Item 4 Order No. R1-2025-0011 Scott and Shasta TMDL Conditional Waivers of Waste Discharge Requirements Short Term Renewal Hearing to Consider Adoption Yreka, California

Water Boards

Elias Scott. Agriculture and Enforcement. May 7, 2025

Hearing Topics

- Watershed Overview, Impairments, TMDLs, Action Plans
- Past Programmatic Approach
- Need for Renewal and Proposed Order
- Public Review Process
- Summary of Public Comment and Responses
- Staff Recommendation



Scott and Shasta Watersheds

- Located in the Klamath Basin
- Natal streams for Chinook Salmon and SONCC Coho salmon
- Unique, climate-resilient cold-water resources
- Scott Snow-melt driven, deep alluvial basin
- Shasta Spring fed, volcanic, stable base flow
- Rural communities with a largely agricultural economy
- Impacted by legacy mining, timber harvest, and ranching – these legacy impacts continue to contribute to impairments
- Ongoing impacts due to some current ranching practices, rural roads, and timber harvest



GIS user community

Scott and Shasta Watersheds

- Scott 303(d) listings for Sediment, Temperature, Biostimulatory Conditions
 - Listed as impaired for sediment in 1992
 - Listed as impaired for temperature in 1998
 - Listed as impaired for biostimulatory conditions in 2012
 - TMDLs for sediment and temperature Adopted by the Regional Water Board on December 7, 2005
 - Approved by the EPA on September 8, 2006
- Shasta 303(d) listings for Temperature, Dissolved Oxygen
 - Listed as impaired for dissolved oxygen in 1992
 - Listed as impaired for temperature in 1994
 - TMDLs for dissolved oxygen and temperature adopted by the Regional Water Board on June 29, 2006
 - Approved by the EPA on January 26, 2007



Drivers of Water Quality Impairments – Scott River Watershed

Sediment	Temperature	Biostimulatory Conditions*
Road-related Sources	Shade	Shade
Streamside Sources	Stream Flow (Surface and GW)	Nutrient Sources
Landslides	Channel Geometry	Onstream Impoundments
	Microclimate	Channel Geometry
		Streamflow (Surface and GW)

*Note: the Biostimulatory Conditions Listing does not have an associated TMDL and the impairment is being confirmed through monitoring.

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CHAPTER 4. IMPLEMENTATION

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		iver Sediment and Temperature TMDL Implementation Actions*
Topic	Responsible	Actions
Grading	Parties County of Siskiyou (County). Regional Water Board.	 The Regional Water Board encourages the County to develop a comprehensive ordinance addressing roads, land disturbance activities, and grading activities outside of subdivisions in the Scott River watershed, or an equivalent County- enforceable mechanism, by September 8, 2008. The ordinance may be specific to the Scott River watershed or county-wide in scope.
Dredge Mining	Regional Water Board.	 Regional Water Board staff shall review laws and regulations that address water quality effects of suction dredge mining and shall investigate the impact of suction dredge mining activities on sediment and temperature loads in the Scott River watershed by September 8, 2009. If Regional Water Board staff find that dredge mining activities are discharging deleterious sediment waste and/or resulting in elevated water temperatures, staff shall propose, for Board consideration, the regulation of such discharges through appropriate permitting or enforcement actions.
Temperature & Vegetation	Parties Responsible for Vegetation that Shades Water Bodies. •Regional Water Board.	 The Regional Water Board encourages parties responsible for vegetation that provides shade to a waterbody in the Scott River watershed to preserve and restore such vegetation. This may include planting riparian trees, minimizing the removal of vegetation that provides shade to a waterbody, and minimizing activities that might suppress the growth of new or existing vegetation (e.g., allowing cattle to eat and trample riparian vegetation). To address compliance with the Nonpoint Source Policy, the Regional Water Board shall develop and take appropriate permitting and enforcement actions to address the human-caused removal and suppression of vegetation that provides shade to a water body in the Scott River watershed. The Regional Water Board of the preparation and development of appropriate permitting and enforcement actions by September 8, 2009.
Water Use	Water Users. County of Siskiyou (County). Stakeholders Regional Water Board.	 The Regional Water Board encourages water users to develop and implement water conservation practices. The Regional Water Board requests the County, in cooperation with other appropriate stakeholders, to study the connection between groundwater and surface water, the impacts of groundwater use on surface flow and beneficial uses, and the impacts of groundwater levels on the health of riparian vegetation in the Scott River watershed. The study should: (1) consider groundwater area delineated in the Scott River Adjuctation, *(2) the amount of water transpired by trees and other vegetation, and (3), if deleterious impacts to beneficial uses are found, identify potential solutions including mitigation measures and changes to management plans. Should the County determine that it and its stakeholders are able to commit to conducting the above study, the County, in cooperation with other stakeholders, shall develop a study plan by September 8, 2007. The study plan shall include: (1) goals and objectives; (2) data collection methods; (3) general locations of data collection sites; (4) data analysis methods; (5) quality control and quality assurance protocols; (6) responsible parties; (7) timelines and due dates for data collection, stata analysis, and reporting; (8) financial resources to be used; and (9) provisions for adaptive change to the study plan and to the study based on additional study data and results, as they are available.
Flood Control & Bank Stabilization	Parties Responsible for Flood Control Structures or Dredge, Fill, and/or Bank Stabilization Activities. Regional Water Board.	 The Regional Water Board encourages parties responsible for levees and other flood control structures to plant and restore stream banks on and around existing flood control structures. The Regional Water Board shall rely on existing authorities and regulatory tools, such as the 401 Water Quality Certification program, to ensure that flood control and bank stabilization activities in the Scott River watershed are conducted in a manner that minimizes the removal or suppression of vegetation that provides shade to a waterbody, prevents or minimizes sediment delivery, and minimizes changes in channel morphology that could increase water temperatures.

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Table 4-10 Scott River Sediment and Temperature TMDL Implementation Actions*		
Topic	Responsible Parties	Actions
U.S. Forest Service U.S. Bureau of Land Management	U.S. Forest Service (USFS). U.S. Bureau of Land Management (BLM). Regional Water Board.	 Contents Related to Elevated Water Temperatures: A commitment by the USFS/BLM to continue to implement the Riparian Reserve buffer width requirements. A monitoring plan to ensure that the Riparian Reserve buffer widths are effective at preventing or minimizing effects on natural shade. A commitment by the USFS/BLM to implement the Riparian Reserve monitoring plan and conduct adaptive management. Contents Related to Grazing Activities: A date for the completion of a description of grazing management practices and riparian monitoring activities implemented in grazing allotments on USFS/BLM lands. A commitment by the USFS/BLM and the Regional Water Board to determine if existing grazing management practices and monitoring activities are adequate and effective at preventing, reducing, and controlling sediment waste discharges and elevated water temperatures. A commitment by the USFS/BLM to develop revised grazing management practices by inadequate or ineffective, subject to the approval of the Regional Water Board's Executive Officer. A commitment by the USFS/BLM to develop revised grazing management practices and monitoring activities, should existing measures be inadequate or ineffective, subject to the approval of the Regional Water Board's Executive Officer.
Grazing	Private Parties Conducting Grazing Activities. Regional Water Board.	 The Regional Water Board encourages the parties responsible for grazing activities to take necessary actions to prevent, minimize, and control sediment waste discharges and elevated water temperatures. The Regional Water Board's Executive Officer shall require parties responsible for grazing activities on private lands in the Scott River watershed to develop, submit, and implement a Grazing and Riparian Management Plan and a Monitoring Plan on an as-needed, site-specific basis. A Grazing and Riparian Management Plan shall describe, in detail, (1) sediment waste discharges and sources of elevated water temperatures caused by livestock grazing, (2) how and when such sources are to be controlled and monitored, and (3) management practices that will prevent and reduce future sources. By September 8, 2008, criteria shall be developed for determining when a Grazing and Riparian Management Plan shall be required, although nothing precludes the Executive Officer from requiring Grazing and Riparian Management Plans prior to this date. Should human activities that will likely result in sediment waste discharges and/or elevated water temperatures be proposed or identified, through a Grazing and Riparian Management Plan or by other means, the responsible party(ies) shall be required to implement their Grazing and Riparian Management Plans prior to this date.
Siskiyou RCD Soott River Watershed Council	Siskiyou Resource Conservation District (SRCD). Scott River Watershed Council (SRWC). Regional Water Board.	 The Regional Water Board and staff shall increase efforts to work cooperatively with the SRCD and SRWC to provide technical support and information to landowners and stakeholders in the Scott River watershed and to coordinate educational and outreach efforts. The Regional Water Board shall encourage the SRWC to (1) implement the strategic actions specified in the Strategic Action Plan and (2) assist landowners in developing and implementing management practices that are adequate and effective at preventing, minimizing, and controlling sediment waste discharges and elevated water temperatures.

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Temperature & Vegetation	 Parties Responsible for Vegetation that Shades Water Bodies. Regional Water Board. 	 The Regional Water Board encourages parties responsible for vegetation that provides shade to a waterbody in the Scott River watershed to preserve and restore such vegetation. This may include planting riparian trees, minimizing the removal of vegetation that provides shade to a waterbody, and minimizing activities that might suppress the growth of new or existing vegetation (e.g., allowing cattle to eat and trample riparian vegetation). To address compliance with the Nonpoint Source Policy, the Regional Water Board shall develop and take appropriate permitting and enforcement actions to address the human-caused removal and suppression of vegetation that provides shade to a water body in the Scott River watershed. The Regional Water Board's Executive Officer shall report to the Regional Water Board on the status of the preparation and development of appropriate permitting and enforcement actions
		by September 8, 2009.

TMDL Action Plan - Scott Water Use The Regional Water Board encourages water users to develop and implement Water Users. water conservation practices. County of The Regional Water Board requests the County, in cooperation with other Siskiyou (County). appropriate stakeholders, to study the connection between groundwater and surface water, the impacts of groundwater use on surface flow and beneficial Stakeholders uses, and the impacts of groundwater levels on the health of riparian vegetation Regional in the Scott River watershed. The study should: (1) consider groundwater Water Board. located both within and outside of the interconnected groundwater area delineated in the Scott River Adjudication,** (2) the amount of water transpired by trees and other vegetation, and (3), if deleterious impacts to beneficial uses are found, identify potential solutions including mitigation measures and changes to management plans. Should the County determine that it and its stakeholders are able to commit to conducting the above study, the County, in cooperation with other stakeholders, shall develop a study plan by September 8, 2007. The study plan shall include: (1) goals and objectives; (2) data collection methods; (3) general locations of data collection sites; (4) data analysis methods; (5) quality control and quality assurance protocols; (6) responsible parties; (7) timelines and due dates for data collection, data analysis, and reporting; (8) financial resources to be used; and (9) provisions for adaptive change to the study plan and to the study based on additional study data and results, as they are available.

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Grazing	 Private Parties Conducting Grazing Activities. Regional Water Board. 	 The Regional Water Board encourages the parties responsible for grazing activities to take necessary actions to prevent, minimize, and control sediment waste discharges and elevated water temperatures. The Regional Water Board's Executive Officer shall require parties responsible for grazing activities on private lands in the Scott River watershed to develop, submit, and implement a Grazing and Riparian Management Plan and a Monitoring Plan on an as-needed, site-specific basis. A Grazing and Riparian Management Plan shall describe, in detail, (1) sediment waste discharges and sources of elevated water temperatures caused by livestock grazing, (2) how and when such sources are to be controlled and monitored, and (3) management practices that will prevent and reduce future sources. By September 8, 2008, criteria shall be developed for determining when a Grazing and Riparian Management Plan shall be required, although nothing precludes the Executive Officer from requiring Grazing and Riparian Management Plans prior to this date. Should human activities that will likely result in sediment waste discharges and/or elevated water temperatures be proposed or identified, through a Grazing and Riparian Management Plan or by other means, the responsible party(ies) shall be required to implement their Grazing and Riparian Management Plans and monitor through appropriate permitting or enforcement actions.

Drivers of Water Quality Impairments – Shasta River Watershed

Dissolved Oxygen	Temperature
Shade	Shade
Tailwater Return Flow	Tailwater Return Flows
Instream Flow	Instream Flow and Surface Diversion
City of Yreka non-point source and wastewater infiltration	Groundwater Accretion and Cold Spring inflow
Lake Shastina and Minor Impoundments	Lake Shastina and Minor Impoundments

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Source or Land Use Activity	Responsible Parties	Actions to Address Dissolved Oxygen and Water Temperature Impairment
Range and Riparian Land Management (cont.)	Regional Water Board (cont.)	 The Regional Water Board shall take appropriate permitting actions as necessary to address the removal and suppression of vegetation that provides shade to a water body in the Shasta River watershed. Such actions may include, but are not limited to, prohibitions, waste discharge requirements (WDRs) or waivers of WDRs for grazing and rangeland activities, farming activities are water bodies, stream bank stabilization activities, and other land uses that may remove and/or suppress vegetation that provides shade to a water body. Should prohibitions, waivers or WDRs be developed, they may apply to the entire North Coast Region or just to the Shasta River watershed. Within ten years of EPA approval of the TMDL (by January 26, 2017), all identified discharges associated with riparian land use activities shall be in compliance with water quality standards, the TMDLs, and
		the NPS Policy.
Tailwater Return Flows	Irrigators	Landowner Actions: Those that oversee and manage tailwater discharges from irrigated lands in the Shasta River watershed, which may include landowners, lessees, and land managers (collectively referred to as irrigators), should employ land stewardship and irrigation management practices and activities that minimize, control, and preferably prevent discharges of fine sediment, nutrients and other oxygen consuming materials, and elevated water temperatures from affecting waters of the Shasta River and its tributaries.
		 Irrigators should implement the applicable management measures for tailwater return flows from the following sources: Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy) (SWRCB 2004 or as amended). Shasta Watershed Restoration Plan (November 1997). Shasta Valley Resource Conservation District Master Incidental Take Permit (ITP) Application (Shasta RCD 2005). Recovery Strategy for California Coho Salmon (Coho Recovery Strategy) (CDFG 2004).
		See Appendix B of this Action Plan for examples of some of these tailwater return flow measures.
		In addition, landowners may develop and implement management measures suitable for their site-specific conditions.
		Irrigators should submit annually to the Regional Water Board a written summary of all tallwater return flow management actions taken to help achieve compliance with water quality standards, the TMDLs, and the NPS Policy, either individually or through the Shasta Valley RCD and its CRMP or through the CDFG Coho ITP.
	 Shasta Valley RCD Shasta CRMP 	RCD Actions: The Shasta Valley RCD and its CRMP should: • Assist irrigators in developing and implementing management practices that minimize, control and preferably prevent discharges of fine sediment, nutrients and other oxygen consuming materials, and elevated water temperatures from affecting waters of the Shasta River and its tributaries.

CHAPTER 4. IMPLEMENTATION

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rce or IUse vity	Responsible Parties	Actions to Address Dissolved Oxygen and Water Temperature Impairment
r Use and	Water Diverters	Water Diverter(s) Actions: Water diverters should employ water management practices and activities that result in increased dedicated cold water instream flow in the Shasta River and its tributaries.
		 Water diverters should participate in and implement applicable flow-related measures outlined in the following sources: Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy) (SWRCB 2004 or as amended). Shasta Watershed Restoration Plan (November 1997). Shasta Valley Resource Conservation District Master Incidental Take Permit (ITP) Application (Shasta RCD 2005). Recovery Strategy for California Coho Salmon (Coho Recovery Strategy) (CDFG 2004).
		See Appendix C of this Action Plan for examples of flow related measures.
		In addition, landowners may develop and implement management measures suitable for their site-specific conditions.
		Within two years (by January 26, 2009), and again within four years of EPA approval of the TMDL (by January 26, 2011), water diverters shall report in writing to the Regional Water Board, either individually or through the Shasta Valley RCD and its CRMP, on the measures taken to increase the dedicated cold water instream flow in the Shasta River by 45 cfs or alternative flow regime that achieves the same temperature reductions from May 15 to October 15.
		Within five years of EPA approval of the TMDL (by January 26, 2012), water diverters shall provide a final report to the Regional Water Board, either individually or through the Shasta Valley RCD and its CRMP, on documenting dedicated cold water instream flow in the Shasta River in relation to the 45 cfs goal or alternative flow regime that achieves the same temperature reductions from May 15 to October 15.
		This recommended flow measure does not alter or reallocate water rights in the Shasta or Klamath River watersheds, nor bind the Regional Water Board in future TMDLs, the State Water Board's Division of Water Rights in any water rights decision, or state and federal courts.
	Shasta Valley RCD	RCD Actions: The Shasta Valley RCD and its CRMP should: • Assist water diverters in developing and implementing management
	 Shasta CRMP 	practices that increase dedicated cold water instream flows in the Shasta River and tributaries.
		 Assist water diverters in developing and implementing a monitoring program to evaluate and document implementation and effectiveness of the actions taken to increase dedicated cold water instream flows in the Shasta River.
	CDFG	State Actions: CDFG will: Assist water diverters in developing and implementing management practices that increase dedicated cold water instream flows in the Shasta River and tributaries.

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Range and Riparian Land Management (cont.)	Regional Water Board (cont.)	 The Regional Water Board shall take appropriate permitting actions as necessary to address the removal and suppression of vegetation that provides shade to a water body in the Shasta River watershed. Such actions may include, but are not limited to, prohibitions, waste discharge requirements (WDRs) or waivers of WDRs for grazing and rangeland activities, farming activities near water bodies, stream bank stabilization activities, and other land uses that may remove and/or suppress vegetation that provides shade to a water body. Should prohibitions, waivers or WDRs be developed, they may apply to the entire North Coast Region or just to the Shasta River watershed. Within ten years of EPA approval of the TMDL (by January 26, 2017), all identified discharges associated with riparian land use activities shall be in compliance with water quality standards, the TMDLs, and the NPS Policy.

TMDL Action Plan - Shasta

Water Use and Flow	Water Diverters	Water Diverter(s) Actions: Water diverters should employ water management practices and activities that result in increased dedicated cold water instream flow in the Shasta River and its tributaries.
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Within two years (by January 26, 2009), and again within four years of EPA approval of the TMDL (by January 26, 2011), water diverters shall report in writing to the Regional Water Board, either individually or through the Shasta Valley RCD and its CRMP, on the measures taken to increase the dedicated cold water instream flow in the Shasta River by 45 cfs or alternative flow regime that achieves the same temperature reductions from May 15 to October 15.

Scott and Shasta TMDL Conditional Waivers

- Conditionally waive the requirement for dischargers to submit a report of waste discharge.
- No enrollment, apply to all landowners
- Developed to implement the TMDL Action Plans and control discharges not otherwise permitted.
- Waivers require renewal every 5 years -Iteratively developed from 2006 - 2018
- Agricultural operations (grazing, alfalfa, grain)
- Riparian management measures
- Planning, monitoring, and reporting requirements
- Staff-driven prioritization for implementation



TMDL Conditional Waivers – Finding 18

- 2018 Waivers included language describing the subsequent renewal/update
 - 18. Following the expiration or replacement of this 2018 Order, the Regional Water Board intends to address water quality concerns associated with agriculture in the Shasta River watershed through a permitting program (i.e. order) more consistent with approaches implemented in other parts of the state. The future order is anticipated to follow the same general approach as this 2018 Order, requiring the Dischargers to proactively implement land stewardship practices and activities that minimize, control, and prevent discharges of fine sediment, nutrients, oxygen consuming materials, and elevated solar radiation loads to the Shasta River and tributaries. The future order would continue to involve on-site water quality assessments with Regional Water Board staff. However, the future order may differ from this Order by incorporating a tiered structure, employing multiple levels of permitting rigor commensurate with the level of discharge or threat of discharge, and may require active enrollment procedures and payment of fees. It is likely that the lowest risk tier would be for those properties that have already been assessed by Regional Water Board staff and successfully implemented practices that minimize, control, and prevent discharges of fine sediment, nutrients, oxygen consuming materials, and elevated solar radiation loads to the Shasta River and tributaries. Higher tiers with increased monitoring and reporting requirements would likely apply to those properties that have not developed plans or taken actions to comply with the conditions of this Order. Any future order would be subject to noticing and public comment before consideration of adoption by the Regional Water Board.

TMDL Conditional Waivers – Finding 18

- Develop an Order more consistent with approaches in other parts of the State
- Continue to incentivize proactive water quality measures (restoration, collaboration, etc)
- Continue on-site water quality assessments
- May incorporate a tiered structure based on threat of discharge
- May require active enrollment and fees
- 2023 Short Term Renewal
- Order R1-2023-0005 Adopted to Renew the 2018 Waivers.
- Provide staff time to envision the next iteration of the Permit
- Continue discharge coverage and ensure enforceable water quality protections



TMDL Conditional Waivers – 2023 Short Term Renewal

 Order R1-2023-0005 Adopted to Renew the 2018 Waivers

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- Provide staff time to envision the next iteration of the Permit
- Continue discharge coverage and ensure enforceable water quality protections



TMDL Conditional Waivers – Other Considerations

Since adoption, various changes have occurred

State-wide irrigated lands program precedential requirements

Scott and Shasta Emergency Drought Regulations

Shasta Safe Harbor Agreement

Ongoing Sustainable Groundwater Management Act efforts in both watersheds



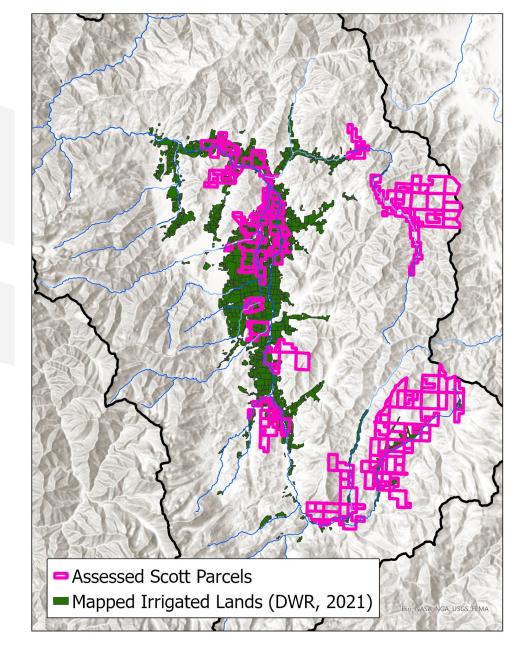
TMDL Conditional Waivers – Benefit

- Provide permit coverage for otherwise unpermitted discharges
- Provide an enforcement mechanism for discharges out of compliance with Waiver conditions
- Provide guidance for landowners, producers, and irrigators regarding TMDL compliance
- Reduce staff burden by eliminating the need for individual WDR development

TMDL Conditional Waivers Progress

Scott

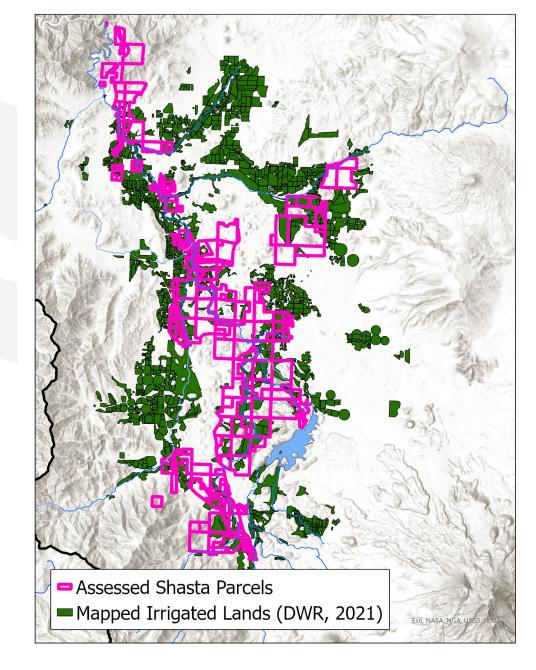
- Assessed 24 Ranches, encompassing 32% of stream frontage miles
- Approved 9 Grazing and Riparian Management Plans



TMDL Conditional Waivers Progress

Shasta

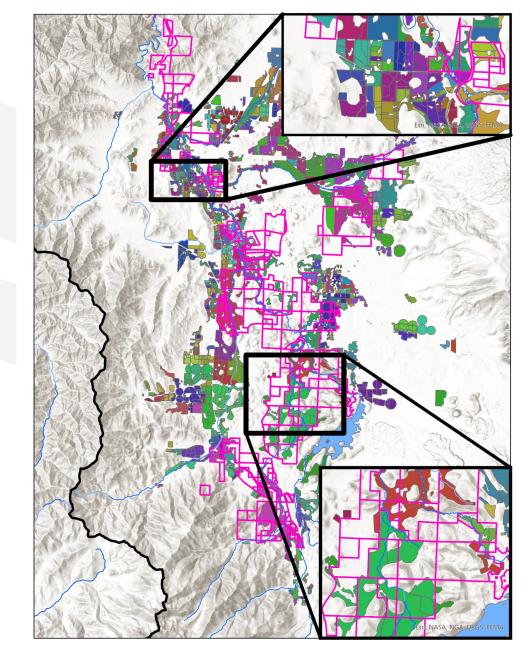
- Assessed 15 Ranches
- Reviewed compliance of Safe Harbor Agreements with Shasta Waiver
- Requested and Approved 6 Plans directly
- Confirmed 5 had Safe Harbor Site Plans that complied with the Waiver
- Issued Enforcement Action for insufficient reporting pursuant to 13267 and the Shasta Waiver



TMDL Conditional Waivers Progress

Land Ownership Configuration

- Both Scott and Shasta Waivers focused on large landowners
- Many small landowners have not been assessed
 - Small ownerships, large Cumulative
 Impact
- Formal enrollment expected to enhance water quality improvements



Need for Renewal

- Staff have determined the need for General Waste Discharge Requirements (GWDR) for the Scott and Shasta
- CEQA will be required
- As work continues GWDR development, discharges still need permit coverage and enforceability
- Allows for more agricultural operations to enter the program
- Current Waiver expires October 7, 2025

Proposed Order - Changes

- Like the 2025 Order: Clean renewal
- Includes findings about:
 - progress to date,
 - WDR Development,
 - CEQA, and
 - Public/Tribal outreach
- Expiration date of October 7, 2026



Proposed Order – Public Engagement

- Public comment period March 5, 2025 through April 4, 2025
- Received one comment Siskiyou County
 - Acknowledged overlap between Waiver, TMDLs, and County's SGMA efforts
 - Requested elements of the Conditional Waivers that address groundwater quality recognize and incorporate the Groundwater Sustainability Agency as a key implementation partner.
 - Response: Collaboration is welcome with the Waivers as well as the ongoing development with the WDR
- No comments received in opposition to the Proposed Order

Staff Recommendation: Adopt as Presented