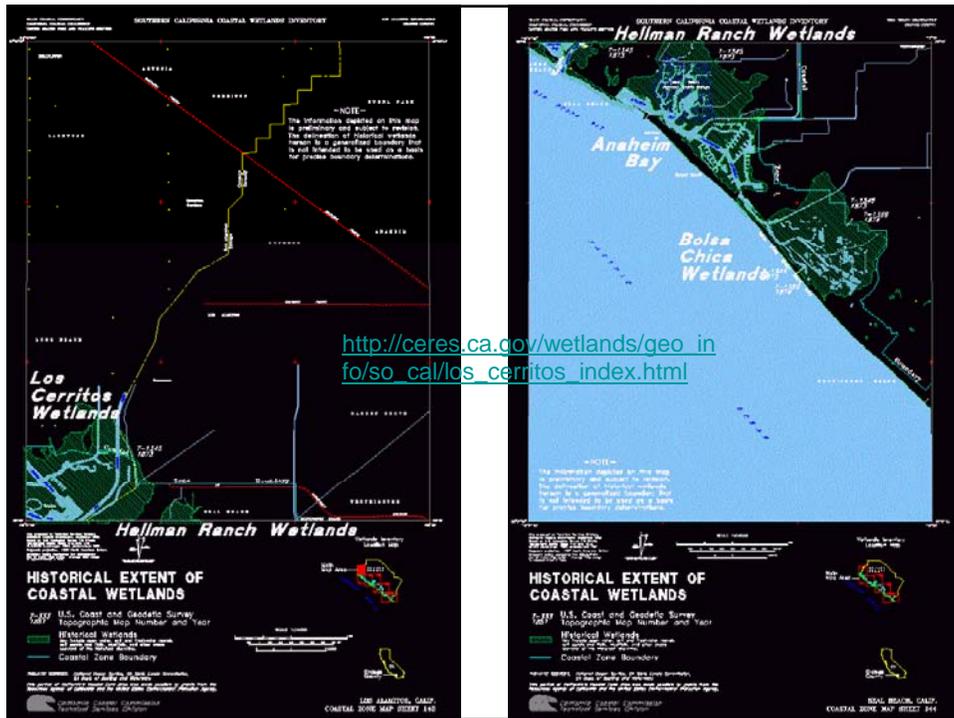
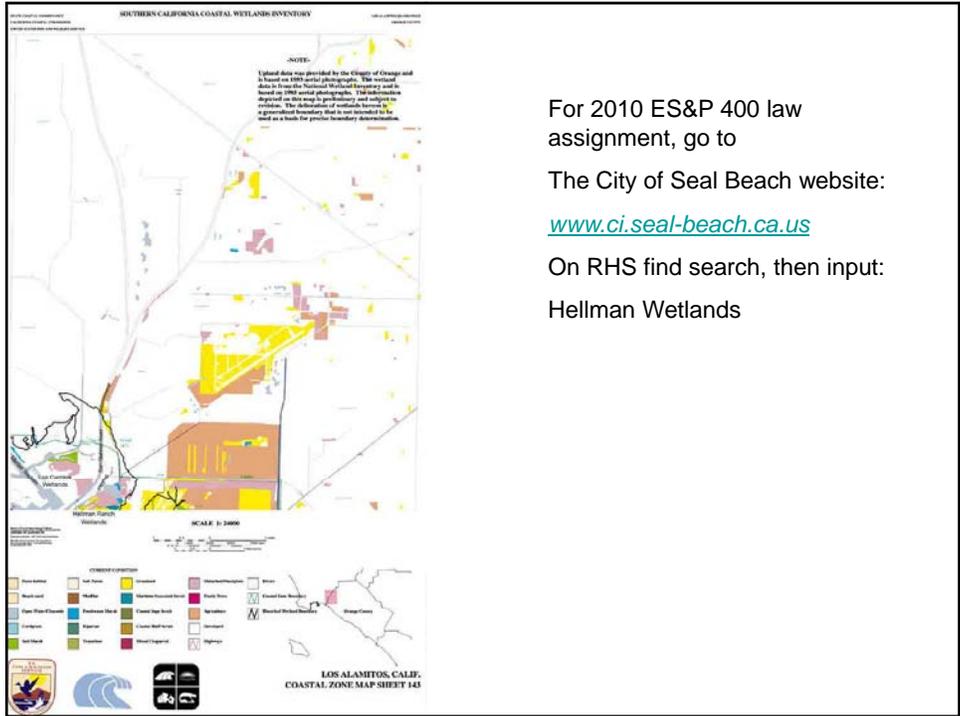


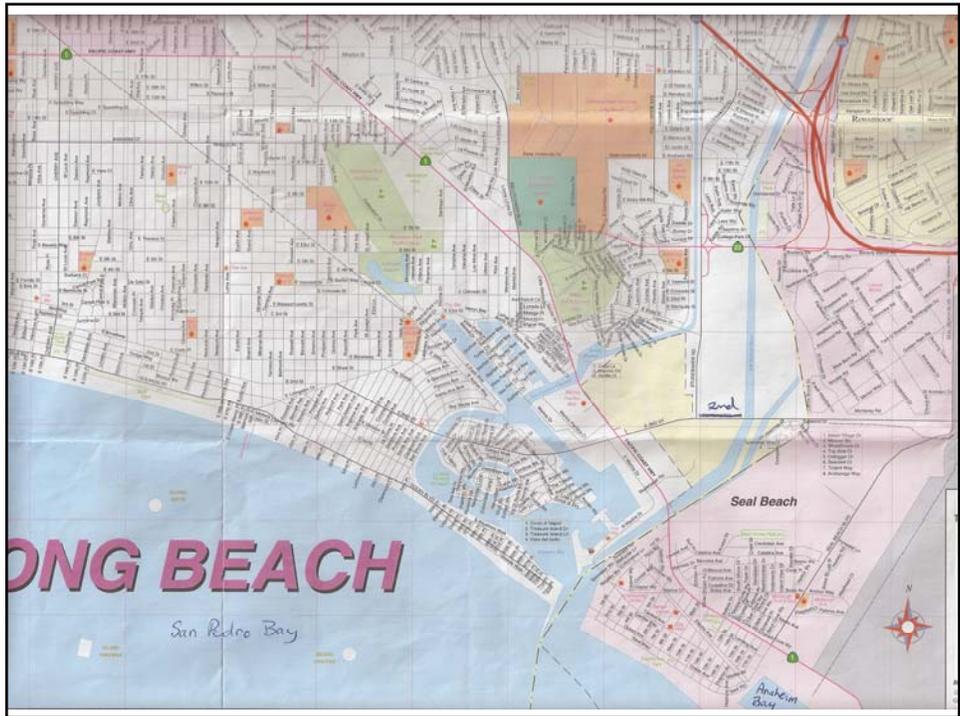
# Application of Law and Doctrine to the Los Cerritos Wetlands Complex

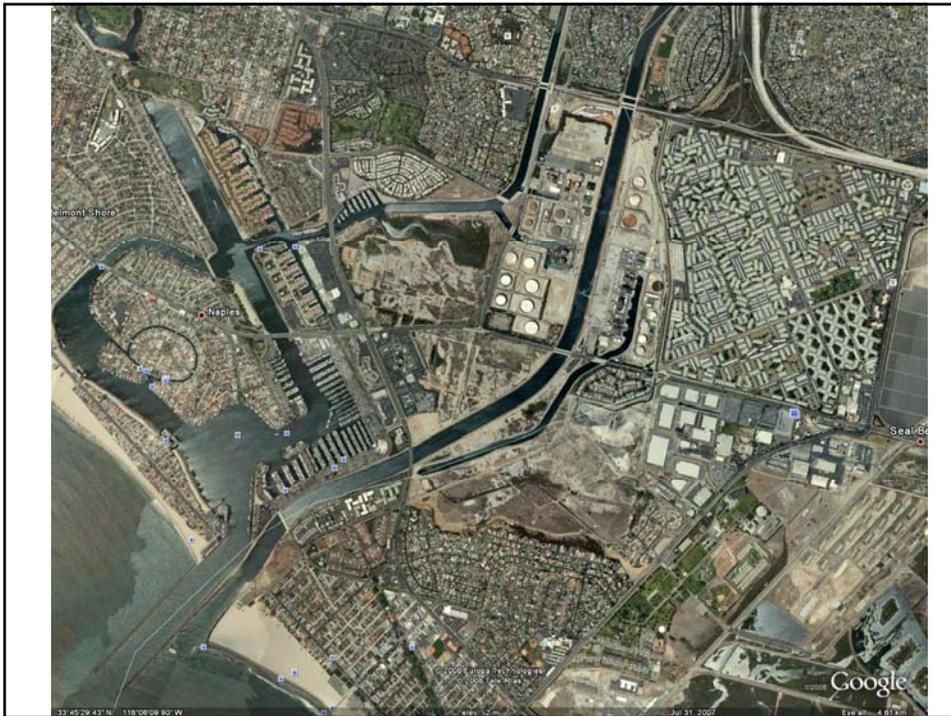
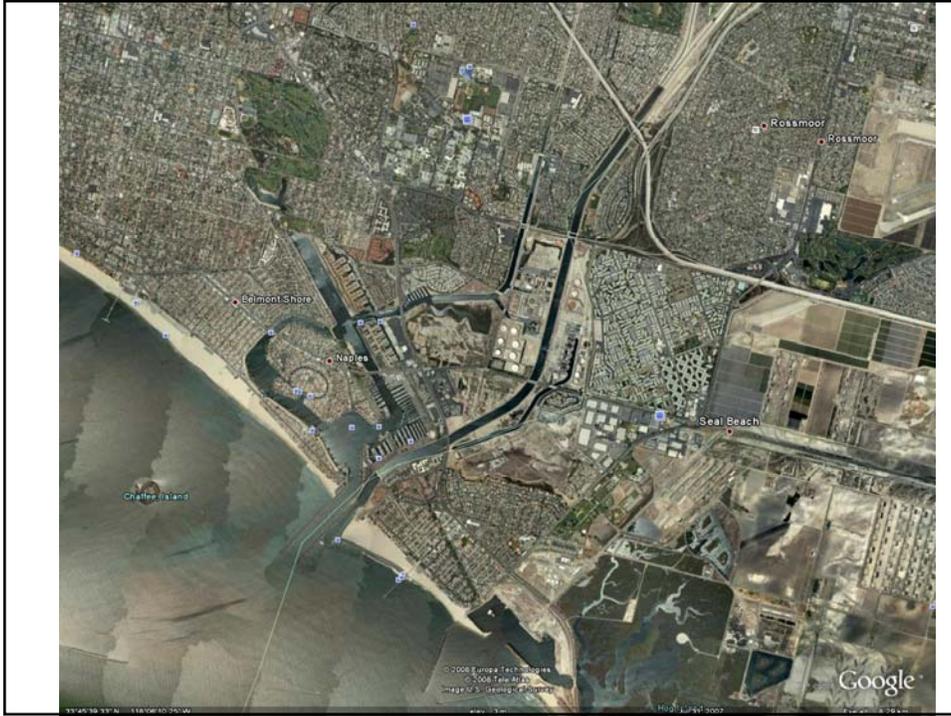
Integrating Law, Policy, Natural and Social Sciences – a case study

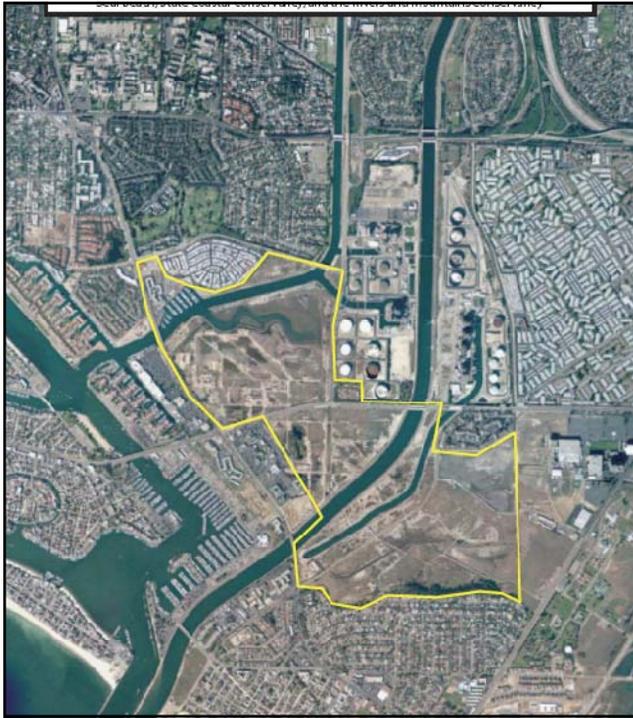




For 2010 ES&P 400 law assignment, go to  
The City of Seal Beach website:  
[www.ci.seal-beach.ca.us](http://www.ci.seal-beach.ca.us)  
On RHS find search, then input:  
Hellman Wetlands

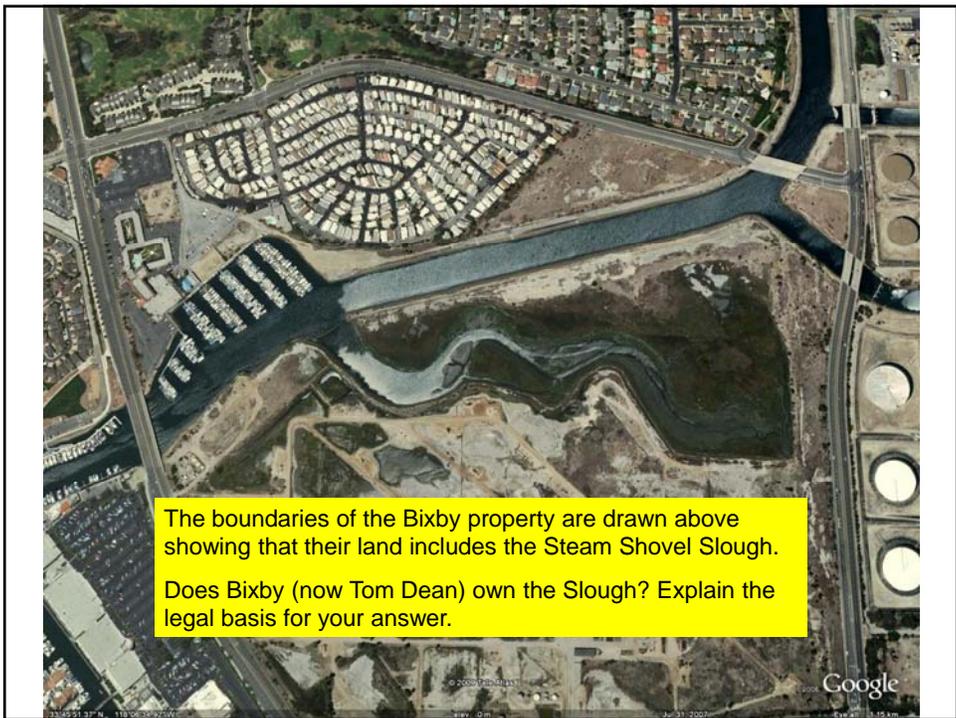




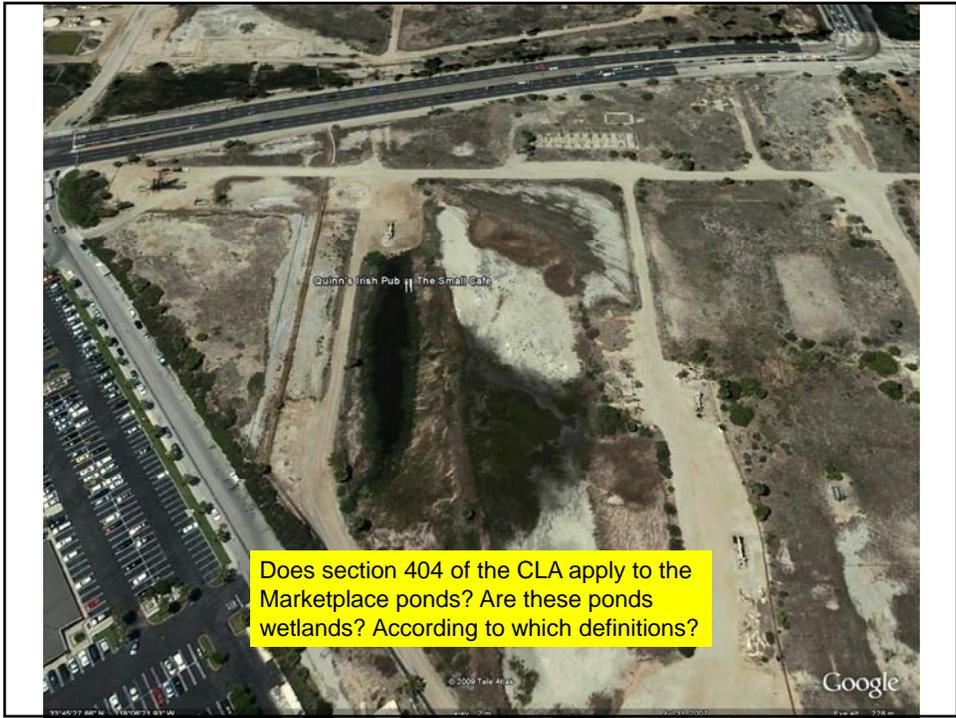


The physical features and biological habitat varies throughout the LCWA study site both geographically and temporally. What are the most significant physical features and biological forms that determine how the land may be used by its owners? For each physical feature and biological form you mention, which laws (sections of laws) restrict use?











## Wetlands

- Among the most productive ecosystems
- Food / Habitat / Reproduction at the base of the Food Chain~1/3 endangered/threatened species use wetlands as habitat; ~1/2 migratory birds use wetlands
- Water Quality Improvement (retain ~80% phosphorous, 89% nitrogen in run-off)
- Flood Protection (watersheds made of 30% or more wetlands lower flood levels 60-80%; Floods cause over \$4 billion damage/year)
- Shoreline Erosion
- Source of Natural Products
- Recreation incl bird-watching
- Nearly 90% wetlands in California are gone (S&T, p.266)
- Diamond-Water Paradox

## Pillars of Wetland Law

### Coastal Areas “Big Four”

- U.S. Clean Water Act (CWA) 402: NPDES regulates discharges (flows into water) from point sources
- CWA 404 – Wetlands
- CWA 303 – TMDLs sets Beneficial uses and ambient concentration (stock) standards to protect uses.
- CWA 319: Nonpoint discharges (flows)
- U.S. Endangered Species Act (ESA)
- California Coastal Act

### Plus common law:

- The Public Trust Doctrine

## Additional Laws

- <http://www.epa.gov/owow/laws.html>
- Convention for the Protection of Migratory Birds 1916, and the Migratory Bird Treaty Act MBTA (1918). Treaties trump (Article VI, Constitution) Federal Law. Article II Section 2, gives the President the power to make treaties with Senate consent, and Article I, Section 8, the last clause gives Congress the power to make laws necessary to execute the powers granted in the Constitution)
- CWA 316: Thermal Discharges
- CWA 311: Discharges from Vessels & Oil Operations

## **CWA 402** (Water Quality – S&T, Ch.5)

- If approved by EPA, states may assume responsibility to implement 402.
- Permitting Program – illegal to discharge w/o NPDES Permit <http://cfpub.epa.gov/npdes/> (National Pollutant Discharge Elimination System) to Waters of the U.S.
- Defs: “Discharge of a pollutant” is “any *addition* of any *pollutant* from any *point source*” and “Point source” is “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”
- “Toxic pollutants” are given on a list of 126 chemicals substances in the CWA plus any designated by EPA due to toxicity, persistence, degradability, and impact on organisms, “Conventional Pollutants” are common in waterways, including biological oxygen demand (BOD), suspended solids, pH, fecal coliform, bacteria, oil and grease, and “Nonconventional Pollutants” include ammonia, chloride, color, iron, and nitrate (p.149 S&T).

## CWA 402 continued

- Agriculture is exempt from being a point source. CWA shall not supercede, abrogate, or impair the authority of states to allocate water, exempting dams from regulation because dams affect water temperature and levels of nutrients depending on whether they release cold, nutrient laden water from the bottom or warm water from the top of the reservoir. Courts are divided over whether mixing more polluted water from US waters with less polluted US water “adds” pollution to US waters.
- “Waters of the US” – definition is a source of contention: has to be navigable water, and includes ephemeral water if it reaches navigable water, but may be broader than navigable water.
- Navigability – relationship to interstate commerce, Commerce clause (Article I, Section 8) of the U.S. Constitution
- Discharges –Technology-based (section 402) and Water Quality-based Requirements (section 303) done by industry. From least to more effective end-of-pipe technology: (BPT) “best practicable control technology currently available” requires a benefit-cost test. BPT has been replaced with BCT but in practice is very similar (p.149, S&T). (BCT) “best conventional pollutant control technology” is end-of-pipe technologies in current use. (BAT) “best available technology economically achievable” can be a new but unused end-of-pipe technology, and cost can be considered.

## CWA 402 Implementation

- Existing point sources meet emission standards set equal to what can be achieved by end-of-pipe BCT and BAT as follows: Toxic pollutants - BAT, Conventional pollutants - BCT, Nonconventional pollutants - BAT unless EPA waives or modifies justifiable by either cost or level of pollution.  
**Example, CalTrans Region 9** and cities: Caltrans argued in court that pollution control was too expensive relative to the economic benefits. The case hinged on an economic analysis of the beneficial uses of the water, and the benefits that would accrue from reducing the concentrations of pollutants under section 303.
- New sources meet “best available control technology, processes, operating methods, or other alternatives, including where practicable, no emissions,” (p.150, S&T) with no cost test.
- Publicly-Owned Treatment Works (POTWs) are required to meet secondary treatment levels, with permits exempting some POTWs that empty into the deep ocean. Primary treatment: separate solids from liquids with filters, screens, settlement tanks. Secondary treatment: microorganisms break down organic matter, faster in aeration tanks. Tertiary and advanced treatment: sand filters, membrane microfilters, ultra-violet light to kill bacteria (p.145, S&T).
- Indirect sources discharge pollutants to sewage system to POTWs, and are regulated. “Prohibited discharge standards” prohibit discharge that interferes with POTWs proper operation or pass through untreated. “Categorical pretreatment standards” require indirect sources to meet “best available technology economically achievable” (BAT) standard (p.151, S&T).

## CWA 404 (Wetlands – S&T, Ch.9, p.267)

- I. Applicability
- Wetlands: surface areas saturated or inundated with water long enough during the year to support hydrophilic vegetation
- Prohibits discharging, Corps definition includes fill or dredging w/o Permit
- Navigability – if near navigable water, it may apply: see US Supreme Ct ruling
- Exemptions include farming, ranching, silviculture.
- Isolated (vernal pool) – does not apply, even under Migratory Bird Treaty, since the Court balanced Congressional reach with traditional state and local land use regulation.
- Rapanos v. US 2006: 4 justices ruled: “the Waters of the U.S.” include only relatively permanent, standing or flowing bodies of water, not transitory puddles or ephemeral flows of water. 5th Justice Kennedy held the Corps needed to show a “significant nexus between a wetland and a traditionally navigable waterway
- Erik Stokstad, “Supreme Court Asks Army Corps to Measure Value of Wetlands,” *Science* 30 June 2006: Vol. 312. no. 5782, p. 1870, Beachboard.

## **CWA 404 (Wetlands cont)**

### II. Standards to obtain a permit; a permittee must show:

1. No Practicable Alternative to proposed activity with less impact on aquatic ecosystem ("Practicable" based on technical and economic feasibility. "Practicable" is also based on whether waterfront is necessary for the activity).
2. No significant adverse impact on Aquatic Resources.
3. All "appropriate and practicable" mitigation required (incl "compensatory mitigation": on-site – preferred – or off-site creation/restoration/enhancement in an equal amount to that which will be destroyed or harmed.
4. Activity must comply with other laws (ESA), CA Coastal Act.
5. Army Corp standard in regulations: the permit must not be "contrary to the public interest" considering fish, wildlife, water quality, flood control, recreation, aesthetics, etc.

## **CWA 303 (Water Quality Standards – TMDLs )**

- **Clean Water Act Section 303(d):Total Maximum Daily Load**  
<http://www.epa.gov/owow/tmdl/>  
<http://www.epa.gov/owow/tmdl/intro.html>
- Salzman and Thompson, Ch 5, p.153
- The combination of pollutants from regulated point sources and unregulated nonpoint sources, resulting in the pollution load in the San Gabriel River and the Los Cerritos Channel is subject to section 303 of the CWA. Section 303 requires states to do the following:

## **CWA 303 (Water Quality Standards – TMDLs cont**

1. designate beneficial uses of the San Gabriel River and the Los Cerritos Channel and receiving reaches of those waters that can include public water supply, protection and propagation of fish, shellfish, and wildlife, recreation in and on the water and its reaches, agriculture, and industry.
2. determine water quality standards (e.g. milligrams of contaminant per liter of water for toxic pollutants) to protect beneficial uses.
3. identify waterways where NPDES permit conditions are insufficient to achieve water quality that meets the standards to protect beneficial uses, and for these waterways determine the total maximum daily load (TMDL) of pollutants that can be discharged within the limits of the standards, accounting for seasonal variations and a margin of safety; a list of the quality-impaired waterways and TMDLs must be submitted to EPA.
4. alter permits to reduce emissions from NPDES permittees to achieve the TMDL standards; and if the TMDL standard cannot be met by reducing discharges from point sources, the state is required to engage in a "continuing planning process" (CPP) to consider ways to reduce discharges from nonpoint sources and the EPA has the authority to disapprove a CPP, but not implement one for the state.

## **ESA Endangered Species Act**

- Salzman and Thompson, Ch.9, p.277
- Environmental rights (vs. utilitarianism and cost-benefit analysis or environmental justice framework for analysis) that are anthropocentric (rather than biocentric or ecocentric) perspective: endangered and threatened species often "are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people." (p.31, S&T).
- U.S. Fish and Wildlife Service (a bureau in Dept Interior) and National Marine Fisheries Service in NOAA (Dept Commerce) – fish. Bans hunting & killing, and protects against destruction or adverse modification of critical habitat including development, timber harvesting, oil development, and water diversion.
- Summary <http://www.fws.gov/endangered/pubs/>
- Endangered/threatened lists (temporal distinction, threatened if likely to become endangered) of species, subspecies, distinct population segments
- Critical habitat – mapped to protect endangered /threatened species – and U.S. F&W may take economics into account

## Endangered Species Act Con't

- Consultation – all federal agencies must consult with each other before issuing a permit, e.g. Army Corp must consult U.S. F&W prior to issuing a permit under CWA 404.
  - Sect. 9(a)(1) prohibits harming/killing (taking) endangered (not threatened) animals, and F&W federal code of regulations prohibits “significant habitat modification or degradation” that “actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering”. ESA lets F&G determine regulations for threatened animals, and in general the same protection applies with specific exceptions like salmon and steelhead. Section 9(a)(2) bans removal of or harm to listed plants on federal land or in violation of state law or on private land by trespassers.
  - “Incidental take” permit is possible, enabling development and land use, if applicant has an acceptable habitat conservation plan (HCP), if applicant has an acceptable habitat conservation plan (HCP). There are regional HCPs.
  - Safe harbor agreements allow private landowners to create habitat that can later be destroyed.
  - 3 S’s: shoot, shovel, and shut-up; example Bryant property.
  - Constitutional takings: restrictions seldom prohibit *any* use of land.
- [http://www4.law.cornell.edu/uscode/html/uscode16/usc\\_sup\\_01\\_16\\_10\\_35.html](http://www4.law.cornell.edu/uscode/html/uscode16/usc_sup_01_16_10_35.html)

## Public Trust Doctrine

- [http://www.nrpa.com/public\\_trust.htm](http://www.nrpa.com/public_trust.htm)
- (Salzman and Thompson, Ch.9, p.262)
- Govts own navigable waterways and tidelands in trust for the public.
- The state shall not convey title to private holders of certain key resources that are held by the state in trust for the people. The ocean and its shores, running water and air are “by the law of nature” ***res communes***, (“things communal”) incapable of exclusive private ownership.

## **Public Trust Doctrine cont**

- Common law (Rome, Britain, U.S., California)
- State cannot convey title to submerged lands if it would affect public use
- U.S. Supreme Court – Illinois vs. Illinois Central RR. In 1869 Illinois granted land under the shoreline of Lake Michigan and along the Chicago waterfront to IC RR, changed its mind 4 years later, and argued based upon public trust doctrine.
- States interpretations vary in expansiveness. Calif Supreme Court, 1971, Marks v Whitney, private owners hold title subject to the state's public trust; one of the most important purposes of the public trust is to preserve tidelands "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 favorable affect the scenery and climate of the area" p.263-4. Also Mono Lake decision.
- But see Calif. Supreme Court, 1970: City of Long Beach v. John R. Mansell (see Beachboard).
- Expansiveness of the doctrine relative to federal and state constitutions and laws is an open question.

## **California Coastal Act**

- Division 20, para 30000 – 30988
- <http://www.coastal.ca.gov/ccatc.html>  
<http://www.coastal.ca.gov/>
- 1972 (Proposition 20)
- Public Access to shore in case of any new development (30212)
- Protection of recreation use (30220)
- Protect, Restore, Enhance environment
- Coastal Zone (3 miles seaward – 500 yards to 5 miles inland, Section 30103)

## California Coastal Act cont

Permit by California Coastal Commission (CCC) required to build (unless city has a Coastal Development Plan approved by CCC)

Wetlands Standards

Additional protection for ESAs (Environmentally Sensitive Areas – Los Cerritos is mapped) to protect habitat values.

Permits only if coastal-dependent (like a marina, houses with docks)

Def: 30121. "Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

**4<sup>th</sup> Federal Law: The Coastal Zone Management Act Reauthorization Amendments**

<http://www.epa.gov/OWOW/NPS/coastnps.html> The CCC submits its plan to implement the CZMA, and once approved gives federal authority to the CCC for management of California coastal zone, including federal government lands in California on the coast. Example: Toll Rd Authority & San Onofre State Park

## Constitution

- <http://www.findlaw.com/casecode/>
- [www.findlaw.com](http://www.findlaw.com)
- Amendment V constrains the U.S. government in that “No person shall ... be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.”
- Amendment XIV states, “nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.”
- Amendment X: “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”  
Taken to include zoning restrictions on land use.

## Other Laws

- <http://www.epa.gov/owow/laws.html>
- **Clean Water Act Section 319:** The **Nonpoint Source Program** (Section 319) requires States to develop nonpoint-source management programs. Nonpoint-source control plans can include State regulatory measures, but usually emphasize voluntary actions. <http://www.epa.gov/owow/nps/cwact.html>
- **CWA Section 311 - Oil:** Section (b)(2)(A) restricts the definition of hazardous materials to those that “present an *imminent and substantial* danger to the public health or welfare, including but not limited to fish, shellfish, wildlife, shorelines, and beaches.” (*italics added*). Section (b)(3) prohibits the discharge from vessels or onshore or offshore oil operations of oil or hazardous materials, and Section (b)(5) requires self reporting of any discharge to avoid prosecution. Section (b)(6) lays out classes of penalties, from fines to imprisonment.

## Other Laws cont

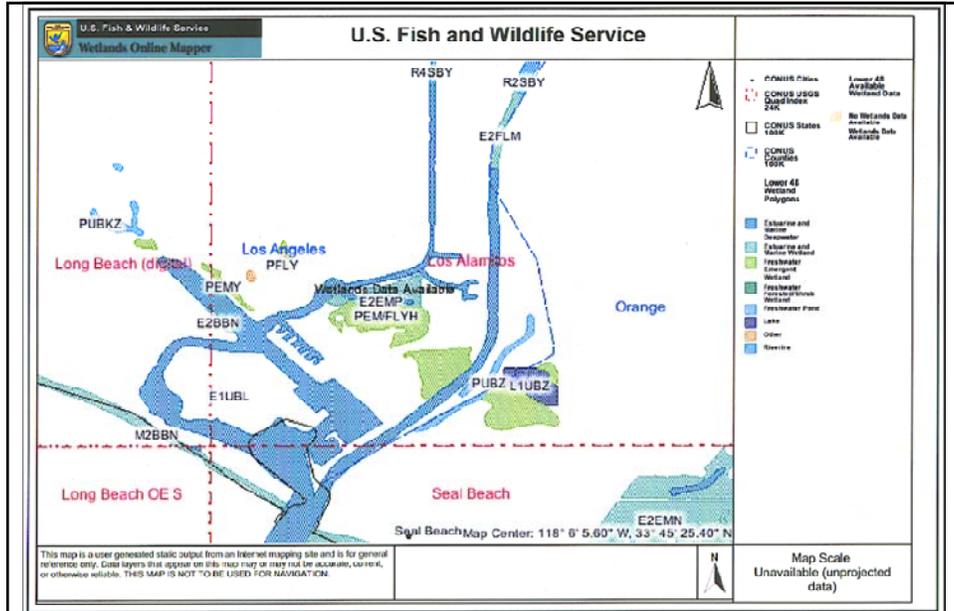
- **Clean water Act Section 316: Thermal Discharges**
- <http://www.epa.gov/owow/laws.html>
- CWA 316(a) “the Administrator (or, if appropriate, the State) may impose an effluent limitation ... with respect to the thermal component of such discharge (taking into account the interaction of such thermal component with other pollutants), that will assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on that body of water.”
- CWA 316(b) “the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.”
- **Safe Drinking Water Act:** <http://www.epa.gov/safewater/sdwa/>
- **The Coastal Zone Management Act Reauthorization Amendments** <http://www.epa.gov/OWOW/NPS/coastnps.html>

## Law and Policy Reading Assignment

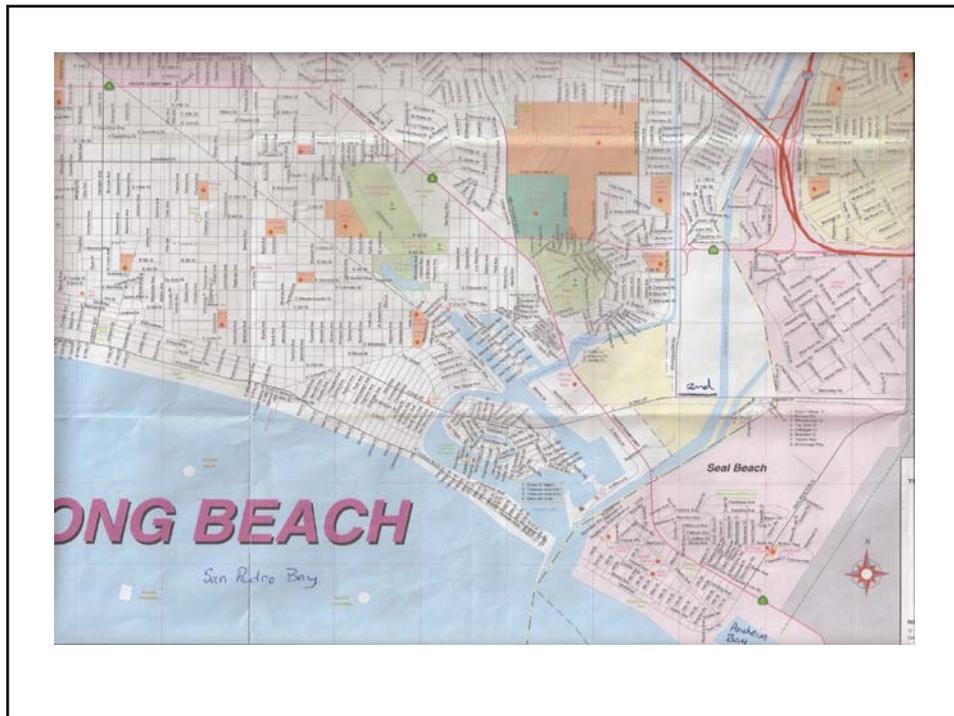
- **See Beachboard**

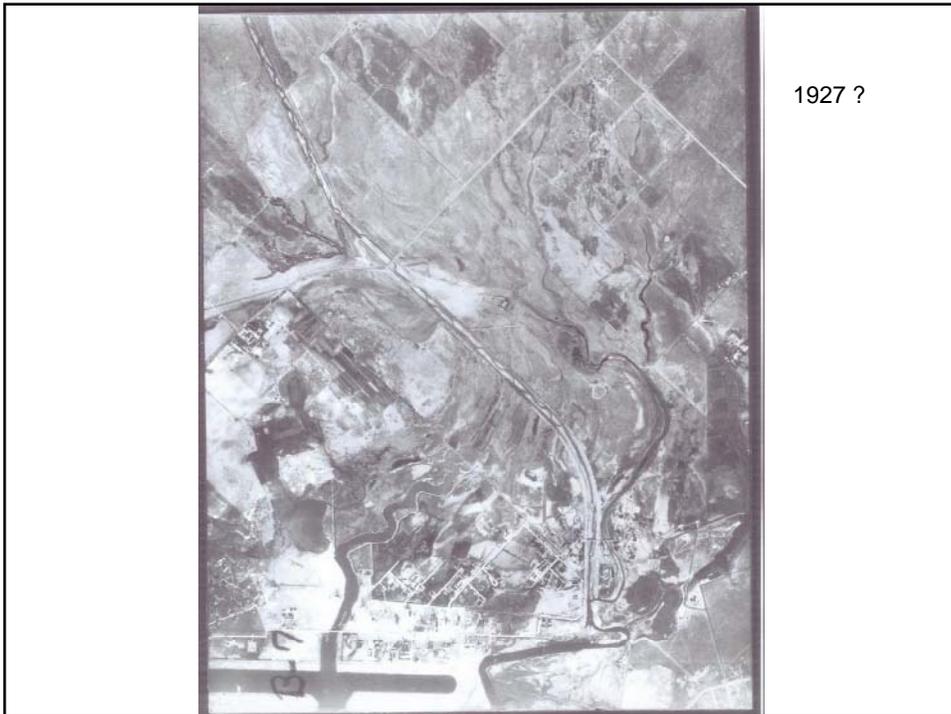
## US Fish and Wildlife Map

- USFWS
- Branch of Habitat Assessment
- National Wetlands Inventory
- **Wetlands Digital Data**
- **Build, search, query, and download custom digital maps and data in the area you choose:**
- <http://wetlandsfws.er.usgs.gov/NWI/index.html>
- <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>



Former Councilman Collona's plan to extend Studebaker to relieve traffic at 2<sup>nd</sup> and PCH would allow a project at that intersection, but require a road through where? And a permit from what Agency?





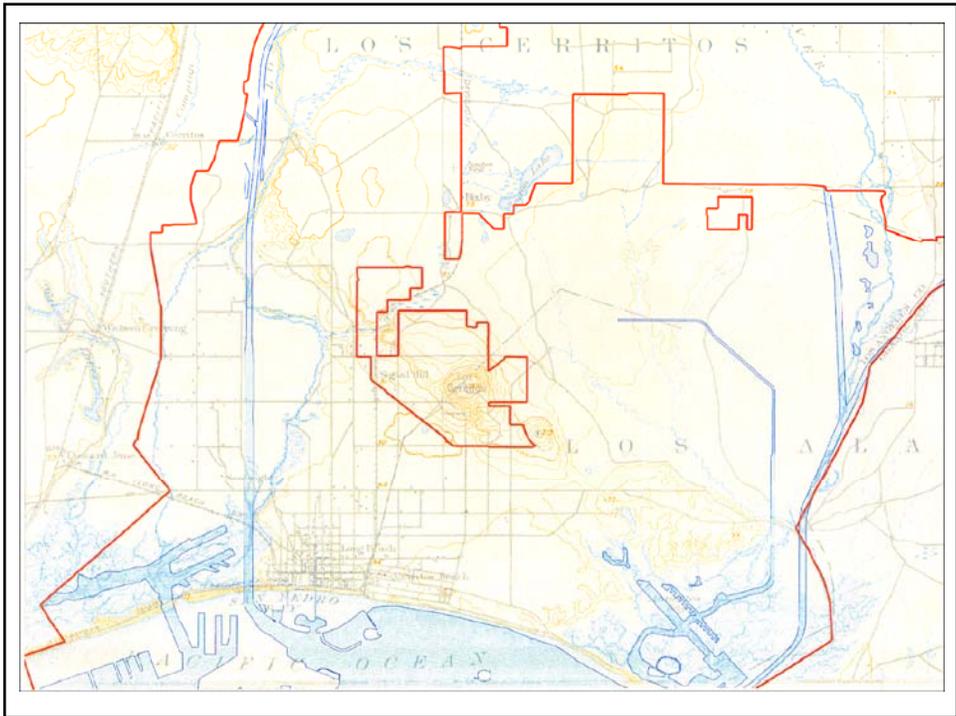


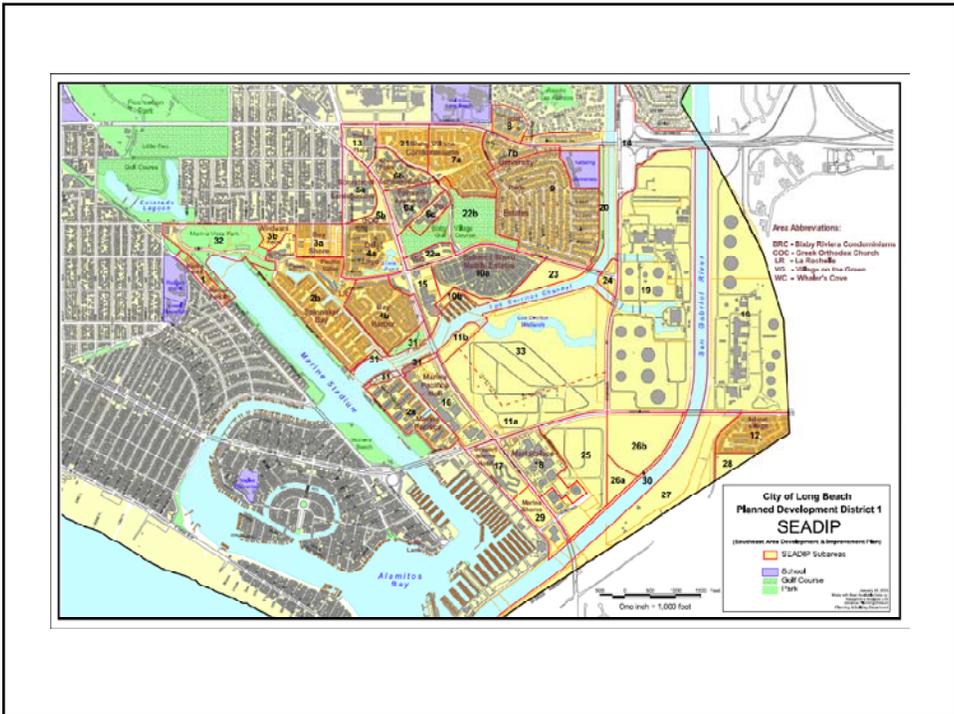
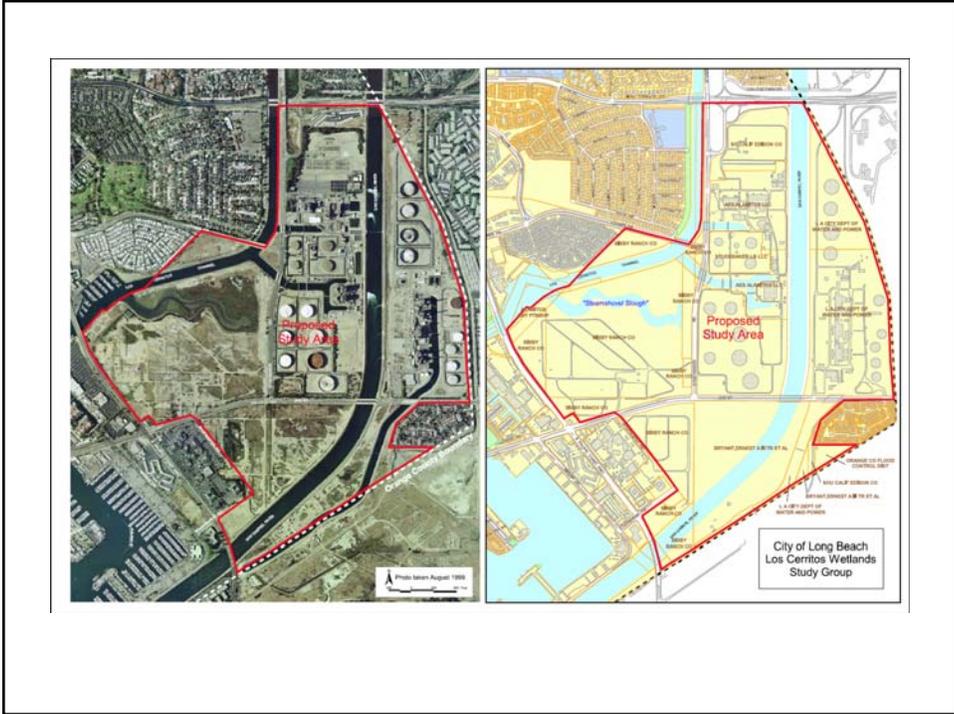
12-15-30

Supreme Court of California, In Bank. CITY OF LONG BEACH, Petitioner, v. John R. MANSELL, as City Manager, etc., et al., Respondents; The STATE of California et al., Real Parties in Interest. L.A. 29700. Nov. 9, 1970.

"Steamshovel Channel. In its natural state this 'channel' was a narrow slough extending in a general northerly direction from the main part of Alamitos Bay." p.13. Eric's home.







## Issues in Application of Laws

### Separate Definitions of “Wetlands”

- Army Corp under CWA 404, relates to navigability
- EPA under CWA 402, relates to navigability
- U.S. Fish & Wildlife Service definition:  
<http://criticalhabitat.fws.gov/>
- Current issue: ephemeral – see U.S. Supreme Ct decision, summer 2006
- California Resources Agency, California Dept Fish and Game under CEQA
- California Coastal Commission under California Coastal Act

### Separate Definitions of “Wetlands” continued

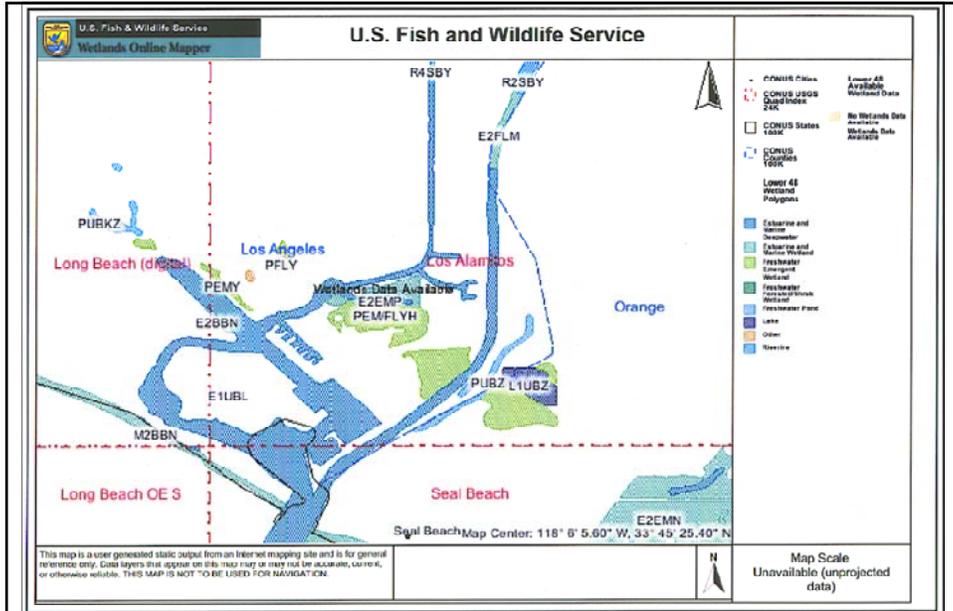
- Treaties trump federal laws regarding the location of a Wetland, irrespective of Commerce Clause constraint and how ephemeral was adjudicated by the Supreme Court in 2006
- Pre-emption of definitions: Clean Water Act lets states set higher standards. In California, the California Water Resources Control Board implements CWA 402 under agreement with EPA

## Specific Application to Los Cerritos Wetlands:

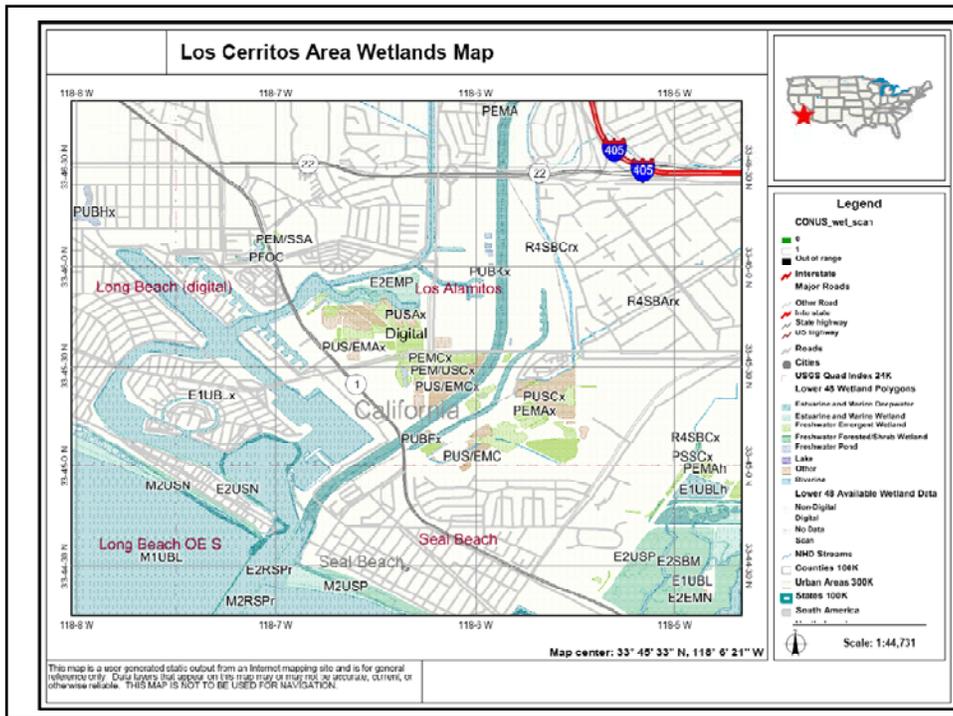
- Under CWA 303, the LARWQCB lists Los Cerritos Channel (not slough) as impaired for
  - Ammonia
  - Metals [copper (in tissue, from brakes, tires), lead (in sediment, from jet fuel?), zinc (in sediment, from brakes)]
  - Chlordane (in sediment, from past use)
  - Coliform
- so TMDLs will be set, scheduled for 2010. See: <http://www.waterboards.ca.gov/losangeles/> and search for regional programs, Los Cerritos Water Management Area

## Specific Application to Los Cerritos Wetlands: continued

- Under CWA 404, the “the salt water marsh” adjacent to the Bahia Marina is clearly navigable since it is tidally connected to the marina. In addition, the US Fish and Wildlife Agency (at [www.fws.gov](http://www.fws.gov), go to endangered species, and go to wetlands) map <http://criticalhabitat.fws.gov/> shows Steam-shovel Slough as a wetlands, and shows emergent wetlands adjacent to the Slough in Bixby, as well as emergent wetlands in Bryant West of the River and in Hellman.



Former Councilman Collona's plan to extend Studebaker to relieve traffic at 2<sup>nd</sup> and PCH would allow a project at that intersection, but require a road through where? And a permit from what Agency?



## Specific Application to Los Cerritos Wetlands: continued

- Endangered Species Act – The following are endangered species, also any migratory birds covered in the Migratory Bird Treaty Act that stopover at the Los Cerritos Wetlands, and for both groups, no taking is allowed:
  - Pelican, brown except U.S. Atlantic coast, FL, AL
  - Plover, western snowy Pacific coastal pop.
  - Tern, California least
  - Vireo, least Bell's
  - Various clapper Rails

## Specific Application to Los Cerritos Wetlands: continued

- Coastal Act
  - Wetland definition applies
  - Access provisions of Coastal Act
  - Approval for development by CCC
  - Coastal dependent development only in an ESA
- Public Trust Doctrine
  - California Supreme Court
  - Federal Courts
  - US Supreme Court
- [http://ecos.fws.gov/tess\\_public/servlet/gov.doi.tess\\_public.servlets.UsaLists?state=all](http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.UsaLists?state=all)

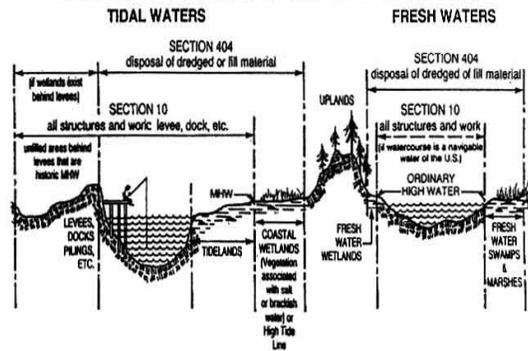
<http://www.coastal.ca.gov/wetrev/wetttitle.html>

**PROCEDURAL GUIDANCE FOR THE REVIEW OF WETLAND PROJECTS IN CALIFORNIA'S COASTAL ZONE**

- I. The ACOE definition (Environmental Laboratory, 1987) reads as follows:
- The following definition, diagnostic environmental characteristics, and technical approach comprise a guideline for the identification and delineation of wetlands.
- a. Definition: The ACOE (Federal Register, Section 328.3(b), 1991) and the EPA (Federal Register, Section 230.4(t), 1991) jointly define wetlands as: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
- b. Diagnostic environmental characteristics: Wetlands have the following general diagnostic environmental characteristics:
  - Vegetation: The prevalent vegetation consists of macrophytes that are typically adapted to areas having hydrologic and soil conditions described in (a) above. Hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions.
  - Soil: Soils are present and have been classified as hydric, or they possess characteristics that are associated with reducing soil conditions.
  - Hydrology: The area is inundated either permanently, or periodically at mean water depths < 6.6 ft. (~ 2 m), or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation. The period of inundation or soil saturation varies according to the hydrologic/soil moisture regime and occurs in both tidal and non-tidal situations
- c. Technical approach for the identification and delineation of wetlands: Except in certain situations defined in this manual, evidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination.
- Figure 4 presents a cross-sectional diagram of the areas and habitats under ACOE jurisdiction, and under which this definition applies.

FIGURE 4

**Scope of Corps Regulatory Jurisdiction**



**US Army Corps of Engineers**  
San Francisco District

NOTE:  
IN ADDITION TO SECTIONS 10 AND 404 JURISDICTIONS,  
THE CORPS REGULATES THE TRANSPORTATION OF  
DREDGED MATERIAL FOR THE PURPOSE OF DISPOSING  
INTO OCEAN WATERS (SECTION 103).



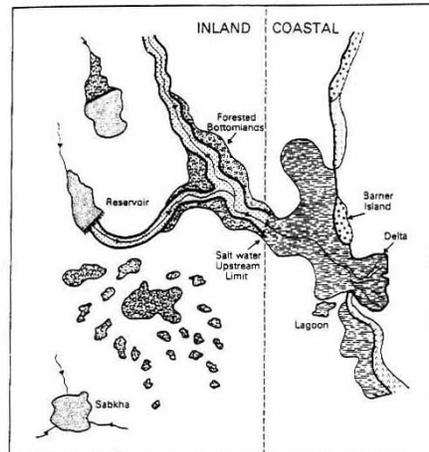
Regulatory Functions Branch  
U. S. Army Corps of Engineers  
211 Main Street  
San Francisco, CA 94106

<http://www.coastal.ca.gov/wetrev/wettitle.html>

## Fish and Wildlife Definition

- II. Like the ACOE definition, the FWS definition (Cowardin, et al., 1979) of a wetland incorporates the three key parameters of hydrophytic vegetation, hydric soils, and hydrology:
- *Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly 16 hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.*
- The FWS classification system is hierarchical, progressing from broad system descriptors to very specific modifiers for water regime, water chemistry, and soils (Cowardin, et al., 1979). Wetlands within each system share similar physical, chemical, and biological characteristics. The systems consist of the coastal wetlands which include marine and estuarine wetlands, and the interior wetlands which include riverine, lacustrine, and palustrine wetlands (Figure 5 illustrates these systems diagrammatically).

FIGURE 5—Diagram Illustrating Major Wetland Systems



Systems		
	Marine, Rocky	
	Marine, Intertidal	
	Estuarine	
	Riverine	
	Lacustrine	
	Palustrine	

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## California Dept Fish & Game Definition

- III. In the California coastal zone , the California Coastal Commission (CCC), with the assistance of the Department of Fish and Game (DFG) is responsible for determining the presence of wetlands subject to regulation under the California Coastal Act. The DFG essentially relies on the FWS wetland definition and classification system, ... except one important difference ... is that the DFG only requires the presence of **one** attribute (e.g., hydrology, hydric soils, or hydrophytic vegetation) for an area to qualify as a wetland (Environmental Services Division, 1987).

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## California Coastal Act and Commission

IV. Section 30121 of the California Coastal Act (1976), the statute governing the CCC, has an exceptionally broad definition for a wetland:

- *Wetland means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, or fens.*

CCC Administrative Regulations (Section 13577 (b)) more explicit:

- *Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitats.*

# Hydric Soils

- hydric soils are those soils that are sufficiently wet in the upper part to develop anaerobic conditions during the growing season. <http://soils.usda.gov/use/hydric/>

Los Angeles County, CA, Southeastern Part (CA696): This soil survey area has no soil data available.



Map Unit Symbol	Map Unit Name Area of Interest (AOI)	Acres in AOI / Hydric	% of AOI
100	ALO CLAY, 9 TO 15 PERCENT SLOPES	103.7 not hydric	22.0%
112	BALCOM CLAY LOAM, 15 TO 30 PERCENT SLOPES	6.8 not hydric	1.4%
123	BOLSA SILT LOAM, DRAINED	35.6 not	7.6%
124	BOLSA SILTY CLAY LOAM	57.8 not	12.3%
125	BOLSA SILTY CLAY LOAM, DRAINED	176.3 not hydric	37.5%
162	MARINA LOAMY SAND, 2 TO 9 PERCENT SLOPES	0.5 not hydric	0.1%
173	MYFORD SANDY LOAM, 2 TO 9 PERCENT SLOPES	64.3 not hydric	13.7%
175	MYFORD SANDY LOAM, 9 TO 15 PERCENT SLOPES	25.7 partially hydric	5.5%
	Totals for AOI	470.7	100%

This rating indicates the proportion of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is designated as "all hydric," "partially hydric," "not hydric," or "unknown hydric," depending on the rating of its respective components.

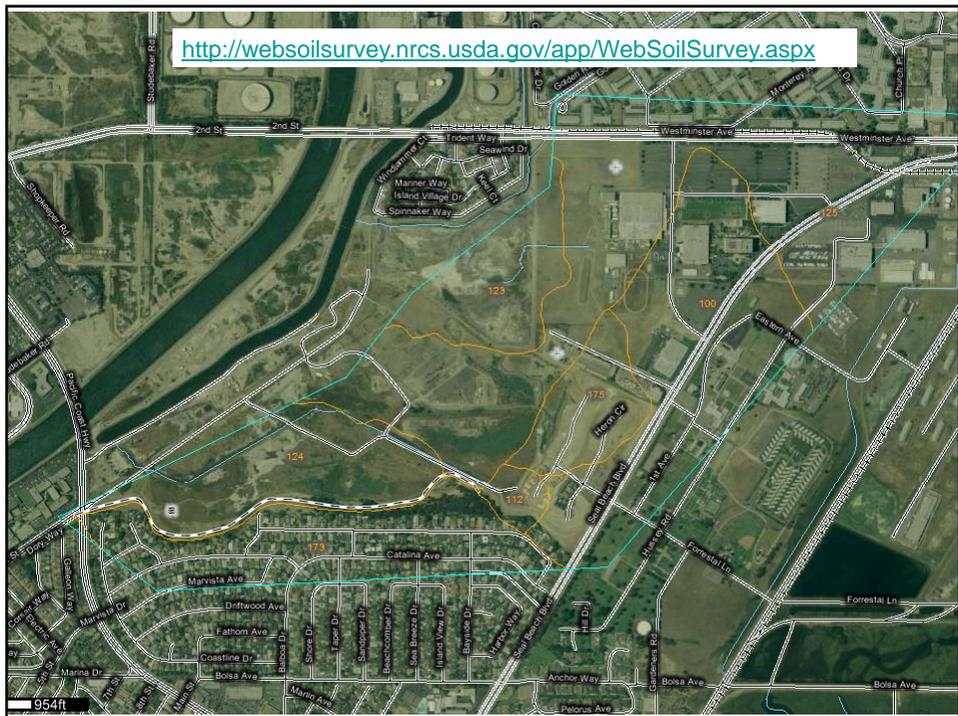
"All hydric" means that all components listed for a given map unit are rated as being hydric, while "not hydric" means that all components are rated as not hydric. "Partially hydric" means that at least one component of the map unit is rated as hydric, and at least one component is rated as not hydric. "Unknown hydric" indicates that at least one component is not rated so a definitive rating for the map unit cannot be made.

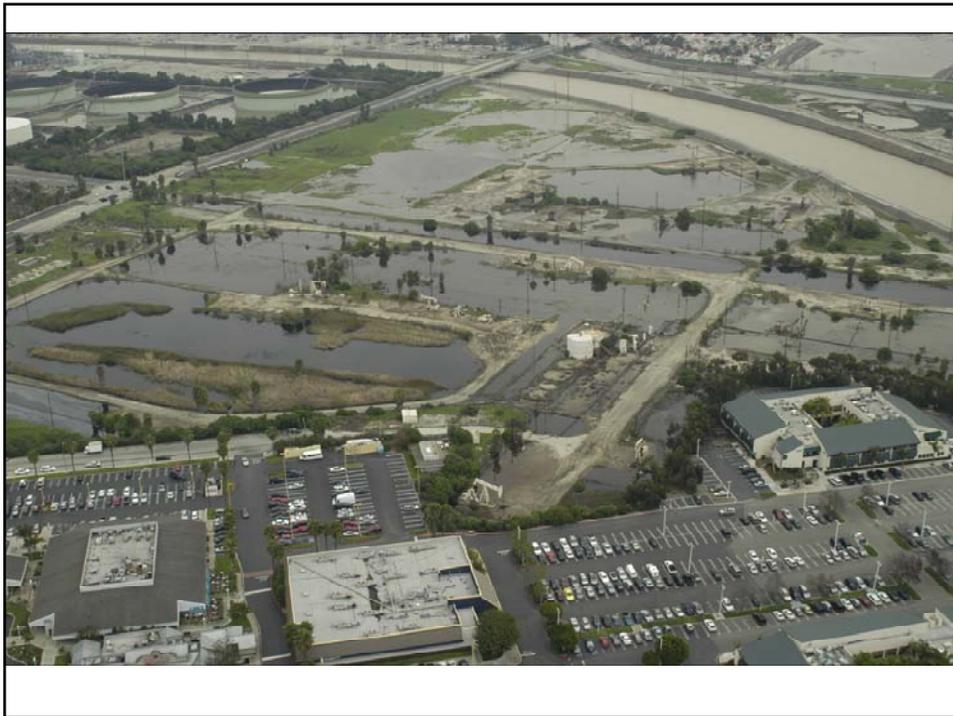
Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:  
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See where the Bryant and Bixby properties are divided by a channel that drains to a pipe outfall to the SG River (extending Studebaker from 2<sup>nd</sup> St. to the River).

## Section 30233(a) of the Coastal Act

- *The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible<sup>24</sup> less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
- *(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
- *(2) Maintaining existing, or restoring previously dredged depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
- *(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*
- *(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
- *(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake or outfall lines.*
- *(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- *(7) Restoration purposes.*
- *(8) Nature study, aquaculture, or similar resource dependent activities.*

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## Mitigation, No Net Loss & Degraded Wetlands

- Mitigating for wetland losses is frequently required in conjunction with coastal development permits granted under Section 30233. Most commonly, these projects involve compensatory mitigation. Both in-kind mitigation and out-of-kind mitigation are used. Coastal Act Section 30607.1 contains some of the most explicit language regarding mitigation for wetland development projects, and states in part:
- *Where any dike and fill development is permitted in wetlands in conformity with Section 30233 or other applicable policies set forth in this division, mitigation measures shall include, at a minimum, either acquisition of equivalent areas of equal or greater biological productivity or opening up equivalent areas to tidal action; provided, however, that if no appropriate restoration site is available, an in-lieu fee sufficient to provide an area of equivalent productive value or surface areas shall be dedicated to an appropriate public agency or the replacement site shall be purchased before the dike or fill development may proceed...*
- *One interpretation suggests Section 30607.1 sanctions acquisition of an existing wetland as acceptable mitigation for an allowable wetland development project. However, such an approach would lead to a net loss of wetland area. In practice, the CCC has interpreted the phrase "at a minimum" to require inclusion of a restoration component in any acquisition plan in order to avoid the net loss of wetland area.*
- *Section 30411 establishes the DFG as the lead agency charged with the study and identification of degraded wetlands, and provides general guidelines for classifying a wetland as degraded. However, the ecological complexity of wetlands and the lack of a single definition limits the degree of certainty with which these determinations can be made. The DFG has described its process for determining if a wetland is in fact degraded (for example see, DFG, 1981).*

# Local Coastal Plan

- Section 30004(a) of the Coastal Act states:
- *To achieve maximum responsiveness to local conditions, accountability, and public accessibility, it is necessary to rely heavily on local government and local land use planning procedures and enforcement.*
- *the Coastal Act directs each of the 73 cities and counties lying wholly or partly within the coastal zone to prepare a Local Coastal Plan (LCP) for CCC review and certification<sup>29</sup>*

