

**CALIFORNIA WATER LAW SYMPOSIUM
GOLDEN GATE UNIVERSITY SCHOOL OF LAW
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**ECOSYSTEM-BASED MANAGEMENT
LEGAL FRAMEWORK**

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Relevant Law

1. Federal Endangered Species Act, 16 U.S.C. §§ 1531 et seq.

- a. The purpose of the federal ESA is “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved.” (16 U.S.C. § 1531(b)) Section 9 of the ESA prohibits the unauthorized “taking” of any species listed as endangered (16 U.S.C. § 1538(a)(1)(b)). Section 4(d) of the statute provides that the U.S. Fish & Wildlife Service (FWS) and the National Marine Fisheries Service (NOAA Fisheries) (NMFS) “may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1).” (16 U.S.C. § 1533(f))
- b. Take is defined as “[to] harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. (16 U.S.C. § 1532(19)) Harass is defined as “an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns (e.g., breeding, feeding, or sheltering).” (16 U.S.C. § 1532(20); 50 C.F.R. § 17.3) Harm is defined as “an act which actually kills or injures wildlife. May include significant habitat modification or degradation that kills or injures wildlife by significantly impairing essential behavior patterns.” (16 U.S.C. § 1532(20); 50 C.F.R. § 17.3)
- c. The ESA allows for the “incidental taking” of listed species subject to criteria designed to ensure that the authorized takings do not violate the paramount statutory purposes of conserving and recovering the species. (16 U.S.C. § 1539(a)(2) (incidental take permit); 16 U.S.C. § 1536(b)(4) (incidental take statement))
- d. Section 10 provides that an incidental take permit may be acquired through a habitat conservation plan (HCP) that will ensure that the authorized taking “will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.” (16 U.S.C. § 1539(a)(2)). An HCP also must, “to the maximum extent practicable, minimize and mitigate the impacts of [the incidental take].” (16 U.S.C. § 1539(a)(2))

- e. Section 10 also authorizes the fisheries agencies to exempt from the take restrictions “acts necessary for the establishment and maintenance of experimental populations” of listed species. (16 U.S.C. § 1539(j)(1) & (2)) This authority is more limited than the scientific research permit and “enhancement of survival” exemptions; experimental populations (including offspring) must be “wholly separate geographically from the non-experimental populations of the same species” and “outside the current range of such species.” (Id.)
- f. Section 7 requires federal agencies, such as the Bureau of Reclamation, to engage in an “interagency consultation” to ensure that their actions are not likely to jeopardize the continued existence of any listed species or adversely modify their critical habitat. (16 U.S.C. § 1536(a)(2)) These consultations culminate in the issuance of a “biological opinion” in which FWS or NMFS describes the terms and conditions pursuant to which the project must operate to avoid violation of the no jeopardy/adverse modification prohibition and to minimize the effects of project operations on listed species. (16 U.S.C. § 1536(b)(3))
- g. FWS and NMFS may include “incidental take statements” in their biological opinions. (16 U.S.C. § 1536(b)(4)) These statements typically place a numeric limit on the protected species that may be taken as a result of project operations. NMFS and FWS may not grant incidental take authorization, however, if such takings would be likely to jeopardize the continued existence of the protected species or adversely modify its critical habitat. (Id.)
- h. FWS and NMFS must base their actions on evidence supported by “the best scientific and commercial data available.” (16 U.S.C. § 1533(b); 16 U.S.C. § 1536(a)(2))
- i. The federal safe harbor program, created by regulation, provides that “in exchange for actions that contribute to the recovery of listed species on non-federal lands, participating property owners receive formal assurances from the [USFWS or NMFS] that if they fulfill the conditions of the [agreement], the Service will not require any additional or different management activities by the participants without their consent.” (16 U.S.C. § 1539(a)(1)(A); 50 C.F.R. § 17.22(c) and § 17.32(c)) At the conclusion of the term of the agreement the landowner may return the enrolled property to the “baseline conditions” that existed before the safe harbor program began.

California Endangered Species Act

1. CESA declares that “it is the policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat and...consistent with conserving the species, to acquire lands for habitat for these species.” (Fish and Game Code § 2052)
2. CESA prohibits “take,” which it defines as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” (Fish and Game Code § 86)
3. CESA allows an exception to the take prohibition if a permittee implements certain conditions of approval specified by DFW. CESA authorizes incidental take only if the activity would not “jeopardize the continued existence of the species.” (Fish and Game Code § 2081(b); Cal. Code

Regs., tit. 14, §§ 783.2-783.8.) The incidental take permit must contain measures roughly proportional to the impact of take that a permittee must implement in order to be exempt from the take prohibition. (Fish and Game Code § 2081(b)(2)) The applicant must ensure adequate funding to implement mitigation, and take must be minimized and fully mitigated. (Id.)

4. If a species is listed by both the federal Endangered Species Act and the California Endangered Species Act (CESA), Fish and Game Code section 2080.1 allows an applicant who has obtained a federal incidental take statement (Section 7 consultation) or a federal incidental take permit (HCP) to request that the Director of CDFW find the federal documents consistent with CESA. If the federal documents are found to be consistent with CESA, a consistency determination (CD) is issued and no further authorization or approval is necessary. (Fish and Game Code § 2080.1; Fish and Game Code § 2080.4)
5. A CD may not be available in some circumstances due to differences between the federal ESA and CESA. CDFW identifies the following: The federal Endangered Species Act does not require full mitigation nor financial assurances to carry out mitigation, while CESA does. CDFW cannot add any conditions to a federal statement/permit to meet CESA's full mitigation standard. The federal statement/permit may not describe mitigation measures in enough detail to meet CESA standards. The federal Endangered Species Act does not prohibit the take of listed plants, while CESA does.
6. California's safe harbor program allows landowners to manage their lands for the benefit of endangered or threatened species, as well as candidate species and "declining or vulnerable species," with protections against the imposition of additional restrictions on land or water use if species populations increase or other protected species are attracted to the property. (Fish and Game Code § 2089.2(a)) CDFW may approve a safe harbor agreement—including incidental take authorization associated with management of the protected species and their habitat—if it determines that "implementation of the agreement is reasonably expected to provide a net conservation benefit to the species" and that the agreement "is of sufficient duration and has appropriate assurances to realize these benefits." (Fish and Game Code § 2089.6(a))

California Natural Communities Conservation Act

1. The California Natural Communities Conservation Act authorizes CDFW to sign agreements with individuals and public entities to create Natural Communities Conservation Plans (NCCPs). The purposes of these plans are to "provide comprehensive management and conservation of multiple wildlife species" (including species listed for protection under the state or federal ESA) and to "identify and provide for those measures necessary to conserve and manage natural biological diversity within the plan area while allowing compatible and appropriate economic development, growth, and other human uses." (Fish and Game Code § 2810(a)) NCCPs also are designed to "provide an early planning framework for proposed development projects within the planning area in order to avoid, minimize, and compensate for project impacts to wildlife," including non-listed species. (Fish and Game Code §§ 2801(b) & (g))

2. NCCPs must protect “habitat, natural communities, and species diversity on a landscape or ecosystem level through the creation and long-term management of habitat reserves or other measures that provide equivalent conservation of covered species appropriate for land, aquatic, and marine habitats.” (Fish and Game Code § 2820(a)(3)) The plans must also integrate adaptive management strategies that “will assist in providing for the conservation of covered species and ecosystems within the plan area.” (Fish and Game Code §§ 2820(a)(2) and (3))
3. NCCPs are not necessarily linked to incidental take permits, as the state statute authorizes any person or public agency to “undertake natural community conservation planning” (Fish and Game Code § 2809). The NCCP Act provides that specified NCCPs may include incidental take authorization. (Fish and Game Code § 2830)
4. NCCPs must include “methods and procedures within the plan area that are necessary to bring any covered species to the point at which the measures provided [in the California ESA] are not necessary.” (Fish and Game Code § 2805(d))
5. An NCCP must include “provisions to ensure that implementation of mitigation and conservation measures on a plan basis is roughly proportional in time and extent to the [project’s] impact on habitat or covered species authorized under the plan” (Fish and Game Code § 2820(b)(9))

Fully Protected Species

1. California law designates 37 species (including 10 fishes and 3 amphibians) as “fully protected species” for which CDFW may not issue incidental take permits. The department may “authorize the taking of a fully protected fish for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species. (Fish and Game Code §§ 3511, 4700, 5050, 5515) The legislature also has granted special exemption authorizing limited take of several fully protected species in the context of highway repair, dam removal, water project maintenance, and habitat restoration. (Fish and Game Code §§ 2081.4-2081.12)
2. In 2011 California amended the fully protected species law to authorize incidental take of such species covered by NCCPs. Fish and Game Code 2805(e) (“Notwithstanding Sections 3511, 4700, 5050, or 5515 ... taking of fully protected species may be authorized pursuant to Section 2835 for any fully protected species conserved and managed as a covered species under an approved natural community conservation plan.”)

Federal Clean Water Act

1. The CWA authorizes federal regulation of activities that may affect the “waters of the United States”—a jurisdictional limitation that has been expanded and contracted by administrative rulemaking and judicial interpretation. (33 U.S.C. § 1362(7); 33 C.F.R. § 328.3)
2. Clean Water Act section 303(c) requires each state to adopt water quality standards that define “designated uses” of the “waters of the United States” within its boundaries, as well as the “water quality criteria for such waters based upon such uses.” (33 U.S.C. § 1313; 40 CFR § 131.4)

These standards must “protect the public health or welfare, enhance the quality of water and serve the purposes of [the Clean Water Act].” (33 U.S.C. § 1313(c)(2)(A))

3. CWA directs that “standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes” (33 U.S.C. § 1313(c)(2)(A))
4. CWA recognizes the primary authority of the states to set and implement water quality standards. These state standards are subject to review by EPA to ensure that they are at least as stringent as necessary to comply with CWA requirements. EPA has authority to set its own standards if a state fails to comply with federal law. (33 U.S.C. § 1313(c)(3) & (4); 40 C.F.R. § 131.5).

California's Porter Cologne Water Quality Control Act

1. California’s Porter-Cologne Act both implements section 303 of the federal Clean Water Act and establishes the state’s own water quality goals and implementation strategies: “The Legislature finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.” (Water Code § 13000)
2. The Porter-Cologne Act applies to all waters of the state, surface and underground. (Water Code § 13050(e))
3. The State Water Board and the regional boards have wide-ranging authority under these laws to define ecological objectives, establish priorities and implementation strategies, and regulate the principal stressors (including water diversions and discharge of pollutants). (Water Code §§ 13000 et seq.)
4. The Porter-Cologne Act provides that the factors each board shall consider to set water quality standards that provide reasonable protection to all designated beneficial uses include, but are not necessarily limited to:
 - (a) Past, present, and probable future beneficial uses of water.
 - (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
 - (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
 - (d) Economic considerations.... (Water Code § 13241)
5. The regional boards have authority to consider the aggregate effects of pollution loading within a watershed, chemical and biological interactions among pollutants, the assimilation capacity of

the receiving waters (as affected by other discharges and diversions), and the risks of varying levels of each pollutant to public health and safety, agricultural and commercial uses, fish and wildlife, and other beneficial uses. (E.g., Water Code § 13263; id. § 13241)

6. In formulating a water quality control plan, the Board is invested with wide authority “to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.” (Water Code § 13000) In fulfilling its statutory imperative, the Board is required to “establish such water quality objectives...as in its judgment will ensure the reasonable protection of beneficial uses...” (Water Code § 13241), a conceptual classification far-reaching in scope. “Beneficial uses’...include, but are not necessarily limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.” (Water Code § 13050(f))

California Constitution, Article X section 2

1. Article X, Section 2 of the California Constitution declares that, “because of the conditions prevailing in this State, the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.”
2. This important mandate governs the exercise of all water rights—including riparian rights, pre-1914 appropriative rights, and groundwater rights exempted from the State Water Board’s permitting and licensing jurisdiction. (E.g., *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443)
3. Under Article X section 2, “[t]he [State Water Board’s] decision is essentially a policy judgment requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of its special knowledge and expertise and its combined statewide responsibility to allocate the rights to, and to control the quality of, state water resources.” (*U.S. v. SWRCB* (1986) 182 Cal.App.3d 82, 130)

California's Public Trust Doctrine

1. The public trust doctrine is said to have its roots in Roman law, which established certain resources as common to the public: the air, the sea, and the shores of the sea. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 434-35) Today in the U.S., the public trust doctrine recognizes the beds and banks of watercourses that were tidally-influenced or navigable at statehood as common public resources. (Id.)
2. With respect to these tidal and navigable waters that are subject to the public trust doctrine, the doctrine protects a broad range of values, including the preservation of trust lands “in their natural state, so that they may serve as ecological units for scientific study, as open space, and

as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area.” (E.g., *Baykeeper v. State Lands Commission* (2015) 242 Cal.App.4th 202, 233 (citing *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 434-435))

3. In *National Audubon Society v. Superior Court*, 33 Cal.3d 419 (1983), the California Supreme Court held that the state—acting through the State Water Board, the courts, and other agencies—“has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible.” (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 434-435)
4. The California courts also have recognized that the doctrine applies to activities that may affect public trust uses of navigable waters, but which are not themselves in or on a navigable river or lake. In *National Audubon*, the California Supreme Court extended the doctrine to encompass non-navigable tributaries to navigable waters, and recently the doctrine was extended to pumping of groundwater that is hydrologically connected to surface water protected by the trust. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 436-437; *Environmental Law Foundation v. SWRCB* (2018) 26 Cal.App.5th 844, 859-860)
5. The public trust doctrine is common law and statutory, and as such, it is subordinate to the constitutional water policy of reasonable use. The California Supreme Court held in *Audubon* that “[a]ll uses of water, including public trust uses, must now conform to the standard of reasonable use” set forth in Article X, Section 2 of the California Constitution. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443)

Other Relevant Laws

1. The Sacramento-San Joaquin Delta Reform Act (Water Code §§ 85000-85350)
2. The Central Valley Flood Protection Act (Water Code §§ 9600-9625)
3. The Sustainable Groundwater Management Act (Water Code §§ 10720-10737.8)
4. Clean Water Act § 404 (33 U.S.C. § 1344)
5. Lake and Streambed Alteration Agreements (Fish and Game Code §§ 1600-1616)
6. Habitat Restoration and Enhancement Act (Fish and Game Code §§ 1650-1657)
7. Regional Conservation Investment Strategies Act (Fish and Game Code §§ 1850-1861)
8. NEPA and CEQA (42 U.S.C. §§ 4321-4335; Public Resources Code §§ 21100-21189.57)