ACTION PLAN TO ADDRESS ELEVATED WATER TEMPERATURES IN THE EEL RIVER WATERSHED

The USEPA has established Total Maximum Daily Loads for elevated temperature in the Upper Main Eel, Middle Main Eel, Lower Main Eel, South Fork Eel, North Fork Eel, and Middle Fork Eel River Watersheds¹. All of those temperature TMDLs have assigned temperature load allocations corresponding to solar radiation loads that occur when the riparian vegetation is at full potential growth conditions, with allowances for the effects of natural factors that act to reduce those potential growth conditions. The goal of this Action Plan is to establish actions that achieve those TMDL load allocations. The following actions constitute the program of implementation to achieve the Eel River Watershed Temperature TMDLs and are consistent with the *Policy to Implement the Water Quality Objectives for Temperature*.

Source or Land Use Activity and Responsible Party	Implementation Actions
Timber Harvest Activities on Non- Federal Lands Regional Water	<u>Action</u> Regional Water Board staff shall make recommendations for additional measures to ensure the TMDL load allocations and water quality objectives for temperature are achieved during the timber harvest review process, as necessary.
Board	<u>Timeline</u> Ongoing
Timber Harvest Activities on Non- Federal Lands	<u>Action</u> Implement riparian management measures that meet the riparian shade allocations and water quality standards. Where the Forest Practice Rules are not sufficient to meet the TMDL allocations or
Parties conducting timber harvest activities that discharge waste or	water quality standards, implement additional measures as directed by Regional Water Board staff during the timber harvest review process.
have the potential to discharge waste	<u>Timeline</u> Ongoing

¹ Upper Main Eel River and Tributaries (including Tomki Creek, Outlet Creek and Lake Pillsbury) Total Maximum Daily Loads for Temperature and Sediment (2004), Middle Main Eel River and Tributaries (from Dos Rios to South Fork) Total Maximum Daily Loads for Temperature and Sediment (2005), Lower Eel River Total Maximum Daily Loads for Temperature and Sediment (2007), South Fork Eel River Total Maximum Daily Loads for Sediment and Temperature (1999), North Fork Eel River Total Maximum Daily Loads for Sediment and Temperature (2002), and Middle Fork Eel River Total Maximum Daily Loads for Sediment and Temperature (2003), each contain a problem statement, source analysis, load allocation, load allocations, linkage analysis, and margin of safety. Please see the individual TMDL documents for more information.

All Activities on USFS Lands	Action Implement the USFS Waiver of WDRs as a mechanism for compliance with the water quality objectives for temperature.
Regional Water Board	Action Regional Water Board staff shall make recommendations for additional measures to ensure the water quality objective for temperature is achieved during the project review process, as necessary.
	<u>Timeline</u> Ongoing
All Activities on Lands Managed by the USFS	Action Conduct land management activities in compliance with the USFS Waiver.
USFS	<u>Timeline</u> As required in the waiver of WDRs.
Agricultural Activities on Non- Federal Lands	Action Develop and implement the Agricultural Lands Discharge Program as a mechanism for compliance with temperature objectives.
Regional Water Board	Timeline Upon adoption
Agricultural Activities on Non- Federal Lands	Action Implement riparian management measures that meet the riparian shade load allocations and water quality standards.
Parties conducting activities associated with	<u>Timeline</u> Ongoing
agriculture that discharge waste or have the potential to discharge waste	Action Conduct land management activities in compliance with the Agricultural Lands Discharge Program when adopted.
on nonfederal land, except dairies.	Timeline Upon adoption of the Agricultural Lands Discharge Program

Road Construction and Maintenance of State Highway Facilities	Action Implement the NPDES Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, Department of Transportation (Caltrans permit).
State Water Resources Control Board	<u>Timeline</u> Ongoing
Regional Water Board	
Road Construction and Maintenance of State Highway Facilities Caltrans	Action Conduct road construction, maintenance and associatedactivities in compliance with the Caltrans permit. <u>Timeline</u> Ongoing
Road Construction and Associated Maintenance on County Lands	Action Implement the Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted under the Five Counties Salmonid Conservation Program (5C Waiver).
Regional Water Board	Action In the event that a county does not show intent to implement the 5C Program, develop WDRs or a conditional waiver of WDRs for that county.
Road	Ongoing
Construction and Maintenance on County Lands	Action Conduct road construction and maintenance in compliance with the 5C Waiver.
Humboldt, Mendocino, and Trinity Counties	<u>Timeline</u> Pursuant to the 5C Program timelines.
Dairy Operations Regional Water Board	Action Implement temperature allocations through the Water Quality Compliance Program for Dairies & Concentrated Animal Feeding Operations (Dairy Program).
	<u>Timeline</u> Ongoing

Dairy Operations Dairy operators	Action Conduct land management activities in compliance with the Dairy Program.
	<u>Timeline</u> Ongoing
Dredge and Fill Activities in Waters of the State	Action Incorporate measures to meet the temperature allocations in 401 water quality certifications.
Regional Water Board	Timeline Ongoing
Waste Discharge Requirement Program	Action Incorporate measures to meet the temperature allocations and water quality objectives for temperature in individual Waste Discharge Requirements and Waivers thereof.
Regional Water Board	<u>Timeline</u> Ongoing
Water Use Regional Water Board State Water Resources Control	<u>Action</u> Work with other agencies and non-governmental organizations to support off-stream storage projects for water diverters currently diverting directly from streams during summer. Work with other agencies and non-governmental organizations to streamline permitting process for conversion of on-stream to off-stream storage.
Board, Division of Water Rights	<u>Timeline</u> Ongoing
Water Use Water users	Action The Regional Water Board encourages all water users to implement water conservation practices and develop off-stream storage facilities to minimize water diversions during low flow periods.
	<u>Timeline</u> Ongoing

Water Use	Action
Regional Water Board State Water Resources Control Board, Division of Water Rights	 Pursue instream flow studies, including the following actions: Work with other agencies and non-governmental organizations to support instream flow studies to; (1) quantify flows necessary for beneficial use support, (2) quantify flow impacts to assist outreach and education efforts, or (3) identify opportunities to increase summer low flows. Coordinate with the California Department of Fish and Wildlife on the development, methodologies, and any criteria relevant to instream flow studies. Consider all sources of water, including headwaters, groundwater, and waters flowing in subterranean streams.
	Until complete
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	 <u>Action</u> Support third-party efforts to address temperature related concerns, including: Education of water users on the importance of water conservation efforts, Education of water users on water conservation practices and opportunities, Assistance for water users in the implementation of water conservation practices, Restoration of riparian vegetation, Other efforts that address water temperature-related concerns.
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Take actions to address the temperature impacts of marijuana cultivation, through the following: • Outreach and education, • Grant support for water conservation efforts, • Coordination with other agencies, • Enforcement actions. <u>Timeline</u> Ongoing

Water Use	Action Continue to coordinate with the State Water Board's Division of
Regional Water Board	Water Rights by participating in the water right application and petition process, providing monitoring recommendations, joint inspections as appropriate, submittal of data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participation in instream flow studies, participation in proceedings related to instream flow, and any other appropriate means to help ensure that the terms of water right permits and licenses are consistent with the intrastate water quality objective for temperature.

ACTION PLAN TO ADDRESS ELEVATED WATER TEMPERATURES IN THE NAVARRO RIVER WATERSHED

The USEPA has established Total Maximum Daily Loads for elevated temperature in the Navarro². The Navarro River Watershed Temperature TMDL has assigned temperature load allocations corresponding to solar radiation loads that occur when the riparian vegetation is at full potential growth conditions, with allowances for the effects of natural factors that act to reduce those potential growth conditions. The goal of this Action Plan is to establish actions that achieve those TMDL load allocations. The Navarro River Watershed Temperature TMDL also identifies the alteration of flow as a factor that may elevate water temperatures in some situations, and sets a target of no increases in diverted flows unless it can be demonstrated that the flow reduction will not increase water temperatures. The following actions constitute a program of implementation to achieve the Navarro River Watershed Temperature TMDL and are consistent with the *Policy to Implement the Water Quality Objectives for Temperature*.

² The Navarro River Total Maximum Daily Loads for Sediment and Temperature (2000) contains a problem statement, source analysis, load allocation, numeric targets, load allocations, linkage analysis, and margin of safety. Please see the TMDL and supporting documents for more information.

Source or Land Use Activity and	Implementation Actions
Responsible Party	
Timber Harvest Activities on Non- Federal Lands Regional Water Board	Action Regional Water Board staff shall make recommendations for additional measures to ensure the TMDL load allocations and water quality objectives for temperature are achieved during the timber harvest review process, as necessary.
board	<u>Timeline</u> Ongoing
Timber Harvest Activities on Non- Federal Lands	<u>Action</u> Implement riparian management measures that meet the riparian shade allocations and water quality standards. Where the Forest Practice Rules are not sufficient to meet the TMDL allocations or
Parties conducting timber harvest activities that discharge waste or	water quality standards, implement additional measures as directed by Regional Water Board staff during the timber harvest review process.
have the potential to discharge waste.	Timeline Ongoing
Agricultural Activities on Non- Federal Lands	Action Develop and implement the Agricultural Lands Discharge Program as a mechanism for compliance with temperature objectives.
Regional Water Board	<u>Timeline</u> Upon adoption
Agricultural Activities on Non- Federal Lands	Action Implement riparian management measures that meet the riparian shade load allocations and water quality standards.
Parties conducting activities associated with	<u>Timeline</u> Ongoing
agriculture that discharge waste or have the potential to discharge waste	Action Conduct land management activities in compliance with the Agricultural Lands Discharge Program when adopted.
on nonfederal land, except dairies.	<u>Timeline</u> Upon adoption of the Agricultural Lands Discharge Program

Road Construction and Maintenance of State Highway Facilities	Action Implement the NPDES Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, Department of Transportation (Caltrans permit).
State Water Resources Control Board	Timeline
Regional Water Board	<u>Timeline</u> Ongoing
Road Construction and Maintenance of State Highway Facilities	<u>Action</u> Conduct road construction, maintenance and associatedactivities in compliance with the Caltrans permit. <u>Timeline</u>
Caltrans	Ongoing
Road Construction and Associated Maintenance on County Lands	Action Implement the Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted under the Five Counties Salmonid Conservation Program (5C Waiver).
Regional Water Board	<u>Action</u> In the event that a county does not show intent to implement the 5C Program, develop WDRs or a conditional waiver of WDRs for that county.
	<u>Timeline</u> Ongoing
Road Construction and Maintenance on County Lands	Action Conduct road construction and maintenance in compliance with the 5C Waiver.
Humboldt, Mendocino, and Trinity Counties	<u>Timeline</u> Pursuant to the 5C Program timelines
Dredge and Fill Activities in Waters of the State	Action Incorporate measures to meet the temperature allocations in 401 water quality certifications.
Regional Water Board	<u>Timeline</u> Ongoing

Waste Discharge Requirement Program Regional Water Board	Action Incorporate measures to meet the temperature allocations and water quality objectives for temperature in individual Waste Discharge Requirements and Waivers thereof. <u>Timeline</u> Ongoing
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Work with other agencies and non-governmental organizations to support off-stream storage projects for water diverters currently diverting directly from streams during summer. Work with other agencies and non-governmental organizations to streamline permitting process for conversion of on-stream to off-stream storage. <u>Timeline</u> Ongoing
Water Use Water users	Action The Regional Water Board encourages all water users to implement water conservation practices and develop off-stream storage facilities to minimize water diversions during low flow periods. <u>Timeline</u> Ongoing
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	 <u>Action</u> Pursue instream flow studies, including the following actions: Work with other agencies and non-governmental organizations to support instream flow studies to; (1) quantify flows necessary for beneficial use support, (2) quantify flow impacts to assist outreach and education efforts, or (3) identify opportunities to increase summer low flows. Coordinate with the California Department of Fish and Wildlife on the development, methodologies, and any criteria relevant to instream flow studies. Consider all sources of water, including headwaters, groundwater, and waters flowing in subterranean streams.
	<u>Timeline</u> Until complete

Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	 <u>Action</u> Support third-party efforts to address temperature related concerns, including: Education of water users on the importance of water conservation efforts, Education of water users on water conservation practices and opportunities, Assistance for water users in the implementation of water conservation practices, Restoration of riparian vegetation, Other efforts that address water temperature-related concerns.
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Take actions to address the temperature impacts of marijuana cultivation, through the following: Outreach and education, Grant support for water conservation efforts, Coordination with other agencies, Enforcement actions.
Water Use Regional Water Board	Action Continue to coordinate with the State Water Board's Division of Water Rights by participating in the water right application and petition process, providing monitoring recommendations, joint inspections as appropriate, submittal of data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participation in instream flow studies, participation in proceedings related to instream flow, and any other appropriate means to help ensure that the terms of water right permits and licenses are consistent with the intrastate water quality objective for temperature. <u>Timeline</u> Ongoing
Water Use State Water Resources Control Board, Division of Water Rights	Action Achieve the Navarro River Temperature TMDL Flow and Temperature Target through implementation of the <i>Policy for</i> <i>Maintaining Instream Flows in Northern California Streams.</i> <u>Timeline</u> Ongoing

ACTION PLAN TO ADDRESS ELEVATED WATER TEMPERATURES IN THE MATTOLE RIVER WATERSHED

The USEPA has established a Total Maximum Daily Load for elevated temperature in the Mattole River Watershed³. The Mattole River Watershed Temperature TMDL has assigned temperature load allocations corresponding to solar radiation loads that occur when the riparian vegetation is at full potential growth conditions, with allowances for the effects of natural factors that act to reduce those potential growth conditions. The goal of this Action Plan is to establish actions that achieve those TMDL load allocations. The following actions constitute a program of implementation to achieve the Mattole River Watershed Temperature TMDL and are consistent with the *Policy to Implement the Water Quality Objectives for Temperature*.

Action Plan to Address Temperature Impairments in the Mattole River Watershed	
Source or Land Use Activity and Responsible Party	Implementation Actions
Timber Harvest Activities on Non- Federal Lands Regional Water Board	Action Regional Water Board staff shall make recommendations for additional measures to ensure the TMDL load allocations and water quality objectives for temperature are achieved during the timber harvest review process, as necessary. <u>Timeline</u> Ongoing
Timber Harvest Activities on Non- Federal Lands Parties conducting timber harvest activities that discharge waste or have the potential to discharge waste	Action Implement riparian management measures that meet the riparian shade allocations and water quality standards. Where the Forest Practice Rules are not sufficient to meet the TMDL allocations or water quality standards, implement additional measures as directed by Regional Water Board staff during the timber harvest review process. <u>Timeline</u> Ongoing
Agricultural Activities on Non- Federal Lands Regional Water Board	Action Develop and implement the Agricultural Lands Discharge Program as a mechanism for compliance with temperature objectives. <u>Timeline</u> Upon adoption

³ The *Mattole River Total Maximum Daily Loads for Sediment and Temperature* (2002) contains a problem statement, source analysis, load allocation, numeric targets, load allocations, linkage analysis, and margin of safety. Please see the individual TMDL documents for more information.

Agricultural Activities on Non- Federal Lands	Action Implement riparian management measures that meet the riparian shade load allocations and water quality standards.
Parties conducting activities associated with agriculture that	Timeline Ongoing Action
discharge waste or have the potential to discharge waste	Action Conduct land management activities in compliance with the Agricultural Lands Discharge Program when adopted.
on nonfederal land, except dairies.	Timeline Upon adoption of the Agricultural Lands Discharge Program
Road Construction and Associated Maintenance on County Lands	Action Implement the Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted under the Five Counties Salmonid Conservation Program (5C Waiver).
Regional Water Board	Action In the event that a county does not show intent to implement the 5C Program, develop WDRs or a conditional waiver of WDRs for that county.
	<u>Timeline</u> Ongoing
Road Construction and Maintenance on County Lands	Action Conduct road construction and maintenance in compliance with the 5C Waiver.
Humboldt, Mendocino, and Trinity Counties	<u>Timeline</u> Pursuant to the 5C Program timelines.
Dredge and Fill Activities in Waters of the State	Action Incorporate measures to meet the temperature allocations in 401 water quality certifications.
Regional Water Board	<u>Timeline</u> Ongoing
Waste Discharge Requirement Program	Action Incorporate measures to meet the temperature allocations and water quality objectives for temperature in individual Waste Discharge Requirements and Waivers thereof.
Regional Water Board	<u>Timeline</u> Ongoing

Water Use	Action
Regional Water Board State Water Resources Control Board, Division of Water Rights	Work with other agencies and non-governmental organizations to support off-stream storage projects for water diverters currently diverting directly from streams during summer. Work with other agencies and non-governmental organizations to streamline permitting process for conversion of on-stream to off-stream storage. <u>Timeline</u> Ongoing
Water Use	Action
Water users	The Regional Water Board encourages all water users to implement water conservation practices and develop off-stream storage facilities to minimize water diversions during low flow periods.
	Timeline
Water Use Regional Water Board State Water Resources Control	Ongoing Action Pursue instream flow studies, including the following actions: • Work with other agencies and non-governmental organizations to support instream flow studies to; (1) quantify flows necessary for beneficial use support, (2) quantify flow impacts to assist outreach and education efforts, or (3) identify opportunities to increase summer low flows.
Board, Division of Water Rights	 Coordinate with the California Department of Fish and Wildlife on the development, methodologies, and any criteria relevant to instream flow studies. Consider all sources of water, including headwaters, groundwater, and waters flowing in subterranean streams.
Water Use	Action
Regional Water Board State Water Resources Control Board, Division of Water Rights	 Support third-party efforts to address temperature related concerns, including: Education of water users on the importance of water conservation efforts, Education of water users on water conservation practices and opportunities, Assistance for water users in the implementation of water conservation practices, Restoration of riparian vegetation, Other efforts that address water temperature-related concerns.
	<u>Timeline</u> Ongoing

Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action Take actions to address the temperature impacts of marijuana cultivation, through the following: Outreach and education, Grant support for water conservation efforts, Coordination with other agencies, Enforcement actions.
Water Use Regional Water Board	Action Continue to coordinate with the State Water Board's Division of Water Rights by participating in the water right application and petition process, providing monitoring recommendations, joint inspections as appropriate, submittal of data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participation in instream flow studies, participation in proceedings related to instream flow, and any other appropriate means to help ensure that the terms of water right permits and licenses are consistent with the intrastate water quality objective for temperature. <u>Timeline</u> Ongoing