2.1 INTRODUCTION

The mission of the Regional Water Board is to achieve the highest water quality consistent with the maximum benefit to the people of the state. Both aquatic ecosystems and groundwaters provide such benefits, and the beneficial uses of water described in this chapter define the resources, services, and qualities of the aquatic systems that characterize high water quality.

Beneficial uses of surface waters and groundwaters presented in this chapter form the foundation on which water quality objectives, discharge prohibitions, and other implementation actions are established.

The beneficial uses of water include not only the great variety of ways in which water benefits people and society but also the functions of water in maintaining the natural environment. The basis for the following discussion of beneficial uses is section 13050(f) of California's Porter-Cologne Water Quality Control Act, which states:

> "Beneficial uses" of the waters of the state that may be protected against water quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

An essential part of the water quality planning process is an assessment of the beneficial uses ~~which~~ that are to be ~~designated~~ identified and protected. Table 2-1 of this chapter identifies beneficial uses for each hydrologic area in the North Coast Region, as well as for specific waterbodies and broad categories of waters (i.e., bays, estuaries, minor coastal streams, ocean waters, wetlands, and groundwaters).

Protection will be afforded to ~~present~~ existing and potential beneficial uses of waters of the North Coast Region ~~as designated and presented in Table 2-1~~. The federal antidegradation policy[1] requires that existing instream water uses and the level of water quality necessary to protect those uses be maintained and protected. It also states that existing uses are those uses actually attained in the waterbody on or after November 28, 1975, whether or not they are included in water quality standards.[2] Existing and potential beneficial uses of water in the North Coast Region are presented in Table 2-1.

The beneficial uses of any specifically identified ~~water body~~ waterbody generally apply to all its tributaries. Also, a beneficial use is to be protected in any location that it is found, regardless of whether it is identified for a specific hydrologic unit in Table 2-1 of the Basin Plan.

[1] 40 CFR § 131.12(a)(1).
[2] 40 CFR § 131.3(e).

Water quality standards are adopted to protect public health ~~or~~ and welfare, to enhance the quality of the waters of the state, and to serve the purposes of the federal Clean Water Act.[3] Water quality standards consist of:

1) ~~designated~~ B~~b~~eneficial uses of water.
2) ~~the~~ W~~w~~ater quality objectives to protect those ~~designated~~ beneficial uses.
3) I~~i~~mplementation of the ~~F~~federal and ~~S~~state policies for antidegradation. ~~and general policies for application and implementation.~~

Chapter 3 of the Basin Plan contains numeric and narrative water quality objectives, including ~~Resolution 68–16~~, the state Antidegradation Policy[4], designed to ensure that all ~~designated~~ beneficial uses of water in the North Coast Region are maintained and protected.

Chapter 4 contains the implementation ~~plans and policies~~ program intended to meet water quality objectives and protect beneficial uses.

Chapter 5 describes the North Coast Region and statewide monitoring and surveillance methods used to measure achievement of the water quality objectives and the ultimate protection of benefical uses of water.

~~The objective of the State's Policy for Maintaining High Quality of Waters in California (Antidegradation Policy - Resolution 68-16) is explained in Chapter 3, on page 3-2.00. The entire text of this Policy is contained in Appendix 6 to the Basin Plan. The federal Antidegradation Policy also applies to the protection of beneficial uses. The federal Antidegradation Policy is contained in Appendix 6-B.~~

2.2 BENEFICIAL USE DEFINITIONS

In 1972, the State Water Board adopted a uniform list of beneficial uses, including ~~descriptions~~ definitions, to be applied throughout all basins of the state. This list was updated in 1996. In addition to the beneficial uses identified on the 1996 statewide list, ~~the following~~ five additional uses have been identified in the~~is~~ North Coast Region.~~:~~ ~~Three wetland beneficial uses, recognizing the value of protecting these unique waterbodies: use have been added, identifying the traditional and cultural uses of waters within the Region.~~

- Wetland Habitat (WET).
- Water Quality Enhancement (WQE).
- Flood Peak Attenuation/ Flood Water Storage (FLD).
- Native American Cultural Use (CUL).
- Subsistence Fishing (FISH).

[3] Clean Water Act § 101(a)(2) and § 303(c).
[4] State Water Board Resolution 68-16.

The ~~following~~ beneficial uses of water are ~~designated~~ defined below are identified within the North Coast Region. Beneficial uses are presented alphabetically by commonly used abbreviation.

Note to Reader: the strikethrough of the existing beneficial use definition format was not included for ease of review.

2.2.1 AGR - Agricultural Supply

Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

2.2.2 AQUA - Aquaculture

Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.

2.2.3 ASBS - Preservation of Areas of Special Biological Significance

Includes marine life refuges, ecological reserves and designated areas of special biological significance, such as areas where kelp propagation and maintenance are features of the marine environment requiring special protection.

2.2.4 COLD - Cold Freshwater Habitat

Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

2.2.5 COMM - Commercial and Sport Fishing

Uses of water for commercial, recreational (sport) collection of fish, shellfish, or other aquatic organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

2.2.6 CUL - Native American Culture

Uses of water that support the cultural and/or traditional rights of indigenous people such as subsistence fishing and shellfish gathering, basket weaving and jewelry material collection, navigation to traditional ceremonial locations, and ceremonial uses.

2.2.7 EST - Estuarine Habitat

Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

2.2.8 FISH - Subsistence Fishing

Uses of water that support subsistence fishing.

2.2.9 FLD - Flood Peak Attenuation/Flood Water Storage

Uses of riparian wetlands in flood plain areas and other wetlands that receive natural surface drainage and buffer its passage to receiving waters.

2.2.10 FRSH - Freshwater Replenishment

Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).

2.2.11 GWR - Groundwater Recharge

Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.

2.2.12 IND - Industrial Service Supply

Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.

2.2.13 MAR - Marine Habitat

Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

2.2.14 MIGR - Migration of Aquatic Organisms

Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.

2.2.15 MUN - Municipal and Domestic Supply

Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

2.2.16 NAV - Navigation

Uses of water for shipping, travel, or other transportation by private, military or commercial vessels.

2.2.17 POW - Hydropower Generation

Uses of water for hydropower generation.

2.2.18 PRO - Industrial Process Supply

Uses of water for industrial activities that depend primarily on water quality.

2.2.19 RARE - Rare, Threatened, or Endangered Species

Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

2.2.20 REC-1 - Water Contact Recreation

Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white-water activities, fishing, or use of natural hot springs.

2.2.21 REC-2 - Non-Contact Water Recreation

Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

2.2.22 SAL - Inland Saline Water Habitat

Uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.

2.2.23 SHELL - Shellfish Harvesting

Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sports purposes.

2.2.24 SPWN - Spawning, Reproduction, and/or Early Development

Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

2.2.25 WARM - Warm Freshwater Habitat

Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

2.2.26 WET - Wetland Habitat

Uses of water that support natural and man-made wetland ecosystems, including, but not limited to, preservation or enhancement of unique wetland functions, vegetation, fish, shellfish, invertebrates, insects, and wildlife habitat.

2.2.27 WILD - Wildlife Habitat

Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

2.2.28 WQE - Water Quality Enhancement

Uses of waters, including wetlands and other waterbodies, that support natural enhancement or improvement of water quality in or downstream of a waterbody including, but not limited to, erosion control, filtration and purification of naturally occurring water pollutants, streambank stabilization, maintenance of channel integrity, and siltation control.

Note to Reader: Strikethrough of relocated Key to Table 2-1 and Table 2-1 not shown for ease of review.

2.3 IDENTIFYING ~~PRESENT~~ EXISTING AND POTENTIAL BENEFICIAL USES

~~In the basin planning process, a number of~~ Existing and potential beneficial uses of water are ~~usually~~ identified for ~~a~~ given ~~body of water~~ waterbodies or categories of waters (e.g. bays/harbors, groundwater). ~~At a minimum, State must~~ D~~d~~esignated uses[5] ~~that~~ are those uses specified for a waterbody or waterbody segment, whether or not they are ~~currently~~ being attained. (40 CFR §131.3(f).) Attainable uses are uses that can be achieved when technologies are implemented to achieve effluent limits under ~~Section 306 of the~~ Clean

[5] Federal law uses the term "designated use" and applies "criteria" designed to protect the use, whereas state law uses the term "beneficial use" and applies "objectives" to protect the uses.

Water Act section 306 and/or when cost-effective and reasonable Best Management Practices (BMPs) are imposed.

Water quality objectives are established ~~(see Chapter 3)~~ to ensure the reasonable protection of beneficial uses (Wat. Code, § 13240.) and to be sufficiently stringent to protect the most sensitive beneficial use. The Regional Water Board reserves the right to ~~resolve any conflicts among~~ balance the values and priorities of competing beneficial uses~~, based on the fact of a given case~~. ~~It should be noted that~~ However, the assimilation of waste~~s~~ is not a beneficial use, and the discharge of waste is a privilege and not a right.

Existing uses are uses that were attained in a waterbody on or after November 28, 1975.[6] This was the date of the first Water Quality Standards Regulation published by USEPA. Existing uses cannot be removed or modified unless a use requiring more stringent criteria is added.[7] However, a use requiring more stringent criteria can always be added because doing so reflects the goal of further improvement of water quality.

Federal law requires that, wherever it is attainable, water quality shall provide for the protection and propagation of fish, shellfish, and wildlife and provide for recreation in and on the water (i.e. fishable/swimmable goals). For example, the Clean Water Act[8] creates a "rebuttable presumption" that fishable and swimmable uses are attainable. This means that most surface waters in the North Coast Region have aquatic life and recreational beneficial uses.

A ~~Waterbodies may have~~ potential beneficial use of a waterbody may be established for any of the following reasons:

1. T~~t~~he use existed before November 28, 1975 but is not currently being attained.~~;~~
2. P~~p~~lans currently exist to put the water to that use.~~;~~
3. C~~c~~onditions make such future use likely.~~;~~
4. T~~t~~he water has been identified as a potential source of drinking water[9] based on the quality and quantity available. ~~(See *Sources of Drinking Water policy*, in Appendix 7) ; and~~
5. Although existing water quality does not support the~~se~~ use~~s~~, ~~but~~ remedial measures[10] may lead to attainment in the future.

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6 40 CFR 131.3 (e).

7 The state may propose the removal of a potential beneficial use of water upon demonstrating that attaining the use is not feasible. (40 CFR §131.10(g).). A use attainability analysis (UAA) must be conducted to justify the proposed change. A UAA is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors. (40 CFR §131.3(g).).

8 Clean Water Act § 101(a)(2) (33 USC §1251(a).

9 State Water Board Resolution 88-63.

10 Remedial measures include implementation of effluent limits required under Clean Water Act ~~S~~section 301(b) and 306 ~~of the CWA~~, and implementation of cost-effective and reasonable best management practices for nonpoint source control. (40 CFR 131.10(d).

6. While there is insufficient information to support the use as existing~~, however,~~ the potential for the use exists, and upon future review the potential ~~designation~~ use may be ~~re-designated~~ re-assigned as existing.

The establishment of a potential beneficial use can have different purposes, such as establishing a water quality goal that must be achieved through control actions in order to re-establish a beneficial use, or ~~serving~~ it can be used to protect the existing quality of a water source for eventual use.

A beneficial use is to be protected in any location that it is found, regardless of whether it is identified for a specific hydrologic unit in the Basin Plan.

Seasonal cycles and variations affect many beneficial uses. For example, many waterbodies in the region support a seasonal migration of anadromous fish (MIGR) in fall and winter and they are used for recreational swimming (REC-1) in summer. Recognizing the seasonality of these beneficial uses is part of the Regional Water Board's responsibility.

As presented in Table 2-1 (~~in the~~ table of beneficial uses), an "E" indicates an existing use and a "P" indicates a potential use. Uses in both classifications are to be equally protected. ~~Biological data, human use statistics, and/or professional experience documents the existing uses.~~

~~Many~~ Large and small communities as well as individual landowners in the North Coast Region depend on surface waterbodies for their municipal and domestic water supply (MUN). The larger surface waterbodies used as a municipal water supply include, but are not limited to, the Smith, Mad, Noyo, Gualala and Russian ~~R~~rivers. ~~Agricultural water use is distributed over more areas than domestic, municipal and industrial use, as it is present in all of the hydrologic units within the Region.~~

Recreational use (REC-1 and REC-2) occurs in all fresh water and saltwater hydrologic units in the North Coast Region ~~on both fresh and salt water~~. Water recreation uses in the region attract ~~over ten~~ millions of people annually and the numbers are expected ~~to keep~~ grow~~ing~~ as population increases. This area has rugged natural beauty and, historically, some of the most renowned fishing streams in North America. The North Coast Region has many unique characteristics: diverse topography including a scenic ocean shoreline and rugged inland mountains, diverse forest environments including a large forested belt which contains more than half of California's redwoods, and productive agricultural lands. ~~and extensive nland moutnains.~~

Coastal areas receiving the greatest recreational use have been the ocean beaches, the lower reaches of rivers flowing to the ocean, and Humboldt and Bodega ~~B~~bays and Bodega Harbor. ~~Rivers~~ Streams receiving the largest levels of recreational use are the Russian, Eel, Mad, Smith, Trinity, and Navarro ~~R~~rivers, and Redwood Creek. Activities cover the spectrum of water-oriented recreation. Fishing, river rafting, kayaking, and canoeing ~~being~~ are popular on the rivers, and fishing, ~~clamming~~ shellfish harvesting,

beach combing, and surfing predominate at the ocean beaches and bays. Photography, painting, bird watching, and sightseeing are important recreational activities which take place throughout the North Coast Region.

Virtually all surface waters in the North Coast Region are home to fish and wildlife ~~in the North Coast Region~~. Coastal waters and streams support anadromous fish, which are important for commercial and sport fishing (COMM), Native American cultural uses (CUL), and subsistence fishing (FISH). Historically, coastal and inland streams in the North Coast Region provided thousands of miles of habitat suitable for salmon and steelhead spawning and rearing. Recent focus has been placed on re-establishment of the once productive ~~anadromous~~ salmonid runs in the North Coast Region through habitat restoration and educational outreach.

Humboldt and Bodega ~~B~~bays and Bodega Harbor support shellfish (SHELL) and fish populations, which are very important to both the commercial fishing industry and recreational~~ist~~ users. Both bays also provide refuge for wildlife populations especially waterfowl, shorebirds, and other water-associated birds.

Many of the watersheds of the North Coast Region support plant and wildlife species that are recognized as rare, threatened, and endangered (RARE). A few examples include the Swainson's hawk (*Buteo swainsoni)*, Bald eagle (*Haliaeetus leucocephalus)*, American peregrine falcon (*Falco peregrinus tundrias)*, Coho Salmon (*Oncorhynchus kisutch)*, Chinook Salmon (*Oncorhynchus tshawytscha)*, Steelhead *(Oncorhynchus mykiss),* Lost River sucker (*Deltistes luxatus)*, Shortnose sucker (*Chamistes brevirostris),* California freshwater shrimp (*Syncaris pacificaz)*, Baker's larkspur (*Delphinium hesperium* sp. *Cuyamacae)*, and Sebastopol meadowfoam (*Limnanthes vinculans),* all of which have been observed in watersheds within the North Coast Region.

Navigation (NAV) is vital to the economy of the North Coast Region. There are fishing ports at Crescent City, Eureka, Fort Bragg, and Bodega ~~Bay~~ Harbor. The principal commercial harbor between San Francisco and Coos Bay, Oregon, is the Port of Eureka ~~located at~~ in Humboldt Bay.

The hydroelectric power generation (POW) projects in the North Coast Region are:

1) The Klamath River Project, ~~located at~~ consisting of Iron Gate Reservoir and Copco ~~Lake~~ Reservoir on the Klamath River.
2) Trinity Dam, ~~located at~~ holding Trinity Lake (formerly Clair Engle Lake) on the Trinity River.
3) Lewiston Dam, which forms Lewiston Reservoir on the Trinity River.
4) Matthews Dam, ~~located at~~ which holds Ruth Lake on the Mad River.
5) Coyote Dam ~~located at~~ which holds Lake Mendocino on the East Fork of the Russian River.
6) Warm Springs Dam, which holds Lake Sonoma on Dry Creek, a tributary to the Russian River.

7) The Potter Valley Project, ~~located at~~ which consists of three components, a) Scott Dam holding Lake Pillsbury on the upper East Fork Eel River, b) Cape Horn Dam holding Van Arsdale Reservoir (a diversion storage facility), and c) a tunnel carrying diverted Eel River water beneath the divide to Potter Valley to the East Fork Russian River.

Many large and small communities as well as individual landowners in the North Coast Region rely, exclusively or in part, on groundwater for municipal or domestic use (MUN). Communities in the region which use groundwater as their drinking water supply include, but are not limited to, Santa Rosa, Sebastopol, Rohnert Park, Ukiah, and Yreka. Almost all landowners outside the city limits of the large communities also rely exclusively on groundwater for domestic use. Other beneficial uses for groundwater include: Industrial Water Supply (IND), Industrial Process Water Supply (PRO), Agricultural Water Supply (AGR), and Freshwater Replenishment to Surface Waters (FRSH). Occasionally, groundwater is used for other purposes (e.g., groundwater pumped for use in aquaculture operations (AQUA).

~~DESIGNATION OF THE "RARE" BENEFICIAL USE~~

~~The Rare, Threatened, or Endangered Species (RARE) beneficial use designation was based, in part, on the information contained within the California Department of Fish and Game's Natural Diversity Data Base (CNDDB). The CNDDB tracks the location and condition of Federal and State listed rare, threatened, endangered, and sensitive plants, animals and natural communities. The CNDDB is the most complete single source of information on California's rare, endangered, threatened and sensitive species, and natural communities. However, the absence of a special animal, plant, or natural community from the CNDDB report does not necessarily mean that they are absent from the area in question, only that no occurrence data was entered in the CNDDB inventory as of January 2001. Supplemental information was collected by interviewing biologists with the California Department of Fish and Game and the U.S. Forest Service regarding the presence of rare, threatened and endangered species.~~

~~The RARE designation is added based on substantial evidence that the waterbody supports threatened or endangered species. By definition, waterbodies with a RARE designation support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered. The Regional Water Board can provide specific information about the sighting(s) used to designate the RARE beneficial use. However, it is the responsibility of the lead agency or project sponsor to provide adequate information as to whether a proposed project will affect fish and wildlife (including plants) and their habitats.~~

~~The RARE beneficial use is generally, but not always, present throughout the entire reach of a particular waterbody. In addition, the RARE beneficial use may not be present throughout the year. The RARE designation is placed on bodies of water where the protection of a threatened or endangered species depends on the water either~~

~~directly, or to support its habitat. The purpose of the RARE designation for a particular hydrologic subarea or waterbody is to highlight the existence of the threatened or endangered species. This will ensure that, absent extraordinary circumstances, RARE species are not placed in jeopardy by the quality of the discharges to those waterbodies.~~

~~Recognition that a waterbody is used by threatened or endangered species (RARE) does not necessarily mean that any particular suite of water quality objectives will be applied to the water body. In the absence of RARE species, the Regional Water Board would rely on the aquatic habitat uses. These include Cold Freshwater Habitat (COLD), Warm Freshwater Habitat (WARM), Estuarine Habitat (EST), Marine Habitat (MAR), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), and Wildlife Habitat (WILD).~~

2.4 ~~BENEFICIAL USES FOR SPECIFIC~~ GENERAL CATEGORIES OF WATERBODIES

Beneficial uses are ~~designated~~ assigned for all waters in the North Coast Region. The waterbodies are separated into various categories. Wetlands and groundwater are described outside of the ~~C~~coastal and ~~I~~inland ~~W~~waters categories, as they are unique waterbodies that require more detailed descriptions. Freshwater and saline wetlands are combined for the purposes of discussion on wetlands, but separated in Table 2-1 for the purpose of ~~designation~~ identification of beneficial uses. Each waterbody category is defined or generally described below.

2.4.1 Coastal Waters

Coastal waters discussed in this section may be defined as waters subject to tidal action and include ocean waters, enclosed bays, harbors, estuaries, and lagoons and ~~. The~~~~is~~ ~~subcategories~~ are described below. In addition to this Basin Plan, the Ocean Plan, the Thermal Plan and the Enclosed Bays and Estuaries Policy describe watert quality objectives and actions necessary for the protection of coasteal waters. ~~Beneficial uses for these coastal waters generally include, but are not limited to: Water Contact and Non-contact Water Recreation (REC-1, REC-2), Estuarine Habitat (EST), Rare, Threatened or Endangered Species (RARE), Wildlife Habitat (WILD), Marine Habitat (MAR), Shell Fish Harvesting (SHELL), Saline Habitat (SAL), and Navigation (NAV).~~ Coastal waters include the subcategories: ocean waters, enclosed bays, and estuaries as described below.

2.4.1.1 Ocean Waters

Ocean waters are territorial marine waters of the region as defined by California law to the extent that these waters are outside of enclosed bays, estuaries, and coastal lagoons.

2.4.1.2 Enclosed Bays

Enclosed bays are indentations along the coast, which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest difference between the headlands or outermost harbor works is less than seventy-five percent of the greatest dimension of the enclosed portion of the bay. ~~These areas are generally more sheltered from wave action than the open coast and are relatively shallow (less than 30m in depth).~~

~~Large shallow inlets and enclosed bays are complex systems interlinking the terrestrial and aquatic environments and composed of an interdependent mosaic of subtidal, intertidal, and surrounding terrestrial habitats~~. Enclosed bays do not include inland surface waters or ocean waters.

2.4.1.3 Estuaries

Estuaries are ~~the~~ tidal ~~portions of rivers~~ areas located at the mouths of streams, which are sometimes temporarily separated from the ocean by sandbars. Estuarine waters extend from a bay or the open ocean to a point upstream where the freshwater of the river mixes with the saline ocean water.

~~Estuarine coastal waters provide protective habitat for marine life (MAR), including shellfish, and support the migration (MIGR) of aquatic organisms including anadromous salmonids. These waters are also used extensively for Water Contact and Non-Contact Water Recreation (REC-1, REC-2), Navigation (NAV), and Commercial and Sport Fishing (COMM), among others.~~

All coastal lagoons of the North Coast Region are included in the estuaries category. The mouths of most of the rivers and creeks are continually affected by tidal action and present a relatively stable environment for wildlife and vegetation. Other coastal lagoons may be separated from tidal action by earthen deposits and thus present an environment with major seasonal variations. Such conditions result in the development of a unique biologic community highly specific to that area. Occasionally, the mouths of these coastal lagoons are opened subjecting the lagoons to tidal flushing which causes short-term changes to the habitat conditions and enhancement of the recreational uses. The action would not alter the categories of beneficial uses of the coastal lagoons.

2.4.2 INLAND SURFACE WATERS

Inland surface waters as presented in this section consist of rivers, streams, lakes, reservoirs, and inland wetlands. ~~Beneficial uses of these inland surface waters and their tributaries are designated on Table 2-1.~~

2.4.2.1 Rivers and Streams

To reflect the federal Clean Water Act "fishable/swimmable" goals the b~~B~~eneficial uses of inland surface waters generally include:

- Water Contact Recreation (REC-1). ~~;~~
- Cold Freshwater Habitat (COLD). ~~;~~
- Warm Freshwater Habitat (WARM). ~~;~~
- Spawning, Reproduction, and Development (SPWN). ~~;~~
- Migration of Aquatic Organisms (MIGR). ~~; and~~
- Commercial and Sport Fishing (COMM), ~~; reflecting the goals of the federal Clean Water act.~~

Inland surface water that meet the criteria mandated by the State Water Board *Sources of Drinking Water Policy*[11] ~~(Resolution No. 88-63, Appendix 7)~~ are ~~designated~~ assigned the Municipal and Domestic Supply (MUN) beneficial use. (~~This policy is reprinted in Appendix 7)~~. Most of the inland surface water in the North Coast Region are protected as existing or potential sources of drinking water.

~~Inland waters are also often designated with Agricultural Water Supply (AGR), Industrial Water Supply (IND), Industrial Process Supply (PRO), Non-contact Water Recreation (REC-2), and Wildlife Habitat (WILD) uses. In addition, inland waterbodies are sometimes designated with Rare, Threatened or Endangered Species (RARE) uses.~~

Many ~~Regional~~ rivers and streams in the North Coast Region are primary sources of replenishment for major groundwater ~~basins~~ areas that supply water for drinking and other uses, and as such must be protected as Groundwater Recharge (GWR).

~~Several waterbodies have been designated with the new Native American Cultural (CUL) beneficial use, which is applied when there is information available indicating that waters were historically used for cultural purposes meeting the new definition of CUL.~~

2.4.2.2 Lakes and Reservoirs

Lakes and reservoirs-are depressions that are natural or artificial impoundments of water. ~~are used for irrigation, municipal water supply, recreation, and hydroelectric power generation, among others. These water resources have the greatest diversity of beneficial uses and are located in several of the Region's hydrologic units.~~ All lakes and reservoirs in the region ~~are designated with~~ assigned the Water Contact Recreation (REC-1) beneficial use, reflecting the federal Clean Water Act goals. Water Contact Recreation (REC-1) uses often can be restricted or prohibited by the entities that manage these waters.

[11] State Water Board Resolution 88-63.

~~The largest reservoirs in the Region (the Central Valley Project's Trinity Lake and the Army Corps of Engineer's Lake Sonoma) export to adjacent hydrologic regions, while Clear Lake Reservoir in Modoc County, supplies water to the United States Bureau of Reclamation (USBR) Klamath Project, which is mainly in Oregon.~~

2.4.2.3 Wetlands

Wetlands are waters of the state and are protected under state regulations by provisions of the California Water Code. In addition, wetlands are protected under the federal Clean Water Act, which was enacted with a goal to restore and maintain the physical, chemical, and biological integrity of the nation's waters, including wetlands. Federal regulations define wetlands as: "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas[12]~~."(40 CFR § 116.3)~~

Although the definition of wetlands differs widely among federal agencies, both the USEPA and the U.S. Army Corps of Engineers use this definition in administrating the Clean Water Act ~~S~~Section 404 discharge permit program.

Federal administrative regulation[13] defines wetlands as a subset of "Waters of the United States," for purposes of the federal Clean Water Act. Waters of the ~~S~~state are defined ~~by the Porter-Cologne Act~~ as "any water, surface or underground, including saline waters, within the boundaries of the ~~S~~state". [14] The definition of w~~W~~aters of the ~~S~~state is broader than the definition of ~~W~~waters of the United States. Under s~~S~~tate law, wetlands are waters of the ~~S~~state and wetland water quality control is within the jurisdiction of the State of California and Regional Water Boards independent of federal law, and need not meet federal jurisdictional requirements under the Clean Water Act section 404 to trigger regulatory controls.

Note to Reader: The portion of the following shown as strikethrough will be relocated to page 4-33.00 of Chapter 4-Implementation Plans as part of this amendment.

~~A United States Supreme Court decision on January 9, 2001, *Solid Waste Agency of Northern Cook County (SWANCC) v. Army Corps of Engineers,* 69 U.S.L.W. 4048 (2001), limited the types of bodies of waters for which U.S. Army Corps of Engineers Section 404 discharge permits are required. The Court held that certain isolated, non-navigable, intrastate waters (a sub-category of wetlands) cannot be interpreted by U.S. Army Corps of Engineers to be navigable waters solely on the basis that they serve as habitat for migratory birds. Therefore, U.S. Army Corps of Engineers discharge permits~~

[12] 40 CFR § 116.3.
[13] 40 CFR § 122.2.
[14] CWA § 13050[e].

~~are not required to discharge dredged or fill material into such bodies of water. The SWANCC decision does not affect the Porter-Cologne (California Water Code) authorities to regulate discharges to isolated, non-navigable waters of the State.~~

~~State and Federal Wetland Policies~~

~~The State of California and the federal government adopted separate wetland policies in August 1993 to protect these valuable waters. These policies represented a significant advance in wetland protection. The policies that were developed represent agreements that are sensitive to the needs of landowners and provide flexibility in the permit process. Both policies support the interim goal of no overall net loss and the long-term goal of increasing the quality and quantity of the remaining wetlands.~~

~~Wetland Identification, Delineation and Regulation~~

~~Regulating development to minimize its effects on existing wetlands is a primary function of several agencies in California. The Regional Water Board's role in this process is the protection of water quality and the beneficial uses of waters. There are many issues pertinent to wetland regulatory decisions that demonstrate the complexity and controversy that surround regulation and protection of this resource. These include defining what a wetland is, determining its allowable uses, and in some cases determining the appropriate compensatory mitigation, all of which are challenging issues.~~

~~The Coastal Act provides strong enforceable policies for protection of wetlands within California's coastal zone. These policies are described in the *Procedural Guidance for the Review of Wetland Projects in California's Coastal Zone* (California Coastal Commission, 1994) and the *Procedural Guidance for Evaluating Wetland Mitigation Projects in the California Coastal Zone* (California Coastal Commission, 1995). These documents also outline wetland identification and delineation processes, the permit and environmental review processes, project performance standards, monitoring programs, and the mitigation process, among others.~~

The Regional Water Board recognizes that wetlands are frequently referred to under the following names (or classifications): saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, sandflats, unvegetated seasonal ponded areas, vegetated shallows, sloughs, wet meadows, fens, playa lakes, natural ponds, vernal pools, diked bay lands, seasonal wetlands, and riparian woodlands.

~~In this Region, the Regional Water Board, in general, relies on the federal *Wetlands Delineation Manual* (U.S. Army Corps of Engineers, 1987) for determining wetland areas subject to the federal Clean Water Act. In the rare cases where the USEPA and U.S. Army Corps guidelines disagree, the Regional Water Board relies on the wetlands delineation made by USEPA. Where the SWANCC decision leads to a federal determination that a specific wetland is not "jurisdictional" for federal purposes, the Regional Water Board will exercise its independent judgment in determining both the~~

~~size and functions of the water at issue, and the necessary requirements to protect water quality as required by Porter-Cologne.~~

~~Regional Water Board staff will prepare and implement a plan to identify and delineate wetlands within the Region to be implemented when funding becomes available. However, because of the large number of small and contiguous wetlands, it may not be practical to delineate and specify beneficial uses for every wetland area. Therefore, wetlands and their beneficial uses may continue to be determined on a site-specific basis, as necessary.~~

~~Constructed Treatment Wetlands~~

~~Constructed wetlands are, in most cases, designed, built and managed to provide wastewater or storm water treatment in order to achieve protection or improvement in receiving water quality. These types of wetlands are not constructed to provide mitigation for projects that impact jurisdictional wetlands. These constructed treatment wetlands can also have other benefits including the support of waterfowl and other wildlife, as well as opportunities for education and recreation.~~

~~The Regional Water Board's approach toward regulation of the use of these constructed wetlands is to encourage protection of these affiliated uses while appropriate treatment uses are supported.~~

~~Beneficial Uses of Wetlands~~

~~The Lahontan and Los Angeles Regional Water Boards have defined three additional beneficial uses related to wetlands that have been adopted by the State Water Board. These beneficial uses: 1) Wetland Habitat (WET), 2) Flood Peak Attenuation/Flood Water Storage (FLD), and 3) Water Quality Enhancement (WQE) are now designated for freshwater and saline wetlands in the North Coast Region (see Table 2-1). The definitions of these beneficial uses can be found within the list of beneficial uses on page 2-4.00. Many beneficial uses for saline and freshwater wetlands have been designated as potential although some wetlands currently have these uses. When field reconnaissance is conducted as part of the wetland identification project described above, the specific beneficial uses of wetlands will be identified as existing or potential on an individual basis.~~

2.4.3 GROUNDWATER

Groundwater is defined as subsurface water in soils and geologic formations that are fully saturated all or part of the year.[15] ~~It~~ This definition includes water in areas where saturation of the soils and geolog~~y~~ic units fluctuates, including areas of fracture porosity and capillary fringe. Groundwater does not include subterranean streams, which have the beneficial uses of surface water. Groundwater bearing formations sufficiently

[15] ~~Groundwater does not include subterranean streams, which have the beneficial uses of surface water.~~

permeable to transmit and yield significant quantities of water are called aquifers. ~~A groundwater basin is defined as a hydrogeologic unit containing one large aquifer or several connected and interrelated aquifers.~~

~~Where an aquifer or a number of aquifers underlie a depression that is surrounded or nearly surrounded by hills or mountains, they make up a groundwater basin. Water-bearing geologic units that do not meet the exact definition of an aquifer occur throughout the Region within groundwater basins. For instance, there are shallow, low permeability zones throughout the Region that have extremely low water yields.~~

A groundwater basin is defined as a hydrogeologic unit containing one large aquifer or several connected and interrelated aquifers and having the character of a basin with respect to the collection, retention, and outflow of water. The California Department of Water Resources identifies 62 groundwater basins in the North Coast Region, including four basins that are divided into a total of nine subbasins. The basins range in size from one square mile to 135 mi^2 and underlie about 7.5 percent of the North Coast Region. Beneath much of the remaining 92.5 percent of the region, groundwater is available from fracture zones in bedrock (fracture porosity). The quantity and depth of water in fractured bedrock may be highly variable and unpredictable.

~~Therefore,~~ ~~f~~For basin planning purposes, the term "groundwater" includes all subsurface waters, except subterreanean stream, whether ~~or not~~ these waters ~~meet the classic definition of an aquifer or~~ occur ~~with~~in ~~identified~~ a groundwater basin~~s~~, an aquifer outside a groundwater basin, or in fracture zones in bedrock.

~~Existing and potential beneficial uses applicable to groundwater in the Region include Municipal and Domestic Water Supply (MUN), reflecting the importance of groundwater as a source of drinking water in the Region and as required by the State Board's *Sources of Drinking Water Policy* (See Appendix 7). Other beneficial uses for groundwater include: Industrial Water Supply (IND), Industrial Process Water Supply (PRO), Agricultural Water Supply (AGR), and Freshwater Replenishment to Surface Waters (FRSH), among others. Occasionally, groundwater is used for other purposes (e.g., groundwater pumped for use in aquaculture operations).~~

2.5 KEY TO TABLE 2-1

The list of beneficial uses in Table 2-1 reflects demands on the water resources of the North Coast Region. Attainment and protection of ~~W~~water quality objectives ~~(see Chapter 3)~~ will adequately protect the quality of the waters of the Region for future generations.

Table 2-1 lists ~~designated~~ beneficial uses of inland surface waters by hydrologic unit, hydrologic area, hydrologic subarea, and in a few cases, by specific waterbody. General categories ~~at the bottom~~ located at the end of the ~~t~~Table 2-1 list the beneficial uses of bays/harbors, estuaries/lagoons, ocean waters, minor coastal streams, freshwater and saline wetlands, and groundwater.

Within Table 2-1, hydrologic unit, area, and sub-area numbers are shown as developed for the ~~S~~state's hydrologic basin planning system. For uniformity purposes, the Calwater system was developed by a ~~S~~state and ~~F~~federal interagency committee in 1997. Calwater is a set of standardized watershed boundaries for California nested into larger previously standardized watersheds, which meet standardized delineation criteria.

~~"~~CALWATER (~~Rbuas)~~ Number~~"~~

This column contains a numeric identifier in a specified order representing specific subdivisions of drainage used by the Calwater classification system. ~~The number follows the format below:~~

~~Hydrologic Region + Basin/ HU + HA + HSA~~

~~"~~Hydrologic Unit/Area/Sub~~unit~~area/Drainage Feature~~"~~

This column contains ~~(in bold type)~~ the names of watersheds and subwatersheds corresponding to the hydrologic unit (HU), hydrologic area (HA), or hydrologic subarea (HSA) number in the preceding column. The definitions of these area classifications are provided below.

HU: Hydrologic Unit

Each hydrologic region is divided into hydrologic units, which are defined by surface drainage as well as topographic and geographic conditions. A hydrologic unit may encompass a major river watershed or a major groundwater basin, contiguous watersheds with similar hydrogeologic characteristics, or a closed drainage area, such as a desert basin or group of such basins.

HA: Hydrologic Area

Major subdivisions of hydrologic units. Best described as major tributaries of a river, large valley groundwater basin, or a component of a stream or desert basin group.

HSA: Hydrologic Subarea

Consist of a major segment of a hydrologic area having significant geographical characteristics of hydrological homogeneity.

Drainage Feature/Waterbody

An individual waterbody, which has been listed as a distinct feature of the hydrologic subunit in which it exists, based on unique designated beneficial uses.

Beneficial Uses

The subheadings under this heading are abbreviations of beneficial uses, which are defined above in section 2.2. An "E" ~~or a "P"~~ in a column ~~beneath one of these designates~~ indicates an existing ~~or potential~~ beneficial use and a "P" indicates a potential beneficial use in the cooresponding ~~a given~~ hydrologic area, sub-area or waterbody, ~~respectively. The complete list of beneficial uses follows:~~

~~**MUN** Municipal and Domestic Supply~~
~~**AGR** Agricultural Supply~~
~~**IND** Industrial Service Supply~~
~~**PRO** Industrial Process Supply~~
~~**GWR** Groundwater Recharge~~
~~**FRSH** Freshwater Replenishment~~
~~**NAV** Navigation~~
~~**POW** Hydropower Generation~~
~~**REC-1** Water Contact Recreation~~
~~**REC-2** Non-Contact Water Recreation~~
~~**COMM** Commercial and Sport Fishing~~
~~**WARM** Warm Freshwater Habitat~~
~~**COLD** Cold Freshwater Habitat~~
~~**ASBS** Preservation of Areas of Special Biological Significance~~
~~**SAL** Inland Saline Water Habitat~~
~~**WILD** Wildlife Habitat~~
~~**RARE** Rare, Threatened,or Endangered Species~~
~~**MAR** Marine Habitat~~
~~**MIGR** Migration of Aquatic Organisms~~
~~**SPWN** Spawning, Reproduction, and/or Early Development~~
~~**SHELL** Shellfish Harvesting~~
~~**EST** Estuarine Habitat~~
~~**AQUA** Aquaculture~~
~~**CUL** Native American Culture~~
~~**FLD** Flood Peak Attenuation/Flood Water Storage~~
~~**WET** Wetland Habitat~~
~~**WQE** Water Quality Enhancement~~
~~**FISH** Subsistence Fishing~~

TABLE 2-1. BENEFICIAL USES OF WATERS OF THE NORTH COAST REGION
Page 1 of 7 pages

CalWater Number	HYDROLOGIC UNIT/HYDROLOGIC AREA/ HYDROLOGIC SUBAREA/DRAINAGE FEATURE NAME	BENEFICIAL USES																											
		AGR	AQUA	ASBS	COLD	COMM	CUL	EST	FISH	FLD	FRSH	GWR	IND	MAR	MIGR	MUN	NAV	POW	PRO	RARE	REC1	REC2	SAL	SHELL	SPWN	WARM	WET	WILD	
101.00	**Winchuck River Hydrologic Unit**																												
	Winchuck River	E	P		E	E					E		E		E	E	E	P	P	E	E	E			E			E	
102.00	**Rogue River Hydrologic Unit**																												
102.20	Illinois River Hydrologic Area	E	E		E	E					E		E		E	E	E	E	P	E	E	E			E			E	
102.30	Applegate River Hydrologic Area	E	P		E	E					E		E		E	E	E	P	E	E	E	E			E			E	
103.00	**Smith River Hydrologic Unit**																												
103.10	Lower Smith River Hydrologic Area																												
103.11	Smith River Plain Hydrologic Subarea	E	P		E	E	E	E			E		E	E	E	E	E		P	E	E	E			E			E	
	Lake Talawa		P		E	E	E				E				E	P	E			E	E	E				E		E	
	Lake Earl	E	P		E	E	E				E		E		E	E	E			E	E	E				E		E	
	Crescent City Harbor		E		E	E					E			E	E		E			E	E	E		E		P		E	
103.12	Rowdy Creek Hydrologic Subarea	E	P		E	E					E		E		E	E	E	P	P	E	E	E			E			E	
103.13	Mill Creek Hydrologic Subarea	E	P		E	E					E		E		E	E	E	P	P	E	E	E			E			E	
103.20	South Fork Smith River Hydrologic Area	E	P		E	E	E				E		E		E	E	E	E	P	E	E	E			E			E	
103.30	Middle Fork Smith River Hydrologic Area	E	E		E	E	P				E		E		E	E	E	E	P	E	E	E			E			E	
103.40	North Fork Smith River Hydrologic Area	E	P		E	E					E		E		E	E	E	E	P	E	E	E			E			E	
103.50	Wilson Creek Hydrologic Area	E	P		E	E	E				E		E		E	E	E	E	P	E	E	E			E			E	
105.00	**Klamath River Hydrologic Unit**																												
105.10	Lower Klamath River Hydrologic Area																												
105.11	Klamath Glen Hydrologic Subarea	E	P		E	E	E	E			E	E	P	E	E	E	E	P	P	E	E	E		E	E	E		E	
105.12	Orleans Hydrologic Subarea	E	P		E	E	E				E	E	E		E	E	E	P	P	E	E	E		P	E	E		E	
105.20	Salmon River Hydrologic Area																												
105.21	Lower Salmon Hydrologic Subarea	E	P		E	E	E				E		E		E	E	E	P	P	E	E	E		P	E			E	
105.22	Wooley Creek Hydrologic Subarea	P	P		E	E	E				E	E	E		E	E	E	P	P	E	E	E		P	E			E	
105.23	Sawyers Bar Hydrologic Subarea	E	P		E	E					E		E		E	E	E	P	P	E	E	E		P	E			E	
105.24	Cecilville Hydrologic Subarea	E	P		E	E					E		E		E	E	E	P	P	E	E	E		P	E			E	
105.30	Middle Klamath River Hydrologic Area																												
105.31	Ukonom Hydrologic Subarea	E	P		E	E	E				E	E	E		E	E	E	P	E	E	E	E			E	E		E	
105.32	Happy Camp Hydrologic Subarea	E	P		E	E	E				E	E	E		E	E	E	P	E	E	E	E			E	E		E	
105.33	Seiad Valley Hydrologic Subarea	E	P		E	E	E				E	E	E		E	E	E	P	E	E	E	E			E	E		E	
105.35	Beaver Creek Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	E	E	E	E			E	E		E	
105.36	Hornbrook Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	E	E	E	E			E	E		E	
105.37	Iron Gate Hydrologic Subarea	P	E		E	E					E		P		E	P	E	E	P	E	E	E		E	E	E		E	
105.38	Copco Lake Hydrologic Subarea	E	E		E	E					E		E		E	E	E	E	P	E	E	E			E	E		E	
105.40	Scott River Hydrologic Area																												
105.41	Scott Bar Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E			E			E	
105.42	Scott Valley Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	E	P	E	E	E			E			E	
105.50	Shasta Valley Hydrologic Area																												
	Shasta River and Tributaries	E	E		E	E					E	E	E		E	E	E	P	P	E	E	E			E	E		E	
	Lake Shastina	E	P		E						E	E	P		P	P	E		P		E	E				E		E	
	Lake Shastina Tributaries	E	P		E	E					E	E	E		E	E	P	P	P		E	E			E	E		E	
105.80	Butte Valley Hydrologic Area																												

TABLE 2-1. BENEFICIAL USES OF WATERS OF THE NORTH COAST REGION
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CalWater Number	HYDROLOGIC UNIT/HYDROLOGIC AREA/ HYDROLOGIC SUBAREA/DRAINAGE FEATURE NAME	BENEFICIAL USES																											
		AGR	AQUA	ASBS	COLD	COMM	CUL	EST	FISH	FLD	FRSH	GWR	IND	MAR	MIGR	MUN	NAV	POW	PRO	RARE	REC1	REC2	SAL	SHELL	SPWN	WARM	WET	WILD	
105.81	Macdoel-Dorris Hydrologic Subarea	E	P		E	E							P		E	E		E	P	E	E	E			E	E		E	
	Meiss Lake	E	P		E							E	P			E			P		P	E				E		E	
105.82	Bray Hydrologic Subarea	E	P			E									E	E		P		E	E	E			E	E		E	
105.83	Tennant Hydrologic Subarea	E	P		E	P					E	E	P		E	E		P	P	P	E	E			E	P		E	
105.90	Lost River Hydrologic Area																												
105.91	Mount Dome Hydrologic Subarea	E	P		E	P					E	E	P		E	P		P	P	E	P	E			E	E		E	
105.92	Tule Lake Hydrologic Subarea	E	P		P	E					E	E	P		E	P			P	E	P	E			E	E		E	
105.93	Clear Lake Hydrologic Subarea	E	P		E	E					E	E	P		E	P	P	P	P	E	E	E		P	E	E		E	
105.94	Boles Hydrologic Subarea	E	P		E	E					E	E	P		E	P		P	P	E	P	E		P	E	E		E	
106.00	**Trinity River Hydrologic Unit**																												
106.10	Lower Trinity River Hydrologic Area																												
106.11	Hoopa Hydrologic Subarea	E	P		E	E	E				E	E	E		E	E	E	P	P	E	E	E		P	E			E	
106.12	Willow Creek Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E		P	E			E	
106.13	Burnt Ranch Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	P	P	E	E	E		P	E			E	
106.14	New River Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E		P	E			E	
106.15	Helena Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E		P	E			E	
106.20	South Fork Trinity River Hydrologic Area																												
106.21	Grouse Creek Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
106.22	Hyampom Hydrologic Subarea	E	P		E	E					E	E	E		E	E	P	E	P	E	E	E			E			E	
106.23	Forest Glen Hydrologic Subarea	E	P		E	E					E	E	E		E	E	P	P	P	E	E	E			E			E	
106.24	Corral Creek Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
106.25	Hayfork Valley Hydrologic Subarea	E	P		E	E					E	E	E		E	E		P	E	E	E	E			E			E	
	Ewing Reservoir		P		E	E							P			E	E		P	E	P	E				E		E	
106.30	Middle Trinity Hydrologic Area																												
106.31	Douglas City Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
106.32	Weaver Creek Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
106.40	Upper Trinity River Hydrologic Area																												
	Trinity Lake (formerly Clair Engle Lake)	E	P		E	E					E	E	E		P	E	E	E	E	E	E	E			E	E		E	
	Lewiston Reservoir	E	E		E	E					E	E	P		P	E	E	E	P	E	E	E			E	P		E	
	Trinity River	E	E		E	E					E	E	P		E	E	E	P	P	E	E	E			E			E	
107.00	**Redwood Creek Hydrologic Unit**																												
107.10	Orick Hydrologic Area	E	P		E	E	E	E				E	E	E	E	E	E	P	P	E	E	E			E			E	
107.20	Beaver Hydrologic Area	E	P		E	E						E	E		E	E	E	P	P	E	E	E			E			E	
107.30	Lake Prairie Hydrologic Area	E	P		E	E						E	E		E	E	E	P	P	E	E	E			E			E	
108.00	**Trinidad Hydrologic Unit**																												
108.10	Big Lagoon Hydrologic Area	E	P	E	E	E	E	E			E	E	E	E	E	E	E		P	E	E	E			E			E	
108.20	Little River Hydrologic Area	E	P		E	E	E	E			E	E	E	E	E	P	E		P	E	P	E			E			E	
109.00	**Mad River Hydrologic Unit**																												
109.10	Blue Lake Hydrologic Area	E	E		E	E	E	E			E	E	E	P	E	E	E	P	E	E	E	E			E			E	
109.20	North Fork Mad River Hydrologic Area	E	P		E	E					E	E	E		E	E	E	P	E	E	E	E			E			E	
109.30	Butler Valley Hydrologic Area	E	P		E	E	E				E	E	E		E	E	E	P	E	E	E	E			E			E	
109.40	Ruth Hydrologic Area	E	P		E	E					E	E	E		E	E	E	E	E	E	E	E			E	E		E	
110.00	**Eureka Plain Hydrologic Unit**																												

TABLE 2-1. BENEFICIAL USES OF WATERS OF THE NORTH COAST REGION
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CalWater Number	HYDROLOGIC UNIT/HYDROLOGIC AREA/ HYDROLOGIC SUBAREA/DRAINAGE FEATURE NAME	BENEFICIAL USES																											
		AGR	AQUA	ASBS	COLD	COMM	CUL	EST	FISH	FLD	FRSH	GWR	IND	MAR	MIGR	MUN	NAV	POW	PRO	RARE	REC1	REC2	SAL	SHELL	SPWN	WARM	WET	WILD	
	Jacoby Creek	E	P		E	E	E	E*			E	E	E		E	E	E	P	P	E	E	E			E			E	
	Freshwater Creek	E	E		E	E	E	E*			E	E	E		E	E	E	P	P	E	E	E			E			E	
	Elk River	E	P		E	E		E*			E	E	E		E	E	E	P	P	E	E	E			E			E	
	Salmon Creek	E	P		E	E	E	E*			E	E	E		E	E	E	P	P	E	E	E			E			E	
	Humboldt Bay	E	E		E	E	E	E*			E		E	E	E	E	E	P	P	E	E	E		E	E			E	
111.00	**Eel River Hydrologic Unit**																												
111.10	Lower Eel River Hydrologic Area																												
111.11	Ferndale Hydrologic Subarea	E	P		E	E	E	E			E	E	E	P	E	E	E	P	P	E	E	E		E	E			E	
111.12	Scotia Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
111.13	Larabee Creek Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
111.20	Van Duzen River Hydrologic Area																												
111.21	Hydesville Hydrologic Subarea	E	P		E	E	E				E	E	E		E	E	E	P	P	E	E	E			E	E		E	
111.22	Bridgeville Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E			E	E		E	
111.23	Yager Creek Hydrologic Subarea	E	E		E	E	E				E	E	E		E	E		P	P	E	E	E			E	E		E	
111.30	South Fork Eel River Hydrologic Area																												
111.31	Weott Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E	E		E	
111.32	Benbow Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E	E		E	
111.33	Laytonville Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E	E		E	
111.40	Middle Fork Eel River Hydrologic Area																												
111.41	Sequoia Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E			E	E		E	
111.42	Spy Rock Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E			E	E		E	
EST use applies only to estuarine portion of the water body as defined in Chapter 2.																													
111.50	North Fork Eel River Hydrologic Area	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E			E	E		E	
111.60	Upper Main Eel River Hydrologic Area																												
111.61	Outlet Creek Hydrologic Subarea	E	E		E	E						E	E		E	E	E	P	P	E	E	E			E	E		E	
111.62	Tomki Creek Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	P	P	E	E	E			E	E		E	
111.63	Lake Pillsbury Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	E	P	E	E	E			E	E		E	
111.70	Middle Fork Eel River Hydrologic Area																												
111.71	Eden Valley Hydrologic Subarea	E	E		E	E					E		E		E	E	E	P	P	E	E	E			E	E		E	
111.72	Round Valley Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	P	P	E	E	E			E	P		E	
111.73	Black Butte River Hydrologic Subarea	E	P		E	E					E		E		E	E	E	E	P	E	E	E			E	E		E	
111.74	Wilderness Hydrologic Subarea	E	P		E	E					E		E		E	E	E	E	P	E	E	E			E	E		E	
112.00	**Cape Mendocino Hydrologic Unit**																												
112.10	Oil Creek Hydrologic Area	E	E		E	E	E	E			E		E		E	P		P	P	E	E	E			E			E	
112.20	Capetown Hydrologic Area	E	P		E	E	E				E	E	E		E	E	E	P	P	E	E	E			E			E	
112.30	Mattole River Hydrologic Area	E	E		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E	P		E	
113.00	**Mendocino Coast Hydrologic Unit**																												
113.10	Rockport Hydrologic Area	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	
113.11	Usal Creek Hydrologic Subarea	P			E	E					E	E	P		E	E	E	P	P	E	E	E			E			E	
113.12	Wages Creek Hydrologic Subarea	E			E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
113.13	Ten Mile River Hydrologic Subarea	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	

TABLE 2-1. BENEFICIAL USES OF WATERS OF THE NORTH COAST REGION
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CalWater Number	HYDROLOGIC UNIT/HYDROLOGIC AREA/ HYDROLOGIC SUBAREA/DRAINAGE FEATURE NAME	BENEFICIAL USES																												
		AGR	AQUA	ASBS	COLD	COMM	CUL	EST	FISH	FLD	FRSH	GWR	IND	MAR	MIGR	MUN	NAV	POW	PRO	RARE	REC1	REC2	SAL	SHELL	SPWN	WARM	WET	WILD	
113.20	Noyo River Hydrologic Area	E	E		E	E		E			E	E	E		E	E	E	E	P	E	E	E			E			E	
113.30	Big River Hydrologic Area	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	
113.40	Albion River Hydrologic Area	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	
113.50	Navarro River Hydrologic Area	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	
113.60	Pt Arena Hydrologic Area																												
113.61	Greenwood Creek Hydrologic Subarea	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	
113.62	Elk Creek Hydrologic Subarea	P	P		E	E		E			E	E	E		E	P	E	P	P	E	E	E			E			E	
113.63	Alder Creek Hydrologic Subarea	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	
113.64	Brush Creek Hydrologic Subarea	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E			E			E	
113.70	Garcia River Hydrologic Area	E	P		E	E		E			E		E		E	E	E	P	P	E	E	E			E			E	
113.80	Gualala River Hydrologic Area																												
113.81	North Fork Gualala Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	P	P	E	E	E			E			E	
113.82	Rockpile Creek Hydrologic Subarea	E	P		E	E		E				E	E		E	E	E	P	P	E	E	E			E	E		E	
113.83	Buckeye Creek Hydrologic Subarea	E	P		E	E						E	E		E	E	E	P	P	E	E	E			E	E		E	
113.84	Wheatfield Fork Hydrologic Subarea	E	P		E	E						E	E		E	E	E	P	P	E	E	E			E	E		E	
113.85	Gualala Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E			E	E		E	
113.90	Russian Gulch Hydrologic Area	E	E		E	P						E	E		E	E			P		E	E	~~E~~		E			E	
114.00	**Russian River Hydrologic Unit**																												
114.10	Lower Russian River Hydrologic Area																												
114.11	Guerneville Hydrologic Subarea	E	P		E	E		E			E	E	E		E	E	E	P	P	E	E	E		P	E	E		E	
114.12	Austin Creek Hydrologic Subarea	E	P		E	E						E	E		E	E	E	P	P	E	E	E			E	E		E	
114.20	Middle Russian River Hydrologic Area																												
114.21	Laguna Hydrologic Subarea	E	P		E	E					E	E	E		E	P	E	E	P	E	E	E		P	E	E		E	
114.22	Santa Rosa Hydrologic Subarea	E	P		E	E						E	E		E	E	E	P	P	E	E	E		P	E	E		E	
114.23	Mark West Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E		P	E	E		E	
114.24	Warm Springs Hydrologic Subarea	E	E		E	E					E	E	E		E	E	E	E	P	E	E	E			E	E		E	
114.25	Geyserville Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	P	P	E	E	E		P	E	E		E	
114.26	Sulphur Creek Hydrologic Subarea	E	P		E	E						E	E		E	E	E	P	P	E	E	E			E	E		E	
114.30	Upper Russian River Hydrologic Area																												
114.31	Ukiah Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E		P	E	E		E	
114.32	Coyote Valley Hydrologic Subarea	E	P		E	E					E	E	E		E	E	E	E	P	E	E	E			E	E		E	
114.33	Forsythe Creek Hydrologic Subarea	E	P		E	E						E	E		E	E	E	P	P	E	E	E			E	E		E	
115.00	**Bodega Hydrologic Unit**																												
115.10	Salmon Creek Hydrologic Area	E	P		E	E		E				E	E		E	E	E		P	E	E	E		P	E			E	
115.20	Bodega Bay Hydrologic Area	E	E		E	E						E	E	E	E	E	E		P	E	E	E		E	E			E	
115.30	Estero Americano Hydrologic Area	E	P		E	E		E				E	E	E	E	E	E		P	E	E	E		P	E			E	
115.40	Estero de San Antonio Hydrologic Area	E	P		E	E		E				E	E	E	E	E	E		P	E	E	E		P	E			E	
	Minor Coastal Streams (not listed above**)	P	P		P	E	P	E			P	P	P	P	P	E	P		P	E	P	P			P	P		E	
	Ocean Waters		E	P		E							P	E	E		E		P	E	E	E		E	E			E	
	Bays		P		E	E	P	P					P	E	E		E		P	P	P	E		E	E	P		E	
	Saline Wetlands		P		P	P	P	P		P	P	P	P	P	P		P			P	P	P	P	P	P	P	E	P	

TABLE 2-1. BENEFICIAL USES OF WATERS OF THE NORTH COAST REGION
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CalWater Number	HYDROLOGIC UNIT/HYDROLOGIC AREA/ HYDROLOGIC SUBAREA/DRAINAGE FEATURE NAME	BENEFICIAL USES																												
		AGR	AQUA	ASBS	COLD	COMM	CUL	EST	FISH	FLD	FRSH	GWR	IND	MAR	MIGR	MUN	NAV	POW	PRO	RARE	REC1	REC2	SAL	SHELL	SPWN	WARM	WET	WILD	
	Freshwater Wetlands	P	P		P	P	P	P		P	P	P	P		P	P	P			P	P	P		P	P	P	E	P	
	Estuaries	P	P		E	P	P	E			P		P	E	E	P	E	P	P	P	E	E		E	E	P		E	
	Groundwater	E	P				E						E			E			P										

Perennial or ephemeral