Federal Lands Permit

Attachment F Watershed Assessment and Recovery Program No. R1-2024-0012

This attachment describes the North Coast Regional Water Quality Control Board's (North Coast Water Board) Watershed Assessment and Recovery Program (WARP). This attachment includes details regarding the methodology for establishing treatment credit obligations, assignment of treatment credit obligations for each Administrative Unit of the United States Forest Service (USFS), Bureau of Land Management (BLM), and National Park Service (NPS) in the North Coast Region, creditable pollutant source treatment activities, alternative credit generating activities, prioritized waterbody planning, and reducing credit obligations.

The North Coast Water Board has delegated its authority to the North Coast Water Board Executive Officer (Executive Officer) to revise, modify, and reissue this attachment as appropriate and without reopening the Federal Lands Permit.

I. WARP OBJECTIVES

North Coast Water Board staff developed the WARP to establish an iterative approach for advancing water quality improvement projects on federal lands while also conforming with the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act.

The WARP establishes regulatory requirements designed to steadily advance the treatment of CSDS over time. The WARP relies on a performance-based credit system developed for each Administrative Unit and tailored to the specific water quality conditions and land management activities on their respective lands. Assigned treatment credits are required to be implemented annually, but compliance will be assessed by averaging treatment credits over a 5-year period. The WARP also provides compliance flexibility by allowing implementation of some alternative actions that protect or improve water quality, including but not limited to aquatic habitat restoration activities, forest resilience and climate adaptation treatments, comprehensive planning strategies, and certain monitoring and adaptive management actions. Compliance requirements are intended to be adjusted over time, as treatments are applied, impairment conditions change, and management activities evolve.

Comments from the USFS and BLM staff indicate that the existing Federal Waiver inhibits agencies from implementing priority projects, such as forest resilience and community protection, due largely to the costs and staff time required to satisfy project-level CSDS treatment obligations. The USFS, BLM, and NPS all face significant resource limitations, budgetary constraints resulting from decisions in the

US Congress, and frequently changing federal administrations. All these factors slow the pace of CSDS treatments on federal lands.

II. OVERVIEW OF THE WARP ANNUAL TREATMENT CREDIT OBLIGATIONS

This section describes the methodology for establishing the annual WARP treatment credit obligations for each of the Administrative Units of the USFS, BLM, and NPS in the North Coast Region. The intent of this methodology is to quantify annual treatment obligations to be conducted by federal agencies to improve water quality conditions over time. The WARP treatment credit obligations are calculations based on the waterbody conditions and management activities for each Administrative Unit's Hydrologic Unit Code (HUC) 12 watersheds. The target size for a HUC 12 watershed is between 10,000 to 40,000 acres.

Attachment F1 provides additional technical information regarding North Coast Water Board staff's methodology and process for conducting the WARP analysis.

A. FACTORS IN THE ANALYSIS

The WARP utilizes characteristics of each Administrative Unit's HUC 12 watersheds, such as water quality conditions and land management activities, to calculate a starting point for treatment credit obligations under the Federal Lands Permit. Each Administrative Unit's credit obligations are expected to be adjusted over time as treatments are applied, impairment conditions change, and management activities evolve.

The WARP assigns credit obligations for portions of each HUC 12 watershed that are under federal land management. The WARP analysis assigns a maximum of 1 credit obligation per HUC 12 watershed and a minimum of 0. The sum of all individual HUC 12 watershed credit obligations within an Administrative Unit then determines the total annual obligation, summarized in Table 2 below.

The specific factors analyzed to determine treatment credit obligations in the WARP fall into the following three categories which are described in greater detail below: Wilderness or Roadless Designations, Clean Water Act Section 303(d) impairments, and status of past and present land management activities. The total acres of each of these factors within all the federally managed HUC 12 watersheds was calculated via a Geographic Information Systems (GIS) analysis.

Each of the three factors is assigned a coefficient that weights their relative potential impacts to water quality, and the GIS-derived areas are multiplied by these coefficients, summed together, and then divided by the total area of the HUC 12 watershed to isolate impacts from federal lands. For more detailed technical descriptions of the GIS analysis and subsequent calculations, please review Attachment F1. These three factors are added together in the WARP obligation analysis calculation, and form the bases for the crediting system:

Wilderness or Roadless Designations

Some federal lands are designated as wilderness or roadless areas and are subject to little, if any, land management activities. Wilderness and roadless areas are anticipated to have fewer impacts associated with anthropogenic sources of pollution than those that occur in managed landscapes. However, some wilderness or roadless areas do support some limited management or land uses, primarily in the form of recreation (e.g., hiking, hunting, backcountry camping) or livestock grazing. For the purposes of the WARP, areas designated wilderness or roadless that include livestock grazing allotments are assigned a different credit obligation value compared to those that do not.

The WARP calculates credit obligations for those portions of federally-managed HUC 12 watersheds that are designated Wilderness/Roadless by multiplying those portions of land by a coefficient of zero (effectively removing them from the obligation calculation), or by 0.15 if they support federally permitted livestock grazing.

Clean Water Act Section 303(d) Impairments

Most of the North Coast Region, including lands within federal ownership, is listed under Section 303(d) of the Clean Water Act as impaired for sediment, turbidity, and/or temperature. These areas warrant additional focus to address the pollutant(s) of concern that is driving the impairment of a waterbody and its associated beneficial uses. The Total Maximum Daily Loads (TMDLs) developed to address the waterbody impairments typically cite historic and ongoing land management activities as the cause of the impairments, including roads, forestry, and legacy mining impacts. Livestock grazing is also identified in some of the TMDLs as a source of sediment and nutrient impact.

The WARP calculates credit obligations for those portions of federally-managed HUC 12 watersheds that are 303(d) listed for sediment, turbidity, nutrients, or temperature, by multiplying those listed land areas by a coefficient of 0.25.

Status of Past and Present Management

The WARP focuses on the suite of nonpoint source activities conducted on federal lands that pose a risk to water quality. These include impacts from roads, logging, fuels management, mining, livestock grazing, and other activities. For the purposes of the WARP, these land use activities collectively fall under the category of "managed", as opposed to Roadless/Wilderness areas described above. The WARP calculates credit obligations for those portions of federally-managed HUC 12 watersheds that are "managed", as described above, by multiplying those portions of land by a coefficient of 0.75.

Administrative Units that have completed an assessment that can demonstrate the successful treatment of 75% of the CSDS in a HUC 12 watershed will have their treatment credit obligation coefficient changed from 0.75 for a "managed" watershed,

to 0.25 for a "treated" watershed. See Section VIII below for additional information on the CSDS treatment credit obligation reduction.

B. SAMPLE WARP CREDIT OBLIGATION CALCULATIONS

The diagram below shows four separate HUC 12 watersheds (01, 02, 03, and 04) that comprise the entire area under the responsibility of an Administrative Unit.



Watershed 01 is considered a "managed" watershed that is also identified as "impaired" under Section 303(d) of the Clean Water Act. Those portions of a HUC 12 that are considered "managed" are assigned a credit obligation of 0.75, and those portions that are designated as "impaired" are assigned a credit obligation of 0.25. Therefore, the WARP treatment credit obligation for Watershed 01 would be a total of 1.

Watersheds 02, 03, and 04 are designated as Wilderness/Roadless areas. Watershed 02 is listed as "impaired" and is assigned a credit obligation of 0.25. Watersheds 03 and 04 are not listed as "impaired". However, Watershed 04 includes federally permitting grazing activities (active/inactive or closed) and is therefore assigned a credit obligation of 0.15. Therefore, the WARP treatment credit obligation for Watershed 02 would be 0.25, Watershed 03 would be zero, and Watershed 04 would be 0.15.

As depicted in Table 1 below, the total credit treatment obligation assigned to the Administrative Unit for the four separate watersheds would be 1.40.

Table 1: Sample WARP Credit Obligation Summary

Watershed Name	Wilderness and Roadless	Grazed Wilderness and Roadless	Impaired	Managed	Subtotal Credit Obligations
01	N/A	N/A	0.25	0.75	1
02	0	N/A	0.25	N/A	0.25
03	0	N/A	N/A	N/A	0
04	0	0.15	N/A	N/A	0.15
				TOTAL	1.40

Note: This example assumes that 100% of each of the four watersheds are administered by an Administrative Unit. The WARP analysis assigns credit treatment responsibilities for those portions (percentages) of a watershed that are under the control of an Administrative Unit. For example, if 75% of Watershed 01 was under

the control of an Administrative Unit and 25% of the watershed was privately owned, the total treatment credit obligation for the watershed would be 0.75.

III. ANNUAL WARP TREATMENT OBLIGATIONS PER ADMINISTRATIVE UNIT

Under the WARP, each USFS, BLM, and NPS Administrative Unit is required to complete annual projects to earn "treatment credits" based on the water quality conditions and land management activities, as described in the treatment credit obligation methodology in Section IV of this memorandum. The WARP analysis calculates each Administrative Unit's treatment credit obligations over time. A thorough description of the WARP treatment credit analysis, including the various factors and calculations used to determine the credit obligations, is found in Attachment F1.

Table 2 below summarizes the total treatment credit obligations for each Administrative Unit, as well as overall size (based on acreage) for general comparison purposes. WARP establishes the baseline credit treatment obligations that each Administrative Unit is expected to satisfy through the planning, designing, and implementation of creditable projects. Each Administrative Unit will be required to complete creditable activities and report accomplishments to the North Coast Water Board annually, but compliance will be assessed by averaging treatment credits over a 5-year period.

Table 2: Annual WARP Treatment Credits per Administrative Unit

Agency	Administrative Unit	Acreage	Credits
U.S. Forest Service Pacific Southwest	Klamath National Forest	1,474,503	54
Region	Shasta-Trinity National Forest	1,258,693	41
	Six Rivers National Forest	1,163,006	28
	Mendocino National Forest	467,491	32
Bureau of Land Management	Arcata Field Office	204,215	6
Wanagement	Redding Field Office	98,719	6
	Ukiah Field Office	37,532	4
National Park Service	Redwood National and State Parks	131,983	3

Each Administrative Unit's WARP credit obligation may change over time because of alterations in land management activities (e.g., grazing in Wilderness allotments), incorporation or removal of land areas from an Administrative Unit, extensive CSDS treatments across a HUC 12 watershed, and/or changes in waterbody impairment statuses.

Note: The Butte Valley Creek and Lost River Watersheds are both identified as part of the Klamath River Watershed, but due to natural and anthropogenic causes, neither directly discharge into the Klamath River. The entirety of Modoc National Forest within the North Coast Region, portions of eastern Klamath National Forest, Lava Beds and Tule Lake National Monuments, and small isolated tracts of land administered by the Applegate Field Office of the BLM, comprise the federal ownership in these two watersheds. These areas are generally dry and flat lying compared to the rest of the Region and are overlain primarily by volcanic rocks that contribute to relatively little surface water drainage. Most of the hydrologic systems discharge into influent basins rather than deliver to larger river systems. There is some commercial timber production occurring in the Butte Valley Creek Watershed, but very little in the Lost River Watershed. Livestock grazing is the primary land management activity. Based on the information above, the Butte Valley and Lost River Watersheds are proposed to be excluded from the WARP analysis due to their lack of 303(d)-listed impairments and site-specific conditions. This CSDS treatments in these Administrative Units would rely on existing road maintenance, restoration, and sediment reduction efforts.

IV. CREDITABLE POLLUTANT SOURCE TREATMENT ACTIVITIES

The WARP establishes regulatory requirements to advance the treatment of controllable sediment discharges sources (CSDS) over time. Sediment pollution prevention projects are often associated with roads, landings, trails, and associated watercourse crossings. However, other CSDS can also be found across the federal landscape, including those areas associated with mines, unstable features, inchannel deposits, and stream diversions.

Table 2 below identifies creditable CSDS treatment activities associated with roads and watercourse crossings:

Table 3: Creditable CSDS Treatment Activities

ROAD SURFACE TREATMENTS	Description	General Performance Targets	Treatment Increments	Credit Value
Road surfaces disconnected from streams	Road surfaces, inboard drainage ditches, and road drainage features (e.g., ditch relief culverts, rolling dips, outsloping) are hydrologically disconnected from streams.	No more than 100 feet of road surface or inboard ditch connected to a stream. Road drainage features frequent enough to limit hillslope erosion, discharge onto stable ground, and do not connect to a stream.	1 mile	0.5
Road surface hardening	Road surfaces near streams are rocked or hardened to minimize erosion and sediment delivery.	Road surfaces sufficiently hardened to allow for year- round use without significant discharges to streams (e.g., no road surface rutting, turbid discharges, etc.)	1 mile	0.25
Diversion potential addressed	Watercourse diversion potential addressed.	All watercourse crossings shall have backup road drainage features (e.g., critical dips) to ensure that streams will remain in their original channel should diversion occur.	1 mile	0.1
WATERCOURSE CROSSING TREATMENTS	Description	General Performance Targets	Treatment Increments	Credit Value
Watercourse Crossing Upgrades	Small Crossing (0-100 cubic yards)	Watercourse crossing upgraded to current standards (e.g., sized to 100-year storm event, crossings	1 crossing upgrade	0.1
Crossing Opgrades	Medium Crossing (100-500 cubic yards)	hydrologically disconnected, installed at grade and in- line with stream, plugging/diversion threat minimized, fill		0.15
	Large Crossing (>500 cubic yards)	prisms compacted, erosion risk minimized		0.2
	Complete barrier removal	Volitional fish passage available at all life stages.	1 crossing upgrade	0.5
STORM-PROOFING ROADS	Roads and watercourse crossings "Storm- Proofed" when all road surface and watercourse crossing treatments described above are completed	Segments of road meet the "Characteristics of Storm-Proofed Roads" standards described in the Pacific Watershed Associates' 2015 Handbook for Forest, Ranch and Rural Roads		1.5
ROAD DECOMMISSIONING	Road decommissioning is the proactive closure to traffic and treatment to reduce its potential environmental impact	A decommissioned road is considered "put to bed" or "vacated" when all stream crossing drainage structures and fills have been excavated and removed, road and landing surfaces are permanently drained, and unstable fill slopes stabilized or removed (excavated).	1 mile	2

Road surface treatments (e.g., road surfacing, ditch relief culvert installation, outsloping) and watercourse crossing treatments (e.g., culvert replacement, rocked ford construction, bridge installation) are often conducted independently of timber harvest or other nonpoint source projects, unlike the private timber harvest process. Federal Agencies typically conduct road surface and watercourse crossing treatments through road improvement projects or through routine maintenance activities. Road treatments are also conducted after certain post-wildfire emergency actions conducted through post fire suppression repair efforts and the Burned Area Emergency Response (BAER) process, or after floods with funding from the Federal Highway Administration. Road surfacing and watercourse crossing treatments must be consistent with the standards described in the Pacific Watershed Associates (PWA) Handbook for Forest, Ranch and Rural Roads (PWA Handbook), or equivalent erosion and sediment control standards. Certain treatments in the PWA Handbook, such as road outsloping, may be infeasible in some locations since most federal roads are open to the public and subject to federal road safety standards.

Although independent project activities provide benefits to water quality, comprehensive road segment treatments that address all aspects of a road segment, and are sometimes referred to as "stormproofing", provide the best benefit for water quality. Stormproofing roads is the comprehensive treatment of all road surfaces and watercourse crossings along a segment of road and is described in the PWA Handbook.

Therefore, stormproofed roads are provided with a minimum of 1.5 credits per mile. If the individual road surface and watercourse treatments exceed 1.5 credits per mile, then the greater value shall apply.

V. ALTERNATIVE CREDIT GENERATING ACTIVITIES

As an alternative to the annual CSDS pollution treatment requirements, the WARP also provides compliance flexibility for up to 30% of an Administrative Unit's total credit obligations through alternative actions that protect or improve water quality, including but not limited to aquatic habitat restoration activities, forest resilience and climate adaption strategies, comprehensive planning strategies to address impaired waterbodies, and certain monitoring and adaptive management actions.

The North Coast Water Board recognizes that many of the federal land management Administrative Units and their partners are implementing aquatic habitat restoration1 actions. These restoration actions, combined with CSDS treatments, are important for recovering watersheds and protecting beneficial uses, and are consistent with the

¹ Although the WARP considers aquatic habitat restoration as an accreditable activity, it should be noted that this Order does not itself permit those activities as they are more appropriately authorized through other existing permitting pathways (See Findings D.5.a of the Order for guidance).

North Coast Water Board's Policy in Support of Restoration in the North Coast Region, Resolution No. R1-2015-0001.

Project activities that promote forest resilience and reduce the potential for high-severity wildfire activity, which can result in extreme impacts to waterbodies, are also recognized as a high priority for water quality protection. These forest management activities also support the objectives of California's Wildfire and Forest Resilience Action Plan.

Routine monitoring of grazing supports adaptive management and changes in annual operating instructions. The Federal Lands Permit requires the USFS to conduct National BMP Effectiveness Monitoring at least four times per year. Considering the value of this type of monitoring, and the expectation that changes to annual operating instructions may result from observed environmental impacts, the WARP includes additional monitoring as an acceptable alternative credit generating activity.

The following activities support the protection and recovery of water quality conditions and are therefore provided as an alternative to satisfy a limited percentage of the CSDS treatment credit obligations in the Order. Use of these actions to satisfy a portion of CSDS treatment credit obligations is optional and at the discretion of the Administrative Unit with review and concurrence by the North Coast Water Board's Executive Officer. Each year, a maximum of 30% of the total WARP credit obligation for an Administrative Unit can be accrued annually based on the alternative credit generating activities. The rationale for establishing a 30% maximum allowance for alternative credit generating activities is to ensure that CSDS treatments are the priority and that treatment of CSDS continually advances across the Administrative Units, especially those associated with existing road and trail infrastructure.

Table 4 below includes information about alternative activities that can be considered to satisfy the CSDS treatment credit obligations:

Table 4: Alternative Credit Generating Activities

ALTERNATE CREDIT GENERATING ACTIVITIES	Description	General Performance Targets	Increments	Credit Value	Credit Cap
Aquatic Habitat Restoration (by Acreage)	Examples of aquatic habitat restoration projects based on acreage may include but are not necessarily limited to: riparian zone planting, off-channel and sidechannel habitats, beaver dam analogues, and removal of nonnative vegetation in the riparian zone.	Projects must be designed and implemented in a manner that conforms with current resource agency standards, such as: the CDFW Stream Habitat Restoration Manual, NOAA-Fisheries Design and Fish Passage Criteria, CDFW/NOAA Recovery Plans or Strategies, Beaver Restoration Manual, etc. All regulatory requirements must be met.	1 acre	1	Up to 30% of current WARP credit obligation*
Aquatic Habitat Restoration (by linear feet)	Examples of aquatic habitat restoration projects based on linear feet may include but are not necessarily limited to: reintroduction of large woody material along a given stream reach	Projects must be designed and implemented in a manner that conforms with current resource agency standards, such as: the CDFW Stream Habitat Restoration Manual, NOAA-Fisheries Design and Fish Passage Criteria, CDFW/NOAA Recovery Plans or Strategies, Beaver Restoration Manual, etc. All regulatory requirements must be met.	1 mile (5280 linear feet)	1	Up to 30% of current WARP credit obligation*
Fuels treatments	Fuels treatments (e.g., timber harvest, mechanical fuels reduction, prescribed fire, prescribed herbivory, and other activities designed to improve landscape health and resilience).	Fuels treatments must be implemented for the purpose of meeting an Administrative Unit's goals and/or agency standards to achieve a "resilient" landscape condition.	1,000 acres	1	Up to 10% of current WARP credit obligation
National BMP Effectiveness Monitoring - <u>Livestock</u> <u>Grazing</u>	Monitoring of grazing allotments to evaluate conditions for adaptive management and resource protection.	Monitoring shall evaluate conformance with Federal Guidance, such as the Aquatic Conservation Strategy (ACS) standards. Where deviations from ACS standards exist, changes to Annual Operating Instructions must be documented	1 monitoring event above those already required in the Monitoring and Reporting Program, see Section VI.B.1	0.5	Up to 5% of current WARP credit obligation

^{*}Please note that all alternative credit generating activities combined cannot add up to more than 30 percent of an annual credit obligation. 70 percent of annual obligations must be met from the activities in Table 2

VI. PRIORITIZED WATERSHED PLANNING AND IMPLEMENTATION PROJECTS

The North Coast Water Board supports the development and implementation of priority planning efforts. Each of the federal agencies implement watershed-based planning programs that prioritize landscape and water quality assessments, implement pollution prevention activities, restore aquatic habitats, and conduct instream monitoring. Examples of these efforts include but are not limited to the following: the USFS's implementation of Watershed Restoration Action Plans through the Watershed Conditions Framework; the BLM's strategic NEPA planning documents in watersheds such as Lack's Creek and the Headwaters Forest Preserve; and the National Park Service's Redwoods Rising program.

As an example, the North Coast Water Board considers the following steps in the USFS's Watershed Restoration Action Plan development as a qualifying "priority planning effort":

- 1. **Step A**: Executive Summary
 - a. Watershed name, general location, watershed area, general physiography, land use, key problems, restoration opportunities/priorities
- 2. Step B: Watershed Characteristics and Conditions
 - a. Geral context/overview (climate, hydrology, geomorphology, fisheries, etc.)
 - b. Watershed conditions (upland, hillslope, riparian, in-channel)
- 3. Step C: Restoration Goals, Objectives, and Opportunities
- 4. **Step D**: Project Monitoring and Evaluation

To promote the utilization of these watershed-based planning efforts, all projects that include treatment of CSDS as well as other alternative credit generating activities (e.g., aquatic habitat restoration, fuels management, etc.) that are being conducted as part of these strategic planning efforts will qualify for WARP treatment credits 1.2 times the normal credit value.

VII. REDUCING CREDIT OBLIGATIONS OVER TIME

The North Coast Water Board's WARP was developed to establish a regulatory framework for advancing pollution control on federal lands, while including adaptive alternatives that provide water quality benefits. The WARP also includes an iterative approach to treatment credit obligations as waterbody conditions, treatment actions, and management activities change over time.

A. WATERBODY CALCULATION FACTORS: FROM "MANAGED" TO "TREATED"

North Coast Water Board staff have designed the WARP to incentivize holistic treatments for HUC 12 watersheds that are identified as impaired for sediment, nutrients, and/or temperature. The beneficial uses of these waterbodies are

impacted, primarily associated with past land use activities, but also attributed to the persistent pollution that is generated from poorly functioning road networks on federal lands.

Like the North Coast Water Board, Federal Agencies endeavor to address the sources of impairments that impact water quality. A major objective of the WARP is to support Administrative Units to successfully prioritize and implement projects at a scale that will support waterbody improvements. In recognition of these efforts, WARP provides an iterative approach by reducing the treatment credit obligations once an Administrative Unit has successfully implemented holistic watershed treatments.

As described earlier, the WARP identifies these portions of federal ownerships as "managed" in the context of the credit obligation methodology and assigns a factor (coefficient) of 0.75 for those portions of a HUC 12 watershed that they control. Administrative Units that demonstrate the successful treatment of 75% of the CSDS in a HUC 12 Watershed will have their treatment credit obligation changed from 0.75 for a "managed" watershed, to 0.25 for a "treated" watershed.

Treated waterbody accomplishments will require detailed descriptions of all work completed compared to assessments of conditions across the subwatershed. Field-based reviews by Federal Lands Permit liaisons will be integral to evaluating proposed WARP treatment credit reductions.

B. WATERBODY DELISTING

In September 2004, the State Water Resources Control Board developed a Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List, which was amended in February 2015. Following procedures established by the Policy, a waterbody can be removed from Section 303(d) of the Clean Water Act for different reasons, including but not limited to: (1) a waterbody meets water quality standards in the North Coast Water Board Basin Plan and sufficient water quality data or other information supporting that the waterbody is no longer impaired, or (2) demonstration that the impairment designation does not apply. In most cases, the removal of a waterbody from Section 303d list must be supported by sufficient CSDS treatments and in-channel sediment data for sediment impairments, and demonstration of effective riparian shade protections and supporting temperature monitoring data for temperature impairments. One of the North Coast Water Board's objectives is to remove waterbodies from Section 303(d) of the Clean Water Act, whenever appropriate.

Once a waterbody has been removed from Section 303(d) of the Clean Water Act in accordance with the State Water Board Policy, the WARP treatment credit obligations will be changed to reflect those adjustments, therefore reducing the treatment credit obligations for that portion of a waterbody under federal land management control.

VIII. WARP REPORTING

Under the proposed WARP, Administrative Units will be required to provide information each year documenting progress implementing projects that qualify for annual treatment credits. Beginning one year after the adoption of the Federal Lands Permit, each Administrative Unit will submit information to the North Coast Water Board using the form included as Attachment C2 detailing the treatments implemented during the previous year and describe and account for their accomplished treatment credits. Administrative Units will also be required to submit a five-year retrospective every five years, which is intended to provide the North Coast Water Board with a periodic update on the progress of WARP implementation across all Federal Agency Administrative Units. North Coast Water Board staff will endeavor to develop an online WARP reporting form for the federal agencies to use.

Order	ed by:	
	Valerie Quinto	
	Executive Officer	
Date:		