


CALIFORNIA DEPARTMENT OF FISH AND GAME

**RIPARIAN RESOURCES AND REGULATORS:
The DFG Lake and Streambed Alteration
"1600" Process**

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**LEGAL AUTHORITY
AND JURISDICTIONS**



FEDERAL: CLEAN WATER ACT

- SECTION 401:
 - REGIONAL WATER QUALITY CONTROL BOARD
Water Quality Certification
- SECTION 404:
 - U.S. ARMY CORPS OF ENGINEERS PERMIT:
 - MAY INITIATE CONSULTATION WITH:
 - NOAA (NMFS) FISHERIES
 - U.S. FISH AND WILDLIFE SERVICE
(SECTION 7 OR SECTION 10 CONSULTATION)
 - >>> Biological Opinion / Incidental Take Statement



FEDERAL II

- INTERNATIONAL MIGRATORY BIRD TREATY ACT




**STATE OF CALIFORNIA
(Department of Fish and Game)**

- CALIFORNIA ENDANGERED SPECIES ACT (CESA)
 - Incidental Take Permit
 - OR
 - Consistency Determination with Federal Incidental Take Statement
 - Fully protected species (no take, e.g. SF garter snake)
- CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
 - RESPONSIBLE AGENCY:
Formally comment on CEQA documents
 - LEAD AGENCY:
Initiate CEQA process

COUNTY AND CITY

- RIPARIAN SETBACKS
- GRADING ORDINANCES (subject to CEQA if discretionary)
 - "CALL FISH AND GAME"



Ecology and Conservation of Coastal California's Riparian Areas
May 12, 2005



The Mission of the Department of Fish and Game is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public.

Department of Fish and Game
Code Sections 1600-1616
(amended January 1,2004)

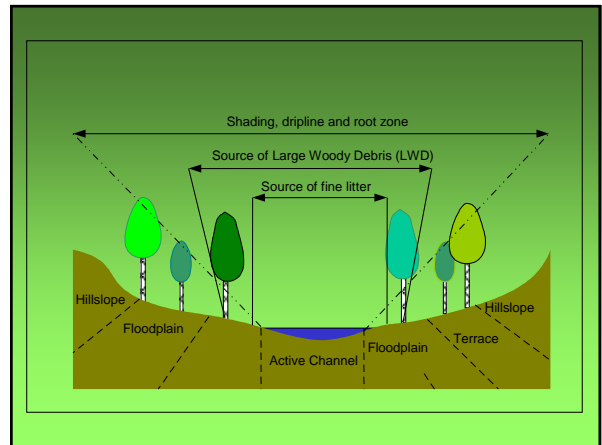
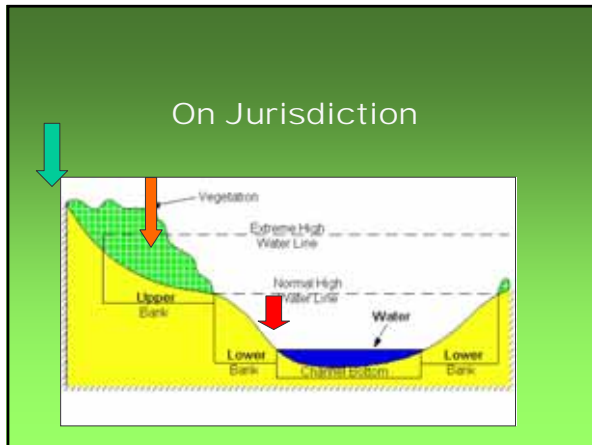
The 1600 process protects waterways, lakes, ponds, riparian areas and associated resources by providing guidance to design projects so as to avoid or reduce impacts to a less than significant level in these areas.

Who needs to apply for a 1600 agreement with the Department of Fish and Game?

The Fish and Game Code Section 1602 requires notification for any project that ...

...that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake ...

The Department must decide whether 1) project sites and impacts may affect a stream or lake, and whether 2) potential changes may be substantial



change the bed, channel, or bank of any river, stream, or lake

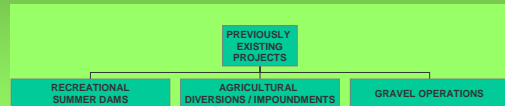


Once notified the Department will review the notification and determine if it is necessary to schedule a site visit to determine if the project has potential impacts and 1) needs an agreement, and 2) needs full (CEQA) environmental review.

1602 Reviews should assess:

- Alteration to bed or bank
- Alteration of water quantity or flow characteristics
- Alteration of water quality
- Impacts to special status species
- Effects on aquatic resources
- Effects on riparian vegetation
- Effects on terrestrial species

“Critical (program) Flows”





“New flows”

- Horizontal directional drilling (HDD): through (and sometimes into) the jurisdictional alluvium
- Bridge projects with effects on the channel
- “But there’s no fish here!”



Riparian ecologistics

- Fish
- Frogs and herptiles
- Birds and bats
- Sedimentation
- Invasive species
- Native species, local genotypes
- Corridors
- Cumulative impacts
- Habitat heterogeneity
- Channel “integrity”



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Waterscapes

- Large woody debris (LWD)
- Retain vegetation for bank stability
- Dissipate new hydraulic energy entering channel
- Protect riffles, pools, and spawnable substrate

Waterscapes and introduced hardscapes

- When feasible, retain access to floodplain
- When feasible, use bioengineering
- Avoid overarmoring (but engineer adequately)
- Adequately sized culverts (fish and flood passage)
- Bridges vs. culverts

NRCS Bio-engineered Streambank Stabilization

Design by Bob Albers and Phill Blake, Napa Field Office Ellie Inley Property



Severe streambank erosion left an 11 foot high vertical bank that set up further potential for significant property loss. NRCS design called for a brush layering treatment, and woven willow revestment wall. The brush layering consists of 3 alternating lifts of soil, willow cuttings, and wraps of coconut erosion control fabric. The willow revestment, constructed of posts and weavings of live, dormant willows will become a live structure, established and maintained with a drip irrigation system. A rock barb was placed just upstream of the brush layering reach, to deflect and roll stream tractive forces back into the channel center.

After, Bank has stabilized, and willows are providing excellent erosion protection and enhanced riparian habitat. Stream meander is stabilized, without negatively affecting downstream properties. This project has successfully withstood several near-flood stage events and is providing excellent stabilization.



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The California Environmental Quality Act (CEQA) /1600 process

Superior Court of California
County of Mendocino, Ukiah Branch

Mendocino Environmental Center
vs
California Department of Fish and Game

February 3, 1999

This court order changed the process for obtaining Lake or Streambed Alteration Agreements after May 1, 1999.

The Court found:

... the Department of Fish and Game must comply with the California Environmental Quality Act (CEQA) when issuing Lake or Streambed Alteration Agreements

How has CEQA changed the 1600 process?

- The process now generally takes more time because an environmental review, subject to CEQA parameters, is done in addition to the field review.
- The environmental review requires that the impacts of the project be assessed and determinations made concerning the significance of those impacts to resources.

- To make these determinations, it is sometimes necessary to require additional surveys or for the Department to consult with other agencies.
- The assessments and determinations are subject to public review and input as part of the process.

!Reality Check!

Resource protection mandates
depend on
staffing

- Who prepares the CEQA document?**
- Fish and Game
or ...
 - Another agency

Key Concept

CEQA reviews must cover
the
entire project

Can a previously prepared CEQA document be used?

Yes, if it adequately covers the current project ...



**How to save time, money
and the resource:**

- Plan the project to avoid or minimize impacts to sensitive areas.

- **Apply early.**

- This is no longer a “hood of the truck” process. The less impacts the project has, the quicker it will move through environmental review. The current expected time from receipt of notification by DFG to the mailing of the draft 1600 agreement in the Central Coast Region is 90 days for *complete* notifications.

Impacts, rather than size of project, ultimately dictate the level of agreement conditions and CEQA review required.

- **Apply well.**

- Follow the directions and provide the information requested.
- Include amounts (linear feet, area, cubic yards, etc.)
- Completely describe the project including equipment to be used, erosion control measures planned, and the time schedules required to do the project.

Notification/Application forms are available online:

www.dfg.ca.gov/1600

Or

Calling (707) 944-5520