STAFF REPORT
FOR
THE BASIN PLAN AMENDMENT
TO REVISE THE BENEFICIAL USES CHAPTER
of the
Water Quality Control Plan for the North Coast Region

June 13, 2003

I. Introduction

Water quality control plans (Basin Plans) provide the basis for protecting water quality in California. Adoption of Basin Plans, by the Regional Boards is mandated by both the Federal Clean Water Act (CWA) and the State Porter-Cologne Water Quality Act (Porter-Cologne). According to the California Water Code (CWC §13050 (j)), Basin Plans consist of the designation of beneficial uses to be protected, water quality objectives designed to protect the beneficial uses, and a program of implementation needed for achieving water quality objectives. The CWA also requires that the State designate beneficial uses for surface waters for protection and propagation of fish, shellfish and wildlife, recreation in and on the water, use of water for public water supplies, and agricultural, industrial, and navigational purposes (CWA §101 and §303). Beneficial uses must be designated for all waters of the State, within the boundaries of the State.

Elements of a Basin Plan amendment dealing with surface water standards (water quality objectives and beneficial uses) and implementation plans are subject to the U.S. Environmental Protection Agency's (U. S. EPA) approval pursuant to CWA Section 303. USEPA has established procedures for conducting reviews of state programs every three years (triennially). The process involves identification of those portions of *the Water Quality Control Plan for the North Coast Region* (Basin Plan), which require modification or additions.

II. Background

The North Coast Regional Water Quality Control Board ((Regional Water Board) adopted its first interim basin plans in 1971. These were followed in 1975 by a comprehensive *Water Quality Control Plan for the Klamath River Basin* and a comprehensive *Water Quality Control Plan for the North Coastal Basin*. The two separate Basin Plans were amended multiple times before 1988, when the Regional Water Board combined and updated the two comprehensive plans and their abstracts into a single Basin Plan. In 1993, the Regional Water Board again updated descriptions and corrected inaccuracies in the Basin Plan. The Regional Water Board amended the Basin Plan numerous other times between 1975 and 1996. However, an update to the identification and designation of beneficial uses has not occurred since the Regional Water Board first adopted the Basin Plan in 1971.

On August 23, 2001, as part of the Triennial Review process, the Regional Water Board directed that an update of the Beneficial Use Section of *The Water Quality Control Plan for the North Coast Region* (Basin Plan), be the first scheduled project on a list of priority Basin Plan amendments, as set out in Resolution No. 2001-93. In response to this direction, staff propose the Beneficial Use Amendment (Exhibit A).

III. Amendment Description

The purpose of this Staff Report for the Beneficial Use Basin Plan Amendment is to present staff recommendations for amending the Basin Plan and to provide a summary of the necessary changes. Alternatives to the amendment are also included in Section V, to address the requirements of the California Environmental Quality Act (CEQA).

This amendment will replace Chapter 2, Beneficial Water Uses in the North Coast Region, of the Basin Plan with an updated version (Exhibit A). The proposed amendment is offered to bring the beneficial use designations up to date, to reflect the current state of knowledge of the existing and potential uses of these waters, and to make the more general previous designations more specific and precise. A description of the beneficial uses of the North Coast Region, including a list of the hydrologic areas, subareas, or waterbodies to which the various beneficial uses are proposed to be added, is included in section IV.
The key points of the proposed amendment to the Beneficial Use Chapter include the following:

- Refined Scale of Designations in the Beneficial Use Table 2-1
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- Recognition of Four Additional Beneficial Uses
- Revision of Two Existing Beneficial Uses

In addition, several subsections have been added to the Beneficial Use Chapter for the purpose of clarification, readability, and to provide a general understanding of the beneficial uses of water in the North Coast Region. Section IV includes descriptions of each of the subsections that have been added and the associated reasons for the addition.

IV. Scope of Basin Plan Revisions

The following contents of Chapter 2, Beneficial Uses will be added or modified as described below.

Beneficial Uses For Specific Waterbodies

This subsection describes the various categories of waterbodies found in the North Coast Region. Wetlands and groundwater have been added to the previously recognized categories of waterbodies.

- **Coastal Waters-** This category includes descriptions of the enclosed bays/harbors, estuaries/lagoons, and ocean waters in the North Coast Region and the beneficial uses common to these waterbodies.

- **Inland Surface Waters**
  This category includes descriptions of rivers, streams, lakes and reservoirs in the region and the beneficial uses usually associated with these waterbodies.

- **Wetlands**
  Definitions and descriptions of the various types of freshwater and saline wetlands have been added to the Beneficial Use Chapter. Three wetland beneficial uses have been added as well as many other existing beneficial uses, to the general saline and freshwater wetland categories presented at the end of Table 2-1. The following subdivisions were also added under the Wetlands narrative:
  - State and Federal Wetland Policies

- Wetland Identification and Delineation
- Constructed Treatment Wetlands
- Beneficial Uses of Wetlands

In the subsection entitled "Wetland Identification and Delineation," staff has removed the following language from the March 4, 2003 Draft Amendment. This paragraph outlines some of the considerations and criteria used by Regional Water Board staff when processing applications for dredge and fill projects within wetlands. This language will be included in a future update of the Implementation Chapter (3) of the Basin Plan as it is more applicable to that Chapter:

In reviewing applications for dredge and fill within wetlands, the following criteria will be employed, in the following specific order of consideration: 1) wetland disturbance should be avoided to the maximum extent practicable; 2) to the extent that avoidance still affects wetlands, disturbance should be minimized; and 3) compensatory mitigation for lost wetland acreage and values through wetlands restoration or creation should be allowed to permit wetlands destruction only after the first two steps have been taken, to avoid and minimize impacts. These criteria mirror the current U.S. EPA's Section 404(b)(1), Guidelines Disposal Sites for Dredge or Fill Material," for evaluating the circumstances under which the filling of wetlands may be permitted.

- **Groundwater**
  A definition and a description of groundwater have been added as part of this amendment. As part of this description we have added a discussion on the saturated and unsaturated components of groundwater. The beneficial uses of groundwater, which are currently recognized; however, only by a footnote to Table 2-1. The designated uses of groundwater have been added to the general groundwater category presented at the end of Table 2-1. This addition will add further clarity for the user of the Basin Plan.

Present And Potential Beneficial Uses

This subsection contains general information on the North Coast Region and its associated beneficial uses. A portion of this narrative is already included in the current Basin Plan, but is updated in the proposed revision, as the existing narrative is somewhat outdated. The heading "Present and Potential Beneficial Uses" has been added for consistency and clarity purposes, as it does not currently have its own subsection heading. A substantial number of the beneficial uses as updated for this section were obtained from the California Department of Water Resources, California Water Plan.

Projected Water Demands

This section has been removed from Chapter 2. Staff plans to revise this section and place it in Chapter 1, a more appropriate location for the Projected Water Demands discussion, when the Basin Plan is revised in the future.

Revised Beneficial Use Table 2-1 Including a Refined Scale of Designations and Updated Designations

The Beneficial Uses Table 2-1 has been expanded to include the Calwater classification system indicating all hydrologic units, (HUs), hydrologic areas (HAs) and hydrologic subareas (HSAs). Within Table 2-1, hydrologic unit, area, and sub-area numbers are shown in the far left column. For uniformity purposes, the Calwater system was developed by a State and Federal interagency committee in 1997. Calwater is a set of standardized watershed boundaries, nested into larger, previously standardized watersheds, meeting standardized delineation criteria. Planning Watershed identification codes in Calwater are based on numeric decimal identifiers used by the State and Regional Water Boards. The California Department of Water Resources (DWR) has adopted Calwater and variations thereof, as a base-map for selected DWR water information bulletin series. Table 2-1 will now also correspond directly to the hydrologic basin planning map for the North Coast Region.

The Beneficial Use Table indicates designated uses by an “E” or a “P” in the beneficial use columns. An “E” indicates an existing beneficial use and a “P” indicates a potential beneficial use. Biological data, human use statistics, and/or professional experience provide the basis for the existing uses (see Beneficial Uses Summary Table Appendix A, Table 1). Existing uses are those uses that were attained in a waterbody on or after November 28, 1975[1], i.e. the water quality was suitable to support the beneficial use (40 CFR § 131.3 (e)). Existing uses cannot be removed or modified unless a use requiring more stringent criteria is added (40 CFR§§ 131.10(h) and 131.12(a)(1)). Documentation supporting the beneficial use designations is contained within the Administrative Record for the Beneficial Use Amendment and summarized by the information contained in the tables presented in Appendix A.

Waterbodies may have potential beneficial uses established for any of the following reasons: 1) the use existed prior to November 28, 1975, but is not currently being attained, 2) plans already exist to put the water to that use, 3) conditions make such future use likely, 4) the water has been identified as a potential source of drinking water based on the quality and quantity available (see *Sources of Drinking Water Policy*, in Appendix 7), 5) existing water quality does not support these uses, but remedial measures[2] may lead to attainment in the future, or 6) there is insufficient information to support the use as existing, however, the potential for the use exists and upon future review, the potential designation may be re-designated as existing.

The designation of beneficial uses must take into consideration the water quality standards of downstream waters and ensure that such downstream standards are met (40 CFR § 131.10(b)). In the current Basin Plan, the delineation of areas is in most cases, at the level of hydrologic unit (HU) or hydrologic area (HA). This amendment proposes to delineate waterbodies at a smaller, more refined scale, in an attempt to increase the level of accuracy and to better reflect the current state of knowledge regarding uses. In the majority of cases this is accomplished by delineation of a hydrologic subareas (HSA) and in fewer cases, by the delineation of a hydrologic area (HA) or a specific waterbody. The intent of these refinements is to make the designated uses match up with the delineated areas more precisely.

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[1] Date of promulgation of the first Water Quality Standards Regulation by USEPA (Tit. 40, Code of Federal Regulations, Section 131.3, promulgated November 28, 1975).

[2] Remedial measures include implementation of effluent limits required under Section 301(b) and 306 of the CWA, and implementation of cost-effective and reasonable best management practices for nonpoint source control. CWA Sect. 131.10(d)

The following is a list of the refined hydrologic areas and subareas where beneficial use designations are changing from Existing (E) to Potential (P). This is due to the fact that the use does not exist in the hydrologic subarea, but was previously designated as E because the use does exist in other hydrologic subareas or hydrologic areas within the same hydrologic unit. The areas are listed below in the following arrangement: Waterbody or area/subarea where the change occurs (former waterbody segment as listed in current Table 2-1)- BENEFICIAL USE with change in designation:

Ukonom HSA (Middle Klamath HA/Klamath River) AQUA
Happy Camp HSA (Middle Klamath HA/Klamath River) AQUA
Seiad Valley HSA (Middle Klamath HA/Klamath River) AQUA
Beaver Creek HSA (Middle Klamath HA/Klamath River) AQUA
Hornbrook HSA (Middle Klamath HA/Klamath River) AQUA
Tule Lake HSA (Klamath River HU/Lost River HA) COLD
Trinity Lake (Trinity River HU/Upper Trinity HA), AQUA
Trinity River (Trinity River HU/Upper Trinity HA) MIGR, SPAWN
Tennant HSA (Butte Valley HA/Meiss Lake) COMM, COLD, WARM
Blue Lake HA (Mad River HU/Mad River) POW
North Fork Mad River HA (Mad River HU/Mad River) POW, AQUA
Butler Valley HA (Mad River HU/Mad River) POW, AQUA
Lower Eel HA (Eel River HU/Eel River) AQUA, POW
North Fork Eel (Eel River HU/Eel River) AQUA
Middle Russian HSA (Russian River HU/Russian River) POW, AQUA
Santa Rosa HSA (Russian River HU/Russian River) POW, AQUA
Mark West HSA (Russian River HU/Russian River) POW, AQUA
Warm Springs HSA (Russian River HU/Russian River) POW
Geyserville HSA (Russian River HU/Russian River) POW, AQUA
Sulphur Creek HSA (Russian River HU/Russian River) POW, AQUA
Ukiah HSA (Russian River HU/Middle Russian River HA) POW
Forsythe Creek HSA (Russian River HU/Middle Russian River HA) POW
Salmon Creek HA (Bodega Bay HU) AQUA
Estero Americano Hydrologic Area (Bodega Bay HU) AQUA
Estero de San Antonio Hydrologic Area (Bodega Bay HU) AQUA

Due to the refinement of beneficial use designations to a smaller scale, an Existing (E) designation has been changed to no designation in the areas listed below. This is based on information that the use does not meet the criteria for existing designation (i.e. it has not occurred in the Hydrologic Subarea (HSA) since November 28, 1975), [3] although it exists in other waterbodies on a larger scale within the same Hydrologic Unit (HU) and/or Area (HA):

Rowdy Creek HSA (Smith River HU/Lower Smith River HA) WARM
Mill Creek HSA (Smith River HU/Lower Smith River HA) WARM
South Fork Smith River HSA (Smith River HU/Lower Smith River HA) WARM
Middle Fork Smith River HSA (Smith River HU/Lower Smith River HA) WARM
North Fork Smith River HSA (Smith River HU/Lower Smith River HA) WARM
Wilson Creek HSA (Smith River HU/Lower Smith River HA) WARM
Beaver HA (Redwood Creek HU) EST
Lake Prairie HA (Redwood Creek HU) EST
Blue Lake HA (Mad River HU) WARM

[3] Date of promulgation of the first Water Quality Standards Regulation by USEPA (Tit. 40, Code of Federal Regulations, Section 131.3, promulgated November 28, 1975).

Butler Valley HA (Mad River HU) WARM
North Fork Mad River HA (Mad River HU) WARM
Ferndale HSA (Eel River HU/Lower Eel River HA) WARM
Scotia HSA (Eel River HU/Lower Eel River HA) WARM, EST
Larabee Creek HSA (Eel River HU/Lower Eel River HA) WARM, EST
South Fork Eel HA (Eel River HU) EST
North Fork Eel HA (Eel River HU) EST
Upper Main Eel HA (Eel River HU) EST
Middle Fork Eel HA (Eel River HU) EST
Capetown HA (Cape Mendocino HU) EST
North Fork Gualala HSA (Mendocino Coast HU) EST
Buckeye Creek HSA (Mendocino Coast HU/Gualala River HA) EST
Wheatfield Fork HSA (Mendocino Coast HU/ Gualala River HA) EST
Austin Creek HSA (Russian River HU/Lower Russian HA) EST
Middle Russian HA (Russian River HU) EST
Upper Russian HA (Russian River HU) EST

In a few cases (seen above), the Estuarine Habitat (EST) beneficial use originally designated to an entire river (or a major segment of a river), resulted in a change from existing to no designation upon refinement of the areas. This situation exists for the following waterbodies: Redwood Creek, Mad River, Eel River, Russian River, and the Gualala River where the estuarine habitat (EST) beneficial use appears to have been designated for the entire river (or the majority of the river). In actuality, the EST use only occurs in the lower segments of these waterbodies within the estuary.

Key to Table 2-1

The purpose of adding a key to Beneficial Use Table 2-1 is to help facilitate complete understanding of the information contained in Table 2-1.

Recognition of Additional Beneficial Uses

Regional Water Board staff is proposing to recognize four additional beneficial uses. Three of these uses have been adopted by the State Water Board and approved by the State's Office of Administrative Law (OAL). These three designations which are designated in the Los Angeles and Lahontan regions, are proposed to be added to this Basin Plan to describe those uses especially related to wetlands in the North Coast Region: 1) Wetland Habitat (WET), 2) Water Quality Enhancement (WQE), and 3) Flood Peak Attenuation (FLD). Addition of these uses is necessary to provide further understanding and protection to the numerous wetland areas in the region. USEPA requires the States to designate uses for all wetlands, and to meet the same minimum requirements of the Water Quality Standards regulation (40 CFR § 131.10) that are applied to other waters (http://www.epa.gov/owow/wetlands/regs/quality.html The addition of the wetland beneficial uses recognizes the functions, values and additional characteristics of these waterbodies that have been protected in the region by the regulation of discharges, but had not received formal designation. This update also acknowledges wetlands as waters of the State and of the U.S., which require protection. In addition, staff propose the addition of a Native American Cultural (CUL) beneficial use. The CUL use requires recognition for several reasons: 1) it is an existing use of water in the region and existing uses of water require recognition under the CWA; 2) it has been approved by the U.S. EPA; 3) States are required to be consistent with the requirements of downstream uses; 4) the use has many components that overlap with already existing uses including MUN, REC-1, NAV, and COLD.

In summary, under the CWA, the State is required to recognize and protect the existing uses of water, whether or not they are designated in the Basin Plan. Wetland Habitat (WET), Flood Peak Attenuation (FLD), Water Quality Enhancement (WQE), and the Native American Cultural (CUL) use are existing uses. Therefore, the Regional Water Board is required to protect water quality to support them. Staff is proposing to designate these uses in the Basin Plan on a refined scale, thus eliminating ambiguities that arise when uses are not clearly outlined in the Basin Plan. Definitions and descriptions of the four proposed beneficial use designations follow. Proposed changes to the definitions as adopted by the State Water Board occur in strikeout and underline.

The beneficial uses of wetlands and other waterbodies include their ability to enhance and protect water quality; the Water Quality Enhancement (WQE) beneficial use recognizes this fact. Characteristics which enable surface waters to provide water quality enhancement include, but are not limited to, riparian vegetation and streambank configuration. The definition of this use is broad enough to allow designation of virtually all surface waters of the North Coast Region. However, this use is only being added to the wetland category, at this time, to give special recognition to the value wetlands provide in improving the water quality of other surface waters. U.S. EPA cites water filtration as one of the many benefits wetlands provide (http://www.epa.gov/owow/wetlands).

> **Water Quality Enhancement (WQE)** Beneficial 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.

The Flood Peak Attenuation/Flood Water Storage (FLD) beneficial use designation is proposed for riparian wetlands in flood plain areas and other wetlands that receive natural surface drainage and buffer its passage to receiving waters. These waters slow runoff and provide temporary storage of direct precipitation and runoff, serving to reduce the heights of flood peaks in adjacent receiving waters, and lengthen the periods of runoff supplied to them. This form of water storage is vital to a number of other beneficial uses including agriculture and wildlife.

> **Flood Peak Attenuation/Flood Water Storage (FLD*)*** Uses of riparian wetlands in flood plain areas and other wetlands that receive natural surface drainage and buffer its passage to receiving waters.

Minor changes were made to the Wetland Habitat (WET) beneficial use definition as it was adopted by the Los Angeles Regional Water Quality Control Board (LARWQCB) and approved by the State Water Board. The LARWQCB combines this definition with the Water Quality Enhancement beneficial use and we are proposing to keep them separate. These proposed changes are shown in strikeout and underline below:

> **Wetland Habitat (WET)** 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, or wildlife habitat.

The Native American Culture (CUL) beneficial use is proposed to recognize the traditional and cultural uses of water in the region by indigenous (native) peoples. Staff proposes this use for the following reasons: 1) The U.S. Environmental Protection Agency (USEPA) recently released revised human health criteria (FR Vol. 67, Number 249). The revised criteria integrates an updated national default freshwater/estuarine fish consumption rate of 17.5 grams/day

recognizing higher consumption rates for subsistence by certain communities including, but not limited to Native Americans; 2) when designating uses, States are required to consider the downstream uses of common waterbodies (40 CFR 131.10(b)); and 3) the Karuk Tribe (located within the North Coast Region) has requested that we add this use. The definition of this proposed beneficial use follows:

> **Native American Culture (CUL)-** 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.

Staff notes that questions have been raised about whether the Regional Water Board can or should regulate Native American beneficial uses and standards on tribal lands. For clarification purposes, staff notes in response that the proposed CUL designation would not apply directly to tribal lands. The Regional Water Board is, however, required by federal law to take into consideration the water quality standards (which includes beneficial uses) of downstream waters (40 CFR 131.10 (b)). This designation therefore, would be used on any waterbody segments that are upstream of tribal lands or other lands where these uses are known

Tribes within the region have submitted information to staff documenting the waterbodies where the use occurs. Based on this information staff proposes designating the following Hydrologic Area (HA), Subarea (HSA), or waterbody with the CUL use:

Smith River Plain HSA
Lake Talawa
Lake Earl
South Fork Smith River HA
Middle Fork Smith River HA
Wilson Creek HA
Klamath Glen HSA
Orleans HSA
Lower Salmon HSA
Wooley Creek HSA
Ukonom HSA
Happy Camp HSA
Seiad Valley HSA
Hoopa HSA
Big Lagoon HA
Little River HA
Blue Lake HA
Butler Valley HA
Jacoby Creek
Freshwater Creek
Salmon Creek
Humboldt Bay
Ferndale HSA
Hydesville HSA
Yager Creek HSA
Oil Creek HA
Capetown HA

Modification of the Commercial and Sport Fishing (COMM) Beneficial Use

The existing standard beneficial use designation for Commercial and Sport Fishing adopted by the State Water Resources Control Board and used by the North Coast Water Board states:

> **Commercial and Sport Fishing (COMM*)*** - Uses of water for commercial, recreational collection of fish and shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

The existing definition is not comprehensive enough to accurately reflect uses in the North Coast Region. Native Americans and other non-Native American communities make use of the waters of the North Coast Region for subsistence fishing (Karuk Tribe letters dated 11/01 & 4/02). Subsistence fishing is a more precise sub-category of human consumption. Subsistence fishing involves a larger per-capita consumption than implicated by common commercial fishing uses. For example, and within that larger per capita consumption inheres the potential for a commensurately increased intake of contaminants that may be concentrated in fish tissue. As mentioned above, the U.S. EPA recently released revised human health criteria (FR Vol. 67, Number 249, December 2002). The revised criteria integrate an updated national default freshwater/estuarine fish consumption rate of 17.5 grams/day. Thus, a separate designation may be necessary to adequately protect subsistence use. The existing use of subsistence is not described in the standard beneficial use definitions adopted by the State Water Board. Instead of creating a new category for subsistence use we are proposing to modify the current definition of COMM as follows (underlined language has been added):

> **Commercial and Sport Fishing (COMM) -** Uses of water for commercial, recreational <u>(sport)</u> collection of fish and shellfish, or other <u>aquatic</u> organisms including, but not limited to, uses involving organisms intended for human consumption, <u>subsistence, and</u>/or bait purposes.

Revision of the Preservation of Areas of Special Biological Significance (BIOL) Beneficial Use to Biologically Significant Areas (BSA)

Currently, the State Water Board's definition does not recognize terrestrial areas. Therefore, staff proposes to accomplish two objectives with the modification of this beneficial use:

1. Modify the SWRCB's standard definition (shown below) to incorporate the term "State Water Quality Protection Areas (SWQPAs)," which is the new term the State Water Resources Control Board will be using to replace the term "Areas of Special Biological Significance (ASBS)" when they finalize a proposed amendment to the Ocean Plan.

2. Change the name of this beneficial use from BIOL (Preservation of Areas of Special Biological Significance) to BSA (Biologically Significant Areas) in order to create a separate, but similar use that recognizes terrestrial areas, in addition to off-shore areas, which have been identified as "biologically significant," by the various agencies that are responsible for these designations (i.e. California Department of Parks and Recreation). These terrestrial areas are not currently covered under the SWRCB definition.

The existing SWRCB standard definition states:

> **Preservation of Areas of Special Biological Significance (BIOL)** Uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves or Areas of Special Biological Significance (ASBS), where the preservation of natural resources requires special protection.

At this time, the North Coast Region is the only region that has not adopted the more recent state-wide standard definition. The proposed definition, would replace the current NCRWQCB definition which follows:

> ~~**Preservation of Areas of Special Biological Significance (BIOL)** 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.~~

Staff proposes the following modifications to the State Water Board's standard use:

> **Biologically Significant Areas (BSA)** - *formerly the beneficial use "Preservation of Areas of Special Biological Significance" (BIOL)*
> Uses of water that support areas or habitats that have been designated as biologically significant, such as established refuges, parks, sanctuaries, ecological reserves, and State Water Quality Protection Areas (SWQPAs) (formerly known as Areas of Special Biological Significance (ASBS)), where the preservation of natural resources requires special protection.

State Water Quality Protection Areas (SWQPAs), formerly known as Areas of Special Biological Significance (ASBS) are designated by the State Water Resources Control Board. In these areas, alteration of natural water quality is especially undesirable. The SWQPA locations have been designated as BSA in this region as listed below. The State Ocean Plan (see Appendix 4) requires discharges of wastewater and/or heat to be a sufficient distance from these areas to assure maintenance of natural water quality conditions. Existing wastewater and/or heat discharges adjacent to these areas must be phased out as promptly as possible.

These coastal waters listed below have been designated as SWQPAs in the North Coast Region. These eight areas are currently listed in Chapter 2 of the Basin Plan. For detailed descriptions of the boundaries of each location, see the Ocean Plan discussion in Chapter 5, Plans and Policies:

- Pygmy Forest Ecological Staircase
- Del Mar Landing Ecological Reserve
- Gerstle Cove
- Bodega Marine Life Refuge
- Kelp Beds at Saunders Reef
- Kelp Beds at Trinidad Head
- Kings Range National Conservation Area
- Redwoods National Park

Based on the revised definition and information provided by the California Department of Fish and Game (CDFG) and U.S. Forest Service (USFS) Fishery Biologists and Hydrologists, and other State and Federal agencies, this amendment proposes to specifically identify hydrologic areas and waterbodies in the Basin Plan that meet the revised Biologically Significant Areas (BSA) definition. These officially designated locations include USFS "Key Watershed" refugia areas, CDFG "Wild Trout Waters," Ecological Reserves, National Wildlife Refuges, Marine Protected Areas, State Parks, and State Reserves. The legal citations and descriptions of these areas are provided below. This information will be presented in Chapter 2 of Basin Plan under the beneficial use definition. Hydrologic areas, subareas, and waterbodies are designated with the BSA use if they are within (or a partially within) the boundaries of an officially designated Biologically Significant Area. There are no additional water quality requirements associated with these locations as there are for the eight SWQPAs sites officially designated by the State Water Board listed above

- **Natural Preserves**

Natural Preserves consist of distinct areas of outstanding natural or scientific significance established within the boundaries of other State Park System units. The purpose of Natural Preserves is to preserve such features as rare or endangered plant and animal species and their supporting ecosystems.

Natural Preserves (URL http://www.ceres.ca.gov/ceres/calweb/Natl_Parks.html or http://www.cal-parks.ca.gov/) are identified by the California State Park and Recreation Commission (Public Resources Code, Division 5 Chapter 1, Article 1). A legal description of each preserve is on file at the California State Park and Recreation headquarters, 1416 Ninth Street, Sacramento, California. The following designated Natural Preserves are located in the region:

- Big Lagoon Forest South, West and East Natural Preserves (Harry A. Merlo State Recreation Area)
- Pygmy Forest Natural Preserve (Van Damme State Park)
- Inglenook Fen-Ten Mile Dunes Natural Preserve (MacKerricher State Park)
- Arena Rock Marin Natural Preserve
- Brush Creek/Lagoon Lake Wetlands and Coastal Dunes Natural Preserve
- Lake Davis Wetlands and Coastal Dunes Natural Preserve

- **Marine Protected Areas**

Marine Protected Areas (MPAs) are defined in Marine Protected Areas Executive Order 13158-9 (URL http://mpa.gov/). This defines an MPA as "any area of the marine environment that has been reserved by Federal, State, territorial, tribal or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein" (Federal Register, 2000). This definition is very similar to that developed by the World Conservation Union which is accepted worldwide. It states: "any area of the intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment" (Kelleher IUCN, 1988; Kelleher, 1999)[4]. There are many different types of MPAs in waters of the United States. A legal description of each MPA is on file with the California Department of Fish and Game. The following sites are Marine Protected Areas in the North Coast Region, as designated in the Marine Life Protection Act:

- Kings Range Marine Recognized Protected Area
- Gerstle Cove Reserve
- Del Mar Landing Ecological Reserve
- MacKericher State Park
- Russian Gulch State Park
- Van Damme State Park
- Sonoma Coast State Beaches
- Arena Rock State Park
- Salt Point State Park
- Fort Ross State Historic Park
- Duxbury Reef Reserve

Ecological Reserves
Areas are designated Ecological Reserves by the California Fish and Game Commission (California Code of Regulations (CCR), Title 14, Section 630). Ecological Reserves are "land or land and water areas" which are designated as an ecological reserve by the commission pursuant to Section 1580 of the Fish and Game Code (URL http://www.dfg.ca.gov/). These areas are to be "preserved in a natural condition for the benefit of the general public to observe native flora and fauna and for scientific study." A legal description of the boundaries of each ecological reserve is on file with the California Department of Fish and Game headquarters, 1416 Ninth Street, Sacramento, California. The following is a list of the Ecological Reserves in the region:

- China Point Ecological Reserve
- Table Bluff Ecological Reserve
- Atascadero Creek Marsh Ecological Reserve
- Theiller Sebastopol Meadowfoam Ecological Reserve
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- Laguna de Santa Rosa Ecological Reserve
- Little Butte Ecological Reserve
- Little Red Mountain Ecological Reserve
- Mattole River Ecological Reserve
- Yorkville Ecological Reserve

- **State Parks**

The California Department of Parks and Recreation (http:// www.parks.ca.gov), defines the purpose of State Parks as the following: to preserve outstanding natural, scenic and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of such geological regions of California as the Sierra Nevada, northwest volcanic, great valley, coastal strip, Klamath-Siskiyou Mountains, southwest mountains and valleys, redwoods, foothills and low coastal mountains, and desert and desert mountains (PRC, Section 5019.53). The following is a list of State Parks in the region:

- Annadel State Park
- Salt Point State Park
- Manchester State Park
- Hendy Woods State Park
- Navarro River Redwoods State Park
- Montgomery Woods State Park
- Van Damme State Park
- Mendocino Headlands State Park
- Mendocino Woodlands State Park
- Russian Gulch State Park
- MacKerricher State Park
- Sinkyone Wilderness State Park
- Richardson Grove State Park
- Humboldt Redwoods State Park
- Grizzly Creek Redwoods State Park
- Patrick's Point State Park
- Humboldt Lagoons State Park
- Prairie Creek Redwoods State Park
- Del Norte Coast Redwoods State Park
- Jedediah Smith Redwoods State Park

- **State Reserves**

The California Department of Parks and Recreation (http:// www.parks.ca.gov) defines State Reserves as: areas embracing outstanding natural or scenic characteristics of statewide significance. The purpose of this classification is to preserve the Reserve's native ecological associations, unique faunal or floral characteristics, geological features and scenic qualities in a condition of undisturbed integrity. State reserves may be established in the terrestrial or underwater environments of the state (PRC, Section 5001.5). Seventeen such reserves operate currently; including eight in the North Coast Region listed below.

- Armstrong Redwoods State Reserve
- Kruse Rhododendron State Reserve
- Jug Handle State Reserve
- Smithe Redwoods State Reserve
- Azalea State Reserve
- Caspar Headlands State Reserve
- Mailliard Redwoods State Reserve
- Montgomery Woods State Reserve

- **National Wildlife Refuges**

Areas are designated as National Wildlife Refuges by the U.S. Fish and Wildlife Service (http://refuges.fws.gov/). The mission of the National Wildlife Refuge System is to "administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." Legal descriptions of the National Wildlife Refuges are on file with the U.S. Fish and Wildlife Service headquarters, 1849 C Street NW, Washington D.C. 20240. The following areas are designated as National Wildlife Refuges, by the U.S. Fish and Wildlife Service in region:

- Lower Klamath National Wildlife Refuge
- Modoc National Wildlife Refuge
- Clear Lake National Wildlife Refuge
- Humboldt Bay National Wildlife Refuge
- Tule Lake National Wildlife Refuge

- **Key Watersheds**

A system identifying Key Watersheds that serve as important refugia for at-risk stock of anadromous salmonids and resident fish species as well as sources of high quality water was developed by the Forest Ecosystem Management Assessment Team in 1993. The Team was comprised of the following agencies: U.S. Fish and Wildlife Service, U.S. National Park Service, USEPA, U.S. Bureau of Land Management, National Marine Fisheries Service, and the U.S. Forest Service. The team produced a document entitled, "Forest Ecosystem Management: An Ecological, Economic, and Social Assessment, Report of the Forest Ecosystem Management Assessment Team."

Key Watersheds include areas of good habitat as well as some areas of degraded habitat. Areas in good condition would serve as anchors for the potential recovery of depressed stocks. Those of lower quality habitat have a high potential for restoration and will become future sources of good habitat with the implementation of a comprehensive restoration program. The following is a list of Key Watersheds identified in the region:

- Lower Klamath Hydrologic Area (HA)
  Bluff Creek, Camp Creek, & Blue Creek

- Middle Klamath Hydrologic Area (HA)
  Clear Creek, Dillon Creek, & Grider Creek
- Salmon River Hydrologic Area (HA)
  Wooley Creek, Red Creek Cap, & Blue Creek

- **Wild Trout Waters**

The California Wild Trout Program (http://www.dfg.ca.gov/fishing/html/WildTrout/wtp.htm) was established by Fish and Game Commission in 1971, to "protect and enhance quality fisheries sustained by wild strains of trout." The Commission recognized the importance of high quality habitat for the maintenance of wild trout populations. The Wild Trout Policy states: "All necessary actions, consistent with State law, shall be taken to prevent adverse impact by and or water development projects affecting wild trout waters." The following North Coast waterbodies are identified as Wild Trout Waters:

- Upper Klamath River (Copco Lake HSA)
- Stone Lagoon (Big Lagoon HA)

Updated Beneficial Use Designations

In the course of researching the existing and potential beneficial uses in the North Coast Region, staff used several sources of information. The Beneficial Uses Summary Table (Appendix A, Table 1) indicates the sources of information used in updating beneficial uses for each of the hydrologic units, areas, subareas, and waterbodies as summarized below.

Designation of the Beneficial Use: RARE

Regional Water Board staff contacted specialists in Fish Biology and Hydrology with the California Department of Fish and Game (CDFG) and the U.S. Forest Service (USFS) see Appendix A, Table 3). Telephone interviews were held from March through August 2002 to discuss the beneficial uses of North Coast waterbodies with USFS and CDFG professionals who are extremely familiar with these waterbodies. The names, titles and agencies of these professionals are listed in the Professional Contacts' Table 2 below. The Table lists the hydrologic units, areas, and subareas for which each professional provided information.

This subsection provides specific information on the sources of data used to update the Rare, Threatened, or Endangered Species (RARE) beneficial use. Table 1 below, presents the information found in the California Department of Fish and Game's Natural Diversity Database (CNDDB) indicating the names and types of endangered and threatened species and the hydrologic units where they have been sighted. This is only a partial list of species as the database relies on individual sightings and reports to the CDFG. Table 1 below, indicates the hydrologic units, areas, and subareas where the RARE use has been designated based on information contained in the CNDDB. Additional hydrologic areas and subareas have been designated RARE based on information provided during interviews with CDFG and USFS professionals (see Beneficial Uses Summary Table, Appendix A, Table 1).

Table 1 below lists each hydrologic unit or area within the North Coast Region and all rare, threatened, or endangered species (RARE) which depend upon the waterbodies in the hydrologic unit, area, and subarea for habitat. Several of these waterbodies have been designated with the RARE beneficial use in the existing Basin Plan, and many are proposed for addition based on the following information contained in the CNDDB.

Table 1 Rare, Threatened, or Endangered Species in the North Coast Region

HU No.	Waterbody	Species	Status*	Type	Applicable Area or ESU (Evolutionary Significant Unit)
101.00	Winchuck River HU	Coho Salmon	FT	Fish	Southern OR / Northern CA Coasts ESU
102.20	Illinois River HA	Coho Salmon Marbled Murrelet Northern Spotted Owl	FT FE, ST FT	Fish Sea bird Bird	Southern OR / Northern CA Coasts ESU Entire Hydrologic Area
102.30	Applegate River HA	Coho Salmon Marbled Murrelet Northern Spotted Owl Siskiyou Mountains Salamander	FT SE, FT FT ST	Fish Sea bird Bird Amphibian	Southern OR / Northern CA Coasts ESU Entire Hydrologic Area Entire Hydrologic Area Entire Hydrologic Area
103.00	Smith River HU[1]	Bald Eagle Bank Swallow Coho Salmon Marbled Murrelet McDonald's Rock Cress Northern Spotted Owl Western Lily	FE ST FT SE, FT FE, SE FT FE, SE	Bird Bird Fish Sea bird Plant Bird Plant	Smith River Smith River Southern OR / Northern CA Coasts ESU Smith River Smith River Smith River Entire Hydrologic Unit
105.10	Lower Klamath River HA	Bald Eagle Coho Salmon Marbled Murrelet Northern Spotted Owl	FE, SE FT FE, ST SE, FT	Bird Fish Sea bird Bird	Entire Hydrologic Area Southern OR / Northern CA Coasts ESU Entire Hydrologic Area Entire Hydrologic Area
105.20	Salmon River HA	Coho Salmon Marbled Murrelet Northern Spotted Owl	FT SE, FT FT	Fish Sea bird Bird	Southern OR / Northern CA Coasts ESU Entire Hydrologic Area Entire Hydrologic Area
105.30	Middle Klamath River HA[1]	Bald Eagle Coho Salmon Marbled Murrelet McDonald's Rock Cress Northern Spotted Owl Siskiyou Mountains Salamander	FE, SE FT FE SE, FT FE, SE FT ST FE	Bird Fish Sea bird Plant Bird Amphibian	Entire Hydrologic Area Southern OR / Northern CA Coasts ESU Entire Hydrologic Area Klamath River Entire Hydrologic Area Klamath River Entire Hydrologic Area
105.40	Scott River HA	Coho Salmon Northern Spotted Owl Siskiyou Mountains	FT FT ST	Fish Bird Amphibian	Southern OR / Northern CA Coasts ESU Entire Hydrologic Area

HU No.	Waterbody	Species	Status*	Type	Applicable Area or ESU (Evolutionary Significant Unit)
		Salamander			
105.50	Shasta Valley HA	Bald Eagle Bank Swallow Coho Salmon Greater Sandhill Crane Northern Spotted Owl Swainson's Hawk	FE ST FT ST FT ST	Bird Bird Fish Bird Bird Bird	Entire Hydrologic Area Lake Shastina Southern OR / Northern CA Coasts ESU Shasta River Shasta River Shasta River
105.80	Butte Valley HA	Bald Eagle Greater Sandhill Crane Northern Spotted Owl Swainson's Hawk	FE ST FT ST	Bird Bird Bird Bird	Entire Hydrologic Area Entire Hydrologic Area Entire Hydrologic Area Entire Hydrologic Area
105.90	Lost River HA[1]	Bald Eagle Bank Swallow Greater Sandhill Crane Lost River Sucker Northern Spotted Owl Swainson's Hawk	FE ST ST FE FT ST	Bird Bird Bird Fish Bird Bird	Entire Hydrologic Area Hydrologic Area except Lower Lost River Entire Hydrologic Area Entire Hydrologic Area Entire Hydrologic Area Tule Lake & Lower Klamath Lake
106.10	Lower Trinity River HA	Coho Salmon Marbled Murrelet McDonald's Rock Cress Northern Spotted Owl	FT FE, ST FE, SE FT	Fish Sea bird Plant Bird	Southern OR / Northern CA Coasts ESU Entire Hydrologic Area Entire Hydrologic Area Entire Hydrologic Area
106.20	South Fork Trinity River HA	Bald Eagle Coho Salmon Northern Spotted Owl	FE FT FT	Bird Fish Bird	Entire Hydrologic Area Southern OR / Northern CA Coasts ESU Entire Hydrologic Area
106.40	Upper Trinity River HA	Bald Eagle Northern Spotted Owl	FE FT	Bird Bird	Entire Hydrologic Area Entire Hydrologic Area
107.00	Redwood Creek HU[1]	Chinook Salmon Coho Salmon Marbled Murrelet Northern Spotted Owl Steelhead Trout Western Snowy Plover	FT FT SE, FT FT FT FT	Fish Fish Sea bird Bird Fish Shore bird	California Coastal ESU Southern OR / Northern CA Coasts ESU Entire Hydrologic Unit Entire Hydrologic Unit Northern California ESU Entire Hydrologic Unit
108.0	Trinidad HU	Tidewater Goby Bank Swallow Beach Layia	FE FT FE	Fish Bird Plant	Big Lagoon HA Little River HA Little River HA

HU No.	Waterbody	Species	Status*	Type	Applicable Area or ESU (Evolutionary Significant Unit)
109.00		Bald Eagle	FE	Bird	Entire Hydrologic Unit
		Chinook Salmon	FT	Fish	California Coastal ESU
		Coho Salmon	FT	Fish	Southern OR / Northern CA Coasts ESU
		Marbled Murrelet	SE, FTFT	Sea bird	Entire Hydrologic Unit
		Northern Spotted Owl	FT	Bird	Entire Hydrologic Unit
		Steelhead Trout		Fish	Northern California ESU
110.00	Eureka Plain HU[1]	California Clapper Rail	FE, SE	Bird	Entire Hydrologic Unit
		Chinook Salmon	FT	Fish	California Coastal ESU
		Coho Salmon	FT	Fish	Southern OR / Northern CA Coasts ESU
		Marbled Murrelet	SE, FT	Sea bird	Entire Hydrologic Unit
		Northern Spotted Owl	FT	Bird	Entire Hydrologic Unit
		Steelhead Trout	FT	Fish	Northern California ESU
		Western Lily	FE, SE	Plant	Entire Hydrologic Unit
111.00	Eel River HU[1]	Bald Eagle	FE	Bird	South Fork Eel River
		Chinook Salmon	FT	Fish	California Coastal ESU
		Coho Salmon	FT	Fish	Southern OR / Northern CA Coasts ESU
		Marbled Murrelet	SE, FT	Sea bird	Entire Hydrologic Unit except Outlet Creek
		McDonald's Rock Cress	FE, SE	Plant	
		Northern Spotted Owl	FT	Bird	South Fork Eel River
		Steelhead Trout	FT	Fish	Entire Hydrologic Unit
		Water Howellia	FT	Plant	Northern California ESU
		Western Snowy Plover	FT	Shore bird	Middle Fork Eel River
		Willow Flycatcher	SE	Bird	Eel River South Fork Eel River
112.00	Cape Mendocino HU	Chinook Salmon	FT	Fish	California Coastal ESU
		Coho Salmon	FT	Fish	Southern OR / Northern CA Coasts ESU
		Marbled Murrelet	FE, ST	Sea bird	Mattole River
		Northern Spotted Owl	FT	Bird	Entire Hydrologic Unit
		Steelhead Trout	FT	Fish	Northern California ESU
113.00	Mendocino Coast HU	Bald Eagle	FE	Bird	Navarro River
		Chinook Salmon	FT	Fish	California Coastal ESU
		Coho Salmon	FT	Fish	Central California ESU
		Contra Costa Goldfields	FE	Plant	Garcia River
		Lotis Blue Butterfly	FE	Insect	Big River
		Marbled Murrelet	SE, FT	Sea bird	Noyo, Big, Navarro, Garcia & Gualala Rivers
		Northern Spotted Owl	FT	Bird	Entire Hydrologic Unit except Jug Handle Creek
		Steelhead Trout	FT	Fish	Northern California ESU

HU No.	Waterbody	Species	Status*	Type	Applicable Area or ESU (Evolutionary Significant Unit)
114.00	Russian River HU	Bank Swallow	ST	Bird	Russian River
		Burke's Goldfields	FE, SE	Plant	Entire Hydrologic Unit
		California Freshwater Shrimp	FE, SE	Crustacean	Entire Hydrologic Unit
		Chinook Salmon	FT	Fish	California Coastal ESU
		Coho Salmon	FT	Fish	Central California ESU
		Geysers Dichanthelium	SE	Plant	Russian River
		Hickman's Cinquefoil	FE, SE	Plant	Laguna de Santa Rosa
		Kenwood Marsh	FE, SE	Plant	Russian River
		Many-Flowered Navarretia	FE, SE	Plant	Laguna de Santa Rosa
		Marbled Murrelet	SE, FT	Sea bird	Russian River
		Northern Spotted Owl	FT	Bird	Entire Hydrologic Unit
		Pitkin Marsh Indian Paintbrush	SE	Plant	Laguna de Santa Rosa
		Pitkin Marsh Lily	FE, SE	Plant	Laguna de Santa Rosa
		Sebastopol Meadowfoam	FE, SE	Plant	Entire Hydrologic Unit
		Sonoma Alopecurus	FE	Plant	Entire Hydrologic Unit
		Sonoma Sunshine	FE, SE	Plant	Laguna de Santa Rosa
		Steelhead Trout	FT	Fish	Central California Coast ESU
		Western Yellow-Billed Cuckoo	SE	Bird	Laguna de Santa Rosa
		White Sedge	FE, SE	Plant	Laguna de Santa Rosa
115.00	Bodega HU	California Freshwater Shrimp	FE, SE FT	Crustacean	Entire Hydrologic Unit
		Coho Salmon	FT	Fish	Central California ESU
		Northern Spotted Owl	FE, SE	Bird	Entire Hydrologic Unit
		Soft Bird's-Beak	FT	Plant	Entire Hydrologic Unit
		Western Snowy Plover		Shore bird	Entire Hydrologic Unit
	Ocean Waters	Steller Sea Lion	FT	Mammal	Entire Classification

HU = Hydrologic Unit – includes all waterbodies and tributaries within the Hydrologic Unit
HA = Hydrologic Area – includes all waterbodies and tributaries within the Hydrologic Area
[1]Waterbodies already designated as RARE in the current Basin Plan

Status*
Federally threatened (FT) or endangered (FE) species are defined in regulations adopted under Section 3 of the Federal Endangered species Act of 1973 (16 USC §§ 1531 – 1544; 50 CFR, Part 17). An endangered species is any species, including subspecies and varieties, "in danger of extinction throughout all or a significant portion of its range." (16 USC § 1532(6).) Threatened and endangered species have been the subject of a proposed and final rule for regulation published in the Federal Register. Thus, these species are also referred to as listed species. Proposed species are species proposed for listing as a threatened or endangered species for which a proposed rule, but not a final rule, has been published in the Federal Register.

Proposed species are granted limited protection under the federal Endangered Species Act. These species must be addressed by federal agencies in biological assessments (Section 7 Consultation), and are given special management consideration by regulatory agencies. Candidate species are species under consideration for listing, but

have not been subject to a proposed rule. Categories for candidate species are related solely to the level of biological information available and not to the degree of threat. Candidate species are not protected under the federal Endangered Species Act.

The definition of state threatened (ST) or endangered (SE) species under the California Endangered Species Act (Fish and Game Code Sections 2050 – 2116) are the same as under the federal Endangered species Act. Under the State Act, all animals previously listed as Rare have been "grand fathered" into the State Act as threatened. All plants previously listed as Rare have been kept as Rare. All plants now listed under the State Act are listed as threatened or endangered.

Designation of other Beneficial Uses

The State Water Resources Control Board Division of Water Right's' (SBDWR) Hydrographic Report Database (Automated Water Rights Information System- AWRIS) was consulted for the addition of several designations. The SBDWR is responsible for granting permits for water withdrawal from waterbodies within the State. The information contained in their database indicates the source of water (waterbody) and the water use type(s), as well as other information. The beneficial use list below corresponds directly with the use codes that are identified in DWR's database (seen to the right) and was therefore used to update many of the Beneficial Use designations in Table 2-1. Appendix A, Table 4 (Water Rights Information Summary of Beneficial Uses) summarizes the beneficial uses that were added based on this information and the waterbody or hydrologic area/ subarea to which they were added.

Beneficial Use	**DWR Water Rights Use Types**
Municipal and Domestic Supply **(MUN)**	Municipal (M) or Domestic (D)
Agricultural Supply **(AGR)**	Irrigation (I), Stockwatering (S), Frost Protection (N), Heat Protection (L)
Industrial Service Supply **(IND)**	Industrial (J), Fire Protection (E), Mining (B), Milling (C)
Hydropower Generation **(POW)**	Power (P), Incidental Power (K)
Water Recreation **(REC-1)**	Recreation (R)
Aquaculture **(AQUA)**	Fish Culture (H)
Wildlife Habitat **(WILD)**	Fish & Wildlife Protection and/or Enhancement (W)

Interviews with Agency Personnel

Staff conducted interviews with many professionals with the U.S. Forest Service, the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWQCB). The information gathered during these interviews was used to determine the necessary updates for designation of beneficial uses. Table 2 below, indicates the professionals who provided this information and their area(s) of expertise. The specific information pertaining to each interview is contained in the administrative record for this Amendment. Appendix A, Table 3 indicates the beneficial use designations which were updated with this information.

Table 2: Professional Contacts

Interview # 1 **Contact Name** **Title**	Dennis Maria Associate Fishery Biologist	**Interview # 2** **Contact Name** **Title**	Bernard Aguilar Associate Fishery Biologist
Agency	CDFG	**Agency**	CDFG
Areas	Siskiyou County	**Areas**	Trinity County
Hydrologic Areas/Subareas /Waterbody	Scott River HA Butte Valley HA Lake Shastina/Tributaries Middle Klamath HA Salmon River HA Lost River HA Shasta Valley HA Shasta River Shasta Lake Shasta River Tributaries	**Hydrologic Areas/Subareas**	Lower Trinity HA Middle Trinity HA Upper Trinity HA Ewing Reservoir Clair Engle & Lewiston Reservoirs
Interview # 3 **Contact Name** **Title**	Larry Preston Associate Fishery Biologist Robert Tasto Project Review & Water Quality Program Supervisor	**Interview #4** **Contact Name** **Title**	Bill Cox Associate Fishery Biologist
Agency	CDFG	**Agency**	CDFG
Areas	Norte/Humboldt Counties Marine Region	**Areas**	Sonoma/Marin Counties
Hydrologic Unit Areas/Subarea/ Waterbody	Lower Eel River HA Capetown HA Redwood Creek HU Eureka Plain HU Van Duzen HA S. F. Eel River HA N.F. Eel River HA Oil Creek HA Mattole River HA Middle Trinity River HA Lower Smith River HA Illinois River HA	**Hydrologic Unit Areas/Subarea/ Waterbody**	Russian River HU Bodega HU Russian Gulch HA Salmon Creek HA
Interview # 5 **Contact Name** **Title**	Darrell Ranken Forest Hydrologist	**Interview # 6** **Contact Name(s)** **Title**	Emil Ekman Fishery Biologist Bob Faust Forest Hydrologist
Agency	USFS	**Agency**	USFS

Areas	Shasta-Trinity National Forest	**Areas**	Mendocino National Forest
Hydrologic Unit Areas/Subarea Waterbody	Upper Trinity River HA S.F. Trinity River HA Ewing Reservoir Lower Trinity River HA S.F. Trinity River HA Middle Trinity River HA	**Hydrologic Unit Areas/Subarea Waterbody**	Upper Main Eel HA Lake Pillsbury Middle Fork Eel River HA
Interview # 7 **Contact Name** **Title**	Jon Grunbaum Fish Biologist Carolyn Cook Hydrologist Leroy Cyr Fishery Biologist-	**Interview #8** **Contact Name** **Title**	Fish Biologist Marty Yamagiwa Hydrologist Sue Becker
Agency	USFS	**Agency**	USFS
Areas	Klamath-Six Rivers National Forest/Orleans Ranger District	**Areas**	Modoc National Forest
Hydrologic Unit Areas/Subarea Waterbody	Wooley Creek HSA Klamath Glen HSA Orleans HSA Salmon River HA Middle Klamath HA Smith River HU Trinity River HA S.F. Trinity River HA Mad River HU Bridgeville HSA N.F. Eel River HA	**Hydrologic Unit Areas/Subarea Waterbody**	Lost River HA
Interview # 9 **Contact Name** **Title**	Roy O'Connor Engineering Geologist	**Interview # 10** **Contact Name** **Title**	Pamela Lindstedt Forester 1
Agency	North Coast Regional Water Quality Control Board	**Agency**	California Dept. of Forestry
Areas	North Coast Region	**Areas**	Mendocino Coast
Hydrologic Unit Areas/Subarea Waterbody	Numerous -see interview sheet	**Hydrologic Unit Areas/Subarea Waterbody**	Pt Arena HA
Interview # 11 **Contact Name** **Title**	Caryn Woodhouse Environmental Scientist	**Interview # 12** **Contact Name** **Title**	Matt St. John Environmental Scientist

Agency	North Coast Regional Water Quality Control Board	**Agency**	North Coast Regional Water Quality Control Board
Areas	North Coast Region	**Areas**	North Coast Region
Hydrologic Unit Areas/Subarea Waterbody	Lost River HA	**Hydrologic Unit Areas/Subarea Waterbody**	Salmon River HA Shasta Valley HA Shasta River Tributaries Shasta Lake
Interview # 13 Contact Name Title	Peter Otis Environmental Scientist Jeff Church Environmental Scientist	**Interview # 14 Contact Name Title**	Robert Klamt Senior Land & Water Use Analyst
Agency	North Coast Regional Water Quality Control Board	**Agency**	North Coast Regional Water Quality Control Board
Areas	North Coast Region	**Areas**	North Coast Region
Hydrologic Unit Areas/Subarea Waterbody	Russian River HU	**Hydrologic Unit Areas/Subarea Waterbody**	Numerous- see interview sheets

Note: When a hydrologic unit (HU) or a hydrologic area (HA) is indicated, the interviewee provided information on all HSAs within that area, unless otherwise noted.

Staff also consulted the Federal Energy Regulatory Commission (FERC) Hydroelectric Projects Under Commission License Database (URL http://www.ferc.gov/hydro/hydro2.htm) in February 2002, to determine additional locations of waterbodies which are the source of hydropower for the designation of the Hydropower Generation (POW) beneficial use (see Appendix A, Table 2).

Beneficial Use Definitions

Each of the beneficial uses are listed below. The definition of the beneficial use and the information relied on for each update is provided.

Rare, Threatened, or Endangered Species (RARE)

> The Rare, Threatened, or Endangered Species (RARE) beneficial use applies to *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.*

Based on information provided by USFS and CDFG professionals and information contained in the CDFG California Natural Diversity Data Base (CNDDB), this amendment proposes to designate existing or potential RARE to the hydrologic areas, subareas, and waterbodies identified in Table 2-1.

Migration of Aquatic Organisms (MIGR)

> The Migration of Aquatic Organisms (MIGR) beneficial use applies to *uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.*

The CDFG and USFS Fishery Biologists provided specific information on hydrologic areas and subareas currently supporting the migration of aquatic organisms. Therefore, this amendment proposes to designate existing or potential MIGR to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Spawning, Reproduction, and/or Early Development (SPWN)

> The Spawning, Reproduction, and/or Early Development (SPWN) beneficial use applies to *uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.*

CDFG and USFS Fishery Biologists provided specific information based on their professional knowledge, of hydrologic areas and subareas currently supporting spawning, reproduction, and/or early development of fish. Based on this information, the amendment proposes to designate existing or potential SPWN to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Municipal and Domestic Supply (MUN)

> Municipal and domestic supply (MUN) are defined as *uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply*.

Staff conducted a thorough review of the SBDWR database, which contains permitted water rights including specific withdrawal locations for individual domestic and municipal water systems. This review was conducted from September to December 2001, for the entire North Coast Region. In addition, staff conducted interviews with CDFG and USFS professionals, who provided specific information of hydrologic areas and subareas with domestic or municipal uses. Based on this information and on State policy (Resolution 88-63, *Sources of Drinking Water Policy)* that all surface and groundwaters are to be considered suitable or potentially suitable, municipal or domestic drinking water supply, and should be so designated (MUN) by the regional water boards, this amendment proposes to designate existing or potential MUN to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Agricultural Supply (AGR)

> Agricultural supply (AGR) is defined as *uses of water for farming horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing*.

Staff conducted a thorough review of SBDWR database from September to December 2001. This database includes permitted water withdrawals for irrigation purposes. In addition, staff conducted interviews with agencies including CDFG and USFS who provided specific information on hydrologic areas and subareas with agricultural supply uses. As a result of this research, this amendment proposes to designate existing or potential AGR to the following hydrologic areas, subareas and waterbodies identified in Table 2-1.

Industrial Service Supply (IND)

> Industrial Service Supply (IND) is defined as *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*.

Staff's review of the SBDWR database included the review of permitted water withdrawals for industrial purposes. In addition, interviews were conducted with RWQCB, CDFG and USFS

professionals with knowledge of the uses in specific areas and waterbodies. Based on this information, this amendment proposes to designate existing or potential IND to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Industrial Process Supply (PRO)

> Industrial Process Supply is defined as *uses of water for industrial activities that depend primarily on water quality.*

Regional Water Board staff's interviews with CDFG, RWQCB, and USFS professionals provided specific information on hydrologic areas, subareas, and waterbodies with existing or potential industrial process supply. This amendment proposes to designate existing and potential PRO to hydrologic areas, subareas and waterbodies identified in Table 2-1.

Groundwater Recharge (GWR)

> Groundwater recharge is defined as *uses of water for natural or artificial maintenance of surface water quantity and quality*.

Based on Regional Water Board staff familiarity with North Coast waterbodies and information provided by USFS, RWQCB, and CDFG professionals, this amendment proposes to designate existing or potential GWR to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Freshwater Replenishment (FRSH)

> Freshwater Replenishment (FRSH) is defined as *uses of water for natural or artificial maintenance of surface water quantity or quality.*

Based on Regional Water Board staff familiarity with North Coast waterbodies and information provided by USFS, RWQCB, and CDFG professionals, this amendment proposes to designate existing or potential FRSH to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Navigation (NAV)

> Navigation is defined as *uses of water for shipping, travel or other transportation by private, military, or commercial vessels*.

This amendment proposes to designate existing or potential NAV to the hydrologic areas, subareas and waterbodies identified in Table 2-1, based on information provided by Regional Water Board Staff, USFS and CDFG professionals.

Hydropower Generation (POW)

> Hydropower Generation (POW) is defined as *uses of water for hydropower generation*.

Staff's review of the SBDWR database also included the review of permitted water rights for hydropower use. Staff also reviewed the Federal Energy Commission (FERC) license database. In addition, USFS and CDFG professionals provided the locations of hydropower plants. Based on the information collected, this amendment proposes to designate existing or potential POW to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Water Contact Recreation (REC-1)

> Water contact recreation is defined as *uses of water for recreational activities involving body contact with water, where ingestion 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*.

Based on Regional Water Board staff familiarity with North Coast waterbodies and information provided by USFS and CDFG professionals, this amendment proposes to designate existing or potential REC-1 to the hydrologic subareas and waterbodies identified in Table 2-1.

Non-contact Water Recreation (REC-2)

> Non-contact Water Recreation is defined *as 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, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities*.

Based on Regional Water Board staff familiarity with North Coast waterbodies and information provided by USFS and CDFG professionals, this amendment proposes to designate existing or potential REC-2 to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Aquaculture (AQUA)

> Aquaculture is defined as *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.*

A complete search of the SBDWR database, which includes permitted water withdrawal for aquaculture facilities, was conducted during December 2001. In addition, CDFG and USFS Fishery Biologists provided additional information on aquaculture facility (including hatcheries) locations during interviews. Therefore, this amendment proposes to designate existing or potential AQUA to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Wildlife Habitat (WILD)

> Wildlife habitat is defined as *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*.

Based on Regional Water Board staff familiarity with North Coast waterbodies, and information provided by USFS and CDFG professionals, this amendment proposes to designate existing or potential WILD to the hydrologic areas, subareas and waterbodies identified in Table 2-1. The water quality in waterbodies throughout the region is adequate to support this use, therefore is designated in all waterbodies/ hydrologic areas/ subareas listed in Table 2-1 whether or not supporting information was gathered during this update process.

Warm Freshwater Habitat (WARM)

> Warm Freshwater Habitat is defined as *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*.

Based on information on the presence of warm water aquatic species provided by CDFG and USFS Fishery Biologists, Regional Water Board staff proposes to designate this use to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Cold Freshwater Habitat (COLD)

> Cold Freshwater Habitat is defined as *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*.

Based on information on the presence of cold water aquatic species provided by CDFG and USFS Fishery Biologists, Regional Water Board staff proposes to designate the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Inland Saline Water Habitat (SAL)

> Inland Saline Water Habitat (SAL) is defined as *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*.

Based on information provided by CDFG biologists, Water Board staff does not propose to designate SAL to any waterbodies in the North Coast Region.

Marine Habitat (MAR)

> Marine habitat is defined as *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).*

Based on information on the presence of Marine Habitat provided by CDFG and USFS Biologists and Hydrologists, Regional Water Board staff proposes to designate the MAR designation to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Estuarine Habitat (EST)

> Estuarine Habitat is defined as *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*).

Based on information indicating the presence of Estuarine Habitat provided by CDFG and USFS Fishery Biologists, Regional Water Board staff proposes to designate the EST designation to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Biologically Significant Areas (BSA)

> Biologically Significant Areas (BSA) *Uses of water that support areas or habitats that have been officially designated as biologically significant, such as established refuges, parks, sanctuaries, ecological reserves, and State Water Quality Protection Areas (SWQPAs), where the preservation of natural resources requires special protection*.

Based on information provided by CDFG, RWQCB, and USFS professionals and information collected on the locations of officially designated Marine Protected Areas, National Wildlife Refuges, Natural Preserves, Ecological Reserves, State Parks, State Reserves, Key Watersheds, and Wild Trout Waters in the region; this amendment proposes to designate the BSA designation to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Shellfish Harvesting (SHELL)

> Shellfish Harvesting is defined as *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*.

Based on information on the locations of waterbodies that support the habitats described above provided by USFS, CDFG Fishery Biologists, and Regional Water Board staff, staff proposes to designate the SHELL designation to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Commercial and Sport Fishing (COMM)

> Commercial and Sport Fishing is defined as *uses of water for commercial or recreational (sport) collection of fish, shellfish, or other aquatic organisms including, but not limited to, uses involving organisms intended for human consumption, including human subsistence and/or for bait purposes*.

Again, the underlined insertions are the proposed amendments to this designation. Based on information provided by USFS and CDFG Fishery Biologists on waterbodies supporting the COMM beneficial use, Regional Water Board staff proposes to designate the COMM designation to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

Water Quality Enhancement (WQE)

> *Beneficial 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*.
>
> Regional Water Board staff proposes to designate the WQE designation to the general freshwater and saline wetlands category as presented in Table 2-1.

Flood Peak Attenuation/Flood Water Storage (FLD)

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

Regional Water Board staff proposes to designate the FLD designation to the general freshwater and saline wetlands category as identified in Table 2-1.

Wetland Habitat (WET*)*

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, and wildlife habitat.

Regional Water Board staff proposes to designate the WET designation to the general freshwater and saline wetlands category as identified in Table 2-1.

Native American Culture (CUL)

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

Based on discussions with (and information submitted by) Tribal entities within the North Coast Region, Regional Water Board staff proposes to designate the CUL designation to the hydrologic areas, subareas and waterbodies identified in Table 2-1.

V. Requirements of the California Environmental Quality Act (CEQA) and Potential Significant Adverse Environmental Impacts

All Basin Plans and Basin Plan amendments are subject to the provisions of the California Environmental Quality Act (CEQA). However, the State Water Resources Control Board's water quality planning process has been certified by the Secretary for Resources as "functionally equivalent to," and therefore exempt from CEQA's requirement for preparation of an environmental impact report (EIR) or negative declaration and initial study (14 CCR §15251(g)). Instead, the State Water Resources Control Board requires a written staff report; an initial draft of the Basin Plan amendment, and an Environmental Checklist Form as "functionally equivalent" documents (23 CCR §3777). These documents replace an EIR or a negative declaration and initial study.

The following sections of this staff report relate to the Environmental Checklist and explain the Regional Water Board's evaluation of potential significant adverse environmental impacts. This amendment proposes to update the beneficial use definitions and designations for waterbodies within the North Coast Region. Beneficial uses are designated for hydrologic areas, hydrologic subareas, and waterbodies throughout the North Coast Region. Water quality standards and objectives will not be changed by this amendment, nor will any action plan, implementation plan, or policy be proposed or amended. There will be no potentially significant adverse impacts on the environment if Chapter 2 of the Basin Plan is updated as proposed in this amendment. All environmental impacts, either positive or negative, are listed below.

Environmental Checklist Form

1. Project title:
   Beneficial Use Amendment to the NCRWQCB Basin Plan

2. Lead agency name and address:
   North Coast Regional Water Quality Control Board
   5550 Skylane Boulevard, Suite A, Santa Rosa, CA 95403

3. Contact person and phone number:
   Lauren Clyde, Sanitary Engineering Associate, (707) 576-2674

4. Project location:
   North Coast Region

5. Project sponsor's name and address:
   North Coast Regional Water Quality Control Board
   5550 Skylane Blvd., Suite A
   Santa Rosa, CA
   California 95403

6. General plan designation:
   n/a

7. Zoning:
   n/a

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The project involves the adoption of an Amendment to the North Coast Regional Water Quality Control Plan (Basin Plan).

The Amendment proposes to updated Chapter 2 of the Basin Plan and will include revisions and additions to the narrative section of the Basin Plan as well as updated designations of beneficial uses for waterbodies within the Region.

9. Surrounding land uses and setting: Briefly describe the project's surroundings: Surrounding lands are primarily agricultural, forest, or rural public and private property.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
N/A

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality	☐ Land Use / Planning
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation / Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☑ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Original signed by: Ranjit Gill, NCRWQCB_____ __2/28/03_____
Signature Date

_____ _____
Printed Name For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that

are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

I. AESTHETICS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

Finding: No Impact.

II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for				

agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☑

Finding: No Impact.

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☑
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☑
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑

Finding: No Impact.

IV. BIOLOGICAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified	☐	☐	☐	☑

as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Finding: No Impact

Item a: Protection of Candidate, Sensitive, or Special Status Species

The project area includes private and public lands in the North Coast Region. Special status species with potential to occur in the project area are shown in the table below.

Listed Animal and Fish Species with Potential to Occur in the North Coast Region Project Area

Common Name	Scientific Name	Status (Federal/State)
Bald Eagle	*Haliaeetus leucocoephalus*	Federal Threatened State Endangered
Marbled Murrelet	*Brachyrampus marmoratus*	Federal Threatened State Endangered
Northern Spotted Owl	*Strix occidentalis caurina*	Federal Threatened
California Coastal Chinook Salmon	*Oncorhynchus tshawytscha*	Federal Threatened
Central California Coast Coho Salmon	*Oncorhynchus mykiss*	Federal Threatened State Endangered
Northern California Steelhead	*Oncorhynchus kisutch*	Federal Threatened

There will be no negative environmental impacts resulting from this Amendment.

V. CULTURAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑

Finding: No Impact.

VI. GEOLOGY AND SOILS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☑
ii) Strong seismic ground shaking?	☐	☐	☐	☑
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑

Finding: No Impact.

VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑

Finding No Impact.

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☑
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☑
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☑
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?	☐	☐	☐	☑
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
f) Otherwise substantially degrade water	☐	☐	☐	☑

quality?				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☑
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	☐	☐	☐	☑
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☑
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

Finding No Impact.

Item a: Adherence to Water Quality Standards or Waste Discharge Requirements

IX. LAND USE AND PLANNING - Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑

Findings: No Impact.

X. MINERAL RESOURCES -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑

Findings: No Impact.

XI. NOISE -- Would the project result in:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive	☐	☐	☐	☑

noise levels?

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Finding No Impact.

XII. POPULATION AND HOUSING -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Findings: No Impact.

XIII. PUBLIC SERVICES	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause				

significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☑
Police protection?	☐	☐	☐	☑
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑

Findings: No Impact.

XIV. RECREATION	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☑

Findings: No Impact.

XV. TRANSPORTATION/TRAFFIC -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**

a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☑
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Result in inadequate parking capacity?	☐	☐	☐	☑
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑

Finding No Impact.

XVI. UTILITIES AND SERVICE SYSTEMS -- Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☑
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

Findings: No Impact.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated-**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered	☐	☐	☐	☑

plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☑
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☑

Finding; No Impact.

Aesthetics

The proposed amendment would not affect aesthetics. This proposed amendment would have no adverse affects on any scenic vista, nor would it damage any scenic resources, degrade the existing visual character or quality of the North Coast Region, or create any new source of light or glare.

Agriculture Resources

The proposed amendment would not affect agriculture resources. This amendment will not convert farmland, conflict with existing zoning for agricultural use or a Williamson Act contract, or involve other changes in the existing environment, which could convert farmland.

Air Quality

The proposed amendment would not affect air quality. This amendment would not conflict with or obstruct any air quality plan, violate any air quality standard, contribute to an existing or potential air quality violation, result in a cumulatively considerable net increase of any criteria pollutant, expose sensitive receptors to substantial pollutant concentration, or create any objectionable odors.

Biological Resources

The proposed amendment would not affect any of the above biological resources. This amendment would not have an adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. It will not have an adverse effect on riparian habitat, other sensitive natural communities, or any wetland. This amendment would not interfere with the movement of any native resident or migratory fish or wildlife species.

This amendment would not conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Cultural Resources

The proposed amendment would not adversely affect any cultural resources. The amendment would not cause a substantial change in the significance of a historical resource or an archaeological resource, or destroy a unique paleontological resource or site of unique geologic feature, or disturb human remains. The proposed update recognizes existing uses of water in the region (i.e. subsistence fishing, basketry and jewelry material collection, and ceremonial uses of water) which are of great importance to the Region's Native American tribal cultures and traditions.

Geology and Soils

The proposed amendment would not expose people or structures to potential adverse affect, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, or landslides. This amendment would not result in soil erosion. No part of this amendment would involve the building of any project or structure that would create risk to life or property by building on the expansive soil or would result in a source of wastewater. Therefore, this amendment would in no way adversely affect the geology and soils of the North Coast Region.

Hazards and Hazardous Materials

The proposed amendment would not involve the transportation, use, or release of hazardous materials.

Hydrology and Water Quality

The proposed amendment would not violate any water quality standards or waste discharge requirements, nor does this amendment propose, in any way, a project that might adversely affect hydrology or water quality.

Land Use and Planning

The proposed amendment would not physically divide any community, conflict with a land use plan, policy, or regulation, nor conflict with a habitat conservation plan. This amendment would not affect land use or planning.

Mineral Resources

The proposed amendment would not result in the loss of a known mineral resource or mineral resource recovery site. This amendment would not directly affect any mineral resource.

Noise

The proposed amendment would not cause or generate noise or ground-borne vibration. This amendment would not affect noise.

Population and Housing

The proposed amendment would not negatively affect population and housing.

Public Services

The proposed amendment does not propose a project that might affect public services.

Recreation

The proposed amendment would not negatively affect recreation.

Transportation/Traffic

The proposed amendment would not affect transportation or traffic.

Utilities and Service Systems

The proposed amendment would not result in the exceedance of wastewater treatment requirements, construct new water or wastewater treatment facilities, construct new storm water facilities, require water supplies, require a landfill, or produce solid waste. This amendment would not affect utilities and service systems.

Mandatory Findings of Significance

The proposed amendment would not degrade the quality of the environment, reduce fish or wildlife habitat, cause fish or wildlife population decreases, eliminate a plant or animal community, reduce or restrict the range of a rare or endangered species, or eliminate any historical or pre-historical object. This amendment would not result in any cumulative impacts and will not cause substantial adverse environmental effects on human beings, either directly or indirectly. This amendment would not adversely affect the environment.

Mitigation Measures

As there are no adverse effects upon the environment from this amendment to the Basin Plan, there is no need for any mitigation measures.

Beneficial Use Amendment Analysis of Alternative Approaches

Introduction

The Clean Water Act requires a continuing planning process that includes periodic review of the accuracy and appropriateness of basin plan standards (CWA section 303(e), 40 CFR § 131.20). The regulations applicable to this "functional equivalent" CEQA process require the evaluation of reasonable alternatives to the proposed activity.

In this section, staff presents an analysis of different ways accomplish the goals and objectives of the Beneficial Use Basin Plan Amendment. The goal of the project is to update the Beneficial Use Chapter of the Basin Plan. The alternatives analyzed below were developed as a possible means of achieving that goal.

Each of the alternatives was analyzed by considering the following criteria:
- Technical feasibility
- Socioeconomic feasibility
- Environmental impacts

Analysis of Alternatives

The following is a summary of three alternatives. The alternatives listed below were considered for potential feasibility during the amendment scoping process:

- Alternative #1 - No Action
- Alternative #2 – Partial Update of the Beneficial Use Chapter
- Alternative # 3 – Complete Update of the Beneficial Use Chapter

Alternative 1 - No Action

The No Action alternative keeps the existing Basin Plan language and does not result in a Basin Plan amendment. No changes to Table 2-1: Beneficial Water Uses in the North Coast Region would occur and the beneficial uses designations would remain the same, as they exist now in the Basin Plan.

The No Action alternative is technically feasible and would not create any socioeconomic or environmental impacts for the same reason. However, in choosing this option the goal of the project is not met and the number one priority amendment on the Regional Water Board's adopted Triennial Review Priority List (dated 8/23/01) is not completed. Federal and State regulations require regular updates of the Basin Plan.

Alternative 2- Partially Updated Beneficial Uses Table

A partially Amended Beneficial Uses Table would result only in some changes to Table 2-1 and no additions to the narrative section of the *North Coast Regional Water Quality Control Plan*, Chapter 2, Beneficial Uses. The changes would be limited to new beneficial use designations by hydrologic unit. The waterbodies listed in Table 2-1 for Alternative 2 would remain as they

are currently shown in the Basin Plan. The Beneficial Uses Table2-1 lists waterbodies generally grouped by hydrologic unit, and includes some specifically listed waterbodies and hydrologic areas. The new beneficial use designations are added to Table 2-1 for this alternative; however, the new designations are applied to entire hydrologic units or areas rather than applied to hydrologic subareas as in Alternative 3. The designated beneficial uses are identified with an "E" for an existing use or a "P" for a potential use. The proposed beneficial uses for wetlands, the Native American Cultural use (CUL), and the proposed changes to the Commercial and Sport Fishing (COMM) and Areas of Special Biological Significance (ASBA) would not be included in this alternative. Appendix B, Table 1 illustrates the beneficial use designations for Alternative 2.

This alternative is technically feasible and does not create negative socioeconomic or environmental impacts. However, this option only partially meets the goal of updating Chapter 2 of the Basin Plan as described above. This option does not make the Basin Plan a user-friendly document nor provide the reader with complete and useful information on existing and potential beneficial uses in the region.

Alternative 3 - Complete Update of the Beneficial Use Chapter

A fully updated Beneficial Uses Section would result in many changes to Table 2-1 and revisions and additions to the Basin Plan as proposed in this Staff Report and shown in the attached amendment. New beneficial use designations would be added to the table where an existing or potential beneficial use designation is lacking for a waterbody. Additionally, the Beneficial Use Table (Table 2-1) would be expanded to list hydrologic units, hydrologic areas, and hydrologic subareas for the waterbodies in the North Coast Region. Alternative 3 would result in the designation of beneficial uses for specific hydrologic features (areas and subareas), rather than applied to entire hydrologic units. This allows for a more accurate identification of beneficial uses across the North Coast Region.

Appendix B, Table 2, illustrates the beneficial use designations for Alternative 3. The table includes the existing beneficial uses and hydrologic units in strikeout for ease in identifying changes to the table. The beneficial uses are identified with an " "E" for an existing use or a "P" for a potential use.

Staff Recommendation

Based on the analysis of the alternatives presented above, Regional Water Board staff recommends approval and implementation of Alternative 3, Complete Update of the Beneficial Uses Chapter. The Basin Plan is required under the California Water Code Section 13050(j) to designate waterbodies with their beneficial uses. As previously recognized by the North Coast Regional Water Quality Control Board during the last Triennial Review, the current Basin Plan is in need of refinement and updating. In order to meet the requirements of the CWA, a complete update of the Beneficial Uses Chapter is necessary.

Finding of No Significant Impacts

The Regional Water Board staff, after consideration of the evidence, recommend that the Regional Water Board finds that the proposed project has no potential for significant adverse environmental impacts, either individually or cumulatively.

Economic Considerations

As the amendment deals only with beneficial use designations and not changes to water quality standards, there will be no discernable economic impacts from the proposed Basin Plan Amendment. (See Appendix C, Attachment 1) October 8, 2002 letter from the SWRCB Office of Statewide Initiatives, Economics and Effectiveness Unit.)

VI. References

Bouwer, Herman. 1978. Groundwater Hydrology. New York, McGraw-Hill.

Bureau of Reclamation (BOR). 2001-a. DataWeb. Lewiston Dam, California. http://dataweb.usbr.gov/dams/ca10165.htm. Downloaded April 13, 2001.

Bureau of Reclamation (BOR). 2001-b. DataWeb. Trinity Dam, California. http://dataweb.usbr.gov/dams/ca10196.htm. Downloaded April 13, 2001.

California Department of Water Resources. 1998. California Water Plan 1998, Bulletin 160-98. http://rubicon.water.ca.gov/b160index.html. Downloaded September 5, 2002.

California Natural Diversity Database (CNDDB). 1999. Special Status Plants, Animals and Natural Communities of Del Norte County, Humboldt County, Mendocino County, Sonoma County, and Glenn County. California Department of Fish & Game. Revised April 5, 1999.

California Natural Diversity Database (CNDDB). 2001. Location Summary Reports. California Department of Fish & Game. Last updated January 2001.

Cox, B. 1999. Field Notes Sonoma/Marin District. Copeland Creek, Sonoma County. July 12, 1999.

Cox, B. 2000a. Letter to Rebecca Van Asdlan, North Coast Regional Water Quality Control Board. December 28, 2000.

Cox, B. 2000b. California Freshwater Shrimp Syncaris Pacifica.

Federal Register. 2000. *Presidential Documents. Executive Order 13158 of May 26, 2000.* Volume 65, No. 105. May 31, 2000. Washington, DC: U.S. Government Printing Office.

URL http://www.mpa.gov

Gaines, D. 2001. California Wildlife Habitat Relationships System. B315. Willow Flycatcher. California Department of Fish and Game and California Interagency Wildlife Task Group. http://www.drg.ca.gov/whdab/B315.html. Downloaded May 15, 2001.

Granholm, S. 2001. California Wildlife Habitat Relationships System. B075. Canada Goose. California Department of Fish and Game and California Interagency Wildlife Task Group. URL http://www.drg.ca.gov/whdab/B075.html. Downloaded May 15, 2001.

Meehan, W.R., Editor. 1991. "Influences of Forest and Rangeland Management on Salmonid Fishes and their Habitats." American Fisheries Society Special Publication 19. American Fisheries Society.

Polite, C. 2001a. California Wildlife Habitat Relationships System. B121. Swainson's Hawk. California Department of Fish and Game and California Interagency Wildlife Task Group. http://www.drg.ca.gov/whdab/B121.html. Downloaded May 15, 2001.

Polite, C. 2001b. California Wildlife Habitat Relationships System. B270. Spotted Owl. California Department of Fish and Game and California Interagency Wildlife Task Group. http://www.drg.ca.gov/whdab/B270.html. Downloaded May 15, 2001.

Serpa, L. 2001. The California Freshwater Shrimp. A ghost-like crustacean we can't afford to lose. URL http://www.r1.fws.gov.sfbnwr/shrimp.html.

Todd, David. 1980. Groundwater Hydrology. John Wiley & Sons, Inc.

U.S. Environmental Protection Agency, March 2002. Functions and Values of Wetlands. Document 843-F-01-002c. http://www.epa.gov/owow/wetlands. Downloaded February 25, 2003.

U.S. Fish and Wildlife Service (USFWS). 2001. Aleutian Canada Goose. Branta Canadensis Leucopareia. http://www.ccfwo.r1.fws.gov/ccfwo/canadagoose.html. Page last updated 05/03/01. Downloaded 05/04/01.

U.S. Geological Survey (USGS). 1998. Forest and Rangeland Birds of the United States, Natural History and Habitat Use. Spotted Owl – Strix occidentalis. USGS Northern Prairie Wildlife Research Center. http://www.npwrc.usgs.gov/resource/1998/forest/species/striocci.htm. Downloaded 05/21/01.

APPENDIX A

APPENDIX A
TABLE 1
Beneficial Uses Data Summary Table

HU/HA/HSA	Waterbody	FERC Database Appendix A Table 2	CNDDB Database Staff Report Table 1	DWR Database Appendix A Table 4	USFS/CDFG Interview Number(s) Staff Report Table 2 & Appendix A Table 3
101.00	Winchuck River Hydrologic Unit		X		
	Winchuck River				
102.00	Rogue River Hydrologic Unit				
102.20	Illinois River Hydrologic Area		X	X	3,9
102.30	Applegate River Hydrologic Area		X		
103.00	Smith River Hydrologic Unit		X		
103.10	Lower Smith River Hydrologic Area				3
103.11	Smith River Plain Hydrologic Subarea				3, 7, 9
	Lake Earl				7
	Lake Talawa				7
	Crescent City Harbor				7
103.12	Rowdy Creek Hydrologic Subarea				7
103.13	Mill Creek Hydrologic Subarea				7
103.20	South Fork Smith River Hydrologic Area			X	3, 7
103.30	Middle Fork Smith River Hydrologic Area			X	3, 7
103.40	North Fork Smith River Hydrologic Area				3, 7
103.50	Wilson Creek Hydrologic Area				
105.00	Klamath River Hydrologic Unit	X			
105.10	Lower Klamath River Hydrologic Area		X		
105.11	Klamath Glen Hydrologic Subarea				7
105.12	Orleans Hydrologic Subarea				7
105.20	Salmon River Hydrologic Area				
105.21	Lower Salmon Hydrologic Subarea			X	1, 7, 12
105.22	Wooley Creek Hydrologic Subarea				1, 7, 12
105.23	Sawyers Bar Hydrologic Subarea			X	1, 7, 12
105.24	Cecilville Hydrologic Subarea				1, 7, 12
105.30	Middle Klamath River Hydrologic Area		X		
105.31	Ukonom Hydrologic Subarea				1, 7
105.32	Happy Camp Hydrologic Subarea				1, 7
105.33	Seiad Valley Hydrologic Subarea				1, 7
105.35	Beaver Creek Hydrologic Subarea				1, 7
105.36	Hornbrook Hydrologic Subarea				1
105.37	Iron Gate Hydrologic Subarea				1

105.38	Copco Lake Hydrologic Subarea				1
105.40	Scott River Hydrologic Area		X		
105.41	Scott Bar Hydrologic Subarea			X	1
105.42	Scott Valley Hydrologic Subarea			X	1
105.50	Shasta Valley Hydrologic Area		X	X	1, 12
	Shasta River				1, 12
	Lake Shastina				1, 12
	Lake Shastina Tributaries				1, 12
105.60	Upper Klamath Lake HA (Oregon)				
105.70	Williamson River HA (Oregon)				
105.80	Butte Valley Hydrologic Area		X		
105.81	Macdoel-Dorris Hydrologic Subarea			X	1, 14
	Meiss Lake				1, 14
105.82	Bray Hydrologic Subarea				1, 14
105.83	Tennant Hydrologic Subarea			X	1, 14
105.90	Lost River Hydrologic Area		X		
105.91	Mt Dome Hydrologic Subarea				1, 8, 11
105.92	Tule Lake Hydrologic Subarea			X	1, 8, 11
105.93	Clear Lake Hydrologic Subarea				8, 11
105.94	Boles Hydrologic Subarea			X	1, 8, 11
106.00	Trinity River Hydrologic Unit				
106.10	Lower Trinity River Hydrologic Area		X		
106.11	Hoopa Hydrologic Subarea				5
106.12	Willow Creek Hydrologic Subarea				2, 5
106.13	Burnt Ranch Hydrologic Subarea				2, 5
106.14	New River Hydrologic Subarea				2, 5
106.15	Helena Hydrologic Subarea				2, 5
106.20	South Fork Trinity River Hydrologic Area		X		5
106.21	Grouse Creek Hydrologic Subarea				5
106.22	Hyampom Hydrologic Subarea				5
106.23	Forest Glen Hydrologic Subarea				5
106.24	Corral Creek Hydrologic Subarea			X	5
106.25	Hayfork Valley Hydrologic Subarea				5
	Ewing Reservoir				5
106.30	Middle Trinity Hydrologic Area				
106.31	Douglas City Hydrologic Subarea			X	2, 3, 5
106.32	Weaver Creek Hydrologic Subarea				2, 3, 5

106.40	Upper Trinity River Hydrologic Area				2, 5
	Trinity Lake (formerly Clair Engle)				2, 5
	Lewiston Reservoir				2, 5
	Trinity River				2, 5
107.00	Redwood Creek Hydrologic Unit		X		
107.10	Orick Hydrologic Area				3, 14
107.20	Beaver Hydrologic Area				3, 14
107.30	Lake Prairie Hydrologic Area				3, 14
108.00	Trinidad Hydrologic Unit		X		
108.10	Big Lagoon Hydrologic Area				3, 9, 14
108.20	Little River Hydrologic Area				3, 9, 14
109.00	Mad River Hydrologic Unit		X		
109.10	Blue Lake Hydrologic Area				3, 7
109.20	North Fork Mad River Hydrologic Area				3, 7
109.30	Butler Valley Hydrologic Area				3, 7
109.40	Ruth Hydrologic Area				3, 7, 9
110.00	Eureka Plain Hydrologic Unit		X		
	Jacoby Creek				3, 14
	Freshwater Creek				3, 14
	Elk River				3, 14
	Salmon Creek				3, 14
	Humboldt Bay				3, 14
111.00	Eel River Hydrologic Unit		X	X	
111.10	Lower Eel River Hydrologic Area				3, 14
111.11	Ferndale Hydrologic Subarea			X	3, 14
111.12	Scotia Hydrologic Subarea				3, 14
111.13	Larabee Creek Hydrologic Subarea				3, 14
111.20	Van Duzen River Hydrologic Area				
111.21	Hydesville Hydrologic Subarea				3, 9, 14
111.22	Bridgeville Hydrologic Subarea				3, 7, 14
111.23	Yager Creek Hydrologic Subarea				3, 14
111.30	South Fork Eel River Hydrologic Area		X	X	
111.31	Weott Hydrologic Subarea				3, 9, 14
111.32	Benbow Hydrologic Subarea				3, 9, 14
111.33	Laytonville Hydrologic Subarea			X	3, 9, 14
111.40	Middle Fork Eel River Hydrologic Area				
111.41	Sequoia Hydrologic Subarea			X	9, 14

111.42	Spy Rock Hydrologic Subarea			X	9, 14
111.50	North Fork Eel River Hydrologic Area				3, 9, 14
111.60	Upper Main Eel River Hydrologic Area				
111.61	Outlet Creek Hydrologic Subarea			X	6, 14
111.62	Tomki Creek Hydrologic Subarea			X	6, 14
111.63	Lake Pillsbury Hydrologic Subarea				6, 14
111.70	Middle Fork Eel River Hydrologic Subarea				
111.71	Eden Valley Hydrologic Subarea				6, 14
111.72	Round Valley Hydrologic Subarea			X	6, 14
111.73	Black Butte River Hydrologic Subarea				6, 14
111.74	Wilderness Hydrologic Subarea				6, 14
112.00	Cape Mendocino Hydrologic Unit		X		
112.10	Oil Creek Hydrologic Area				3
112.20	Capetown Hydrologic Area (Bear River)			X	3
112.30	Mattole River Hydrologic Area			X	3, 9
113.00	Mendocino Coast Hydrologic Unit		X		
113.10	Rockport Hydrologic Area				14
113.11	Usal Creek Hydrologic Subarea				14
113.12	Wages Creek Hydrologic Subarea				14
113.13	Ten Mile River Hydrologic Subarea				14
113.20	Noyo River Hydrologic Area			X	14
113.30	Big River Hydrologic Area			X	14
113.40	Albion River Hydrologic Area			X	14
113.50	Navarro River Hydrologic Area			X	14
113.60	Pt Arena Hydrologic Area				
113.61	Greenwood Creek Hydrologic Subarea			X	10
113.62	Elk Creek Hydrologic Subarea			X	10, 14
113.63	Alder Creek Hydrologic Subarea			X	10
113.64	Brush Creek Hydrologic Subarea			X	10
113.70	Garcia River Hydrologic Area			X	
113.80	Gualala River Hydrologic Area				
113.81	North Fork Gualala Hydrologic Subarea				14
113.82	Rockpile Creek Hydrologic Subarea				14
113.83	Buckeye Creek Hydrologic Subarea				14
113.84	Wheatfield Fork Hydrologic Subarea				14
113.85	Gualala Hydrologic Subarea			X	14

113.90	Russian Gulch Hydrologic Area			X	4
114.00	Russian River Hydrologic Unit		X		
114.10	Lower Russian River Hydrologic Area				4, 13
114.11	Guerneville Hydrologic Subarea				4, 13
114.12	Austin Creek Hydrologic Subarea				4, 13
114.20	Middle Russian River Hydrologic Area				
114.21	Laguna Hydrologic Subarea				4, 9, 13
114.22	Santa Rosa Hydrologic Subarea				4, 9, 13
114.23	Mark West Hydrologic Subarea				4, 9, 13
114.24	Warm Springs Hydrologic Subarea				4, 13
114.25	Geyserville Hydrologic Subarea				4, 13
114.26	Sulphur Creek Hydrologic Subarea	X			4, 13
114.30	Upper Russian River Hydrologic Area				
114.31	Ukiah Hydrologic Subarea	X			4, 13
114.32	Coyote Valley Hydrologic Subarea	X			4, 13
114.33	Forsythe Creek Hydrologic Subarea				4, 13
115.00	Bodega Hydrologic Unit		X		
115.10	Salmon Creek Hydrologic Area				4, 9
115.20	Bodega Harbor (or Bay) Hydrologic Area			X	4, 14
115.30	Estero Americano Hydrologic Area			X	4
115.40	Estero de San Antonio Hydrologic Area			X	4, 14
	Coastal Waters				14
	Groundwater				14
	Ocean Waters				14
	Bays				14
	Wetlands				14
	Estuaries				14

APPENDIX A
TABLE 2

FERC TABLE
HYDROPOWER (POW) BENEFICIAL USE DESIGNATION

FERC Hydropower Locations HA/HSA/Waterbody	HA/HSA No.	Beneficial Use	Project Name	Project No.
Klamath River HA	105.37 105.38	POW	Klamath River Project	2082
Warm Springs HSA	114.24	POW		3351
East Fork Russian River-Ukiah HSA	114.31	POW	Lake Mendocino	2841
Merrill Creek-Middle Klamath HA	105.30	POW	Cornwell	2987
Mill Creek –Ruth HA	109.40	POW	Mill & Sulfur Creeks (Matthews Dam)	6154
Tailrace Canal of Project 77 Coyote Valley HSA	114.32	POW	Power Canal (Potter Valley Project)	8936

Appendix A
Table 3

Designation Updates Based on Interviews with USFS and CDFG Professionals

Waterbody/HSA/HA	HA/HSA No.	Potential Beneficial Use (P)	Existing Beneficial Use (E)	Interview No.
Scott River HA	105.40	Proc/ Warm/ Aqua	Mun/Agr/Ind/Nav/Rec-1/Rec-2/ Comm/Cold/Wild/Rare/Migr/Spwn/Aqua	1
Butte Valley HA	105.80	Ind*/Proc*/Aqua	Agr/Pow/Rec1/Rec2/Comm/Cold/Wild/ Migr/Spwn	1
Lake Shastina	105.50	Mun/Ind/Proc/Migr/ Aqua	Rec1/Rec2/Comm/Warm/Cold/Wild/Migr /Spwn/Gwr/Frsh/Nav/Bsa/	1
Shasta River/ Tributaries		Proc/Pow/Bsa*/Rare*	Mun/Nav*/Rec1/Rec2/Comm/Warm/Cold/ Wild/Migr/Spwn	1
Middle Klamath HA	105.30	Aqua*/Pow*	Mun/Agr/Proc/Pow/Rec1/Rec2/Comm/ Warm/Cold/Wld/Rare/Migr/Ind/Bsa/Spwn	1
Iron Gate HSA	105.37	Mun/Agr/Ind/Proc	Frsh/Nav/Pow/Rec1/Rec2/Comm/Warm/ Cold/Wild/Rare/Migr/Spwn/Aqua	
Copco HSA	105.38	Proc/Aqua	Mun/Agr/Ind/Frsh/Nav/Pow/Rec1/Rec2/ Warm/Cold/ Bsa/Wild/Rare/Migr/Spwn	
Lower Salmon HSA	105.21	Proc/Shell/Aqua	Mun/Agr*/Ind/Frsh/Nav/Pow/Rare Rec1/Rec2/Comm/Cold/Wild/Migr/Spwn	1
Lower Trinity HA	106.10	Pow*/ Proc/Aqua*	Mun/Agr/Ind/Gwr/Frsh/Nav/Rec1/Rec2/ Comm/Cold/Wild/Rare*/Migr/Spwn/Bsa*	2, 5
Middle Trinity HA	106.30	Proc/Pow/Warm/ Aqua*	Mun/Agr/Ind/Gwr/Frsh/Nav/Rec1/Rec2/ Comm/Cold/Wild/Rare/Migr/Spwn	2, 3
Upper Trinity HA	106.40	Ind/Proc/Pow Rare/Aqua*	Nav/Rec1/Rec2/Comm/Warm*/Cold/Wild/ Spwn*/Migr*	2, 5
Ewing Reservoir		Spwn/Ind/Proc/Aqua/ Rec1	Mun/Rec2/Comm/Warm/Cold/Wild/Rare/ Migr/Nav	2, 5
Clair Engle & Lewiston Reservoir	106.40	Ind/Proc/Rare	Mun/Agr/Gwr/Frsh/Nav/Rec1/Rec2/ Comm/Cold/Wild/Rare/Migr/Spwn/Aqua	2
Lower Eel HA	111.10	Proc/Pow/	Mun/Agr/Ind/Rec1/Rec2/Comm/Cold/ Warm/Wild/Rare/Migr/Spwn/Nav/ Rare/Bsa*/Aqua*	3
Capetown HA	112.20	Agr/Gwr/Rare	Mun/Agr/Ind/Gwr/Rec1/Rec2/Comm/ Cold/Wild/Rare/Migr/Spwn	3
Mad River HU	109.00	Mar*/Aqua*	Mun/Agr/IndFrsh/Nav/warm*/Bsa*/Rare/ Proc/Gwr/Frsh/Rec1/Rec2/Wild/Est*	
Trinidad HU	108.00	Mun*/Proc/Rec1*/ Aqua	Agr/Ind/NavRec1/Cold/Rec2/Comm/Cold/ Bsa*/Wild/Mar/Migr/Spwn/Est	
Eureka Plain HU	110.00	Proc/Pow/	Mun/Agr/Ind/Gwr/Rec1/Rec2/Comm/ Cold/Wild/Rare/Migr/Spwn/Shell*/Est /Bsa*	3

Van Duzen HA	111.20	Proc/Aqua*/Pow*	Mun/Agr/Ind/Gwr/Pow/Rec1/Rec2/ Comm/Warm/Cold/Wild/Rare/Migr/Spwn Nav*/Frsh	3
S.F. Eel HA	111.30	Proc/Aqua	Mun/Agr/Ind/Frsh/Gwr/Nav/Pow/Rec1 /Rec2/ Bsa*/ Comm/Warm/Cold/Wild/Rare/Migr/Spwn	3
N.F. Eel HA	111.50	Proc/Comm/Aqua	Mun/Agr/Rec1/Rec2/Warm/Wild/Rare/ Migr/Spwn/Bsa	3
Oil Creek	112.10	Mun/Rec1/Rec2/Pow	Agr/Ind/Cold/Wild/Rare/Migr/Spwn/Aqua	3
Mattole River HA	112.30	Proc/Nav/Warm	Mun/Agr/Ind/Gwr/Frsh/Rec1/Rec2/Comm / Cold/Wild/Rare/Migr/Spwn/Est	3
Russian River HU (minus Laguna HAS)	114.00	Rare, Aqua*	Mun/Agr/Ind/Proc*/Nav/Rec1/Rec2/ Comm/Spwn/ Pow*/Cold/Warm/ Gwr/Aqua/Est*	4
Laguna HSA		Mun/Proc/Pow/Shell /Aqua	Agr/Ind/Gwr/Cold/Warm/Rec1/Rec2/Wild/ Rare/Migr	
Bodega HU	115.00	Pow*/ Rare/Est/Aqua/Proc*	Mun/Gwr/Nav/Rec1*/Rec2/Rare/ Est*/Spwn/Migr/Wild/Mar*	4
S.F. Trinity HA	106.20	Proc/Rec1*/Aqua	Mun/Rec2/Comm/Cold/Wild/Rare	5
Lower Trinity HA	106.10	Nav/Pow/Rare/Ind/ Proc	Mun/Agr/Ind/Gwr/Frsh/Nav/Rec1/Rec2/ Comm/Cold/Wild/Rare/Migr/Spwn	5
Upper Main Eel HA	111.60	Biol	Mun/Agr/Ind/Gwr/Nav/Pow/REc1/Rec2/ Comm/Warm/Cold/Wild/Rare/Migr/Spwn	6
Middle Fork Eel HA	111.70	Proc/Nav/Pow*/ Warm/ Aqua*/Biol/	Mun/Agr/Ind/Gwr*/Frsh/Bsa*//Nav/Pow/R ec1/Rec2/ Comm/Warm/Cold/Wild/Rare/Migr/Spwn	6
Wooley Creek HSA	105.22	Pw/Shell/Aqua/Proc	Mun/Agr/Ind/Rec1/Rec2/Comm/Warm/Co ld/Wild/Rare/Migr/Spwn	7
Klamath Glen HSA	105.11	Ind/Pow/ Proc/Aqua/Biol	Mun/Agr/IndGwr/Frsh/Nav/Rec1/Rec2/ Bsa/Comm/Warm/Cold/Rare/Mar/Migr/ Shell/Spwn/Est	7
Orleans HSA	105.12	Rare/Shell/ Proc/Aqua	Mun/Agr/Nav/Rec-1/Rec-2/Comm/Warm/Cold/Wild/Rare/Migr/ Bsa/Ind/Spwn/Gwr/Frsh/Est	7
Lost River HA	105.90	Mun/Ind/Proc/Pow*/ Aqua/Nav*	Agr/Gwr/Frsh/Rec1/Rec2/Comm/Warm/ Cold/Wild/Rare/Spwn/Migr	8

*** the use does not apply to the entire HU, HA, or HSA (see Table 2-1 for specific designations of beneficial uses)**

Appendix A Table 4

SWRCB Division of Water Rights (DWR) Information System (WRIS)
Summary of Beneficial Uses

HA/HSA/ Waterbody	HA or HSA No.	Beneficial Use	DWR Use Code	Source Name	Tributary Name	Permit No.	File No.
South Fork Noyo River	113.20	Agr	I R S	SF Noyo River	Noyo River	015174	8
		Mun	D		Hayworth Creek		8
Eel River	111.00	Pow	P W	Eel River	Pacific Ocean	000781	11
Upper Main Eel River	111.62	Agr/Mun	D I S		Berry Creek	006660	8
Eel River	111.00	Pow	P	Eel River	Pacific Ocean		8
		Mun/Rec1	D R	Hartstone Creek	Eel River	011152	8
Tomki Creek	111.62	Agr	S	Mill Creek	Outlet Creek	011349	8
Tomki Creek	111.62	Mun/Agr/Rec1	D I R		Long Branch Creek	012979	8
Outlet Creek	111.61	Agr/Ind/Rec1	E I S R	Sherwood Creek	Outlet Creek	014858	8
Tomki Creek	111.62	Mun/Agr/Rec1/Ind	D E I R		Long Branch Creek	015305	8
Upper Main Eel River	111.61	Mun	M	Davis Creek	Moore Creek	020352	8
Round Valley	111.72	Mun	M	Willits Creek	Mill Creek		8
Benbow	111.33	Ind/Agr/Rec1	E I S R W		Long Valley Creek	020613	8
		Aqua	H	Capehorn Creek	Eel River		8
Ferndale	111.11	Agr	I	Francis Creek	Salt River	005696	10
Eel River	111.00	Agr	I	Eel River	Pacific Ocean	007300	10
Spy Rock	111.42	Pow	P	Yew Wood Creek	Hembrey Creek	006824	10
	111.42	Ind/Mun	J M	Eel River	Pacific Ocean	014644	10
Ferndale	111.11	Mun	D M	Eel River Underflow	Pacific Ocean	015925	10
Ferndale	111.11	Mun	D M	Dean Creek Springs	Dean Creek	015926	10
Sequoia	111.41	Pow	P	Mud Creek	S. Dobbyn Creek		10
Mattole River	112.30	Mun/Agr	D I	Mattole River	Pacific Ocean	014664	10
		Agr	I		Salmon Creek	007398	1
Estero Americano	115.30	Ind	J		Estero Americano	007683	1
		Mun/Ind	D J	Salmon Creek	Pacific Ocean	010350	1
Garcia River	113.70	Mun/Ind	D J	Rolling Brook Creek	Garcia River	011772	1
		Mun/Ind	D J	N. Fork Henry Gulch	Henry Gulch	007110	1
San Antonio		Mun/Agr/Rec1	D R S		Stemple Creek	012006	1
		Agr	S		Americano Creek	013846	1
Bodega Harbor	115.20	Agr	S W		Cheny Gulch	013764	1
		Mun	M	Bonee Gulch	Greenwood Creek	015559	1
		Ind/Rec1/Agr	E R S W		Salmon Creek	017913	1
Bodega Harbor	115.20	Mun/Rec1/Agr	D R S		Quinlan Gulch	017518	1
Garcia River	113.70	Mun	M	Garcia River Underflow	Pacific Ocean	017016	1
		Ind/Rec1/Agr	E R S W		Stemple Creek	017437	1
Estero Americano	115.30	Aqua/Pow	H K	Estero Americano	Bodega Bay	019106	1
Alder Creek	113.63	Mun	D		Irish Gulch	020443	1
Gualala	113.85	Ind/Rec1/Agr/Mun	D E I R	Timber Cove Creek	Pacific Ocean	020626	1
		Ind/Rec1/Mun/Agr	DEIJRSW		Pacific Ocean		1
Gualala River	113.85	Ind/Rec1/Mun/Agr	DEIJRSW	Timber Cove Creek	Pacific Ocean		1
Greenwood Creek	113.61	Mun	M	Greenwood Creek	Pacific Ocean		1
		Mun	D		Americano Creek		1

Russian Gulch	113.90	Ind/Mun	D E		West Branch Russian Gulch		1
Timber Cove	113.85	Ind/Mun	C S	North Fork Kolmer Gulch	Kolmer Gulch		1
Garcia River	113.70	Mun/Ind/Agr/Rec1	D E I R	Slick Rock Creek	Pacific Ocean		1
South Fork Gualala	113.85	Agr	I	Stewart's Point	Pacific Ocean		1
Greenwood Creek	113.61	Mun/Agr	D I S		Greenwood Creek		1
Garcia River	113.70	Mun/Agr	D I S	Garcia River	Pacific Ocean		1
Brush Creek	113.64	Agr	I S	Brush Creek	Pacific Ocean		1
Estero San Antonio	115.40	Mun	D		Estero de San Antonio		1
Russian Gulch	113.90	Mun/Agr	D I S	East Branch Russian Gulch	Russian Gulch		1
Shasta Valley	105.50	Mun/Ind	D J	Little Shasta River	Shasta River	002581	29
Shasta Valley	105.50	Aqua/Agr	H I S	Julien Creek	Shasta River	007736	29
Macdoel-Dorris	105.81	Agr/Wild	S W		Red Rock Valley	012751	30
Tennant	105.83	Mun	M	Antelope Creek	Antelope Sink	015769	30
		Agr	S		Meiss Lake		30
Boles	105.94	Agr	S		Boles Creek		30
Boles	105.94	Agr/Wild	I S W	Boles Creek	Willow Creek		33
Middle Fork Smith River	103.30	Aqua	H	Monkey Creek	Middle Fork Smith	006746	34
Tule Lake	105.92	Agr/Rec1	I R S		Tule Lake Sump	007666	33
Scott Bar	105.41	Mun	D	Kelsey Creek	Scott River	004374	28
Scott Valley	105.42	Pow	P	Boulder Creek	Scott River	004673	28
Scott Valley	105.42	Mun/Agr	D I		McGuffy Creek	005348	28
Scott Valley	105.42	Rec/Agr	R S	Noyes Valley Creek	East Fork Scott River	010374	28
Lower Salmon	105.21	Mun/Agr	D I	Thompson Gulch	South Fork Salmon River	004652	26
Lower Salmon	105.21	Ind/Mun	B D	Timber Gulch	South Fork Salmon River	006813	26
Sawyers Bar	105.23	Mun/Ind	D E	Jessups Gulch	North Fork Salmon River	004992	27
Sawyers Bar	105.23	Mun/Pow	D K	South Fork Jessups Gulch	Jessups Gulch	006533	27
Sawyers Bar	105.23	Ind	B	Alder Creek	North Fork Salmon River	006740	27
Hayfork Valley	106.25	Mun/Agr	D I S	Digger Gulch	Hayfork Creek	019578	24
Douglas City	106.31	Mun/Agr/Aqua/Rec	D H I R	Barleyfield Creek	Reading Creek		23
		Agr/Ind	E I S		Copco Lake	017329	22
		Mun	D	Snackenburg Creek	Copco Lake	015848	22
		Pow	P	Ritterbush Gulch	N. Fork Trinity River	017306	21
Middle Fork Smith River	103.30	Aqua	H	Monkey Creek	Middle Fork Smith	006746	34
Douglas City	106.31	Mun/Agr/Aqua/Rec	D H I R	Barleyfield Creek	Reading Creek		23
		Agr/Ind	E I S		Copco Lake	017329	22
		Mun	D	Snackenburg Creek	Copco Lake	015848	22
		Pow	P	Ritterbush Gulch	N. Fork Trinity River	017306	21
Illinois River	102.20	Aqua/Rec	H R	Elk Creek	West Fork Illinois	012017	4
Illinois River	102.20	Mun/Agr/Pow	D I P	North Fork Dunn Creek	Dunn Creek		4

Middle Fork Smith River	103.30	Mun	D		Middle Fork Smith	010646	34
South Fork Smith River	103.20	Pow	P	South Fork Smith River	Smith River		34
Big River	113.30	Ind	J	Ten Mile River	Pacific Ocean		2
Big River	113.30	Agr	I	Wages Creek	Pacific Ocean		2
Albion River	113.40	Agr	I S	Marsh Creek	S. Fork Albion River		2
Ten Mile River	113.13	Mun/Agr	D S	Ten Mile River	Pacific Ocean		2
Wages Creek	113.12	Mun/Agr/Ind	D G I	Wages Creek	Pacific Ocean		2
		Agr	I	Bailey Gulch	Little Salmon Creek		2
		Mun	D		Pacific Ocean		2
Noyo River	113.20	Mun	M		Hare Creek	017900	2
Albion River	113.40	Mun/Agr/Ind	D E S	Marsh Creek	Albion Creek	017674	2
Noyo River	113.20	Agr/Rec	I R		Pudding Creek	016203	2
Noyo River	113.20	Mun/Ind/Rec	D E R	Jack Peters Gulch	Pacific Ocean	014155	2
Navarro River	113.50	Agr	I		Barton Gulch	011234	2
Oil Creek	112.10	Agr	I	Fleener Creek	Pacific Ocean	010436	2
Noyo River	113.20	Ind	J	Pudding Creek	Pacific Ocean	009549	2
		Aqua/Agr/Ind/Rec	H I J R	Digger Creek	Pacific Ocean	003887	2

Beneficial Use	**Corresponding DWR Use Code**
Municipal and Domestic Supply **(MUN)**	Municipal (M) or Domestic (D)
Agricultural Supply **(AGR)**	Irrigation (I), Stockwatering (S), Frost Protection (N), Heat Protection (L)
Industrial Service Supply **(IND)**	Industrial (J), Fire Protection (E), Mining (B), Milling (C)
Hydropower Generation **(POW)**	Power (P), Incidental Power (K)
Water Recreation **(REC-1)**	Recreation (R)
Aquaculture **(AQUA)**	Fish Culture (H)
Wildlife Habitat **(WILD)**	Fish & Wildlife Protection and/or Enhancement (W)

APPENDIX B

APPENDIX B

TABLE 1
ALTERNATIVE 2

SEE
APPENDIX B
TABLE 2
ALTERNATIVE 3

APPENDIX C

SEE APPENDIX C ATTACHMENT 1

ECONOMIC REVIEW MEMO FROM SWRCB DATED 10/8/02