

**CHAPTER 2
REGULATIONS AND PERMITS**

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2.1 FEDERAL LAWS AND REGULATIONS

Laws and ordinances are acts of legislation passed by legislative branches of government such as the US Congress, the State Legislature, County Boards of Supervisors and City Councils. Regulations are developed by the executive branch's agencies assigned to administering the implementation of the laws. Although distinct, the terms "laws" and "regulations" are often combined to describe the rules that must be followed to avoid breaking the law.

FEDERAL ENDANGERED SPECIES ACT (ESA)

The Federal ESA provides a program for the conservation of endangered and threatened species and provides for the conservation of designated critical habitat of listed species. Federal agencies shall ensure that actions or projects are not likely to jeopardize the continued existence of listed species and also ensure that no destruction or adverse modification of critical habitat for the listed species occurs.

- **ESA Section 4** – Determination of Endangered, Threatened, and Species of Concern status and designation of critical habitat. Section 4 requires development of a recovery plan for declining populations. A species is considered *endangered* when it is in danger of extinction throughout all or a significant portion of its range and *threatened* when it is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. On the Central California Coast, Coho salmon are listed under the Federal ESA as *endangered*, while Chinook salmon and Steelhead trout are listed as *threatened*.
- **ESA Section 4(d)** - Requires NOAA Fisheries to issue regulations deemed "necessary and advisable to provide for the conservation of the species". A 4(d) Rule applies to species listed as *threatened*, and outlines what actions are likely to take a specific listed species. Section 4(d) also allows for fines upon violation and third party lawsuits. On the Central California Coast, Steelhead trout have 4(d) Rule regulations. The following activities listed in Table 2-1 are enumerated in the 4(d) Rule for Central California Coast steelhead (May 18 2000) as those "most likely to cause harm and thereby violate the 4(d) Rule". NOAA Fisheries ESA enforcement focuses on these categories of activities.
- **ESA Section 7** – Interagency Cooperation Agreements. Requires federal agencies, in consultation with NOAA Fisheries and USFWS, to ensure that protections of the species are built into projects and requires a Biological Assessment (BA) if one or more listed species may be present in the project action area. This section applies to federally-funded and federally-permitted projects or Corps projects such as flood control or water supply structures. These types of projects have a "federal nexus", and thus warrant a Section 7 Agreement.
- ◆ **ESA Section 9** – Provides guidance regarding activities determined to result in "take". Application of uniform regulations when a species is listed as endangered. Defines "**take**" of a species: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" with respect to federally listed species under ESA. "**Harass**" includes annoying a protected species to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering. "**Harm**" is defined as an act that actually kills or injures a protected species and can arise from significant modification or degradation of habitat, which impairs essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering.
- **ESA Section 10**– Exceptions - applies to those projects with no federal involvement. Provides guidance on the issuance of "incidental take" permits when potential "take" of listed species, which

requires development of a satisfactory Habitat Conservation Plan (HCP) for the species. Also deals with direct take associated with authorized monitoring and research activities.

Table 2-1. Activities Determined to Cause Take or Harm to Listed Species under Section 4(d) of the Federal Endangered Species Act¹

A. Constructing or maintaining structures like culverts, berms, or dams that eliminate or impede a species' ability to migrate or gain access to habitat.
B. Discharging pollutants such as oil, toxic chemicals, radioactivity, carcinogens, mutagens, teratogens, or organic nutrient-laden water (including sewage water) into a listed species' habitat.
C. Removing, poisoning or contaminating plants, fish, wildlife, or other biota that the listed species requires for feeding, sheltering or other essential behavioral patterns.
D. Removing or altering rocks, soil, gravel, vegetation or other physical structures that are essential to the integrity and function of a listed species' habitat.
E. Removing water or otherwise altering streamflow in a manner that significantly impairs spawning, migration, feeding or other essential behavioral patterns.
F. Releasing non-indigenous or artificially propagated species into a listed species' habitat or into areas where they might gain access to that habitat.
G. Constructing or operating dams or water diversion structures with inadequate fish screens or passage facilities.
H. Constructing, maintaining or using inadequate bridges, roads or trails on stream banks or unstable hill slopes adjacent to or above a species' habitat
I. Conducting timber harvest, grazing, mining, earth-moving, or other operations that substantially increase the amount of sediment going into streams
J. Conducting land-use activities that may disturb soil and increase sediment delivery to streams, such as logging, grazing, farming, and road construction- in riparian areas and areas susceptible to mass wasting and surface erosion.
K. Illegal fishing. Harvest that violates fishing regulations is a top enforcement concern.
L. Various streambed disturbances may trample eggs or trap adult fish preparing to spawn. The disturbance could be mechanical disruption caused by construction push-up dams. Removing gravel, mining or other work in a stream channel. It may also take the form of egg trampling or smothering by livestock in the streambed or by vehicles or equipment being driven across or down the streambed, or any similar disruption.
M. Illegal interstate and foreign commerce dealing in imports or exports of listed or steelhead. Altering lands or waters in a manner that promotes unusual concentrations of predators.
N. Shoreline and riparian disturbances (whether in river, estuary, marine or floodplain environment) may retard or prevent the development of certain habitat characteristics upon which the fish depend (e.g. removing riparian reduces vital shade and cover).
O. Filling or isolating side channels, ponds, and intermittent waters (e.g. installing tidal gates and impassable culverts) can destroy habitats that fish depend upon for refuge during high flows.

CLEAN WATER ACT (CWA)

The Clean Water Act is the nation's primary water quality protection law authorizing the Environmental Protection Agency (EPA) to restrict pollution discharges. Certain sections require permits, based on regulations promulgated by the EPA in conjunction with the State Water Resources Control Board (SWRCB). In many instances, regulatory authority over clean water has been given to the states and is implemented by the State Water Resources Control Board (SWRCB) and the nine California Regional Water Quality Control Boards (RWQCB).

- **Section 401** – Requires that anyone discharging dredge or fill material into a surface water of the U.S. must not violate the State's water quality standards. The State's authority or duty to issue

¹ NMFS. (June 2000). A Citizen's Guide to the 4(d) Rule for Salmon and Steelhead on the West Coast.

401 Water Quality Certifications is dependent on a valid Section 404 application with the Army Corps of Engineers. The State may only enforce 401 for a valid Section 404 project. “Water Quality Certification” is carried out and enforced by the RWQCB.

- **Section 402 and NPDES Phase-II** - Prohibits the discharge of all pollution unless permitted. Notice of Intent (NOI) to SWRCB; permitting by RWQCB. Permit program entitled National Pollution Discharge Elimination System Phase II (NPDES Phase II), provides for permits for discharges of storm water from: (a) construction activity >1 acre of soil disturbance; (b) certain industrial activities including mining and vehicle maintenance (such as County Road Maintenance Yards); and c) municipal facilities, including roads. The Phase II Stormwater permit requirements, effective in March 2003 in most central California coastal counties, address water quality issues in areas of the watershed that are served by a municipal storm sewer system. Phase II compliance will include implementation of BMPs such as published in these guidelines, and the achievement of measurable goals in the following areas: 1) public education, 2) public participation/involvement, 3) illicit discharge detection and elimination, 4) construction site runoff control, 5) post-construction runoff control, and 6) pollution prevention/good housekeeping. Some cities and many construction projects were subject to Phase I municipal and construction permits. Those cities under Phase I MS4 permits currently have different requirements than those under Phase II.
- **Section 404** - Regulates the discharge of dredged or fill material into “waters of the United States”, including tidal and non-tidal wetlands (tied to Sect. 401 State process above). Permitting carried out by US Army Corps of Engineers (COE).
 - **“Waters of the U.S.”** - In nontidal waters, jurisdiction extends:
 - a) to the ordinary high water mark in the absence of adjacent wetlands.
 - b) beyond the ordinary high water mark to the limit of the adjacent wetlands, when present.
 - c) to the limit of the wetland when only wetlands exist.
 - **“Ordinary High Water Mark”** – “That line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.” [33 CFR 328.3(e)]

FISH AND WILDLIFE COORDINATION ACT

- Requires all federal agencies to consult with USFWS, NOAA Fisheries and DFG for activities that “affect, control, or modify waters of any stream or other bodies of water.” These agencies review applications for Clean Water Act Sect. 404 permits and provide comments to the Corps about the environmental impacts of the proposed project.
- Gives USFWS & NOAA Fisheries an expanded responsibility for review of federal projects (including those with federal permits or funding) that includes concerns about general plant and wildlife species that may not be addressed by the Endangered Species Act, particularly a project’s secondary effects.

COASTAL ZONE MANAGEMENT ACT (CZMA)

- Implemented through the State by the Coastal Commission and the County or City Local Coastal Plan (LCP).
- Requires that Clean Water Act Section 404 general permit must comply with CZMA.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

- Requires federal agency decision-makers to document and consider the environmental implications of their actions, including the issuance of permits, funding, and rights-of-entry.

RIVERS AND HARBORS ACT OF 1899 - Section 10

- Prohibits the unauthorized obstruction or alteration of any navigable waters of the U.S. without a permit from the Corps of Engineers (COE).
- Jurisdiction is limited to those activities affecting the “navigable waters of the U.S.” See Figures 2-1 and 2-2.
- Original regulatory authority has been superseded by Section 404 of the Clean Water Act to a great extent.

NATIONAL HISTORIC PRESERVATION ACT OF 1966 – Section 106

- Requires federal agencies to review projects for impacts to historic and archeological resources.
- Requires projects with federal involvement to determine the significance of cultural resources with the Area of Potential Effect.
- Requires consultation and concurrence with the State Office of Historic Preservation (SHPO).

2.2 STATE LAWS AND REGULATIONS

CALIFORNIA FISH AND GAME CODE

➤ Sections 1600-1607 - “Lake and Streambed Alteration Agreement Process”

- Public agencies must comply under Section 1602 of DFG code.
- Requires notification to DFG for any project that will impact a river, stream or lake. Measures to prevent substantial adverse affect on fish or wildlife are developed with applicant in an Agreement.
- Agreement is technically not a “permit” but a “mutual agreement” between DFG and project proponent.
- Projects must also (since 5/1/99) be reviewed under the California Environmental Quality Act (CEQA).
- No pre-notification is required for emergency projects by a public agency to maintain, repair or restore an existing highway, within the existing right-of-way, within one year of damage. Notification required within 14 days of beginning work.
- Jurisdictional limit is usually marked by DFG – in practice - to be at the top of the stream or lake bank or at the outer edge of the riparian vegetation, whichever is wider. However, the broad definition in DFG Code Section 1602 gives DFG great flexibility in deciding what constitutes a stream – sometimes to the 100-year flood plain.

➤ Section 5650 – Water Pollution

- Prohibits anyone from depositing, permitting to pass into, or place where it can pass into the waters of this state, most pollutants, including any petroleum, acid, asphalt, bitumen, or residuary product of petroleum; ...or any substance or material “deleterious to fish, plant life, or bird life.”
- Does not apply to pollution discharged under a permit from RWQCB or SWRCB.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

- Regulates any discharge that may affect waters of the state (which include all surface and ground waters)
- Provides the State with authority to regulate consistent with (and in excess of) CWA requirements. The CWA distinguishes between point (pipe) and nonpoint (runoff) sources of water pollution in California.
- Administered by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB)

CALIFORNIA ENDANGERED SPECIES ACT (CESA)

Coho salmon in all FishNet Counties are now listed as endangered under the California State Endangered Species Act. (San Mateo and Santa Cruz Counties, 1995; Marin, Sonoma and Mendocino, 2002). A comprehensive Recovery Plan for these listed fish was completed in 2004 by the Department of Fish and Game as part of the State Fish and Game Commission’s agreement on implementing the listing.

- Regulations under CESA prohibit the “take” of plant and animal species designated by the California Fish and Game Commission as either endangered or threatened. Seeks to ensure that action is not likely to destroy or adversely modify “essential habitat” necessary to the continued existence of the species. [Fish & Game Code Sections 2080-2081]
- “Take” includes hunting, pursuing, catching, capturing, killing, or attempting such activity, but does not now include indirect mortality resulting from habitat modification (due to change by recent legislation).

- Section 2080 states no further state authorization needed if a federal ESA’s Section 10 Incidental Take Permit has been obtained.
- Section 2081 authorizes incidental take permits by DFG, under certain conditions. Projects with potential impacts to coho salmon in the central California coastal counties, (*endangered*), require an incidental take permit, 2081.
- (Sect. 2090, state agency consultation requirement, was repealed effective 1/1/99.)
- When a species is also listed under the Federal ESA, DFG must participate in the federal consultation to the greatest extent practicable and adopt the federal Biological Opinion as its Biological Opinion, wherever possible.
- Website: www.dfg.ca.gov/hcpb/ceqacesa/cesa/cesa.html

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

- Requires state, regional, and local agencies to assess the significant environmental effects of proposed projects and to circulate these assessments to other agencies and the public for comment before making decisions on the proposed projects.
- Exempts most road maintenance actions through the use of a Categorical Exemption (“CE” or “Cat Ex”), when no potential for significant environmental impact exists. However, there is often potential for impact – e.g. there is a presumption that ESA species are present and may be affected (in this chapter, see *Federal Laws and Regulations: ESA*) – and Cat Exes are limited by the following exceptions (CEQA Title 14, Categorical Exemptions, 15300.2 – Exceptions):
 - Location (e.g. a particularly sensitive environment)
 - Cumulative Impact (of successive projects in same place)
 - Scenic Highways (damage to scenic resources such as trees and rock outcroppings within officially designated state scenic highway)
 - Hazardous Waste Sites
 - Historical Resources

Given that such exceptions can be and are broadly interpreted, it is much more efficient to implement appropriate BMPs to ensure that activities result in less than significant effect.

Cat Ex examples include:

- Class 1 (Existing Facilities): Includes maintenance of existing public facilities, such as road grading for purpose of public safety; rehabilitation of damaged facilities to meet current standards of public health and safety; maintenance of stream channels (clearing of debris) to protect fish and wildlife resources;
- Class 2 : Replacement or Reconstruction of existing facilities involving negligible or no expansion of capacity
- Class 4 (Minor Alterations to Land): Minor alterations (excluding removal of healthy, mature scenic trees), such as grading on slope <10% not in waterway, wetland, or geologic hazard area; filling of earth into previously excavated land.
- Other actions (or group of actions) should achieve CEQA compliance through completion of an Initial Study supporting a Negative Declaration (“Neg Dec”), a Mitigated Negative Declaration (“Mit Neg Dec), or an Environmental Impact Report (EIR).
- Issuance of Local and State permits, such as DFG’s 1602 agreement or a County Use Permit, also must comply with CEQA procedural requirements.

CALIFORNIA COASTAL ACT

- Sets policy for land use within the coastal zone and assigns decision-making and administration to the Coastal Commission

- Implemented at the local level primarily through County or City Local Coastal Plans (LCP) and local agencies, once LCPs are approved by the Coastal Commission.
- No coastal development permit is required for repair and maintenance of existing public roads, including resurfacing, ditch cleaning, and slide removal. A permit is required for excavation or disposal of fill outside of the roadway prism. (Section 30610).

SURFACE MINING AND RECLAMATION ACT (SMARA)

- Requires local government to adopt and implement ordinances regulating upland surface mines and instream gravel mining and to require Reclamation Plans for each mining site obtaining a local use permit.
- Reclamation plans overseen in an advisory capacity by the Calif. Dept. of Conservation, Office of Mine Reclamation.
- Caltrans reviews reclamation plans for mines in the 100-year floodplain, or within 1 mile upstream or downstream of a Caltrans bridge.

2.3 LOCAL GOVERNMENT LAWS AND REGULATIONS

COUNTY GENERAL PLANS, COMMUNITY PLANS AND LOCAL COASTAL PLANS

- The Countywide General Plan, establishes land use designations, standards, and policies, which may address erosion control, water quality protections, riparian set-backs, and other habitat-related issues. Community Plans establish priorities based on regional resources and community values and visions.
- Local Coastal Plans (LCPs) must comply with the California Coastal Act.
 - Are adopted as an element of the General Plan and provide special standards and policies for activities within the coastal zone (extending up to five miles inland from the mean high tide line).
 - Clean Water Act Section 404 general permit must comply with Coastal Zone Management Act (CZMA), which is implemented through the State by the Coastal Commission and the County or City LCP.

COUNTY ORDINANCES

Each County has a suite of ordinances that are implemented through County Code. Ordinances are often the vehicle whereby a vision from a county plan is enacted into law. Table 2-2 lists the General Plan Elements and Ordinances found in the FishNet counties that directly or indirectly pertain to salmonid fishery and stream habitat protection.²

Table 2-2. County General Plan Elements and Ordinances

County	General Plan Elements	Ordinances
Marin	Environmental quality element	Dam permit (amendment), Chapter 11.04
	Community development element	Watercourse diversion & obstruction, Chapter 11.08
	Transportation element	Grading, Chapter 19.08
	Housing element	Native tree preservation, Chapter 22.xx
	Noise element	Mining and quarrying, 23.06 (amendment)
	Environmental hazards element	Excavating, grading & filling, Chapter 23.08
	Agricultural element	Urban runoff, Chapter 23.18
	Community facilities element	Integrated pest management, Chapter 23.19
	Parks and recreation element	Improvements, Chapter 24.04
	Trails element	Drainage, Chapter 24.04.520
	Economic element	Grading, Chapter 24.04.620
	Local coastal plan unit I	Miscellaneous (bridges), Chapter 24.02.875
	Local coastal plan unit II	Local Coastal Plan code Chapter 22.56
	Tamalpais Area Community Plan	Riparian Zone Protection Ordinance
San Geronimo Valley Community Plan		
Point Reyes Station Community Plan		
Monterey	Natural resources, Chapter I	Grading ordinance, Chapter 16.08
	Environmental constraints, Chapter II	Erosion control ordinance, Chapter 16.12
	Human resources, Chapter III	Floodplain regulations, Chapter 16.16
	Area development, Chapter IV	Preservation of Oak and Protected Trees, Chapter 16.60
	Countywide land use, Chapter V	Pajaro River banks & levees, Chapter 16.65
	Carmel Area Plan	Subdivision Ordinance, Title 19
	Carmel Valley Master Plan	Zoning ordinance, Title 21

² Harris, R.L. (January 2001). Effects of County Land Use Policies and Management Practices on Anadromous Salmonids and Their Habitats.

County	General Plan Elements	Ordinances
	South County Area Plan	
	Greater Monterey Peninsula Area Plan	
	Toro Area Plan	
	Cachagua Area Plan	
	Central Salinas Valley Area Plan	
	North County Area Plan	
San Mateo	Vegetation, water, fish and wildlife, Chapter 1	Growth management
	Soil resources, Chapter 2	Floriculture
	Mineral resources, Chapter 3	Sensitive habitats
	Visual quality, Chapter 4	Riparian corridors
	Historical and resources, Chapter 5	Rare and endangered species
	Park and recreation resources, Chapter 6	Visual resources
	General land use, Chapter 7	Natural hazards
	Urban land use, Chapter 8	Recreation and visitor serving facilities
	Rural land use, Chapter 9	Zoning ordinance
	Water supply, Chapter 10	Excavation, grading, filling, clearing, Section 8600
	Waste water, Chapter 11	Grading permit standards handbook
	Transportation, Chapter 12	Significant tree ordinance 11,000 - 12,000
	Solid waste, Chapter 13	Riparian corridor/ zoning ordinance update
	Housing, Chapter 14	Storm Water Management Ordinance, Section 5000
	Natural hazards, Chapter 15	
	Local Coastal Plan	
	Man-made hazards, Chapter 16	
Santa Cruz	Land use element	Zoning ordinance, Chapter 13.10
	Circulation element	Site and landscape design review, Chapter 13.11
	Housing element	Coastal zone regulations, Chapter 13.20
	Conservation and open space element	Subdivision ordinance, Chapter 14.01
	Public safety and noise element	Geologic hazards, Chapter 16.10
	Parks, recreation and public facilities	Grading regulations, Chapter 16.20
	Community design	Erosion control, Chapter 16.22
		Riparian corridor protection, Chapter 16.30
		Sensitive habitat protection, Chapter 16.32
		Significant Tree Ordinance- Chapter 16.34
		Mining regulations, Chapter 16.54
Sonoma	Land use element	Erosion control plans required, Chapter 7
	Housing element	Flood damage prevention, Chapter 7
	Open space element	Storm water quality, Chapter 11
	Agricultural resources element	Watercourse protection ordinance 1108
	Resources conservation element	Anti roiling ordinance, Chapter 23, 3836R
	Public safety element	Zoning ordinance, Chapter 26
	Circulation and transit element	Vineyard erosion and sediment control ordinance , Chapter 30
	Air transportation element	
	Public facilities and services element	
	Noise element	

2.4 PERMITS

Permits are needed from different agencies for many types of project and purposes. To help you find out what permit is required, from which agency, and for what types of projects, three tables are provided below. You can look up the permit by agency name, by permit name, or by project type.

Once you have a permit, you need to know what is important about its contents. A checklist of important categories to look for in each permit is provided. Compliance with the rules is essential – penalties and fines for the county and individuals can be stiff. A significant change in the project must be run by all permitting agencies.

Table 2-3. Types of Permits- By Agency

AGENCY	PERMIT	WHAT TYPES OF PROJECTS
➤ Federal		
U.S. Army Corps of Engineers (COE)	CWA Section 404 Permit	Projects that will deposit dredged or fill material into “waters of the U.S.”, including wetlands
	<ul style="list-style-type: none"> • Individual Permit 	All activities not covered by General Permit (see below)
	<ul style="list-style-type: none"> • General -Nationwide Permit (NWP) <p style="text-align: center;">NWPs related to road maintenance</p>	Categories of activities with minimal impacts on aquatic resources: #3 – Maintenance #7 – Outfall Structures and Maintenance #12 – Utility Line Activities #13 – Bank Stabilization #14 – Linear Transportation Crossings #23 – Approved Categorical Exclusions #27 – Stream & wetland restoration #33 – Temporary Construction, Access, and Dewatering #41 – Reshaping existing drainage ditches #43 - Storm Water Management Facilities
	<ul style="list-style-type: none"> • Regional General Permit (RGP) 1 – San Francisco District 	Only for fish passage/ sediment reduction projects at water crossings in the San Francisco District
NOAA Fisheries	ESA Section 4(d) rules ESA Sect. 7 Consultation to COE 404 permit, or other federal agency ESA Section 10	When project involves work in a stream with listed salmon or steelhead species.
Fish and Wildlife Service (USFWS)	ESA Sect. 7 Consultation to COE 404 permit or other federal agency	When project could jeopardize an endangered or threatened species (non-anadromous) or result in adverse impact to its critical habitat

AGENCY	PERMIT	WHAT TYPES OF PROJECTS
	ESA Section 10	
➤ State		
Dept. of Fish & Game (DFG)	Fish & Game Code Sect. 1602 Streambed Alteration Agreement	Instream projects / culverts / stream crossings / fish screens/ water & stream diversions / bank stabilization/ bridges / riparian plant removal
	CESA Section 2081 Incidental Take Permit	For projects likely to cause the death of a species listed as threatened or endangered under CESA
State Water Resources Control Board (SWRCB) / Regional Water Quality Control Bd. (RWQCB) – North Coast Region	CWA Section 401 – Water Quality Certification	Same as 404 (Corps) – 401 needed whenever 404 required. If no 404 required (isolated wetlands), may need waste discharge requirements (WDR) or waiver under Porter-Cologne Act. File Notice of Intent (NOI) with RWQCB.
	CWA Section 402 – NPDES Storm Water Permit National Pollution Discharge Elimination Systems	Construction projects that cover > 1 acre of soil disturbance; in areas of industrial and municipal operations and maintenance programs, . NPDES storm water permits, both construction and municipal, require consideration of runoff treatment systems to minimize impacts of runoff discharges.
	Waste Discharge Requirements (WDRs or WDR waivers)	Any project involving activity within waters of the state (including wetlands). Note: The definition of “waters of the state” is broader than “waters of the U.S.” Therefore, projects not subject to a CWA Section 404 permit (headwaters, isolated water bodies, etc.) may still require permits from this agency
State Lands Commission (SLC)	Land use lease	Installation of structures or disposal of dredged material on beds of navigable streams, bays and estuaries.
Lead Agency	CEQA compliance (not a permit)	State permit-issuing agencies must comply with CEQA process during permit process
Local – County / City		
Planning Dept.	Use or Conditional Use permit Grading and Building permit Significant Tree Removal permit Riparian Exception	Rock quarries / gravel extraction Stream bank projects Vegetation management
Public Works Dept.	Grading permit Encroachment permit	Soil disturbance > X cu. yds. (depending on county grading ordinance)
Lead Agency	CEQA compliance (not a permit)	Permit-issuing agency must comply with CEQA process during permit process

Table 2-4. Types of Permits – By Permit Name

PERMIT Informal / Formal Name	AGENCY	PURPOSE
“401” / CWA Section 401 – Water Quality Certification or Waiver	SWRCB / Regional Water Quality Control Bd. (RWQCB) – North Coast Region	Same as 404, but for up to 5 years and multiple projects.
“402” or “SWP” / CWA Section 402 – Storm Water Permit		Storm water runoff – minimize impacts
“404” / CWA Section 404 permit	U.S. Army Corps of Engineers (COE)	Protection of wetlands and waters of the U.S. from discharge of dredged or fill material
<ul style="list-style-type: none"> Individual permit 		Regulate specific activities on an individual basis
<ul style="list-style-type: none"> General – Nationwide Permit “NWP” 		Regulate specific categories of activities, usually with minimal impacts on aquatic resources, on a national basis
<ul style="list-style-type: none"> “RGP” or Regional General Permit 		Regulate specific categories of activities, usually with minimal impacts on aquatic resources, on a regional basis
<ul style="list-style-type: none"> Section 4(d) ESA Rule Section 7 Consultation / Section 10 HCP / “take” for monitoring & research 	NOAA Fisheries	Protect federally-listed anadromous fish species (salmon & steelhead & habitat)
	U.S. Fish & Wildlife Service (USFWS)	Protect other federally- listed species & their habitat
“1602” / Fish & Game Code Sect. 1602 Streambed Alteration Agreement	Calif. Dept. of Fish & Game (DFG)	Ensure no net loss of stream habitat values or acreage
“2081” / Fish & Game Code Sect. CESA Incidental Take Permit		Protect State-listed animal and plant species & habitat
CEQA compliance (not a permit)	Lead Agency = Implementing or Permit-issuing agency	Assess the significant environmental effects of proposed projects.
Use permit or Conditional Use permit; Building permit; Grading permit	County or City Planning Dept.	Ensure compliance with General Plan & ordinances
Local Coastal permit	County or City Planning Dept.	Ensure wetland impacts are avoided or minimized in the coastal zone
Grading permit	County or City Public Works Dept.	Minimize or avoid erosion and sedimentation

Table 2-5. Permits by General Permit Type for Routine Road Maintenance

General Road Maintenance Project Category	General Environmental Concerns about Activity	Permits or Approval that may be required
Streambank erosion control	<ul style="list-style-type: none"> Sediment discharge to stream Riparian plant impact 	<ul style="list-style-type: none"> 404 CWA permit – NWP #13 or RGP #1 401 CWA permit

General Road Maintenance Project Category	General Environmental Concerns about Activity	Permits or Approval that may be required
		<ul style="list-style-type: none"> • NOAA Fisheries consultation • 1602 DFG agreement
Ditch maintenance	<ul style="list-style-type: none"> • Sediment discharge to stream from ditch • Aquatic habitat removal 	<ul style="list-style-type: none"> • 404 CWA permit if “water of the US” – NWP #41 for reshaping • 401 CWA if 404 needed • 1602 DFG agreement ?? • ESA consultation ??
Culvert maintenance & replacement	<ul style="list-style-type: none"> • Sediment or debris discharge into stream • Fish stranding or blockage to migration 	<ul style="list-style-type: none"> • 1602 DFG agreement • 404 CWA – NWP #14 or RGP #1 • 401 CWA • Consultation with NOAA Fisheries and possible permit.
Vegetation management	<ul style="list-style-type: none"> • Loss of riparian plants • Create erosion risk 	<ul style="list-style-type: none"> • County Tree Ordinance • 1602 DFG if working within riparian zone • County Pesticide Ordinance • Special use permit if trees located on federal land • May require a Habitat Conservation Plan
Spoil disposal	<ul style="list-style-type: none"> • Sediment and debris discharge to stream • Harms slope stability of site • Filling wetlands 	<ul style="list-style-type: none"> • County conditional use permit / coastal permit • County grading permit • Special use permit if on federal land • 404 CWA if wetlands or floodplain involved • 401 CWA if 404 needed • Possible Section 7 permit ??
Maintenance yard Management	<ul style="list-style-type: none"> • Stormwater runoff of stored materials to streams • Spills of hazardous materials • Contamination of groundwater & soils 	<ul style="list-style-type: none"> • 402 CWA Stormwater Plan & General Industrial Stormwater Permit • County Pesticide Ord. • Compliance with County Spill Plan • CWA Waste Discharge Permit for petroleum discharge to septic system or for oil/water separators
Bridge maintenance	<ul style="list-style-type: none"> • Discharge of bridge materials into stream • Damage to riparian area • Harm to bats & swallows 	<ul style="list-style-type: none"> • CWA Waste discharge permit for lead-based paint discharge • DFG & USFWS notification • 404 CWA permit for instream work • 401 CWA permit for

General Road Maintenance Project Category	General Environmental Concerns about Activity	Permits or Approval that <u>may</u> be required
		instream work <ul style="list-style-type: none"> • 1602 DFG agreement for instream work
Emergency maintenance (Typical emergency response activities include: storm damage patrol; debris removal; emergency opening or closing of a road; and repairs to roads, slopes, and drainage facilities.)	<ul style="list-style-type: none"> • Discharge of sediment and debris into stream system • Stream habitat damage due to heavy equipment instream or in riparian zone 	<ul style="list-style-type: none"> • 1602 DFG post-project notification • 404 CWA pre-project notification • 401 CWA post-project notification • Hazardous spill notification process to checklist agencies

CATEGORIES OF PERMIT CONDITIONS

The following checklist includes most of the categories of requirements, conditions, mitigations, and limits often placed on a permit. Permit conditions and project mitigations protect against both direct impacts and potential impacts to the species or habitat.

- ❑ **Project Description and Purpose** – Scope of proposed action
- ❑ **Timing of Project Actions** – Limits to season, month, time of day, particularly **Limited Operating Periods** (LOPs) which can restrict action during special periods for sensitive animals (e.g., spawning, nesting)
- ❑ **Project Location** – Map or description of project site
- ❑ **Mitigations** included in the original Project Description – Practices proposed by the applicant (County) to minimize or avoid environmental impacts
- ❑ **Revised or Additional Mitigations** – Other practices required by the permitting agency) to minimize or avoid environmental impacts
- ❑ **Monitoring Requirements** – Records that must be kept and data that must be collected during and after the project
- ❑ **Endangered or Threatened Species** – List of those known or possible at the site
- ❑ **Site Inspections** – Who and when an agency representative may need to be on-site during the project and his/her right to be there
- ❑ **Emergency Actions** – Clarifies which emergency actions can begin without prior notification or permit; agency must still be notified after action has begun.
- ❑ **Duration of Permit** – Beginning and Ending Date of permit’s active status
- ❑ **Penalties for Violation** of Permit Conditions – Potential fines and jail sentence
- ❑ **Biological Assessment (BA)** – As required by federal Endangered Species Act
- ❑ **Alternatives Analysis** - Alternative actions to the original proposal

ARE THESE PERMITS ALWAYS REQUIRED?

The need for permits and CEQA compliance can depend on the size and location of a project and the methods being used for the project. Site-specific conditions are important to consider. For more specific information on permits needed for each project or BMP, see “Permits” at the end of each maintenance activity in Chapters 5-10.

BEFORE performing a Routine Maintenance Project, be sure of the following:

- ✓ All necessary permits / agreements / consultations are completed for this project and are on site at the project.
- ✓ The final permit paperwork is available in the Project file.
- ✓ Review with all road crew involved, the specific conditions listed on the permits (see Permit Conditions above) *and make sure they understand the requirements.*
- ✓ Post Final permits on site, if required. DFG 1602 Agreements must be available on site.
- ✓ Notify permit-issuing agencies prior to beginning the project.

CONSEQUENCES OF NOT COMPLYING WITH PERMIT REQUIREMENTS

If permits are not complied with, or the necessary permits are not obtained, the penalties to the County (with liability including the responsible individual) for unpermitted activity can be quite strong:

1. **Regional Water Quality Control Board (RWQCB)** enforcement of violations to the Clean Water Act, the Porter-Cologne Act, and the Basin Plan can involve the following actions:
 - a) Administrative Civil Liabilities, with fines at \$10 per gallon of spill (\$2,000 /cu. yd., or \$20,000 per 10 yd. dump truck) of liquid or sediment. (One cubic yard of soil is equivalent to 202 gallons.)
 - b) Cleanup and Abatement Order – with fines for non-compliance
 - c) Time Schedule Order – with fines for non-compliance with deadlines
 - d) Cease and Desist Order – subject to fines
 - e) Fines < \$50,000 can be issued by the Executive Officer or Board; larger fines can be decided by the Board.
2. **California Dept. of Fish and Game (DFG)** can issue fines and penalties for violations of the **Fish & Game Code** (see Section 12000-):
 - a) Most violations are misdemeanors.
 - b) Punishment is a fine <\$1,000, imprisonment in the county jail for not more than six months, or both fine and imprisonment.
 - c) Violation of pollution prohibitions under F& G Code Section 5650 punishable by civil penalty of not more than \$25,000 for each violation; imprisonment in the county jail for not more than one year, or both fine and imprisonment. Person is also liable for all actual damages and for reasonable costs incurred in cleaning up the deleterious substance or material.
 - d) Punishment for a second or subsequent violation of Section 1602 on the same project or streambed alteration agreement, or any violation of the State Endangered Species Act (CESA), is a fine of <\$5,000 or imprisonment in the county jail for a period not to exceed one year, or both.
3. **Federal Endangered Species Act (ESA)** violations are assessed by the NOAA Fisheries Director (SW Region) or the USFWS Director (Western Region) and may involve the following penalties:
 - a) Civil penalty of up to \$25,000 per violation against any person who knowingly violates any provision of the ESA or any regulation issued to implement the taking and no damage/destruction provisions of Section 9.
 - b) Criminal penalties of up to \$50,000 (total) and/or one year's imprisonment for knowing violations of the act or regulations.
 - c) Penalties are most often assessed against private individuals and entities for section 9 violations.
 - d) Citizens may bring suit to enforce the act when compliance is not followed.

- 4. Clean Water Act Section 404 (EPA and ACOE) violations** are similar to the RWQCB actions above. Both the Corps (ACOE) and the EPA have independent enforcement authority.:
- a) Administrative penalties for EPA involve:
 - i) Class I violations – for less serious unpermitted activities, carry a maximum of \$10,000 per violation, with a total maximum of \$25,000;
 - ii) Class II violations – for more serious unpermitted activities, carry a maximum of \$10,000 per day for each day during which the violation continues, with a total maximum of \$125,000.
 - b) Corps’ enforcement has a maximum of \$25,000 per day for both classes.
 - c) Negligent violations carry misdemeanor sanctions, including penalties of \$2,500 to \$25,000 per day and imprisonment of up to one year.
 - d) Known violations carry felony sanctions, including penalties of \$5,000 to \$50,000 per day and imprisonment of up to three years.

TIME REQUIRED TO OBTAIN A PERMIT

Since the time for obtaining necessary permits can be lengthy and delay the start of road maintenance projects, it is very important to begin the permit process as soon as possible and to start the clock ticking on each of the permits that will or may be needed. Pre-consultation prior to permit application is highly encouraged. Table 2-4 lists the estimated time required for most permits. Some permit time schedules are established by statute (*), while other time periods are set at the discretion of the agency. Timing can also be delayed by complex projects, incomplete application materials, insufficient staffing for permit reviews, and “surprise” issues during inspection of the proposed project site. Note that the clock usually does not start ticking until the agency formally deems the application to be “complete”.

Table 2-6. Estimated Time Required for Permits by Permit Name

PERMIT / Other Requirement	AGENCY	TIME REQUIRED Minimum / Maximum
401 CWA – Water Quality Certification or Waiver (from discharge requirements)	RWQCB – Regional Water Quality Control Board	30 days to determine if application is “complete”; 60 days from complete application
402 CWA – General Storm Water Permit	RWQCB / SWRCB	Valid on receipt of complete Notice of Intent (NOI) (30 days)
404 CWA – Individual	COE – US Army Corps of Engineers	60-90 days / 2 years + (?)
404 CWA – General / Nationwide		30 days to determine if application complete; 45 days from “complete” application
404 CWA – General / Regional (RGP)		Same as Nationwide
Section 4(d) rule take limitation	NOAA Fisheries or	No time limit
Section 7 ESA - Informal Consultation	US Fish & Wildlife Service (USFWS)	30 days to get species list + 180 days max. for Biological Assessment (BA) + 30 days to accept BA*

Section 7 ESA - Formal Consultation		135 days max. for Biological Opinion, after acceptable BA is received.* (unless agreement to extend)
Section 10 ESA - Habitat Conservation Plan - Incidental Take Permit		No time limit
1602 – F&G Streambed Alteration Agreement	DFG – Calif. Dept. of Fish and Game	45 days* / 65 days*
2081 – CESA - Incidental Take Permit		120 days *
Use Permit	County / City	45-90 days
Grading Permit	County / City	varies

* Time limit set by statute

MOST COMMON PLAYERS IN THE PERMIT PROCESS

The following county, state and federal agencies are the most common players setting the conditions for projects that could potentially affect water quality, stream habitat, or salmon and steelhead fisheries. Getting to know the abbreviations or acronyms for the agencies and types of permits is helpful in permit discussions (See *Appendix B - Glossary*).

- **County / City Planning, Public Works, and Environmental Health Departments**
 - ◆ Responsible for permits to be issued under ordinances, such as Grading and Riparian Protection Ordinances, Tree Protection, Surface Mining and Reclamation, and encroachment.

- **California Dept. of Fish and Game (DFG)**
 - ◆ Responsible state agency for the public trust resources of fish and wildlife in California
 - ◆ Regulates activities potentially resulting in alteration of streambeds and banks or diversion of a stream's natural flow, as per the Fish and Game Code Section 1600
 - ◆ Protects species listed under the California Endangered Species Act (CESA).
 - ◆ Commenting agency (not permit-issuing) for federal and state permits under the Clean Water Act, Coastal Act and for regulations under CEQA
 - ◆ Website: //www.dfg.ca.gov

- **Regional Water Quality Control Boards; in the FishNet Region this includes the North Coast, San Francisco Bay and Central Coast Regional Boards**
 - ◆ Responsible agency for implementation of the State Porter-Cologne Water Quality Control Act and the Federal Clean Water Act.
 - ◆ Regulates activities that may potentially discharge pollutants into watercourses or storm water drainage systems.
 - ◆ Administers permit program entitled National Pollution Discharge Elimination System (Phase I & II), provides for permits for discharges of storm water from: (a) construction activity >1 acre of soil disturbance; (b) certain industrial activities including mining and vehicle maintenance (such as County Road Maintenance Yards); and c) municipal facilities, including roads.
 - ◆ Issues certifications under the Clean Water Act, such as the Sect. 401 certification required for a US Army Corps of Engineers permit under Sect. 404

- ◆ Issues Waste Discharge Requirements (WDRs) under the State Porter-Cologne Act; (WDRs are the main state permitting tool as authorized by the California Water Code). Such permits may be issued for any discharge of waste that could affect waters of the state, including wetlands.
 - ◆ Regulates potential discharge of pollutants into all surface and ground waters, including “creeks,” a term that includes drainage ditches and similar waterways with beneficial uses
 - ◆ Website: // www.swrcb.ca.gov/rwqcb1 (North Coast); www.swrcb.ca.gov/rwqcb2 (SF Bay); www.swrcb.ca.gov/rwqcb3 (Central Coast)
- **California Coastal Commission** (coastal counties only)
- ◆ Responsible for administering the California Coastal Act and the federally approved California Coastal Management Program of the Coastal Zone Management Act (CZMA)
 - ◆ Regulatory jurisdiction within the coastal zone varies in dimensions along the coast, with a maximum extension of up to five miles inland from the mean high tide line. Permit jurisdiction for proposed projects within the immediate ocean or bay shoreline (tidelands, submerged lands, and public trust lands)
 - ◆ Counties and cities implement Coastal Act policies through their adopted Local Coastal Plans (LCPs) certified by the Coastal Commission. Coastal Zone permits are permits are usually issued by local planning agency, such as a county or city.
 - ◆ Coordinates with local and state commenting agencies
 - ◆ Website: // www.coastal.ca.gov
- **U.S. Army Corps of Engineers (US ACOE)**
- ◆ Major agency responsible for regulation of Sect. 404 under the federal Clean Water Act, which includes “waters of the U.S.” and almost all wetlands. Jurisdiction essentially includes all bodies of surface water in California.
 - ◆ Coordinates with federal consulting agencies and DFG (under the Fish & Wildlife Coordination Act) for its permit process
 - ◆ Initiates consultation with NOAA Fisheries and USFWS under the Endangered Species Act
 - ◆ Website: // www.spn.usace.army.mil/regulatory/
- **NOAA Fisheries**
- ◆ Responsible agency for almost all marine species, including protection of salmon and steelhead listed as threatened or endangered under the federal Endangered Species Act, and their designated critical habitat; also implements Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act
 - ◆ Issues Incidental Take Permits under Section 10 of the Endangered Species Act for non-federal projects involving a “take” of species federally listed as threatened or endangered; indirect take associated with otherwise lawfully authorized activities, and direct take for research and monitoring.
 - ◆ Conducts ESA Section 7 consultation for any activity funded, carried out or permitted by a federal agency that might jeopardize the continued existence of a listed salmon or steelhead species or adversely affect their critical habitat.
 - ◆ Consulting agency (not permit-issuing) for federal Clean Water Act permits (Sect. 404), and for any project (permits, funding, assistance, etc.) due to Fish and Wildlife Coordination Act requirement and/or involving other federal agencies such as FEMA, EPA, and Federal Highways.
 - ◆ Websites: SW Region – <http://.swr.nmfs.noaa.gov>; NW Region – <http://.nwr.noaa.gov>

- **U.S. Fish and Wildlife Service (USFWS)**
 - ◆ Responsible agency for protection of terrestrial and non-marine (non-salmon) aquatic species listed as threatened or endangered under the federal Endangered Species Act
 - ◆ Commenting agency (not permit-issuing) for federal Clean Water Act permits (Sect. 404) and for any project with federal involvement (permits, funding, assistance, etc.) due to Fish and Wildlife Coordination Act requirement.
 - ◆ Issues Incidental Take Permits under Section 10 of the Endangered Species Act for non-federal projects involving a “take” of federally listed species. (see ESA section below for definitions of “take”).
 - ◆ Conducts ESA Section 7 consultation for any activity funded, carried out or permitted by a federal agency that might jeopardize the continued existence of a listed non-salmon species or adversely affect their critical habitat.
 - ◆ Website: [//www.ccfwo.r1.fws.gov/](http://www.ccfwo.r1.fws.gov/)

LESS COMMON PLAYERS IN THE PERMIT PROCESS

Only in limited instances do the following agencies require permits or get involved in the permit process for county road maintenance projects:

- **California Dept. of Conservation**
 - ◆ Office of Mine Reclamation implements reporting, compliance, and reclamation requirements of the Surface Mining and Reclamation Act (SMARA) for rock and gravel mines and quarries
 - ◆ Website: [//www.consrv.ca.gov/omr/](http://www.consrv.ca.gov/omr/)
- **State Lands Commission (SLC)**
 - ◆ Authorizes leases for use of the state’s tide and submerged lands and beds of historically navigable rivers, including sites for bridge supports
 - ◆ Website: [//www.slc.ca.gov/](http://www.slc.ca.gov/)
- **State Water Resources Control Board (SWRCB)**
 - ◆ Responsible State agency for enforcement of the Porter-Cologne Act and Clean Water Act.
 - ◆ Delegates most federal and state water quality permit and enforcement activity to its 9 Regional Water Quality Control Boards (RWQCB)
 - ◆ Oversees water rights applications, allotments and permits for water diversions
 - ◆ Adopts statewide General Permit for Storm Water Discharges, issued by SWRCB and enforced by the RWQCBs.
 - ◆ Oversees and regulates statewide general permits which include construction, industrial, linear construction, and Small MS4 permits.
 - ◆ Website: [//www.swrcb.ca.gov/](http://www.swrcb.ca.gov/)
- **U.S. Environmental Protection Agency (EPA)**
 - ◆ Delegates most federal water quality permit and enforcement activity to the State
 - ◆ Reserves compliance authority for runoff (“nonpoint source”) pollution unless delegated to the State (delegated to RWQCBs in California)

- ◆ Shares responsibility with RWQCB for developing Total Maximum Daily Load (TMDL) allocation for pollutants for listed North Coast streams; gives final approval authority for each proposed TMDL.
 - ◆ Website: //www.epa.gov/ow
- **Federal Highway Administration (FHWA)**
- ◆ Funds many road and bridge rehabilitation projects and emergency repairs on Forest Highways, including STIP & HBRR.
 - ◆ Federal funding triggers environmental review under the National Environmental Policy Act (NEPA), Endangered Species Act (Section 7 Consultation), and Historic Preservation Act (Section 106 consultation).
 - ◆ Website: //www.fhwa.dot.gov
- **U.S Forest Service (USFS)**
- ◆ Requires an easement, encroachment, right-of-way or Special Use Permit on repairs to Forest Highways (local roads through National Forests) if working outside of the transportation easement.
 - ◆ Administers projects under the Emergency Relief for Federally Owned Roads (ERFO).
 - ◆ USFS involvement triggers NEPA, ESA Section 7, National Historic Preservation Act Section 106, and other requirements, depending on the Forest Plan or other land management plan.
 - ◆ Website: //www.r5.fs.fed.us/
- **Bureau of Land Management (BLM)**
- ◆ May own road right-of-way or adjacent land needed for road project staging and construction.
 - ◆ BLM involvement triggers NEPA, ESA Section 7, National Historic Preservation Act Section 106, and other requirements, depending on the Forest Plan or other land management plan.
 - ◆ Website: //www.ca.blm.gov/caso
- **State Historic Preservation Office (SHPO)**
- ◆ Consults with federal agencies regarding the significance of historic and archaeological resources in the projects' Area of Potential Effect for projects outside the County's right-of-way, with federal involvement.
 - ◆ Website: //ohp.parks.ca.gov
- **Underground Service Alert (USA)**
- ◆ Not an agency, this non-profit service helps locate underground facilities before excavation or drilling projects are begun. Requires at least 2 working days notice before digging once excavation limits are marked. Contact (800) 642-2444.

2.5 REGULATORY AGENCY CONTACTS FOR FISHNET 4C

Agency Contact	Sonoma	Marin	San Mateo	Santa Cruz	Monterey
Department of Fish and Game Streambed Alteration Program					
Bay Delta Headquarters Yountville, CA (707) 944-5520	X	X	X	X	
Central Region Headquarters Fresno, CA (559) 243-4005					X
U.S. Army Corps of Engineers Regulatory Branch					
San Francisco District San Francisco, CA (415) 503-6795	X	X	X	X	X
Regional Water Quality Control Board 401 Certification					
North Coast RWQCB Santa Rosa, CA (707) 576-2220	X				
San Francisco Bay RWQCB Oakland, CA (510) 622-2300		X	X		
Central Coast RWQCB San Luis Obispo, CA (805) 549-3147				X	X
NOAA Fisheries Northern CA Habitat Coordinator					
Southwest Region Santa Rosa, CA (707) 575-6050	X	X	X	X	X
U.S. Fish & Wildlife Service					
Coast-Bay Delta Branch, Sacramento Field Office Sacramento, CA (916) 414-6625	X	X	X	X	X
California Coastal Commission					
North Central Coast District San Francisco, CA (415) 904-5260	X	X	X		
Central Coast District Santa Cruz, CA (831) 427-4863				X	X

2.6 PERMITTING REFERENCES

- Bass, R., Herson, A., and K. Bogdan. (1999). CEQA Deskbook: A Step-By-Step Guide On How To Comply With The California Environmental Quality Act, (2nd edition) Solano Press Books, Pt. Arena, CA. [(707)884-4508]
- California Dept. of Fish and Game. (2000). “Lake & Streambed Alteration Agreement Process,” Sacramento. 153 p. [[//www.dfg.ca.gov/1600/1600.html](http://www.dfg.ca.gov/1600/1600.html)]
- Cylinder, P.D., Bogdan, K.M., Davis, E.M., and A. I. Herson. (1995). Wetlands Regulation: A Complete Guide To Federal And California Programs, Solano Press Books, Pt. Arena, CA. 363 p. [(707)884-4508]
- Jones & Stokes Associates, Inc. (1997). Handbook Of Regulatory Compliance For The Anadromous Fish Restoration Program. Sacramento, CA. Prepared for U.S. Fish and Wildlife Service, Stockton, CA. [(209)946-6400]
- Mueller, T.L. (1996). Guide To Federal And California Endangered Species Laws, Planning And Conservation League Foundation. Sacramento. [(916) 444-8726]
- National Marine Fisheries Service. Endangered Species Act – Section 7 and Section 10 handbooks. [[//www.nwr.noaa.gov/](http://www.nwr.noaa.gov/)]
- National Marine Fisheries. (June 2000). A Citizen’s Guide to the 4(d) Rule for Salmon and Steelhead on the West Coast.
- Oregon Association of Clean Water Agencies. (2000). Endangered Species Act Assessment Manual. Prepared by CH2MHill. [(503)236-6722, or [//www.oracwa.org](http://www.oracwa.org)]
- U.S. Fish and Wildlife Service. “Habitat Conservation Plans and the Incidental Take Permitting Process.” [[//endangered.fws.gov/hcp/hcpplan.html](http://endangered.fws.gov/hcp/hcpplan.html)]