms of affecting groundwater supplies for out-of-stream beneficial uses, and undesirable results that would affect these uses. It does not, but should, explicitly address other instream beneficial uses, such as those associated with GDE

The Draft Criteria should be revised to include a discussion of specific GDE, including those associated with the federally listed endangered southern California steelhead.

55.2 Minimum Thresholds [Section 354.28(a)(b)(1)(A)(B), (d), and (e)]

Pages 19-23

As with the discussion of lowering groundwater levels, the Draft Criteria discusses minimum thresholds primarily in terms of groundwater supplies for out-of-stream beneficial uses.

For example, the Draft Criteria indicates:

> "Based on the well impact analysis, the GSA Committee agreed to set the minimum threshold for representative wells screened in the Careaga Sand at 12 feet below spring 2018 groundwater levels. If groundwater levels continued to decline at current rates (2019–2021) in representative wells, minimum thresholds for the chronic lowering of groundwater levels sustainability indicator would be exceeded in 50 percent of representative wells (*See* Section 5.5.2.7), approximately four to five years following implementation of the GSP. These thresholds are not expected to cause a significant and unreasonable reduction of groundwater in storage." (p. 22)

To develop a clear understanding of the consequence of the Committee's minimum threshold, which is currently lacking, the Draft Criteria should be revised to include a discussion of the predicted consequences of the proposed threshold on GDE, including those associated with the federally listed endangered southern California steelhead.

5.5.2.4 Effects of Minimum Thresholds on Neighboring Basin [Section 354.28(b)(3)]

Page 24

The neighboring basins include the Santa Ynez River Valley Groundwater Basin – Central Management Area (CMA) of the Santa Ynez Basin and San Antonio Creek Valley Groundwater Basin (SACV).

The Draft Criteria recognizes that the CMA is hydrologically down gradient of the EMA and is hydrologically connected. However, the Draft Criteria indicates:

> "Based on available information, groundwater gradients at the boundary between the EMA and SACV are such that groundwater does not flow between the EMA and SACV and therefore, the SACV would not be impacted by the minimum threshold for the chronic lowering of groundwater levels sustainability indicator in the EMA." (p. 24)

As NMFS has noted in previous comments, while groundwater management actions in the mainstem of the Santa Ynez River may not directly affect flow in the tributaries to the Santa Ynez River, drawing down the groundwater near the confluence of the tributary and the Santa Ynez River can affect the hydraulic connectivity between the tributaries and the river. This hydraulic connectivity (even if only seasonal) can have implications for the movement (or migration) of a variety of fish and or amphibian species (*See* State Water Resources Control Board 2011). These tributaries, therefore, should not be considered as disconnected from the water table, but should be classified in the revised document as having interconnected surface water in accordance with the SGMA.

5.5.2.5 Effects of Minimum Thresholds on Beneficial Uses and Land Use [Section 354.28(b)(4)

Page 25

The Draft Criteria states that, "No federal, state, or local standards exist for chronic lowering of groundwater levels." (p. 25). While it is true that there are not numeric standards, this statement does not appear to recognize the broad standards that that are established by SGMA.

5.5.3 Measurable Objectives (Section 354.30(a), (b), (c), (d), and (g)]

Pages 26-27

See comments above regarding Information and Methodology Used to Establish Minimum Thresholds and Measurable Objectives (5.3.3).

5.6.2 Minimum Thresholds [Section 354.28(a)(b)(1), (c)(2), (d), and (e)]

Pages 30-32

See comments above regarding Information and Methodology Used to Establish Minimum Thresholds and Measurable Objectives (5.3.3).

5.6.2.3 Effects on Beneficial Uses and Land Uses [Section 354.28(b)(4)]

Page 33

The beneficial uses of the surface waters of the Santa Ynez River that are associated with the GDE include: Warm Fresh Water Habitat (WARM), Cold Fresh Water Habitat (COLD), Estuarine Habitat (EST), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Migration of Aquatic Organisms (MIGR), and Spawning, Reproduction, and /or Early

Development of fish (SPWN) (*See*, for example, California Regional Water Quality Control Board, Central Coast Region (2019), Table 2.1. Identified Uses of Inland Surface Waters).

As noted above, the Draft Criteria, appears to focus primarily on out-of-stream beneficial uses, but should be revised to expressly and explicitly deal with all of the beneficial uses that are associated with GDG, including the federally listed endangered southern California steelhead.

5.6.3 Measurable Objective [354.30(a)(c), (d), and (g)]

Page 34

See comments above regarding Information and Methodology Used to Establish Minimum Thresholds and Measurable Objectives (5.3.3).

5.8.1 Undesirable Results [Section 354.26(a), (b)(1), (b)(2), and (d)]

Page 36

See comments above regarding Effects on Beneficial Uses and Land Uses (5.6.2.3)

5.8.2 Minimum Thresholds [Section 354.28(b)(1), (c)(4), and (e)]

Pages 38-41

See comments above regarding Information and Methodology Used to Establish Minimum Thresholds and Measurable Objectives (5.3.3).

5.8.2.5 Effects of Minimum Thresholds on Beneficial Uses and Land Use [Section 354.26(b)(3)]

Pages 42-44

See comments above regarding Information and Methodology Used to Establish Minimum Thresholds and Measurable Objectives (5.3.3).

5.9.2 Minimum Thresholds [Section 354.26(c) and 354.28(a), (b)(1), (c)(5)(A)(B), (d), and (e)]

Pages 47-51

See comments above regarding Information and Methodology Used to Establish Minimum Thresholds and Measurable Objectives (5.3.3).

5.10 Depletion of Interconnected Surface Water Sustainability Management Criterion

Pages 52 - 62

As noted above, the Draft Criteria appear to rely on methodology that use vegetation as the principal means of identifying GDE (*e.g*., The Nature Conservancy 2019). For example, the Draft Criteria indicates:

> "A sustained drop in groundwater levels below root zones caused by groundwater pumping could result in permanent loss of GDEs. Monitoring of groundwater levels near the confluence of Alamo Pintado and Zanja de Cota Creek with the Santa Ynez River will be conducted by the GSA as part of EMA monitoring programs (*See* Section 4) to assess whether there is potential for significant and unreasonable adverse impacts to a long-term decline in the health of the GDEs in the subject areas and eventual permanent habitat loss." (p. 55)

A decrease in groundwater levels less than the depth of the root zone can result in effects to surface flows, particularly base flows (*See* Brunke and Goslin 1977, Fetter 1997). As a consequence, the Draft Criteria do not address all the potential GDE, including the federally listed endangered southern California steelhead. Also, in addition to the riparian areas in the vicinity of the confluence of Alamo Pintado and Zanja de Cota Creek with the Santa Ynez River, other reaches of the Santa Ynez River within the EMA (between Hilton Creek and Alisal Creek) are potentially affected by groundwater withdrawals. Additionally, the confluences of Alisal Creek, Quiota Creek, San Lucas Creek, and Zaca Creek (below Bradbury Dam), and Tepusquet Creek, Cachuma Creek and Santa Cruz Creek (above Bradbury) and the Santa Ynez River could be impacted by groundwater withdrawals from the EMA. See also comments above on Effects of Minimum Thresholds on Neighboring Basins, 5.5.2.4.

The Draft Criteria should be revised to recognize these other GDE, including those associated with the federally listed endangered southern California steelhead.

The Draft Criteria also asserts:

> "The minimum threshold for depletion of interconnected surface water is set to protect habitat and sensitive species at specific locations in the EMA where there is a connection between groundwater and surface water. The minimum threshold for depletion of interconnected surface water in the EMA is not anticipated to impact sustainability in the CMA because conditions that are necessary to avoid impacts to Category A GDEs [i.e., those supporting identified beneficial use in the subject areas] in the EMA will continue to support flows into the CMA." (p. 59)

This approach does not adequately recognize all the potential GDE, or does it provide any metric for guiding groundwater withdrawals, or set any numeric standard for the maintenance of base flows necessary to support GDE.

The Draft Criteria should be revised to include specific metrics for GDE, including those associated with the federally listed endangered southern California steelhead.

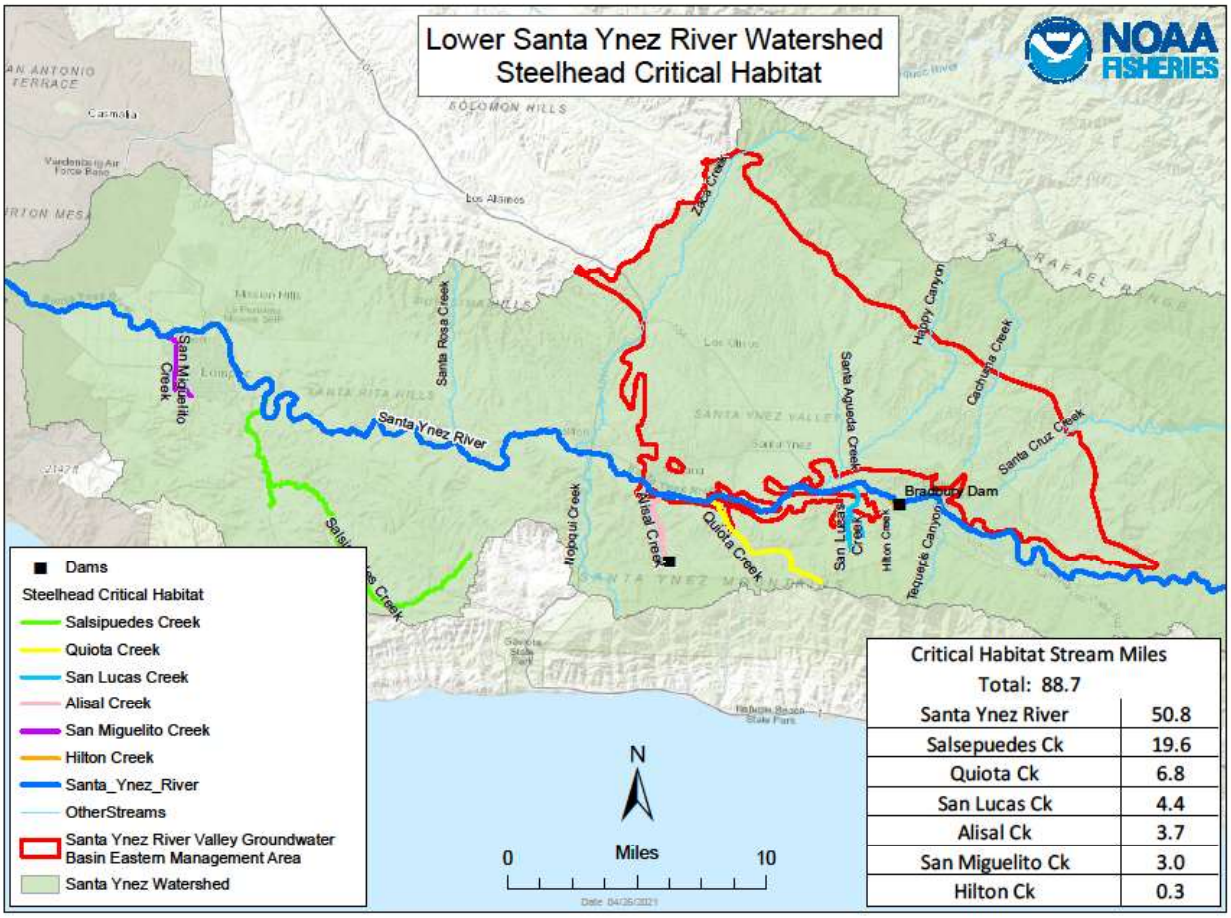


Figure 1. Lower Santa Ynez River Steelhead Critical Habitat Map. Source: 70 FR 52488). Final Rule: Endangered and Threatened Species; Designation of Critical Habitat for Seven Evolutionarily Significant Units/Distinct Population Segments of Pacific Salmon and Steelhead in California.

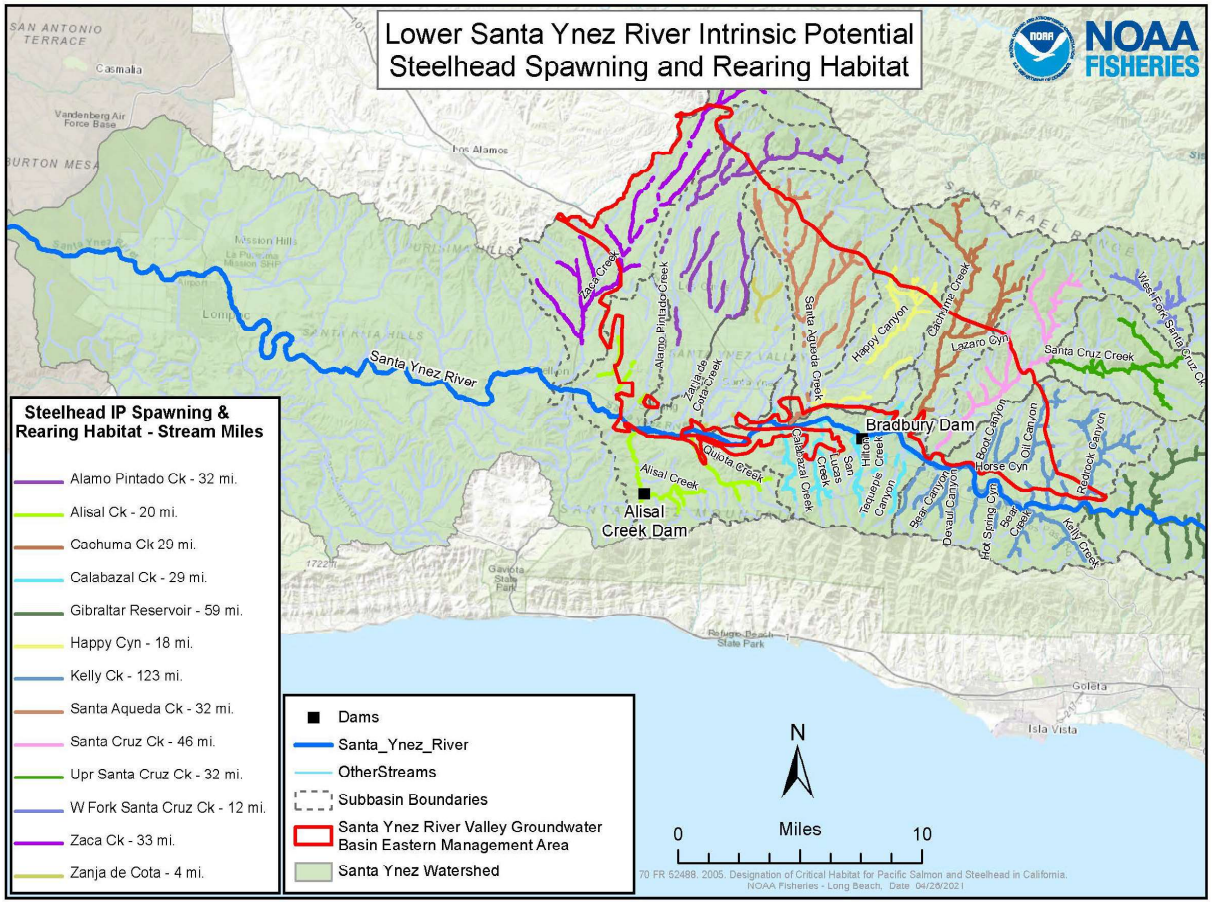


Figure 2. Lower Santa Ynez River Steelhead Intrinsic Potential Steelhead Spawning and Rearing Habitat Map. Source: Boughton and Goslin 2006.

References

Barlow, P. M. and S. L. Leake. 2012. Streamflow Depletion of Well – Understanding and Managing the Effects of Groundwater Pumping on Streamflow. United State Geological Survey *Circular* 1376.

Boughton, D. and M. Goslin. 2006. *Potential Steelhead Over-Summering Habitat in the South-Central/Southern California Recovery Domain: Maps Based on the Envelope Method.* NOAA Technical Memorandum NMFS-SWFSC TM-391.

Boughton, D. H., H. Fish, J. Pope, and G. Holt. 2009. Spatial patterning of habitat for *Oncorhynchus mykiss* in a system of intermittent and perennial stream. *Ecology of Freshwater Fishes* 18: 92-105.

Brunke, M. and T. Gosner. 1977. The Ecological Significance of Exchange Processes between Rivers and Groundwater. *Freshwater Biology* 37(1977): 1-33.

California Department of Water Resources. 2016. Bulletin 118. California Groundwater: Working Towards Sustainability, and Interim Update 2016.

Central Coast Regional Water Quality Control Board. 2019. Water Quality Control Plan for the Central Coast.

Croyle, Z. 2009. Analysis of Baseflow Trends Related to Upland Groundwater Pumping for Los Garzas, San Clemente, Potrero, and San Jose Creeks. Master's Thesis. California State University, Monterey Bay.

Fetter, C. W. 1977. Statistical analysis of the impact of groundwater pumping on low-flow hydrology. *Journal of American Association* 32(4):733-744.

Glasser, S., J. Gauthier-Warinner, J. Gurrieri, J. Kelly, P. Tucci, P. Summers, M. Wireman, and K. McCormack. 2007. Technical Guide to Managing Groundwater Resources. U.S. Department of Agriculture, FS-881.

Hayes, S. A., M. H. Bond., C. V. Hanson, E. V. Freund, J. J. Smith, E. C. Anderson, A. J. Ammann, and R. B. MacFarlane. 2008. Steelhead growth in a small Central California watershed: upstream and estuarine rearing patterns. *Transactions of the American Fisheries Society* 137:114-128.

Hayes, S. A., M. H. Bond. C. V. Hanson, A. W. Jones., A. J. Ammann, J. A. Harding, A. L. Collins, J. Peres, and R. B. MacFarlane. 2011. Down, up, down and "smolting" twice? Seasonal movement patterns by juvenile steelhead (*Oncorhynchus mykiss*) in a coastal watershed with a bar closing estuary. *Canadian Journal of Fisheries and Aquatic Sciences* 68(80:1341-1350.

Heath, R. C. 1983. Basic Ground-Water Hydrology. U.S. Geological Survey. Water Supply Paper 2220.

Hebert, A. 2016. Impacts to Anadromous Fish through Groundwater Extraction. Master's Project and Capstone. 366. University of San Francisco.

National Marine Fisheries Service. 2016. South-Central/Southern California Coast Steelhead Recovery Planning Domain. 5-Year Review: Summary and Evaluation. Southern California Coast Steelhead District Population segment National Marine Fisheries Service. West Coast Region. California Coastal Office. Long Beach, California.

National Marine Fisheries Service. 2012. Southern California Steelhead Recovery Plan. National Marine Fisheries Service, West Coast Region, Long Beach, California.

Sophocleous, M. 2002. Interactions between Groundwater and Surface Water: The State of the Science. *Hydrogeology Journal* 10.1 (2002): 52-67.

SWRCB (State Water Resources Control Board). 2011. F*inal Environmental Impact Report for Consideration of Modifications to the U.S. Bureau of Reclamation's Water Right Permits 11308 and 11310 (Applications 11331 and 11332) to Protect Public Trust Values and Downstream Water Rights on the Santa Ynez River below Bradbury Dam (Cachuma Reservoir).*

The Nature Conservancy. 2019. Groundwater Dependent Ecosystems under the Sustainable Groundwater Management Act. Guidance for Preparing Groundwater Sustainability Plans.

Central Coast Regional Water Quality Control Board

June 24, 2021

VIA ELECTRONIC MAIL

Mr. Bill Buelow, PG
Groundwater Program Manager
Santa Ynez River Water Conservation District
Eastern Management Area Groundwater Sustainability Agency
bbuelow@syrwcd.com

Dear Mr. Buelow:

RECOMMENDATION FOR COORDINATION BETWEEN EASTERN MANAGEMENT AREA GROUNDWATER SUSTAINABILITY AGENCY AND LOS OLIVOS COMMUNITY SERVICES DISTRICT, SANTA BARBARA COUNTY

The Central Coast Regional Water Quality Control Board (Central Coast Water Board) is a state agency that implements state and federal water quality laws within the central coast region. The Santa Ynez Eastern Management Area falls within the jurisdictional area of the central coast region and as such, the Central Coast Water Board has an interest in monitoring, preserving, and restoring water quality within the area. Central Coast Water Board staff has received communication from the Los Olivos Community Services District (CSD) regarding a groundwater recharge and monitoring program associated with implementation of sewer and wastewater treatment programs that may be mutually beneficial to the Los Olivos community and the Eastern Management Area Groundwater Sustainability Agency (GSA). Specifically, the Los Olivos CSD intends to collect, treat, and recycle wastewater and subsequently recharge that recycled water into the Santa Ynez groundwater basin within the Eastern Management Area. This project would require a groundwater monitoring network and would provide a source of recharge to the basin. Due to the nexus between the CSD's goals and recharge (and associated monitoring) needed by the GSA to manage the groundwater basin, the Central Coast Water Board encourages the GSA to coordinate with the CSD to identify opportunities for resource sharing (e.g., monitoring wells) and/or acquisition of mutually beneficial funding (grants, loans, etc.). For instance, the GSA may have opportunities to acquire grants or loans supporting groundwater recharge projects that are tied to the Sustainable Groundwater Management Act (e.g., Proposition 68[1]) whereas such funding opportunities are not available to the CSD. Conversely, the CSD may have access to funding sources that are not available to the GSA.

[1] Proposition 68 provides a minimum of $103 million in funds for projects that support groundwater recharge, water supply reliability, or prevent or clean up contamination of groundwater that serves as a source of drinking water. https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater

The Los Olivos area has been identified as a problem area both by the Central Coast Water Board and Santa Barbara County due to the decades-long problems with wastewater disposal via on-site wastewater treatment systems (septic systems). As such, the Central Coast Water Board supports efforts to develop a communitywide wastewater collection and treatment system in Los Olivos and encourages coordination between the CSD and GSA that could ultimately benefit groundwater quality and sustainability.

The Central Coast Water Board staff thanks the Eastern Management Area GSA for its consideration on this topic and for the work being done to sustainably manage groundwater resources in the Santa Ynez groundwater basin. If you have questions or would like to discuss in greater detail, please feel free to reach out to James Bishop, Daniel Pelikan, or Diane Kukol at the Central Coast Water Board:

James Bishop, P.G.
Engineering Geologist
Central Coast Water Board
James.Bishop@waterboards.ca.gov
805-542-4628

Daniel Pelikan, P.G., C.Hg.
Engineering Geologist
Central Coast Water Board
Daniel.Pelikan@Waterboards.ca.gov
805-549-3880

Diane Kukol, P.G.
Senior Engineering Geologist
Central Coast Water Board
Diane.Kukol@Waterboards.ca.gov
805-542-4637

Sincerely,

for Matthew T. Keeling
Executive Officer

cc:

Matt Keeling, Central Coast Water Board, Matt.Keeling@Waterboards.ca.gov

Jennifer Epp, Central Coast Water Board, Jennifer.Epp@Waterboards.ca.gov

Diane Kukol, Central Coast Water Board, Diane.Kukol@Waterboards.ca.gov

Natalie Stork, State Water Resources Control Board, Natalie.Stork@Waterboards.ca.gov

Daniel Pelikan, Central Coast Water Board, Daniel.Pelikan@Waterboards.ca.gov

Sarah Sugar, State Water Resources Control Board, sarah.sugar@waterboards.ca.gov

James Bishop, Central Coast Water Board, James.Bishop@Waterboards.ca.gov

Los Olivos Community Services District, losolivoscsd@gmail.com

Douglas Pike, Los Olivos Community Services District, dpike@mnsengineers.com

R:\RB3\Shared\SGMA\Santa Ynez\Santa Ynez CSD.docx

Santa Ynez Water Group
c/o Doug Circle
Rancho Cañada de Los Pinos LLC
doug@circlevision.com

July 5, 2021

Board of Directors, Santa Ynez River Valley Basin **Eastern Management Area GSA**
Chair: Brett Marymee, SYRWCD (Cindy Allan, Alternate)
Brad Joos, SYRWCD Improvement District #1 (Paeter Garcia, Alternate)
Karen Waite, City of Solvang (Ryan Toussaint, Alternate)
Joan Hartman, County of Santa Barbara (Meighan Dietenhofer Alternate)

c/o William (Bill) Buelow
Santa Ynez River Water Conservation District
3669 Sagunto Street, Suite 101
Santa Ynez, CA 93460

Transmitted via email attachment to bbuelow@syrwcd.com

Re: EMA Draft Sustainable Management Criteria "Section"

Dear Directors and Staff:

As you know the Santa Ynez Water Group (SYWG) was formed to engage on behalf of landowners with the GSAs concerning development of the Santa Ynez River Valley GSPs. SYWG includes, vineyards, vegetables, and other interests and currently represents 54 landowners and 7,853 acres in the Santa Ynez River Valley Basin.

SYWG has been consistent in its comments that the sustainable management criteria (SMC) and projects and management actions (PMA) should be develop in a manner that ensures meaningful engagement with the agricultural landowners in the Basin to ensure the most equitable and cost-effective PMAs can be developed. We are disappointed that the EMA has chosen to keep the agricultural landowners at arm's length in this process and work very closely the City of Solvang and ID-1 on the development of SMC that are favorable for them. The unreasonably short comment period on the SMC memo – two weeks with a holiday – is the latest evidence that EMA does not intend to seriously consider the impacts on land values and agribusiness in the planning process. The unreasonably short SMC memo comment period was inadequate for meaningful stakeholder review and comment and to prepare for the corresponding Citizens Advisory Group meeting. We reserve the right to comment later in the process.

Sincerely,

Doug Circle

cc: SYWG Members
Bryan Bondy, Bondy Groundwater Consulting, Inc.

CENTRAL MANAGMENT AREA
CITIZEN ADVISORY GROUP
MEMORANDUM

DATE: July 26, 2021

TO: CMA GSA Committee

FROM: CMA Citizen Advisory Group
(representative Len Fleckenstein)

SUBJECT: Review and Discussion Draft Numeric Groundwater Model Technical Memorandum

---

Attendees
CMA CAG Members in attendance: Deby Laranjo, Sharyne Merritt, Larry Lahr, Len Fleckenstein, and Jeff Newton

Staff in attendance: Bill Buelow (SYRWCD)
Consultants in attendance: Jean Moran and Curtis Lawler (Stetson Engineers)

Purpose
The CMA GSA Committee requested staff for the GSA agencies to coordinate meetings of the CMA CAG. Through a coordinated effort, the CAG held a meeting via teleconference due to the COVID-19 restrictions. The meeting was held on June 17, 2021. The purpose of the meeting was for the CMA CAG (CAG) to review the Draft Numeric Groundwater Model Technical Memorandum. The Memorandum was prepared by the Stetson Engineer's team. A copy of the document was made available to the CAG prior to the meeting at www.SantaYnezWater.org.

CAG Comments on the Draft Water Budget Technical Memorandum:
Each member of the CAG was given the opportunity to ask questions or make comments on the Draft Technical Memo. Discussion occurred with each question and comment by various members of the CAG, Staff and Consultants. Below is a summary of the comments and questions by topic:

Timeliness of Water Data

- CAG members noted that the most recent data shown in the Technical Memorandum is for 2018 which wouldn't account for recent increase in agriculture between Buellton and Lompoc. Can more recent data be included?
    - Consultant answered that new data would have to be incorporated after a plan is prepared, i.e., as part of plan updates post-2022.

- Also, many of the new crops may be drawing on river water from alluvium, so they wouldn't impact uplands groundwater.
- Consultant displayed a graph showing water levels are higher now compared to 2018. Graph is US Bureau of Reclamation's (USBR) data of total dewatered storage between Bradbury Dam and SY River narrows near Lompoc. Wells are monitored monthly by USBR.

River Alluvium vs. Groundwater

- CAG members expressed some confusion or uncertainty about relationship between the Santa Ynez River Alluvium and the groundwater basin. There was a lengthy discussion of the relationship between the Santa Ynez River Alluvium, and uplands groundwater basins. All agreed on the need to explain the relationship in technical memos and the final GSP.
  - Consultant noted that explaining the relationship is complex, because the State Water Quality Control Board manages water rights and usage from the river alluvium, whereas CA Dept of Water Resources oversees SGMA implementation for development of GSPs.
  - In the CMA, there are areas where the Santa Ynez River Alluvium is underlain by bedrock/Monterey shale, and some areas where it is underlain by the uplands groundwater basin.
  - Staff reminded attendees that the river alluvium gets replenished by rainfall and releases from Cachuma Reservoir, including fish-flow releases. SYRWCD is the entity which requests Water-Rights Releases to the USBR.
- Consultant noted that the GSA agreed to set conservative minimum thresholds for groundwater levels at 15 feet below recent historically low levels. SGMA is intended to manage groundwater, not surface water. However, the SGMA states that implementation of the GSP should not cause significant and unreasonable depletions of inter-connected surface water.
- CAG members expressed a desire to see the GSP clarify the legal and technical distinctions between wells set in the river alluvium and groundwater wells set in the basin. CAG members further recommended that the GSP include definitions of surface wells and groundwater wells, along with a map showing alluvial and uplands groundwater wells, so the public can understand the distinction.
  - Consultant expects the final plan could include a requirement for some type of well registration to clearly indicate whether a well is drawing from the alluvium (and therefore subject to SWQCB permits) or from the groundwater (and therefore subject to any requirements of the GSP).
  - Staff noted that some wells located in the SYRWCD's Zone A (within the Santa Ynez River bed) do not draw from the river alluvium but are actually deep wells drawing from the groundwater basin below the alluvium. For wells in the Santa Ynez River Alluvium, staff indicated well depths will be reviewed and reports of diversion to the SWRCB will be verified, as requested by DWR.
  - Staff indicated that the Hydrogeological Conceptual Model (HCM) will be edited to be clearer on these distinctions.

    - Consultant displayed figure from HCM showing wells in alluvium; these well owners will have to register their wells as either alluvial wells or groundwater wells.
- CAG member recommended the text should not say "groundwater pumped as surface water"; instead the text should either say it's groundwater or it's alluvial/surface water being pumped.
    - Consultant agreed to do global search for use of term "pumped as surface water".

Data on Existing Wells

- A CAG member asked if we have an accurate count of the number of wells in the CMA.
    - Staff believes SYRWCD's data set is good; however, the data lacks a lot of detailed information that would be needed for future water management. The GSP could require updated information.
    - Groundwater pumping data is currently self-reported by well owners to SYRWCD. Surface water diverters are also required to report production to the State Water Resources Control Board.
    - City of Buellton already has meters on its wells.
    - The GSP could potentially require metering for groundwater wells.

Well Production & Pumping Data

- CAG noted a need for consistent order of CMA and WMA data in Table 7 (Production Well Summary) and Table 8 (Pumping Summary).
- CAG asked whether it's confusing to show a graph with combined CMA and WMA data because recharge rate in CMA differs from recharge in WMA.
    - Staff explained the combining of data was needed for the numeric groundwater model, and that the model originated in work done for the WMA. Consultant noted this combined data allowed them to see how water flows from CMA into WMA, especially along the river.
    - Groundwater levels in the Santa Rita area are lower than in Buellton Uplands, suggesting a hydrogeological barrier separating the groundwater basins of CMA and WMA.

Cannabis Water Usage

- Discussion focused on data available to determine water usage by cannabis growers.
- Staff noted SYRWCD has no official irrigation factors for cannabis. Usage varies depending on inside vs. outside plantings, among other factors. Assumed to be similar to corn, which is one of the higher crop irrigation factors.
    - District needs to develop water factor(s) for cannabis, depending on how its grown.
- CAG noted that the State restricts cannabis growers from using surface/alluvial water between April and November. Thus, it is important to know whether a grower's well is drawing from alluvium or from groundwater.
    - Staff will verify that cannabis growers (in order to get a County permit) are required to meter their water usage. Unsure when/how usage would be reported.
    - County land use planners should inform SYRWCD about permit applications so staff can better know if cannabis grower's water source is surface or groundwater.

Staff would be able to review and comment on pending projects if Board of Supervisors directed County planners to share information with SYRWCD.

Evapotranspiration (ET):

- CAG noted evapotranspiration estimate is high: about half as much as agricultural usage. What is the impact on groundwater rather than on surface water? Is the ET being subtracted from estimate of groundwater volume?
    - Consultant indicated that ET is estimated based on acreage of species and water usage factors. Data from the Nature Conservancy (from 1985-2015) shows riparian flora is doing well in the CMA.
    - The ET estimate would be subtracted from the alluvial water supply estimate. Map figure 14 shows ET is taking place in the riparian zones.
    - Consultant also noted that from a legal perspective the flora influences the surface water above the Lompoc Narrows, but the flora influences the groundwater below the narrows.
    - Consultant agrees to add info to the ET table to show distinction between ET influencing surface water versus groundwater. Consultant will add columns to Table 9 to show ET relation to CMA vs. WMA; data is from the model using 4-acre cells.
    - Staff noted that this riparian ET information needs to be included because it's all part of the CMA's water budget which must account for both surface water and groundwater.

Groundwater Modeling

- CAG asked about the calibration of the model.
- Consultant indicated that the model calibrates well with measured groundwater levels.
- The model's uncertainty is in knowing exactly how much water is being pumped at each well; therefore, consultants had to make estimates for the model inputs. The model will need to be refined in future years.
- CAG member questioned whether Table 11 (Parameter Adjustment/Sensitivity Analysis) has errors regarding impact of recharge. Table seems to show an increase in recharge having a large negative impact on groundwater.
    - Consultant will review and check the table.