

Air, Water and Land Use Permitting Considerations for Biomass Energy Facilities in OR and CA

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Benefits of Biomass Power

- Renewable Energy
- Domestic Source of Energy
- Healthy Forests/Reduce Wildfire Danger
- Air Quality Benefits
- Greenhouse Gas Reduction
- Promoted by Federal, State, and even Local Policy

Do these benefits improve the permitting situation?

Yes,



and No



Potential Environmental Issues

- Air Quality
- Water Use & Discharge
- Land Use
- Transportation
- Biological Resources
- Noise
- Cultural Resources
- Visual/Aesthetics

*Focus
today
is on
the
first 3*

Biomass Power and Air Quality Issues



Air Quality Permitting for Biomass Power

- Principal air pollutants of concern:
 - NO_x (ozone precursor)
 - PM
 - VOC (ozone precursor)
 - CO
 - HAPs (particularly HCl)
- Size of plant and associated emissions critical

Which one are you building?

This one?



or this one?



- Minor Source

or

- Minor Source

Biomass Power and Water Quality Issues



Water Quality Permitting for Biomass Power

- Water Use
- Water and Wastewater Discharge
 - Non-contact cooling water
 - Waste water
- Storm Water
 - Construction
 - Operation
 - Storm Water Pollution Prevention Plan



Biomass Power and Land Use Issues



Land Use Permitting for Biomass Power

- Siting and Land Use
- Zoning
- Conditional or Special Use Permits
- Community Acceptance

The 4 P's in Permitting

- ✓ Planning
- ✓ Perception
- ✓ Perseverance
- ✓ Patience

Regulatory Rapport

- ✓ Framing the biomass project and its positive attributes
- ✓ Pre-application discussions
- ✓ Understanding the system and the regulatory necessities
- ✓ Developing permitting & compliance strategies



California

The ~~Good~~, the Bad, and the Ugly

California as a National Leader in Renewable Energy



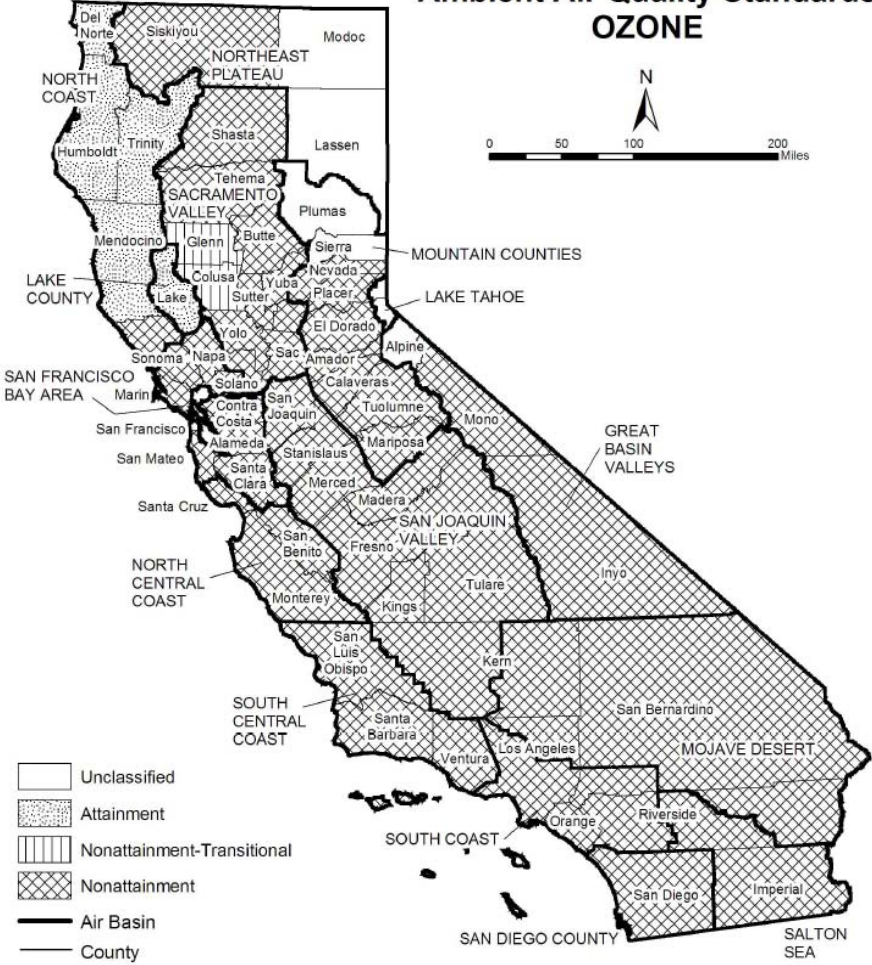
but also

Regulatory Complexity, Uncertainty,
and Confusion

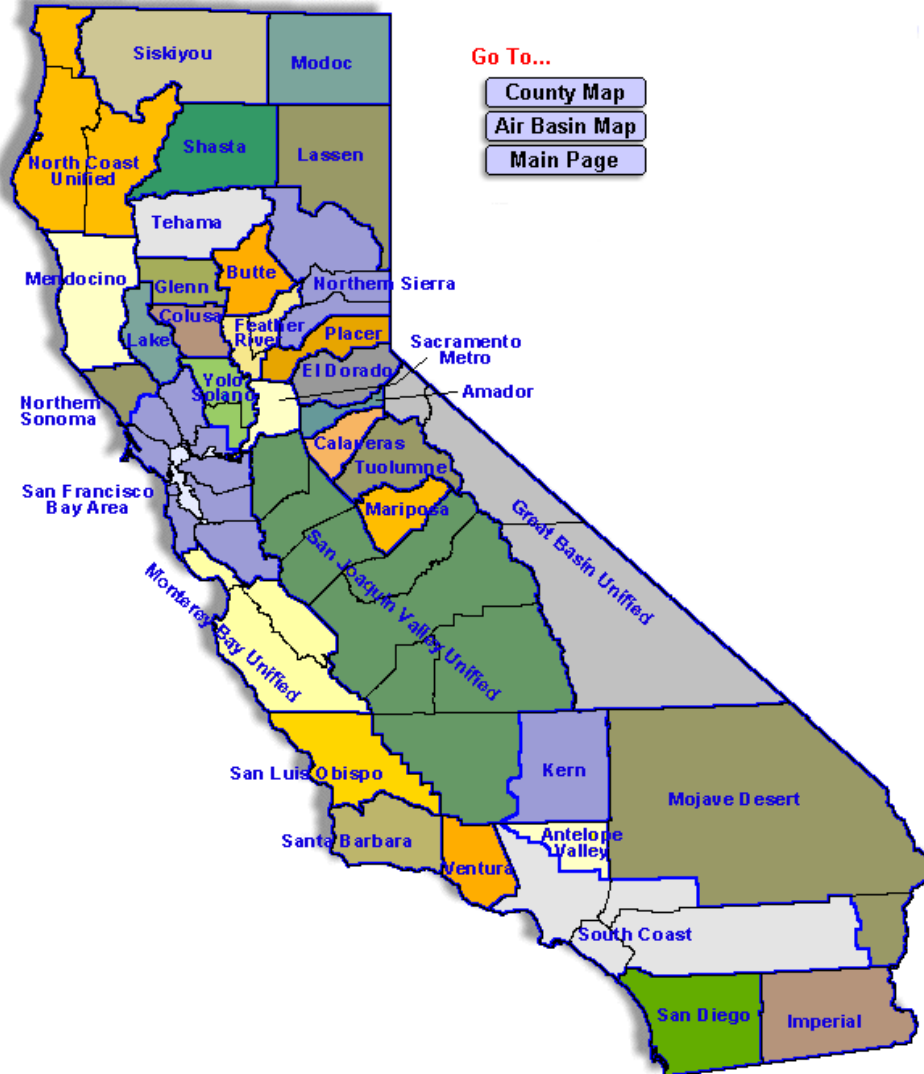
CA Air Quality Permitting

- High order of complexity due to:
 - Air quality constraints
 - 35 separate air districts
 - Voluminous regulations at state and district levels

2006 Area Designations for State Ambient Air Quality Standards OZONE



California Air Districts



Go To...

- [County Map](#)
- [Air Basin Map](#)
- [Main Page](#)

Air Quality Constraints

- Many of the CA Air Districts are in non-attainment for NOx and PM
- Attainment v. Non-attainment
- Emissions controls particularly important in CA
- Need for offset emissions – are they available and at what cost?

The California Process

- District-specific rules and emission rules
- Authority to Construct
- Permit to Operate
- Title V Permit

CA Water Quality Permitting

- Water use
 - Generally local agencies
- Wastewater Discharge
 - Regional Board
- Storm Water
 - State Board



CA Regional Water Quality Control Boards



- 1 – North Coast
- 2 – San Francisco Bay
- 3 – Central Coast
- 4 – Los Angeles
- 5 – Central Valley
- 6 – Lahontan
- 7 – Colorado River Basin
- 8 – Santa Ana
- 9 – San Diego

CA Land Use

- Siting
- Zoning Conformance
- Condition Use Permits
- Community Acceptance
- California Environmental Quality Act

CEQA!

- CEQA – The California Environmental Quality Act
- Purpose – to inform the public of environmental decisions by CA agencies
- Public process driven
- For biomass power plants usually led by land use or air quality agencies

Basic CEQA Components

- Environmental Information Form
- Environmental Checklist & Initial Study
- CEQA Determination
 - Exempted
 - Negative Declaration
 - Mitigated Declaration
 - Focused EIR
 - Full EIR

Land Use Permits & Zoning

- County or City Planning/Community Development Department
- Zoning must be Industrial (or need for zoning change)
- Conditional Use Permits usually needed



Oregon

Simpler? Let's Hope So!



Oregon Air Quality Permitting

- Administered principally by the Department of Environmental Quality, Air Division
- Better, more centralized guidance
- Regional offices for Northwestern OR, Eastern OR, and Western OR
- Some local/regional air quality agencies – urban oriented



The Oregon Process

- Air Contaminant Discharge Permit
- Several ACDP Permit types
 - Basic, General, Simple, and Standard
 - Applicants need to decide which type
- Title V

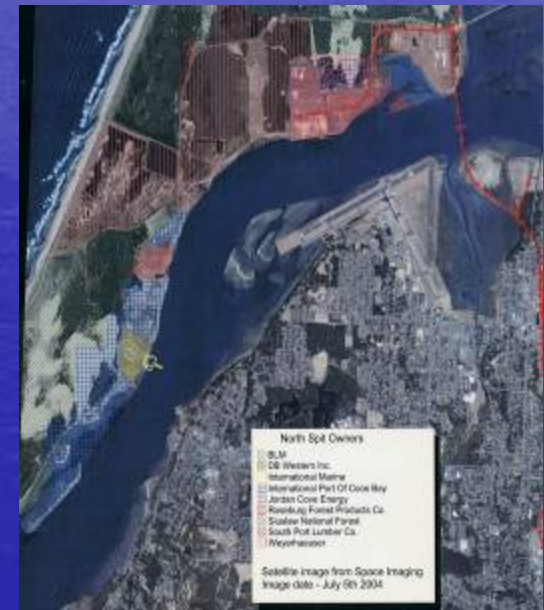
Oregon Water Quality

- Water Use
 - Water Resources Department
- Wastewater Discharge
 - DEQ, Water Division
 - General Permit for 40 gpm of surface discharge
 - General Permit for non-contact cooling water
- Storm Water
 - DEQ, Water Division
 - Con/Ops General Permits



Oregon Land Use

- Similar to CA in regards to local control
- No CEQA though
- Land Use Compatibility Statement
- OR Dept. of Energy Siting





U.S. Dept.
of
Redundancy
Department

Federal & Tribal



Federal Agencies/Tribal Entities vs. State and Local Control

- Federal Land Management Agencies
- Environmental Protection Agency
- May use local/state standards
- Tribal Environmental Department
- FARR

Remember

The 4 P's in Permitting

- ✓ Planning
- ✓ Perception
- ✓ Perseverance
- ✓ Patience

Questions? Comments? Ridicule?

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