2017 SUSTAINABLE AG EXPO

Regulatory Agency Permitting and Ecological Considerations for Vineyard Operations

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Presentation Outline

- Regulated Activities
- Regulatory Agency Review
- Permit Requirements
- Road/Culvert Design Considerations
- Permitting Strategies
- Ecological Considerations
- Review & Questions
Regulated Activities

- Bridge installations
- Culvert installations
- Road improvements
- Bank stabilization
- Silt/sediment removal
- Vegetation clearing
- Maintenance activities
Main Regulatory Agencies

- State Agencies
  - CDFW – Lake/Streambed Alteration Agreement
  - RWQCB – 401 Water Quality Certification

- Federal Agencies
  - Army Corps of Engineers – 404 Permit / Section 10
    - USFWS – Consultation under ESA for listed species
    - NMFS – Consultation under ESA for anadromous fisheries

- Local Agencies
  - CEQA Lead Agency
    - Grading/Building Permits
California Department of Fish and Wildlife

- Blue line drainages and tributaries.
- Limits defined as bed and bank of channel.
- Extends to outer edge of riparian vegetation.
- Top of bank in absence of vegetation.
- May include swales in some circumstances.
- If project can be completed outside “100-yr. floodplain” then no application necessary.
Limits defined as the Ordinary High Water Mark (OHWM) of channel.
Requires a defined bed and bank and evidence of flow.
Must maintain a significant nexus to navigable waters of the U.S.
Not permanently fixed—can change over time in response to natural processes.
Includes adjacent wetlands that meet Corps’ definition.
Corps Summary / Overview

SECTION 404
Discharge of Dredged or Fill Material

SECTION 10
All Structures and Work if a Navigable Water of U.S.

UPLAND
FRESH WATER WETLANDS
RIVERS STREAMS LAKES PONDS
FRESH WATER WETLANDS
UPLAND

Corps of Engineers Regulatory Jurisdiction in FRESH WATERS
Regional Water Quality Control Board

- “Waters of State” similar to CDFW definition.
- Top of bank or extent of riparian vegetation if present.
- May include swale features in upland areas as well.
- Typically more conservative on areas of coverage.
CDFW Permitting Strategies

- CDFW Code section 1602 requires notification for these activities:
  - substantially divert or obstruct the natural flow of any river, stream, or lake;
  - substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
  - deposit debris, waste, or other materials that could pass into any river, stream, or lake.

- If you’re unsure whether or not your activity is regulated, reach out to CDFW to avoid a Notice of Violation.
- If feasible, request a pre-app site walk to discuss your project.
- You may be able to avoid permit application.
U.S. Army Corps of Engineers

- Must obtain permit for – “deposit of dredged or fill materials in waters/wetlands”
  - Culverts, fill materials, rip-rap, etc.
- Section 404 of Clean Water Act (CWA)
- Exemptions may apply to some activities, exclusions apply to geographic jurisdiction:
  - Normal farming activities
  - Some maintenance activities
  - Construction/maintenance of farm and forest roads
  - Exclusions: some upland ditches, erosional features, gullies, swales, and groundwater
- Do not regulate “clean” excavation or “incidental fallback”
Regional Water Quality Control Board

- Permit required for projects that impact waters of the U.S.
- Section 404 of the CWA
  - Triggers the need to obtain a Section 401 Water Quality Certification for dredge and fill activities
- Section 401 of the Clean Water Act
  - Once triggered, additional waters (waters of the State) may become a consideration in the Certification decision
  - Example: additional culverts along roads
- Can require Notice of Intent to comply with WQ Order No. 2004-0004-DWQ; “Waste discharge requirements for waters deemed by the Corps to be outside of Federal Jurisdiction”...
Crossing Design Considerations

- Clear spans
- Rail car bridges
- Natural bottom culverts
- Vegetated rip-rap
CDFW Maintenance Agreements

- Maintenance agreements can be obtained from CDFW for annual cleanup within drainages.
- Per 1602 of LSAA Program.
- Includes veg and silt/sediment removal.
- 5 to 10-yr agreements.
Ecological Considerations

• Early design considerations:
  ➢ Maintain contiguous habitat features, where feasible.
  ➢ Design around drainages and provide adequate buffers.
  ➢ Identify known wildlife corridors and maintain, if feasible.
  ➢ Deer fencing should allow for movement of smaller sized mammals.
Ecological Considerations

- Stream and drainage corridors:
Ecological Considerations

- Provide adequate buffers.
- Repair past damages, where feasible.
- Promote natural vegetation growth.
- Willows are “nature’s rip rap.”
- Maintain connectivity for wildlife habitat/passage.
- Manage roads appropriately/standard BMPs:
  - Out slope to avoid concentrated flows
  - Install rolling dips
  - Flow dissipation devices at outlets
- Install bio swales, where feasible.
Ecological Considerations

- Long-term maintenance considerations:
  - American kestrel boxes
  - Barn owl boxes
  - Eco-friendly rodent control
Summary

- Build relationships with regulatory agencies.
- Communicate early and often with agency reps.
- For complex project(s), set-up pre-app meetings on site.
- Have good understanding of your project and overall objectives.
- Integrate ecofriendly designs into drainage crossings, where feasible.
- Free-span bridges will typically avoid Corps permits.
- Manage your drainage corridors and other open space areas to improve water quality and provide wildlife habitat.
- Incorporate the most current ecofriendly designs and practices to your vineyard operations.
QUESTIONS?