Resolution No. R1-2013-0058 Attachment 3

[Add a new sub-section to the Water Quality Control Plan for the North Coast Region implementation chapter (Chapter 4) with the following Action Plans. This section will be added after the "ACTION PLAN FOR THE KLAMATH RIVER TOTAL MAXIMUM DAILY LOADS ADDRESSING TEMPERATURE, DISSOLVED OXYGEN, NUTRIENT, AND MICROCYSTIN IMPAIRMENTS IN THE KLAMATH RIVER IN CALIFORNIA AND LOST RIVER IMPLEMENTATION PLAN." In addition to adding the following language, several editorial revisions will be made, including appropriate changes to the Title Page, Table of Contents, Summary of Basin Plan Amendments (Appendix 1), page numbers, table and figure numbers, footnote numbers, and headers and footers to reflect the new language. The final locations of tables and figures in relation to the text may also be changed to accommodate the existing formatting of the Basin Plan.]

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

The USEPA has established Total Maximum Daily Loads (TMDL) 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 Watersheds ¹. 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-for the Implementation of the Water Quality Objectives for Temperature*.

Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Timber Harvest Activities on Non- Federal Lands	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.
Regional Water Board	Timeline Ongoing
Timber Harvest Activities on Non- Federal Lands	Action Implement the riparian shade allocations and water quality standards through 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
Parties conducting timber harvest activities that discharge waste or have the potential to	allocations or water quality standards, implement additional measures, as appropriate and necessary as directed by Regional Water Board staff during the timber harvest review process. Timeline
discharge waste	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, numeric targets, load allocations, linkage analysis, and margin of safety. Please see the individual TMDL documents for more information.

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Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source of Use Ac	ctivity	Implementation Actions
Responsit	ble Party	
All Activiti USFS Land Regional W Board	ds	Action Implement Order No. R1-2010-0029, Waiver of Waste Discharge Requirements for Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region, and any future revisions, the (USFS Waiver of WDRs) as a mechanism for compliance with the water quality objectives for temperature.
		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. Timeline Ongoing
All Activiti Lands Mar the USFS		Action Conduct land management activities in compliance with the USFS wW aiver of WDRs and in accordance with project-level recommendations.
USFS		<u>Timeline</u> As required in the <u>USFS_wW</u> aiver of WDRs.
Agricultura Activities of Federal La	on Non-	Action Develop and implement the Agricultural Lands Discharge Program as a mechanism for compliance with temperature objectives.
Regional W Board	/ater	Timeline Upon adoption
Agricultura Activities of Federal La	on Non-	Action Implement the riparian shade load allocations and water quality standards through riparian management measures, that meet the riparian shade load allocations and water quality standards.
Parties con activities as with agricul discharge v	ssociated Iture that waste or	Timeline Ongoing
have the po discharge v nonfederal except dair	waste on land,	Action Conduct land management activities in compliance with the Agricultural Lands Discharge Program when adopted.
		Timeline Upon adoption of the Agricultural Lands Discharge Program

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Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land	
Use Activity and	Implementation Actions
Responsible Party	
Road Construction	Action
and Maintenance	Implement the NPDES Statewide Storm Water Permit and Waste Discharge
of State Highway	Requirements for the State of California, Department of Transportation (Caltrans
Facilities	permit).
State Water	
Resources Control	
Board	<u>Timeline</u>
Regional Water	Ongoing
Board	
Road Construction	Action
and Maintenance	Conduct road construction, maintenance and associated_activities
of State Highway Facilities	in compliance with the Caltrans permit.
	<u>Timeline</u>
Caltrans	Ongoing
Road Construction	<u>Action</u>
and Associated	Implement the Order No. R1-2013-0004, Waiver of Waste Discharge Requirements and
Maintenance on County Lands	General Water Quality Certification for County Road Management and Activities Conducted under Under the Five Counties Salmonid Conservation Program In the
County Lands	Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in The North Coast
Regional Water	Region (5C Waiver of WDRs), and any future revisions.
Board	Action
	Action In the event that a county does not show intent to implement the 5C ProgramWaiver of
	WDRs, develop WDRs or a conditional waiver of WDRs for that county.
	<u>Timeline</u>
	Ongoing
Road Construction	Action Conduct road construction and maintenance in compliance with the EC Waiver of
and Maintenance on County Lands	Conduct road construction and maintenance in compliance with the 5C Waiver <u>of</u> WDRs.
an evanty Euro	<u></u>
Humboldt,	<u>Timeline</u>
Mendocino, and	Pursuant to the 5C Waiver of WDRsProgram timelines.
Trinity Counties Dairy Operations	Action
Daily Operations	Implement temperature allocations through the Water Quality Compliance Program for
Regional Water	Dairies & Concentrated Animal Feeding Operations (Dairy Program), and any future
Board	revisions.
	<u>Timeline</u>
	Ongoing
Dairy Operations	Action Action
Dairy operators	Conduct land management activities in compliance with the Dairy Program.
	Timeline
	<u>Timeline</u> Ongoing
	Crigoria

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Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

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Source or Land	Insulance of a Constant
Use Activity	Implementation Actions
and	
Responsible Party	
Dredge and Fill	Action
Activities in	Incorporate measures to meet the temperature allocations in 401 water quality
Waters of the State	certifications.
Regional Water	<u>Timeline</u>
Board	Ongoing
Waste Discharge	<u>Action</u>
Requirement	Incorporate measures to meet the temperature allocations and water quality objectives
Program	for temperature in individual Waste Discharge Requirements and Waivers thereof.
Regional Water	<u>Timeline</u>
Board	Ongoing
Water Use	Action
	Work with other agencies and non-governmental organizations to support off-stream
Regional Water	storage projects for water diverters currently diverting directly from streams during
Board	summer. Work with other agencies and non-governmental organizations to streamline
	the permitting process for conversion of on-stream to off-stream storage.
State Water	
Resources Control	<u>Timeline</u>
Board, Division of	Ongoing
Water Rights	
111	
Water Use	Action
10/-1	The Regional Water Board encourages all water users to implement water conservation
Water users	practices and develop off-stream storage facilities to minimize water diversions during
	low flow periods.
	Timeline
	Timeline Ongoing
Water Use	Action
	Pursue instream flow studies, including the following actions:
Regional Water	Work with other agencies and non-governmental organizations to support
Board	instream flow studies to; (1) quantify flows necessary for beneficial use
	support, (2) quantify flow impacts to assist outreach and education efforts, or (3)
Otata Mari	identify opportunities to increase summer low flows.
State Water	Coordinate with the California Department of Fish and Wildlife on the
Resources Control	development, methodologies, and any criteria relevant to instream flow studies.
Board, Division of	Consider all sources of water, including headwaters, groundwater, and waters
Water Rights	flowing in subterranean streams.
	Timeline
	Until complete

4-4.00 11/2013

Table 4-19: Actions to Address Temperature Impairments in the Eel River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	Action 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. Timeline 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 and pollution control efforts, • Coordination with other agencies, • Enforcement actions. Timeline Ongoing
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, conducting joint inspections as appropriate, submittal submittingef data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participation participating in instream flow studies, participation participating in proceedings related to instream flow, and participating by 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. Timeline Ongoing

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

The USEPA has established Total Maximum Daily Loads (TMDL) 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

4-5.00 11/2013

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² The *Navarro River Total Maximum Daily Loads for Sediment and Temperature and Sediment* (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.

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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 for the Implementation of the Water Quality Objectives for Temperature*.

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
Timber Harvest	Action
Activities on Non- Federal Lands	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.
Regional Water Board	<u>Timeline</u> Ongoing
Timber Harvest Activities on Non- Federal Lands	Action Implement the riparian shade allocations and water quality standards through 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
Parties conducting timber harvest activities that discharge waste or	allocations or water quality standards, <u>as appropriate and necessary implement</u> 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	Timeline Upon adoption
Agricultural Activities on Non- Federal Lands	Action Implement the riparian shade load allocations and water quality standards through riparian management measures that meet the riparian shade load allocations and water quality standards.
Parties conducting activities associated with agriculture that discharge waste or	Timeline Ongoing
have the potential to discharge waste on nonfederal land, except dairies.	Action Conduct land management activities in compliance with the Agricultural Lands Discharge Program when adopted.
	<u>Timeline</u> Upon adoption of the Agricultural Lands Discharge Program

4-6.00 11/2013

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Source or Land	
Use Activity	Implementation Actions
and	implementation Actions
Responsible Party	
Road Construction	Action
and Maintenance	Implement the NPDES Statewide Storm Water Permit and Waste Discharge
of State Highway	Requirements for the State of California, Department of Transportation (Caltrans
Facilities	permit).
State Water	
Resources Control	
Board	
Regional Water	<u>Timeline</u>
Board	Ongoing
Road Construction	Action
and Maintenance	Conduct road construction, maintenance and associated_activities in compliance with
of State Highway	the Caltrans permit.
Facilities	
	<u>Timeline</u>
Caltrans	Ongoing
Road Construction	<u>Action</u>
and Associated	Implement the Order No. R1-2013-0004, Waiver of Waste Discharge Requirements and
Maintenance on	General Water Quality Certification for County Road Management and Activities
County Lands	Conducted under Under the Five Counties Salmonid Conservation Program In the
	Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in The North Coast
Regional Water	Region (5C Waiver of WDRs) and any future revisions.
Board	
	<u>Action</u>
	In the event that a county does not show intent to implement the 5C Waiver of
	WDRs Program, develop WDRs or a conditional waiver of WDRs for that county.
	Timeline
Dood Construction	Ongoing
Road Construction	Action Conduct road construction and maintenance in compliance with the EC Waiver of
and Maintenance	Conduct road construction and maintenance in compliance with the 5C Waiver of
on County Lands	WDRs.
Humboldt,	
Mendocino County,	Timeline
and Trinity Counties	Pursuant to the 5C Program-Waiver of WDRs timelines
Dredge and Fill	Action
Activities in	Incorporate measures to meet the temperature allocations in 401 water quality
Waters of the State	certifications.
Regional Water	<u>Timeline</u>
Board	Ongoing
Waste Discharge	Action
Requirement	Incorporate measures to meet the temperature allocations and water quality objectives
Program	for temperature in individual Waste Discharge Requirements and Waivers thereof.
ogram	To temperature in individual videte blocharge frequirements and vidivers thereof.
Regional Water	Timeline
Board	Ongoing
	99

4-7.00 11/2013

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Source or Land	
	Implementation Actions
Use Activity and	Implementation Actions
Responsible Party	
Water Use Regional Water Board	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 the permitting process for conversion of on-stream to off-stream storage.
State Water	<u></u>
Resources Control Board, Division of	Timeline Ongoing
Water Rights	
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.
	Timeline Ongoing
Water Use	<u>Action</u>
Regional Water Board	 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.
State Water Resources Control 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.
	Timeline Until complete
Water Use	<u>Action</u>
Regional Water Board	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
State Water	practices,
Resources Control Board, Division of Water Rights	 Restoration of riparian vegetation, Other efforts that address water temperature-related concerns.
	<u>Timeline</u>
	Ongoing
	l Crigoria

4-8.00 11/2013

Table 4-20: Actions to Address Temperature Impairments in the Navarro River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
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:
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, conducting joint inspections as appropriate, submittal of submitting data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participation participating in instream flow studies, participation participating 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. Timeline Ongoing
Water Use State Water Resources Control Board, Division of Water Rights	Action Achieve the Flow and Temperature target contained in the Navarro River Watershed Temperature TMDL Flow and Temperature Target through implementation of the Policy for Maintaining Instream Flows in Northern California Coastal Streams. Timeline Ongoing

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

The USEPA has established a Total Maximum Daily Load (TMDL) 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-for the Implementation of the Water Quality Objectives for Temperature*.

4-9.00 11/2013

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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.

Table 4-21: Action Plan to Address Temperature Impairments in the Mattole River Watershed

Source or Land Use Implementation Actions Activity and	
Responsible Party	
Timber Harvest Action	
Activities on Non- Regional Water Board staff shall make recommendations for additional mea	ouroe to
	ire are
achieved during the timber harvest review process, as necessary.	
Regional Water Board Timeline	
Ongoing	
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Timber Harvest Action	ub vincviou
Activities on Non- Federal Lands Implement the riparian shade allocations and water quality standards through management measures that meet the riparian shade allocations and water of the riparian shade allocations and water quality standards through the riparian shade allocations and water quality standards through the riparian shade allocations and water quality standards through the riparian shade allocations and water quality standards through the riparian shade allocations and water quality standards through the riparian shade allocations and water quality standards through the riparian shade allocations and water quality standards through the riparian shade allocations and water of the riparian shade allocations are represented by the riparian sh	<u>n</u> riparian
standards. Where the Forest Practice Rules are not sufficient to meet the TN	
Parties conducting allocations or water quality standards, as appropriate and necessary implement timber harvest additional measures as directed by Regional Water Board staff during the time.	10H
, , ,	nber narvest
activities that review process. discharge waste or	
have the potential to Timeline	
discharge waste Ongoing	
Agricultural Action	
Activities on Non- Develop and implement the Agricultural Lands Discharge Program as a med	chaniem for
Federal Lands compliance with temperature objectives.	
compliance with temperature objectives.	
Regional Water <u>Timeline</u>	
Board Upon adoption	
Agricultural Action	
Activities on Non- Implement the riparian shade load allocations and water quality standards the	<u>nrough</u>
Federal Lands riparian management measures that meet the riparian shade load allocation	is and water
quality standards.	
Parties conducting	
activities associated Timeline Ongoing	
with agriculture that Ongoing	
discharge waste or	
have the potential to discharge waste on Conduct land management activities in compliance with the Agricultural Lan	de
nonfederal land, Discharge Program when adopted.	us
except dairies.	
Timeline	
Upon adoption of the Agricultural Lands Discharge Program	
Road Construction Action	
and Associated Implement the Order No. R1-2013-0004, Waiver of Waste Discharge Require	rements and
Maintenance on General Water Quality Certification for County Road Management and Activ	
County Lands Conducted #Under the Five Counties Salmonid Conservation Program In the	
of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in The North Coas	
Regional Water (5C Waiver of WDRs).	
Board (Contained Line Line Line Line Line Line Line Line	
Action	
In the event that a county does not show intent to implement the 5C Waiver	of WDRs
Program, develop WDRs or a conditional waiver of WDRs for that county.	
<u>Timeline</u>	

4-10.00 11/2013

Table 4-21: Action Plan to Address Temperature Impairments in the Mattole River Watershed

Ongoing Action
Action
Conduct road construction and maintenance in compliance with the 5C Waiver of WDRs.
<u>Timeline</u> Pursuant to the 5C <u>Program Waiver of WDRs timelines.</u>
Action Incorporate measures to meet the temperature allocations in 401 water quality certifications.
<u>Timeline</u> Ongoing
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
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. Timeline Ongoing
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. Timeline Ongoing

4-11.00 11/2013

Table 4-21: Action Plan to Address Temperature Impairments in the Mattole River Watershed

Source or Land Use Activity and Responsible Party	Implementation Actions
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.
	Timeline Until complete
Water Use Regional Water Board State Water Resources Control Board, Division of Water Rights	 Action 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.
-	Timeline 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:
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, conducting joint inspections as appropriate, submittal of submitting data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participation participating in instream flow studies, participation participating 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. Timeline Ongoing

4-12.00 11/2013

4. IMPLEMENTATION PLANS

4-13.00 11/2013