

Legal Aspects of Weather Modification



Application

- Laws
- Liability
- Water Rights



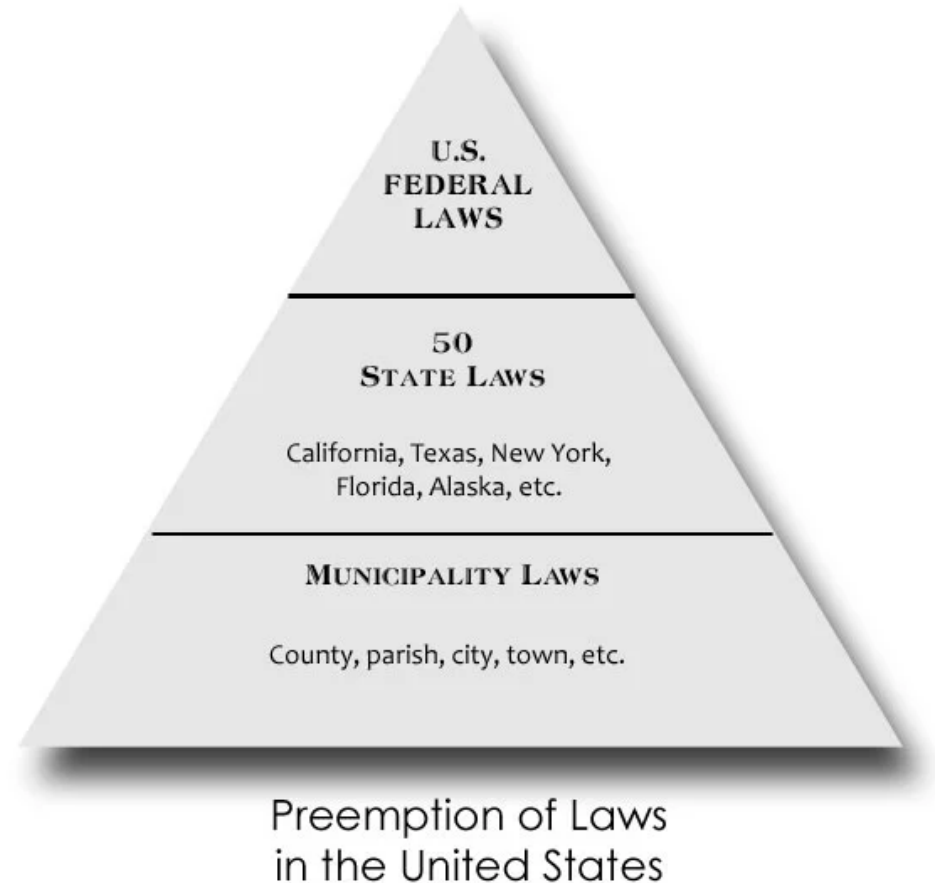
Who makes the laws and rules?

- Legislatures
 - Express policy – Make laws regarding regulation, funding.
- Administrative Agencies
 - Make Regulations
 - Decide cases (licenses, permits)
 - Administer Programs
- Courts
 - Decide cases (resolve disputes, review administrative decisions)



What are the Levels of Laws

- States
 - Most have laws
 - Lots of variations
- Federal
 - Appropriations
 - Study
 - Reporting
- International
 - WMO – World Meteorological Organization



Regulatory Agency

- Umbrella Agency
- Board
 - Director
 - Staff

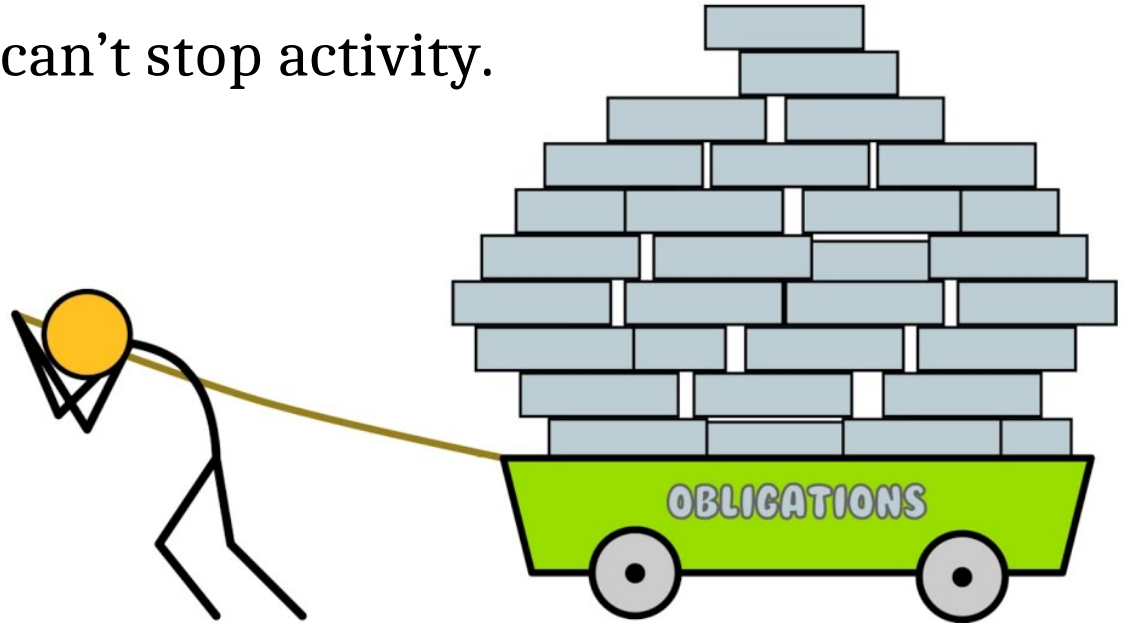


Interstate Interactions

- Permitting
- Sharing Equipment
- Water Right
- Agreements
- Liability

International Obligations

- Notice given about seeding.
- Countries Consult
- Affected Neighboring Country
 - Decides what to do, but can't stop activity.
- Can take legal action.
- Has to prove liability.



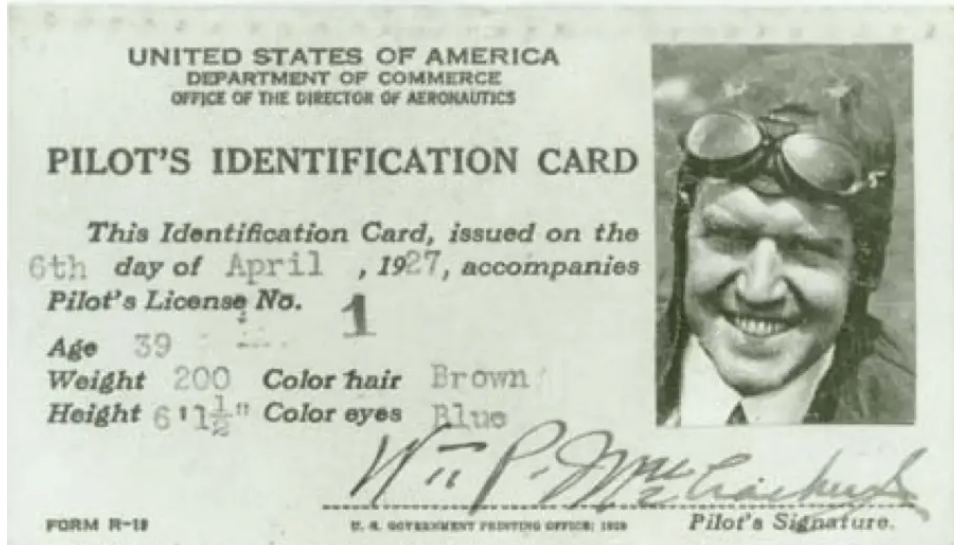
Common Way to Regulate

- Licensing and Permitting
 - What are some example of licenses and permits?
- Need both to conduct seeding in some states.
- License – Authority to practice profession.
- Permit – Authority to operate a given project.



License Criteria

- Professional Qualification
 - Training/Education
 - Or Experience
- Good Character



Licensing Procedures

- Grant/denial
 - Application
 - Determination
- Renewal/Non-renewal
 - Application
 - Determination
- Suspension - Temporary
- Revocation - Permanent

Permit Procedures

- Grant/denial
 - Application
 - Notices hearings determination
 - Grant as requested
 - Grant as altered
 - Denied
- Provisional/renewal/non-renewal
- Modification/Suspension/Revocation



Federal Reports

- Authority
 - The only Federal law is Reporting
- Timing
- Contents
 - Days
 - Purposes
 - Hours
 - Seeding Agents
- Uses
 - Annual Report
- WMO Register

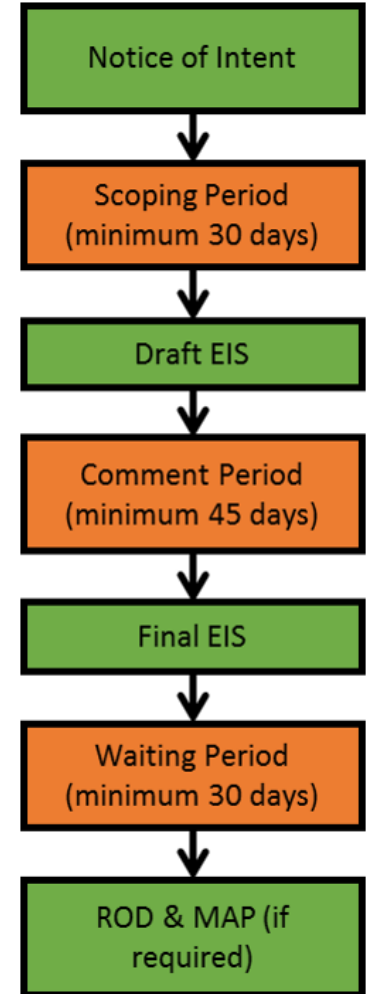
State Reports

- Forms
- Data



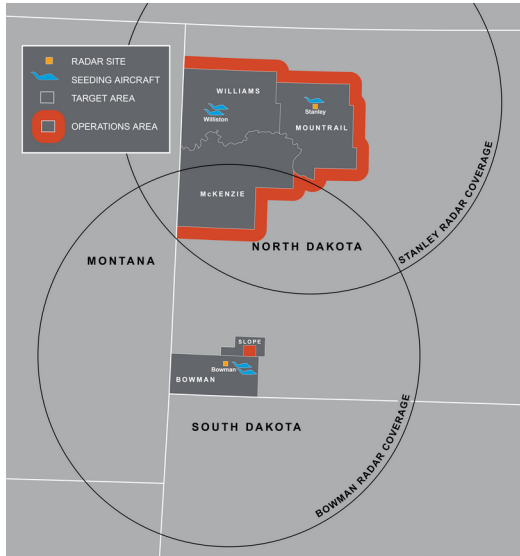
Environmental Impact Statements (EIS)

- Federal requirement under certain conditions.
- EIS are also required by some states.
- Federal EIS required when:
 - Federal dollars are involved.
 - Seeding actually done.
 - Possible significant impact on the environment.
- Process takes years, may kill project.



Wilderness Act

- Legislation – Areas “untrammeled by the hand of man”
- Impact on Weather Modification
 - Seeding Areas
 - Data Collection



President Lyndon B. Johnson signed the Wilderness Act on September 3, 1964,

Liability - Should this Concern You?

- Three things have to be proved to win:
 - Conduct (defendant)
 - Impact (plaintiff)
 - Causation



Types of Liability

- Trespass (intrude on property)
- Negligence (careless)
- Nuisance (harm outweighs benefit)
- Abnormally dangerous activity

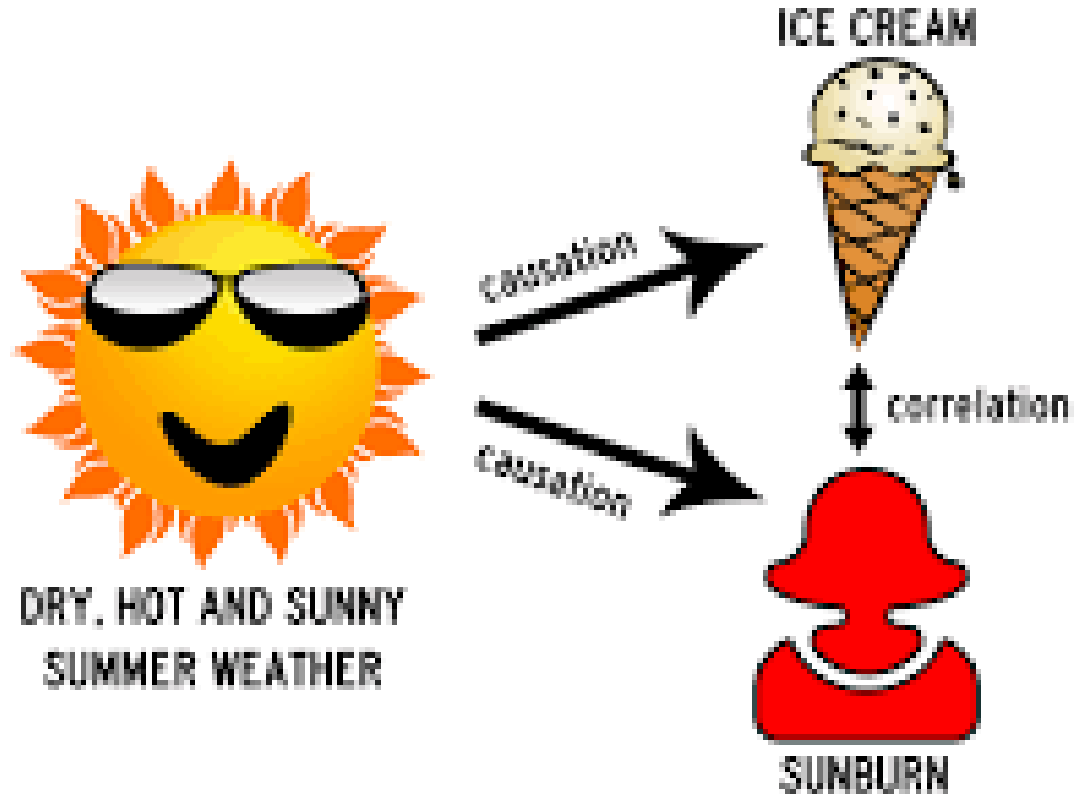


Harm (Impact)

- Economic
 - Expenses incurred
 - Income lost
- Non-economic
 - Nominal
 - Intangibles

Causation

- Hardest to Prove
- No Cases Won



Defenses

- Immunity (government)
- Privilege (public necessity)
- Shifting cost
 - Insurance
 - Indemnification (contract)



Water Rights: Who Gets Extra Precipitation

Theories

- Riparian
 - Owners of land by water have equal right to use the water.
- Appropriation
 - First come, first served

Treatment of Additional Water

- Seeder
- Landowner
 - Can appropriate
 - Prior Appropriation
 - As Natural Precipitation (ND)

