

Monitoring Monday - North Coast Regional Water Board (Region 1)

Join us each Monday as the Clean Water Team shares information and resources on water quality monitoring. This Monday we will look at the North Coast Regional Water Quality Control Board.

Remote wilderness and towering redwoods characterize the North Coast Region, which stretches from the Oregon border to the southern boundary of the watershed of the Estero de San Antonio and Stemple Creek in Marin and Sonoma counties and encompasses all basins draining into the Pacific Ocean, including Lower Klamath Lake and Lost River basins.

This Region is a land of wet coastal mountains and drier inland valleys, it accounts for 12 percent of the State's land area, but 35 percent of its freshwater runoff. It includes all of, or a portion of, ten counties (Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity).

Its 340-mile-long coastline includes estuaries and environmentally sensitive areas protected by State law. Timber harvesting, agriculture, recreation, and tourism are mainstays of the local economy.

The North Coast Region is characterized by distinct temperature zones. Along the coast, the climate is moderate and foggy, and the temperature variation is minimal. However, inland temperatures can range widely with seasonal variations in temperatures sometimes exceeding 100°F.

Precipitation over the North Coast Region is greater than for any other part of California, and floods can be a hazard.

The North Coast Region is abundant in surface water and groundwater resources. Although the North Coast Region constitutes only about 12% of the area in California, it produces about 41% of the annual runoff. This runoff contributes to flow in surface water streams, storage in lakes and reservoirs, and replenishment of groundwater.

Most of the North Coastal Basin consists of rugged forested coastal mountains dissected by six major river systems: the Eel, Russian, Mad, Navarro, Gualala, and Noyo rivers, and numerous smaller river systems. Soils are generally unstable and erodible, and rainfall is high. The area along the eastern boundary of the North Coastal Basin is mostly National Forest land administered by the United States Forest Service. Major population areas are centered in the Humboldt Bay and Santa Rosa areas.

California is divided into hydrologic regions. The North Coast Region is Hydrologic Region Number 1. There are 14 major surface water hydrologic units in the North Coast Region. Each of these hydrologic units is divided into smaller units called hydrologic areas and hydrologic subareas.

DWR has identified 62 groundwater basins in the North Coast Region. Groundwater may also exist even where groundwater basins have not been identified. Groundwater basins do not always follow the same boundaries as surface waters.

Groundwater is used widely throughout the North Coast Region for municipal, domestic, agricultural, urban, and industrial water supply. The supply of groundwater in the North Coast Hydrologic Region varies yearly with precipitation, infiltration, and the amount of withdrawals from groundwater basins. Withdrawals are dependent on several factors, such as changes in surface water availability, urban and agricultural growth, market fluctuations, and water use efficiency practices. Groundwater extractions and uses vary by watershed. According to the DWR, groundwater contributes about one-third of the total water supply for agricultural, urban, and managed wetlands in the North Coast Region.

Ample precipitation in combination with the mild climate found over most of the North Coast Region provides for a wealth of fish, wildlife, and scenic resources. The mountainous nature of the North Coast Region, with its dense coniferous forests interspersed with grassy or chaparral-covered slopes, provides shelter and food for deer, elk, bear, mountain lion, furbearers, and many upland bird and mammal species.

Virtually all surface waters are home to fish and wildlife in the North Coast Region. The North Coast Region's native fish species include salmonids such as coho, Chinook, pink and chum salmon, as well as steelhead, coastal cutthroat, and rainbow trout. Other native fish include green and white sturgeon, eulachon, Pacific and western brook lamprey, stickleback, five sculpin species, two sucker species, and several minnow species.

Historically, coastal, and inland streams in the Region provided thousands of miles of habitat suitable for salmon and steelhead. Recent focus has been placed on re-establishment of the once productive anadromous salmonid runs in the North Coast Region through habitat restoration and educational outreach.

Healthy fisheries support the economy of the North Coast Region through commercial fishing and tourism. Further, riparian ecosystems are integral to the continued success of native fish populations and the subsistence fishing and cultural uses.

The federal government has a responsibility to protect fisheries that are subject to tribal trust rights. This tribal trust responsibility applies to the Klamath and Trinity River systems, both of which run through tribal lands and are subject to tribal fishing rights.

Tidelands and marshes are extremely important to many species of waterfowl and shore birds for feeding and nesting. Cultivated land and pasturelands also provide supplemental food for many birds, including small pheasant populations. Tideland areas along the north coast provide important habitat for marine invertebrates and nursery areas for forage fish, game fish, and crustaceans. Many species of seabirds use offshore coastal rocks as nesting areas.

Major components of the economy are tourism and recreation, logging and timber milling, aggregate mining, commercial and sport fisheries, sheep, beef and dairy production, and vineyards and wineries.

The largest urban centers are in the Eureka area of Humboldt County and in the Santa Rosa area of Sonoma County, the latter of which has experienced the highest population growth of all the counties within the North Coast Region. Numerous Native American communities are scattered throughout the region.

In all, the North Coast Region offers a beautiful natural environment with opportunities for scientific study and research, recreation, sport, and commerce. To ensure their perpetuation, the resources must be used wisely. In many cases, water quality within the North Coast Region is sufficient to support, and in some cases enhance the beneficial uses assigned to specific waterbodies. However, there are several present or potential water quality issues, which may interfere with beneficial uses or create nuisances or health hazards.

North Coast Regional Water Board

- **Website**
 - www.waterboards.ca.gov/northcoast/
 - **Map**
www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/180710/BPMap.pdf
 - **Phone List**
www.waterboards.ca.gov/northcoast/about_us/phone_list/
 - **Contact Us**
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- **Press Room**
www.waterboards.ca.gov/northcoast/press_room/
- **Public Notices - Decisions Pending and Opportunities for Public Participation**
www.waterboards.ca.gov/northcoast/public_notices/
- **Surface Water Monitoring**

www.waterboards.ca.gov/northcoast/water_issues/programs/swamp/
[www.waterboards.ca.gov/water_issues/programs/swamp/monitoring/regional monitoring_programs/region_1.html](http://www.waterboards.ca.gov/water_issues/programs/swamp/monitoring/regional_monitoring_programs/region_1.html)

- **Water Quality Control Plan for the North Coast Region**
www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/
- **Water Quality Compliance Programs**
www.waterboards.ca.gov/northcoast/water_issues/programs/

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