

WATER LAW

Senior College

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Today's Class

- Overview of the course
- Water and how we use it
- Introduction to water allocation law

What is water law?

- Principles, rules, and procedures
- Allocation of freshwater resources
- Among various *uses* and *users*
 - Save Mono Lake, or slake LA's thirst?
 - Water the crops, or preserve the salmon run, or cool the nuclear power plant?
 - Water for growing cities or established rural residences?
 - Bottled spring water for America, or healthy rivers for riparian residents and recreational users?

In this course

- Legal principles of US water law
- Classic and contemporary water law “cases”
- Environmental Protection and Water Allocation
- Interstate Water Allocation: The Battle in the Apalachicola-Chattahoochee-Flint River Basin

Broader themes

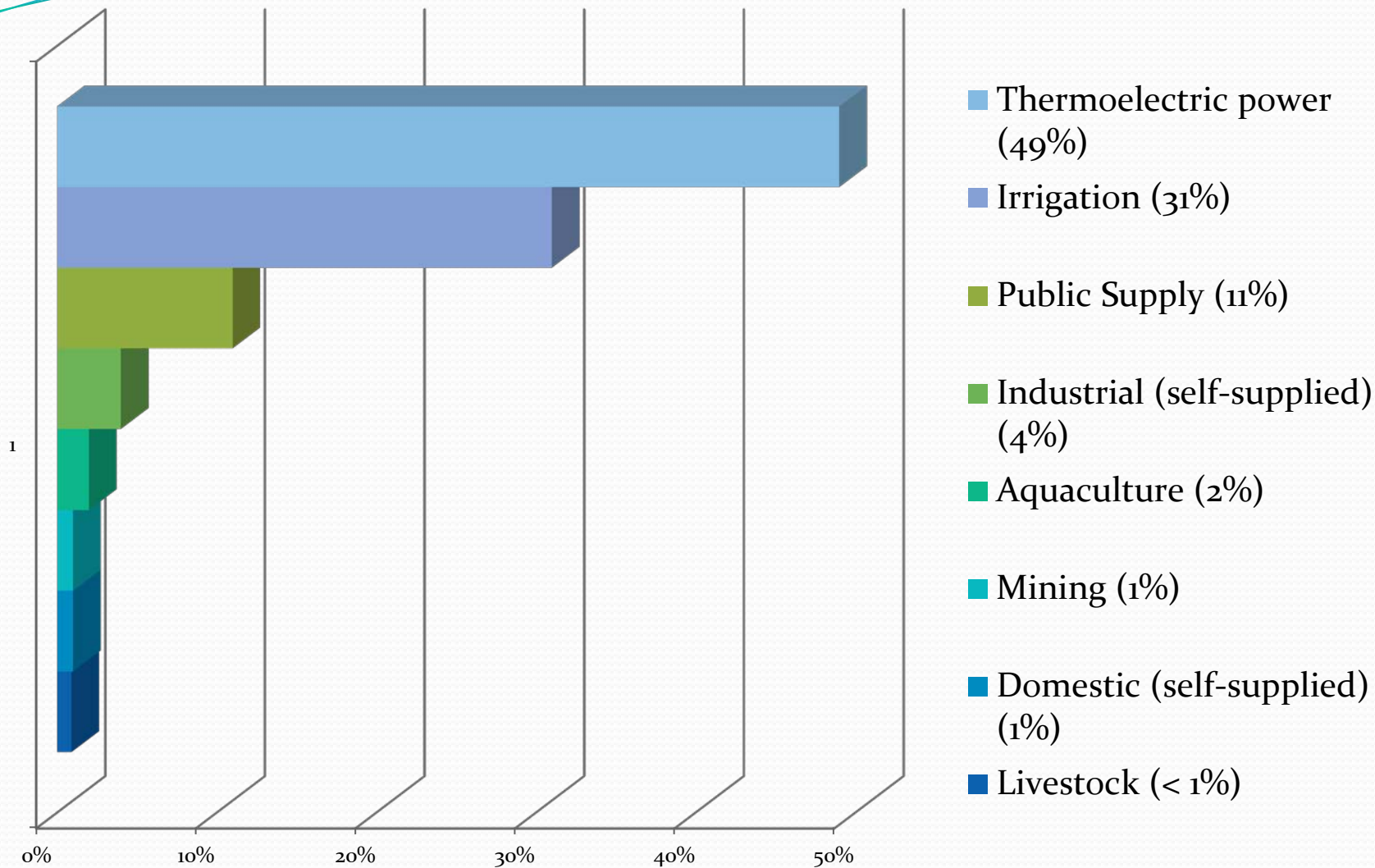
- Legacy law
 - The “lords of yesterday, a battery of 19th century laws, policies, and ideas that arose under wholly different social and economic conditions, . . . remain in effect owing to inertia, powerful lobbying forces and lack of public awareness.”
 - Charles F. Wilkinson
- Who should make the necessary changes?
 - Courts? The creators of the rules.
 - Legislatures? The democratically-elected representatives of the people.

Where is the world's water?

- Oceans (97%)
- Glaciers & ice caps (2%)
- Lakes, rivers, vegetation and the atmosphere (0.5%)
- Groundwater (0.6%)
 - Freshwater is a renewable, flowing resource
 - Except for some groundwater
- US water withdrawals (2005): 410 billion gallons per day

Water withdrawals -- Purposes

- Public supply
- Industrial (self-supplied)
- Thermoelectric power
- Irrigation
- Aquaculture
- Domestic (self-supplied)
- Mining
- Livestock



Percentage of Total Water Withdrawals

Water Withdrawals in Iowa -- 2005

- Total withdrawals: 3,370 million gpd
- Groundwater withdrawals: 683 million gpd
- Surface water withdrawals: 2,680 million gpd

Water use in Iowa

- Uses

- Thermoelectric – 2,530 million gpd
- Public supply – 398 million gpd
- Industrial (self-supplied) – 190 million gpd
- Livestock – 116 million gpd
- Mining – 47.4 million gpd
- Domestic (self-supplied) – 34.6 million gpd
- Irrigation – 33.3 million gpd
- Aquaculture – 16.4 million gpd

Consumptive or non-consumptive?

- Thermoelectric power?
- Public supply?
- Industrial?
- Irrigation?

Water Law -- Overview

- Surface water allocation systems in US
 - Riparian rights
 - Prior appropriation
 - Hybrid
- Federal authority
- Groundwater allocation
- Interstate water allocation

Riparian Rights I

- Eastern (humid) states
- Ownership of *riparian* or *littoral* land
- Give rights to
 - Access water surface for boating, hunting, fishing
 - Operate water driven machinery (mills)
 - Consume water from the river or lake

Riparian Rights II

- Water usage rights of riparians -- traditional
 - “natural flow” doctrine
 - May use water, so long as flow is not significantly diminished in quantity or quality
 - Other limits
 - Transport of water to non-riparian land is prohibited
 - Transport of water out of the watershed is prohibited

Riparian rights III

- Today, all riparians have right of “reasonable use”
 - In theory, proportional sharing of shortages
- Jurisdictional variations
 - Preference for so-called “natural uses”
 - location of use generally not restricted
- Administered through permit system

Prior Appropriation

- The Law of the (arid) West
- Why not riparian rights?
 - Lands were publicly owned (i.e. riparian dwellers were not riparian owners)
 - Farms and mines were often far from water source
- Miners adopted a 'first-come, first-serve' rule for mining claims and water.
 - Courts enforced and developed this approach

Prior Appropriation II

- Traditional elements of an ‘appropriation’
 - *Intent* to apply water to a beneficial use
 - an actual *diversion* of water from a natural source
 - *application* of the water to a *beneficial use* with a reasonable time
- If a claim becomes “perfected” by actual use, priority ‘relates back’ to formation of intent
 - Generally must show actual work toward a diversion to establish intent

Prior Appropriation III

- Water right is the amount of water taken and beneficially used
 - “Beneficial use is the basis, the measure, and the limit of the appropriator’s right.”
- Western streams are generally over-appropriated
- Priority determines the value of appropriative rights

Hybrid states

- Many Western states are “pure appropriation” states – statutes or constitution
- Some states, for historical reasons, have a mixed system
 - States along the 100th meridian
 - California, Oregon, Washington
- Others
 - Louisiana
 - Hawaii

Federal authority

- Control over navigable waters
 - Commerce clause
 - State ownership of river beds
- Control over water resources through water projects: navigation, flood control, agriculture, power generation
- Environmental laws
- Reserved water rights & public land

Groundwater I

- Absolute ownership doctrine
 - a/k/a the “English Rule” or the “Law of the Biggest Pump”
- Rationale
 - Ancient rights of landowners: airspace above and soil beneath
 - Groundwater sources and movements “are **so secret, occult, and concealed**” that any effort to regulate by law would result “in **hopeless uncertainty**, and would, therefore, be **practically impossible.**” Frazier v. Brown (Ohio 1861)

Groundwater II

- Efforts to judicially regulate groundwater use
 - Correlative rights
 - Prior appropriation
 - American “reasonable use”
 - But, in many states, use must be on overlying land
 - Right to use applies, even if there is some harm to others
- Permit systems widely in place
 - But may still rest on these rules
 - May not apply to smaller users

Interstate water allocation

- Equitable apportionment
- Interstate compact