

Salinity Management & Regulatory Issues

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Litigation Pertaining to Saline Water

- Litigation issues involving saline and nutrient laden waters are not new but variations of issues typically litigated allegations pertaining to:
 - Environmental issues such as adverse habitat impact and site location,
 - Nonperformance issues relating to contractual obligations, and
 - Damages whether it be to health or property.

Litigation Pertaining to Saline Water

- Lawsuits have raised issues that span the spectrum from allegations involving:
 - Adverse habitat impacts,
 - Inadequate environmental review of saline discharges that historically have received little attention,
 - Facility siting and nuisance complaints,
 - Damages lawsuits alleging trespass and public and private nuisances caused by salinity pollution

Litigation Pertaining to Saline Water

- Many of the legal fights have been fought to a draw:
 - Difficult evidentiary standards to meet & attenuated causal relationships between the operations alleged as causation of environmental harm
 - Most parties have found it more productive to settle their disputes than to engage in protracted litigation

Avoiding Litigation

- Generally, litigation can be avoided if effective management practices are in place that competently address health, environmental and economic impacts as part of the planning process before implementation of policy, practices or procedures
- Better approach for dispute resolution is alternative dispute resolutions tools such as mediation or arbitration – more on this later

The Claude "Bud" Lewis Carlsbad Desalination Plant



Seawater Desalination Litigation

Carlsbad Desalination Plant in San Diego County litigation issues initiated by Surfrider:

- Compared operation of Plant to water recycling and stated Plant "... is likely to use 5 times more water and twice as much energy to produce the same amount of drinking water."
- Challenged SDWB "... interpretation of Porter-Cologne Water Quality Control Act, requiring coastal industry to use 'best available site, design, technology, and mitigation measures feasible to minimize the intake and mortality of all forms of marine life' "

Seawater Desalination Litigation

:

- Claimed SDWB "impermissibly" allowed Plant to use the best BMPs to minimize impact to aquatic organisms
- Surfrider's litigation challenges not upheld by the Court

(2/2)

Tampa Bay Seawater Desalination facility



- During construction period an engineering company & two contractors went into bankruptcy -- subsequent litigation ended in settlement
- Litigation against a subcontractor claimed that desal plant failed to reach production goals during performance test because subcontractor had purchased inferior equipment and materials – resolved through negotiations



Both arbitration and mediation employ a neutral third party to oversee the process, and they both can be binding. However, it is common to employ mediation as a *non-binding* process and arbitration as a binding process.

Litigation or Mediation/Arbitration

- Daniel P. Fernandez (article in Journal of Business Case Studies re: Tampa Bay Water) concluded:
 - “Litigation is an especially poor way to establish water policy and supply water, while at the same time balancing the impacts to the resource and the environment.”
 - “... litigation is an expensive, unpredictable, and often unsatisfactory mechanism for resolving disputes ... especially so in complex cases, including public or private water supply, industry and agriculture.”

Kern County Oil Fields



Brine Management in Inland Areas

Saline Water Disposal – Legal Issues, Starrh & Starrh (1/2)

- Starrh and Starrh Cotton v. Aera Energy LLC
 - Case initiated in 2001 in California's Kern Co. Superior Court
 - Starrh alleged produced oilfield water:
 - ✓ High in salts and other minerals, was placed in ponds by defendants
 - ✓ Migrated downward into an aquifer and under the plaintiff's property

Brine Management in Inland Areas

Saline Water Disposal – Legal Issues, Starrh & Starrh (2/2)

- Starrh and Starrh Cotton v. Aera Energy LLC
 - Court found in favor of plaintiff stating that condition created under plaintiff's property by defendant constituted a continuing trespass
 - Case was appealed to the California 5th District Court of Appeal where the Court of Appeal in 2007 upheld the Kern County Superior Court decision in favor of the plaintiff

Brine Management in Inland Areas

Deep Well Injection of Produced Water by Oil Industry – Legal Issues, Palla Farms: (1/2)

- Palla Farms versus Four Oil Producers
 - Case initiated in 2014 in California's Kern Co. Superior Court
 - Palla Farms alleges:
 - Oil producers used "aging and sometimes faulty" injection wells

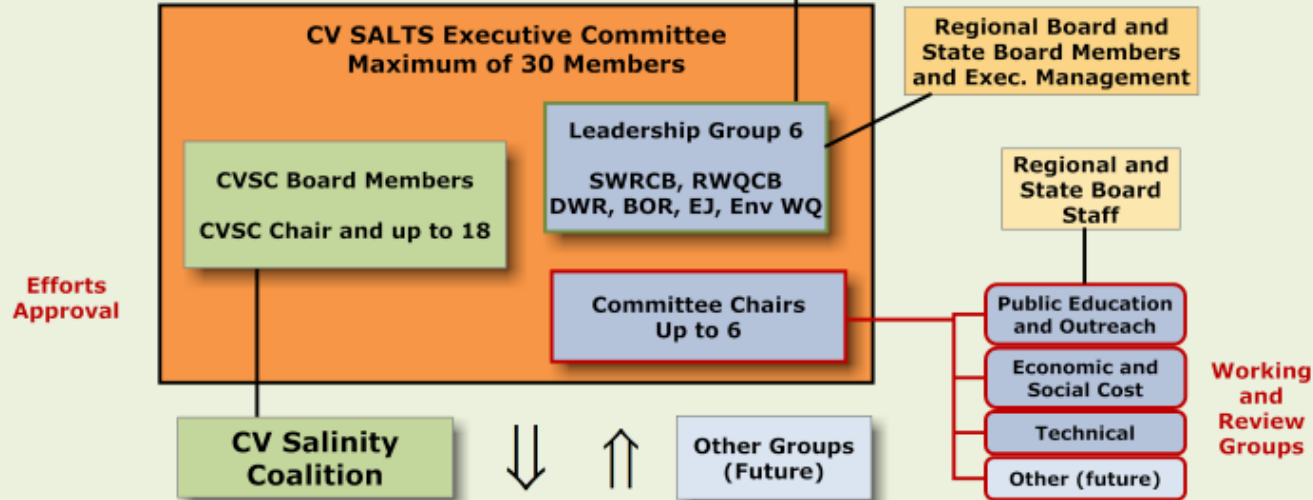
Brine Management in Inland Areas

Deep Well Injection of Produced Water by Oil Industry – Legal Issues, Palla Farms: (2/2)

- Palla Farms further alleges:
 - Injection wells improperly operated resulting in:
 - ✓ Groundwater contamination
 - ✓ Elevated salinity and boron contamination of the groundwater
 - ✓ Death of a large number of cheery trees located on farm
 - ✓ Deprivation of income and the loss of use of the groundwater underlying farm

Leadership
Steering
Committee

CV Salinity Leadership (formerly policy) Group



CV SALTS



Salinity & Nutrient Management Plan (SNMP) Development

- Well developed SNMPs:
 - Protect water quality for designated beneficial uses
 - Provide good risk management tool for lessening risk of litigation
- Where litigation is imminent the settlement of the dispute by arbitration or mediation should be considered as a preferable course of action

Salinity & Nutrient Management Plan Development

- California's Central Valley Regional Water Quality Control Board (CVWB) undertook development of comprehensive SNMP commencing in 2006
 - Need for development of SNMP was long evident:
 - ✓ Extensive anthropogenic contamination of groundwater by nitrates
 - ✓ Adverse economic impact resulting from the salinization of California's Central Valley waters.

CV SALTS – Strategies, Policies & Guidance

1. Groundwater Management Zone Policy
2. Nitrate Permitting Strategy
3. Salinity Management Strategy
4. Exceptions Policy
5. AGR Policy
6. Salinity Variance Program Policy
7. Offsets Policy
8. Drought & Water Conservation Policy
9. Guidance to Implement Secondary Maximum Contaminant Levels
10. Guidance for Developing Alternative Compliance Projects for Nitrate Discharges
11. Factors to Support a Maximum Benefit Finding

Importance of Stakeholder Involvement

- While each of these strategies, policies and guidance items represents an area that can:
 - Generate significant litigation
 - Result in a judge dictating the final policy
- Long term stakeholder effort:
 - Does not guarantee no litigation
 - Should greatly work in favor of reducing substantial litigation
 - Should have outcome of protecting water quality

Conclusions

- Where dispute does exist over salinity management policies or practices or their execution, alternative dispute resolution strategies such as mediation or arbitration are preferable to litigation
- A thorough and competent stakeholder process, while time and resource consuming, can result in the development of policies more effective for the good management of salinity and also more acceptable to the effected public



Thank You