

## Water Law outline, Fall 2005. Professor Barbara Cosens.

### I. ALLOCATION REGIMES

#### A. SURFACE WATER

##### 1. Riparian

###### a) Acquisition

(1) **Becoming a riparian:** you must be "abutting" a watercourse or water body-- i.e., you must be in the "riparian zone."

(a) Abutting: either the high-water or the low-water mark could be determinative--you must check the jurisdiction you're in.

(b) Riparian zone: the area that parcels much touch to be riparian.

###### (2) Title rules

(a) Unity of title: any tracts contiguous to the abutting tract are riparian if all of them are held under single ownership regardless of the times when the various tracts were acquired.

i) This rule favors growing water uses and works well where there's abundant water.

ii) This rule is the easier of the two for administering water rights, because you don't have to trace title back.

(b) Source of title: water may be used only on land which has been held as a single tract throughout its chain of title.

i) This rule prevents riparian land from being expanded, and works well where there's scarce water.

ii) Under this rule, subdivision will shrink riparian land. A study in Wisconsin found that unity of title would encompass 64% more land than source of title.

###### b) Use

###### (1) Natural versus artificial uses

(a) *Kundel Farms v. Vir-Jo Farms* (Iowa 1991) (p114): natural uses preferred over artificial uses.

i) Facts: K, upstream from V-J, modifies a culvert to create a wetland for hunting. V-J, who needs water for stock, complains because the modified culvert stops the flow at times.

ii) Rule: the court recognizes a hierarchy: natural uses are preferred over artificial uses, and so a riparian can only apply water to an artificial use if it does not interfere with natural uses on the stream and must be reasonable with respect to other artificial uses on the stream.

iii) Application: a wetland is an artificial use, and so must yield to V-J's

(b) Roscoe Pound on natural and artificial uses: Pound argues that "natural" uses are simply those that involve taking only small quantities, and that "artificial" uses are those that involve diverting large quantities. This checks out, because the "natural" use preference has not been extended to municipalities supplying domestic water to their inhabitants.

###### (2) Reasonable use

(a) The English Rule: no interference with natural flow.

- (b) The American Rule: reasonable use.
- (c) *Mason v. Hoyle* (Conn. 1888) (p117): reasonable use required.
  - i) Facts: H, an upstream mill owner, is storing water so that he can run his mill all year, and so is stopping flow to downstream mills.
  - ii) Rule: the Court adopts the American, reasonableness rule.
    - a. Factors in assessing reasonableness:
      - 1) Equality: whether the use is equal in comparison to other users' uses.
      - 2) Appropriateness: whether the use is "adapted to the character and capacity of the stream."
      - 3) Natural flow: whether the use permits the usual flow of the stream.
      - 4) Drought: whether there is seasonal or otherwise recurring drought or abundance.
      - 5) Custom: what the immemorial local custom of use is upon the stream.
      - 6) Cost-benefit: the benefit to the user versus the injury to other riparians.
    - iii) Application: H's use isn't reasonable. The court also considers the fact that H had steam power available to run his mill.
- (d) *Harris v. Brooks* (Ark. 1955) (p125): reasonable use required.
  - i) Facts: P, a resort, and D, a rice farm, are both on a lake. D's irrigation is lowering the level of the lake.
  - ii) Rule: the court sets up a hierarchy of uses: domestic uses have first priority and are per se reasonable, then come artificial uses, which are per se unreasonable if they completely destroy other uses but are subject to a reasonability balancing otherwise.
  - iii) Application: D must make sure the lake stays at its normal level.
  - iv) Compare *Hoover v. Crane* (Mich. 1960) (p131): where Ps could not prove that it was D's irrigation that was causing lake level to go down, D's use wasn't unreasonable. P could still return to the court to show that it was, in fact, D's irrigation causing the lake's recession.
    - a. Factors for assessing reasonableness:
      - 1) What the use is for
      - 2) Extent of the use
      - 3) Duration of the use
      - 4) Necessity of the use
      - 5) Application
      - 6) Nature and size of the stream
      - 7) Other uses
      - 8) Extent of the injury
- (e) *Pyle v. Gilbert* (Ga. 1980) (p140): recognizing that natural flow rule, modified by reasonable use requirement, is the law in Georgia.

- (f) Factors for assessing reasonableness, compiled:
  - i) Equality (*Mason*)
  - ii) Interference with natural flow (*Mason*)
  - iii) Drought (*Mason*)
  - iv) Custom (*Mason*)
  - v) Extent of the use (*Hoover*)
  - vi) Duration of the use (*Hoover*)
  - vii) Necessity of the use (*Hoover*)
  - viii) Other uses (*Hoover*)
  - ix) Purpose of the use (Restatement, *Hoover*)
  - x) Suitability of the use to the stream (*Mason*, Restatement, *Hoover*)
  - xi) Economic value of the use (Restatement)
  - xii) Social value of the use (Restatement)
  - xiii) Extent of harm (*Mason*, Restatement, *Hoover*)
  - xiv) Practicality of avoiding harm (Restatement)
  - xv) Practicality of adjusting quantity use (Restatement)
  - xvi) Protection of existing uses (Restatement)
  - xvii) Justice of requiring other use to bear the loss (Restatement)

### (3) Nonriparian use

- (a) *Pyle v. Gilbert* (Ga. 1980) (p140): allowing use of water on nonriparian land if granted by riparian to the nonriparian.
  - i) Justification:
    - a. Restatement, which in turn notes that riparian rights are property rights subject to transfer and that water law should be utilitarian.
    - b. Availability of condemnation: since Georgia can condemn water rights and thereby acquire them, nonriparians should be able to acquire them by grant.
- (b) Restatement (Second) of Torts: allows nonriparian use; but riparians not subject to liability for water use that harms a nonriparian, whereas nonriparians are subject to liability for harm to riparians.

## 2. Prior appropriation

### a) Acquisition

#### (1) Principles

- (a) Intent requirement: the intent requirement has been satisfied in many ways, such as a surveyor marking out location of ditches, or board of directors approval of a development plan when accompanied by some physical manifestation of intent. Colorado requires that intent be manifested by an overt act that gives adequate notice to all interested third parties. A reconnaissance walk was not enough in one case.
- (b) Physical diversion requirement
  - i) *Reynolds v. Miranda* (N.M. 1972) (p162): intent to beneficially use, plus actual beneficial use, plus a man-made diversion are all required to claim water rights in New Mexico.

- a. Facts: D historically used grass nourished by water from a wash as a pasture; a natural arroyo formed and diverted the water elsewhere and grass diminished. Now D wants to use drill wells for irrigation, and claims rights to the wash (now arroyo) water.
  - b. Rule: actual, man-made diversion, plus intent to apply and actual application to a beneficial use is required to claim water rights in New Mexico. Even if an actual diversion was not be required in every case, at the very least there must be an intent to use the water plus an actual application to beneficial use.
  - c. Application: D cannot show an actual diversion, obviously, but also can't even show any intent to use the water--cutting grass and using it for pasture is not enough to show intent.
- ii) Stockwatering: this has been a traditional exception to the physical diversion requirement, including in Idaho (see *R.T. Nahas v. Hulet* (Idaho 1983) (n3p164)).
  - iii) Instream uses
    - a. *State v. United States* (Idaho 2000) (p2:4p): the U.S. can't get instream rights for a wildlife refuge (unless the state of Idaho gets them for it by permit).
- (c) Relation back
- i) *Sand Point Water & Light v. Panhandle Development* (Idaho 1905) (p164): under the posted notice statute, if the party works on the diversion with due diligence and finishes the diversion and applies the water to a beneficial use, then the appropriation is complete and the priority date relates back to the posting of notice (not the date of actual diversion).
- (d) Due diligence
- i) *Sand Point Water & Light v. Panhandle Development* (Idaho 1905) (p164): enough diligence, under the posted notice statute, where party began work 29 days after posting and filing notice and continuously worked, daily, after that.
  - ii) *Denver v. Northern Colorado Water Conservancy District* (Colo. 1954) (p168): [muni. with lots of money can't hold up projects in an entire basin without really demonstrating work]
- (2) **Methods**
- (a) **Diversion and application to a beneficial use**
    - i) You can still do this in Idaho for a home well and stockwatering.
  - (b) **Notice and Diversion**
  - (c) **Permit**
    - i) The common law methods of diversion and notice became a problem because there was no central recording and it was hard to plan for the future. So, states created permit systems, which have caused appropriation and riparian regimes to merge somewhat.
    - ii) **Idaho**
      - a. Constitutional provisions

- 1) Article XV, s 3: "The right to divert and appropriate the unappropriated waters of any natural stream to beneficial uses shall never be denied."
  - 2) Article XV, s 7: "There shall be constituted a Water Resource Agency."
- b. Statutory provisions**
- 1) I.C. s 42-103: water rights shall only be acquired by appropriation under the application, permit and license procedure.
  - 2) I.C. s 42-201: water rights an only be acquired by application, permit, and license procedure. (1903)
  - 3) I.C. s 42-402:
    - (1) You have to apply for a water right before commencing construction.
    - (2) Municipal future needs applications.
    - (3) Storage applications.
    - (4) Applications must have a plan and map.
    - (5) Large diversion applications.
    - (6) Agricultural purposes applications.
    - (7) Filing fee must be paid.
  - 4) I.C. s 42-202B: Definitions
  - 5) **I.C. s 42-203A: main permitting statute**
    - (1) Upon receipt of new application, IDWR must prepare a notice.
    - (2) and (3) And publish it.
    - (4) Anyone can file a written protest with IDWR and get a hearing.
    - (5) Protest or not, IDWR can reject, or partially approve, or grant with conditions, any application:
      - that will reduce the quantity of water under existing rights
      - where the water supply is insufficient for the purpose sought
      - where the application isn't made in good faith, or is made for delay or speculation
      - where the applicant doesn't have enough money to do the work
      - that will conflict with the local public interest
      - that is contrary to the conservation of water resources in Idaho
  - 6) I.C. s 42-204: examination of permit procedures, and commencement of work:
    - IDWR has to require that work be completed within five years or less of approval
    - you can get an extension if federal government red tape or litigation has delayed you-- but the extension is only for the

amount of actual delay

- you can get up to seven years extension for really big projects
- you can get an extension for big reservoir projects
- you can get an extension if you're the U.S.
- in all other situations, you can get one extension, up to five years, for good cause
- for permits for 25 cfs or less, you have to start work within one year, and you have to work with due diligence and uninterruptedly to completion.

7) I.C. s 42-212: private waters: IDWR can't issue a permit to divert waters of lakes less than 5 acres big that are located entirely on private property-- except to the landowner or with the landowner's written permission.

- c. *Nielson v. Parker* (Idaho 1911) (p3:1p): the court says that despite the 1903 permit statute, the diversion and beneficial use method still worked. The priority date of a permit relates back to the application date; the diversion plus beneficial use priority date is the date of application to a beneficial use.
- d. *Washington State Sugar Co.* (Idaho 1915) (p3:3p): the granting of a permit gives no water right-- you have to still substantially comply with every provision of the permit statute and every condition of the permit. But, once you've complied, you get a right that relates back to the issuance of the permit.
- e. *Hardy v. Higginson* (Idaho 1993) (p3:5p): the court says that amendments to a water right permit are subject to a local public interest inquiry even though the amendment statute (42-211) doesn't expressly say so-- the court says this is clear from the legislative scheme which requires a public interest inquiry for initial permitting (42-203A) and change of use (42-222).
  - 1) The court also makes it clear that by applying for a permit, you only get an "inchoate" right, "which will ripen into a legal and complete appropriation by compliance with the statutory steps" and "is not an appropriation of the public waters of the state. It is not real property. It is merely a consent given by the state to construct and acquire real property."

## b) Use

### (1) Priority

- (a) *Cary v. Cochran* (Neb. 1940) (p180): upstream juniors may use water out of priority if the water would not reach downstream seniors in any event (due to losses).

### (2) Scope of right

- (a) *Crowley v. District Court* (Mont. 1939) (p185): a senior's method of diversion is protected from interference from juniors--the water right is a right "to divert and use the water, not merely to have it left in the streambed."

- i) Facts: juniors put in a dam, and release the amount of water that a downstream senior is entitled to--but its not enough water to *get* that amount of water to the downstream senior.
  - ii) Rule: the court says that the senior's water right protects his method of diversion, because it's a customary one even though it's not the most efficient.
    - a. One idea that's behind this is that juniors take the river as they find it.
  - iii) Application: the juniors must pay damages to the senior--enough so that he can pay for what's needed to get the amount of water he's entitled to to where he needs it.
  - iv) Compare *Schodde v. Twin Falls Land & Water* (1912) (n1p188): a senior's use of waterwheels was not protected from a dam that makes the waterwheels useless. The Court says that the waterwheels are unreasonable in light of their worth--serving just one small farm--compared to the worth of the dam--supplying irrigation to 300K acres.
    - a. *Crowley* distinguishes *Schodde* by saying that it was about the right to the *force* of the water, not to a method of diversion. This is a poor distinction--but shows that Montana does not look at reasonableness in diversion-method-protection cases, whereas Idaho does.
- (b) *Green v. Chaffee Ditch* (Colo. 1962) (p233): where a user held a paper right to 16 cfs, but where the user had only ever applied 8 cfs to beneficial use, the user only actually had a right to 8 cfs.
- (c) Water quality: generally, water quality is left to be controlled by (mainly federal) regulatory programs.
- i) *A-B Cattle v. United States* (Colo. 1978) (p199): the court avoids addressing whether water quality is part of a water right.
    - a. Note that if the quality change was that the water now contained arsenic, the court would either have to address the quality issue or else the suit would have been brought in tort.
- (3) Beneficial and reasonable use**
- (a) *Grimes, State Dept. of Ecology v.* (Wash. 1993) (p190): beneficial use was a part of Washington appropriation doctrine from the beginning, and so will be applied to a seniors rights that predate codification and later amendment.
    - i) Facts: G acquired his water right in 1906, before the Washington Water Code was adopted in 1917 and later amended in 1971.
    - ii) Rule: the court applies the beneficial use requirement, as it was part of the prior appropriation doctrine prior to the Washington Water Code. However, certain aspects of "beneficial" use were not part of the doctrine until after codification, and so won't be applied to the pre-Code water right.
      - a. Beneficial use: the court says that "beneficial use" encompasses two principal elements:

- 1) The purposes for which the water is used: only certain activities will be recognized as beneficial uses.
  - 2) The measure of the water right: an appropriator is entitled to the amount necessary for his beneficial use. To determine this amount, the court looks to "reasonable use," which is in turn a matter of waste and "water duty" (the amount of water needed to irrigate one acre of a particular crop). Reasonableness does not turn on historic use, and includes custom as only a factor. The court discusses "reasonable efficiency" as a test, looking to balance competing needs of efficiency and maximum utilization with physical and economic limitations.
- (b) Historic use: under this rule, a court will look to what an appropriator has used historically. This is used in Montana, but not in Washington, e.g. (see *Grimes*).
- (c) Transportation losses
- i) *Crowley v. District Court* (Mont. 1939) (p185): a senior's method of diversion is protected from interference from juniors--the water right is a right "to divert and use the water, not merely to have it left in the streambed."
    - a. Facts: juniors put in a dam, and release the amount of water that a downstream senior is entitled to--but its not enough water to get that amount of water to the downstream senior.
    - b. Rule: the court says that the senior's water right protects his method of diversion, because it's a customary one even though it's not the most efficient.
      - 1) One idea that's behind this is that juniors take the river as they find it.
    - c. Application: the juniors must pay damages to the senior--enough so that he can pay for what's needed to get the amount of water he's entitled to to where he needs it.
    - d. Compare *Schodde v. Twin Falls Land & Water* (1912) (n1p188): a senior's use of waterwheels was not protected from a dam that makes the waterwheels useless. The Court says that the waterwheels are unreasonanle in light of their worth--serving just one small farm--compared to the worth of the dam--supplying irrigation to 300K acres.
      - 1) *Crowley* distinguishes *Schodde* by saying that it was about the right to the *force* of the water, not to a method of diversion. This is a poor distinction--but shows that Montana does not look at reasonableness in diversion-method-protection cases, whereas Idaho does.
  - ii) *Glen Dale Ranches v. Shaub* (Idaho 1972) (n3p190, pXXX): an appropriator is not entitled to divert approximately twice the amount needed to irrigate in order to compensate for transportation losses.
  - iii) *A-B Cattle v. United States* (Colo. 1978) (p199): diversion methods must be reasonable--an appropriator is "not entitled to command the

whole or a substantial flow of the stream merely to facilitate his taking the fraction of the whole flow to which he is entitled" (citing *Bender* and *Schodde*).

- a. Facts: after a dam is built, appropriators on an irrigation get clear water that doesn't include the silt that used to prevent the ditch from leaking.
- b. Rule: the court rejects the appropriators' argument that silt is part of water quality and so they are entitled to keep it as part of their water right, and instead says that a leaky ditch is an unreasonable diversion method and won't be protected.
  - 1) This result is based in part on the policy of maximum utilization of water.

#### (4) Reuse

- (a) Efficiency: in the west, irrigation efficiency is about 50%, and can be as low as 25%. However, inefficient irrigation often means more return flow, whereas efficiency increases may increase consumption and decrease return flow, leaving no net gain in water supply.
  - i) *Shelton Farms, Southeastern Colorado Water Conservancy District v. Colo.* 1974 (p219): the court says that you don't get a right to any water you help to salvage by removing water-loving vegetation (phreatophytes).
    - a. To allow that would be to allow a windfall, the court says, because the salvagers have added nothing new; also, it would lead to widespread removal of phreatophytes and could result in a barren wasteland.
- (b) *Estate of Steed v. New Escalante Irrigation Co.* (Utah 1992) (p208):
  - i) Facts: by increasing the efficiency of its irrigation, D deprives P of the runoff it had been relying on.
  - ii) Rules:
    - a. First of all, runoff, waste, and seepage may be subject to reappropriation, but the appropriator can't insist on continued waste unless the runoff has returned to the stream or commingled with the water table.
      - 1) This is the rule in most states.
      - 2) Note how this goes against the "juniors take the stream as they find it" principle.
    - b. Secondly, the first user is entitled to the efficiency improvements it can implement--in so holding the court rejects P's argument that there has been no net efficiency increase and notes that the adopted rule promotes conservation by incentivizing each user to increase efficiency.
      - 1) States have gone different ways on whether efficiency savings can be applied to new crops: Montana says you can, Oregon says you can use half, Arizona says you cannot, and California lets you sell it.

(c) *Fulton Irrigating Ditch, Denver v.* (Colo. 1972) (p215):

- i) Facts: D irrigating company gets its water from Denver's sewage, but now Denver wants to "successively use" (for a new purpose, as opposed to "reuse," which is for the same purpose) and dispose (sell) its sewage.
- ii) Rule: Denver can successively use and dispose of its water, both by specific statutory authorization and at common law which says that a water developer is entitled to consume all of the water it develops and so therefore must be able to reuse, successively use, or dispose of it to.
  - a. This furthers a policy, the court says, of encouraging the minimization of water taken from the western slope.
  - b. Note that generally a user must show "no injury" when changing use, even if a senior user. Here, however, the court thinks it's important that Denver paid to import all of the water.

**(5) Storage**

(a) One-fill rule: under this rule, a reservoir may be filled only once per year. Carryover storage may or may not be debited against the filling.

**(6) leftovers**

**(a) takings**

- i) *Grimes, State Dept. of Ecology v.* (Wash 1993) (p190): the court says that a vested water right is private property protected by the Fifth Amendment, but the "beneficial use" requirement is a permissible limitation.

**c) Change**

**(1) Taxonomy of changes in use**

- (a) Point of diversion (POD)
  - i) Additional points of diversion
- (b) Point of return
- (c) Place of use (POU)
  - i) Place of storage
- (d) Type of use
- (e) Period of use

(2) *Green v. Chaffee Ditch* (Colo. 1962) (p233): a user who sold half of its 16 cfs paper right found out that it sold all of its actual right when the court determines that it only had a right to 8 cfs.

**(a) Rules:**

- i) No injury: changes are permitted only when the changer can prove that other users on the stream will not be harmed.
- ii) Limit to former actual usage: the extent of needed use in the original location is the criterion in considering change of point of diversion.
  - a. The users could probably not have gotten around this by developing the entire paper right just before transfer, because of the due diligence requirement.
  - b. Note that because the use is also changing in type from irrigation

to municipal, the court caps usage by rate rather than amount, since the use will now be year-round rather than seasonal.

- (3) *Orr v. Arapahoe Water and Sanitation District* (Colo. 1988) (p240): the court says you can only transfer the amount of historic use.
- (a) Facts: users want to change from irrigation to wells for municipal purposes.
  - (b) Rule: "the right to change a point of diversion is limited in quantity by historical use at the original decreed point of diversion" and "to the duty of water with respect to the original place of use." A senior can't enlarge the historical use by changing the point of diversion, in other words.
    - i) The historical use limitation exists primarily to protect juniors.
- (4) *Metro Denver Sewage Disposal District v. Farmers Reservoir* (Colo. 1972) (p247): a municipality isn't subject to the "no injury" rules on change of use!
- (a) Facts: Denver wants to change the point of return of its effluent, from above P to below P.
  - (b) Rule: changes of points of return of waste water are not governed by the same rules as changes of points of diversion--there is no vested right in downstream appropriators to maintenance of the same point of return of irrigation waste water.
    - i) Is this a true loosening of the no injury rule, or just a special exception for large municipalities??
  - (c) Compare *Boulder & Left Hand Ditch, Boulder v.* (Colo. 1976) (p249): the court limits *Metro Denver* by saying it dealt only with waste water and not with return flow generally.
    - i) Facts: one ditch company begins using some of another ditch company's water (with permission), resulting in some return flow ending up in another watershed.
    - ii) Rule: this is a change of place of use and is therefore subject to the no injury rule--it does not fall under *Metro Denver* because its mere return flow, not waste water.

(5) **Idaho**

(a) IC 42-108: change provision--standards

(b) IC 42-222(1): change provision--application procedures

Comment: IC 42-222: Change in point of diversion, place of use, period of use, or nature of use of water under established rights.

(1) Any person entitled to the use of water whether represented by license issued by the department of water resources, by claims to water rights by reason of diversion and application to a beneficial use as filed under the provisions of this chapter, or by decree of the court, who shall desire to change the point of diversion, place of use, period of use or nature of use of all or part of the water, under the right shall first make application to the department of water resources for approval of such change . . . Upon receipt of such application it shall be the duty of the director of the department of water resources to examine same, obtain any consent required by section 42-108, Idaho Code [the other change provision], and if otherwise proper to provide notice of the proposed change in the same manner as application under section 42-203A, Idaho Code [notice and protest provision]. Such notice shall advise that anyone who desires to protest the proposed change shall file notice of protests with the department within ten (10) days of the last date of publication.

Upon the receipt of any protest it shall be the duty of the director of the department of water resources to investigate the same and to conduct a hearing thereon . . . .

When the nature of use of the water right is to be changed to municipal purposes and some or all of the right will be held by a municipal provider to serve reasonably anticipated future needs, . . . that portion of the right held for reasonably anticipated future needs at the time of change shall not be changed to a place of use outside the service area . . . .

The director of the department of water resources shall examine all the evidence and available information and shall approve the change in whole, or in part, or upon conditions, provided no other water rights are injured thereby, the change does not constitute an enlargement in use of the original right, the change is consistent with the conservation of water resources within the state of Idaho and is in the local public interest as defined in section 42-203A(5), Idaho Code, and the new use is a beneficial use, which in the case of a municipal provider shall be satisfied if the water right is necessary to serve reasonably anticipated future needs as provided in this chapter. The director may consider consumptive use, as defined in section 42-202B, Idaho Code, as a factor in determining whether a proposed change would constitute an enlargement in use of the original water right. The director shall not approve a change in the nature of use from agricultural use where such change would significantly affect the agricultural base of the local area. The transfer of the right to the use of stored water for irrigation purposes shall not constitute an enlargement in use of the original right even though more acres may be irrigated, if no other water rights are injured thereby.

**d) Loss**

(1) *Jenkins v. State, Dept. of Water Resources* (Idaho 1982) (p254):

(a) Facts: stream A irregularly flows into stream B. J has some rights on both stream A and B, and so argues that he should be able to divert everything from stream B.

(b) Rule:

i) Abandonment: a common law doctrine that is very rarely enforced; it has two elements:

- a. Intent to abandon
- b. Actual surrender

ii) Forfeiture: a statutory rule that you lose your water rights if you don't make beneficial use of them for five continuous year.

a. Defenses to forfeiture:

- 1) Extension for good cause
- 2) Wrongful interference
- 3) Resumed after five years but before any third-party claims

(c) Application: J never diverted from stream A, A does not flow regularly into B, J has not tried to get water from A for 18 years, and J has not raised any defenses to forfeiture; therefore J's rights from A have been statutorily forfeited.

**(2) Abandonment**

(a) *Fulton Irrigating Ditch, Denver v.* (Colo. 1972) (p215): Denver didn't abandon its water by sending it to consumers' taps.

**(3) Forfeiture**

- (a) *Hagerman Water Right Owners, State v.* (Idaho 1997) (p4:10p): IC 42-222 (2) allows for partial forfeiture of water rights.

Comment: IC 42-222(2): All rights to the use of water acquired under this chapter or otherwise shall be lost and forfeited by a failure for the term of five (5) years to apply it to the beneficial use for which it was appropriated . . . .

- i) The court reaches this result by first determining that the plain language of the statute is ambiguous and so then looking at the agency practice (what folks are relying on) and policy (that otherwise a user could hold his entire right by only using a part of it and that recognition of partial forfeiture promotes economic use of water).

e) **Idaho**

(1) **Basics**

- (a) *Drake v. Earhart* (Idaho 1890) (p2:1p): prior appropriation is the allocation regime in Idaho.

- i) Facts: D, who does not abut the stream, has posted notice and diverted, claiming 600 in. from a stream with only 150 in. available. E is on the stream and wants some water.

- ii) Rule: the court recognizes prior appropriation as the rule in Idaho.

(b) Idaho Constitution Article XV

- i) Section 1: the state can regulate water use.

Comment: Use of waters a public use.-- The use of all waters now appropriated, or that may hereafter be appropriated for sale, rental or distribution; also of all water originally appropriated for private use, but which after such appropriation has heretofore been, or may hereafter be sold, rented, or distributed, is hereby declared to be a public use, and subject to the regulations and control of the state in the manner prescribed by law.

- a. Other states actually say that waters are *owned* by the state.

- ii) Section 3: recognizes prior appropriation as the law in Idaho.

Comment: Water of natural stream -- Right to appropriate -- State's regulatory power -- Priorities.-- The right to divert and appropriate the unappropriated waters of any natural stream to beneficial uses, shall never be denied, except that the state may regulate and limit the use thereof for power purposes. Priority of appropriation shall give the better right as between those using the water; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall (subject to such limitations as may be prescribed by law) have the preference over those claiming for any other purpose; and those using the water for agricultural purposes shall have preference over those using the same for manufacturing purposes. And in any organized mining district those using the water for mining purposes or milling purposes connected with mining, shall have preference over those using the same for manufacturing or agricultural purposes. But the usage of such subsequent appropriators shall be subject to such provisions of law regulating the taking of private property for public and private use, as referred to in section 14 of Article I of this Constitution.

(2) **Acquisition**

- (a) *State v. United States* (Idaho 2000) (p2:4p): the U.S. can't get instream rights for a wildlife refuge (unless the state of Idaho gets them for it by permit).

- i) Facts: the U.S. wants water for a wildlife refuge--there would be no diversion because it would be an instream use.

- ii) Methods of acquisition in Idaho:
  - a. Before 1971
    - 1) "Statutory method": apply for a permit.
    - 2) "Constitutional method": diversion + application to a beneficial use.
  - b. After 1971: permit only (see IC 42-103).
- iii) Diversion: generally, an actual diversion and beneficial use is required.
  - a. Exceptions:
    - 1) Stock watering.
    - 2) State entities may hold instream uses for the benefit of Idahoans.
  - b. The diversion requirement serves to provide notice to others.
- iv) Application: the U.S. can't claim an instream use under the limited exception because those still require a permit, and the U.S. hasn't asked Idaho to apply for a permit.

### (3) Reasonable and beneficial use

#### (a) Transportation losses

- i) *Glenn Dale Ranches v. Shaub* (Idaho 1972) (p2:8p): an appropriator cannot have unreasonable conveyance loss, and if so must pay to make the transportation more efficient.
  - a. Facts: D is losing about half of the water he's diverting due to his leaky ditch.
  - b. Rule: due to a public policy against waste, users cannot divert to compensate for unreasonable loss; such a user must "construct flumes, pipes, or other lining if necessary to prevent such unreasonable loss." Thus, water is measured for reasonableness at point of diversion, not at place of use.
    - 1) In looking at beneficial use, the court looks both, then, at the type of use and the reasonableness of the use (no waste).

#### (4) Future needs

- (a) *Beus v. Soda Springs* (Idaho 1940) (p2:11p): municipalities are special--they can acquire water for future needs and not have to divert the water.
  - i) Facts: the city acquired 100 in. in 1885, 125 in. in 1892, and 87.5 in. in 1898. B got 100 in. in 1895. So, B wants to find a way to get some of the city's earlier water, arguing forfeiture.
  - ii) Rules:
    - a. Municipalities are special--they may acquire water for future needs and doesn't have to irrigate or divert. This is because cities have the power, by statute, to acquire and hold water for future needs.
    - b. Municipalities don't have to use their water within their city limits--by statute they can supply excess water to others.

### 3. Reserved rights

- a) Comparison of appropriative and reserved water rights

- (1) Appropriative rights:
  - (a) Quantity: beneficial use
  - (b) Drought: allocation in priority
  - (c) Future needs: new water rights must be acquired and they will be junior (with the possible exception, in some jurisdictions, of special future needs rules for municipalities)
- (2) Reserved rights:
  - (a) Quantity: the amount necessary for the purpose of the reservation (e.g., practically irrigable acreage, says federal law with respect to Indian reserved water rights)
  - (b) Drought: allocation in priority (priority date is the date of reservation, though)
  - (c) Future needs: included
- b) **Indian**
  - (1) Jurisdiction: the McCarran Amendment gives state courts jurisdiction to adjudicate Indian reserved rights (*Colorado River Water Conservation Dist. v. U.S.* (1976) (n3p854)).
  - (2) Power to reserve
    - (a) *Winters v. United States* (1908) (p101): the federal government can reserve water rights by implication, the Court says. With respect to Indians, these are rights granted *to* the U.S. by the Indians.
    - (b) *Arizona v. California* (1963) (p842): the federal government claimed reserved water from the Colorado system for Indian reservations. The Court says that the federal government *can* reserve water for Indians after Arizona's statehood, and that it *did*.
      - i) Says that it won't use equitable apportionment for determining water rights between Indian reservations and states, because Indian reservations aren't states and instead are governed by statutes and executive orders.
      - ii) Says that the federal government *can* reserve water for Indians after Arizona became a state.
      - iii) Says that the federal government *did* reserve water for the Indian reservations.
      - iv) Establishes the Practically Irrigable Acreage standard for determining the quantity of Indian reserved rights.
  - (3) Quantification
    - (a) PIA
      - i) *Arizona v. California* (1963) (p842): the Court establishes the Practically Irrigable Acreage (PIA) method for determining the quantity of Indian reserved rights ("the only feasible and fair way by which reserved water for the reservations can be measured is irrigable acreage").
      - ii) *In re General Adjudication in the Big Horn* (Wyo. 1988) (p885): the Wyoming Supreme Court, adjudicating water rights, including Indian

reserved rights, on the Big Horn system, determines that the relevant treaties intended to reserve for only agricultural purposes, and did not reserve groundwater. As to quantity, the court employed the PIA standard.

- a. PIA analysis: the court employs a two-part analysis.
  - 1) The PIA must be susceptible of sustained irrigation-- this includes: (1) proof of arability and (2) proof of engineering feasibility.
  - 2) The PIA must be irrigable at reasonable cost (this requires proof of economic feasibility).

**(b) Homeland standard**

- i) *In re Adjudication of Gila River System* (Ariz. 2001) (Cosens article): the Arizona Supreme Court determines that the Indian reservation's purpose was to establish a homeland, and that the measure of the water right is thus specific to the needs, wants, plans, cultural background, and geographic setting of the particular reservation--and can't be defined by single measure like PIA.
- ii) Cosens article, misc:
  - a. Federal law determines the scope of Indian reserved rights.
  - b. The PIA is inequitable: it sometimes awards too much water, sometimes too little.
  - c. PIA also prevents economic diversity and change in use.
  - d. However, moving from PIA to the homeland standard disturbs long-time reliance on PIA--people have invested in determining PIA for different places.
  - e. Also, going from PIA to homeland will change the calculation, for settlement purposes, of recommended levels of federal funding for water development on Indian reservations.

**(4) The Nez Perce Settlement**

- (a) Nez Perce component: not based on practically irrigable acreage; \$90m for development of water rights.
- (b) Salmon/Clearwater component: off-reservation hunting and fishing rights become instream flow rights to maintain habitat (but this is a weak protection since the instream rights are held by the state).
- (c) Snake River flow component: provides money to purchase flows to maintain the salmon habitat (an ESA issue).

**c) Federal**

**(1) Jurisdiction**

- (a) *United States v. District Court in and for Eagle County* (1971) (p851): the Court says that the McCarran amendment is a waiver of sovereign immunity for water rights adjudication, allowing Colorado to adjudicate all rights. In doing so, the Court rejects the federal government's argument that Colorado can't adjudicate federal reserved water rights because those aren't claims made "under state law" per the amendment's language--thus the McCarran amendment gives states authority to

adjudicate appropriative, riparian, and reserved rights. This case, then, is landmark.

- (b) *Dugan v. Rank* (1963) (n1p853): the McCarran Amendment applies only to general adjudications, not private ones.
- (c) *Higginson v. United States* (Idaho 1988) (p1:10p): the Idaho Supreme Court determines that the SRBA authorizing legislation intended "consent" to mean simply the McCarran amendment-- the U.S. doesn't have to give special consent in each case (and thereby be able to determine the boundaries of the adjudication). Further, the court determines that the entire river system (all tributaries) must be included in the adjudication because otherwise it would be specific adjudication and *Dugan* would prevent the application of the McCarran amendment.

(2) Intent to reserve

- (a) *U.S. v. New Mexico* (1978) (p856): because *Arizona* established the federal government's *power* to reserve following statehood, etc. is simply about the U.S.'s implied intent-- how much water it impliedly reserved. The Court sets out the rule for federal reservation of non-Indian water rights:
  - i) The Court will imply "only that amount of water necessary to fulfill the purpose of the reservation, no more." Yet, "where water is necessary, the U.S. intended to reserve the necessary water." But "where water is only valuable for a "secondary use of the reservation," the the Court infers that "Congress intended that the U.S. would acquire water in the same manner as any other appropriator."
    - a. See *Cappaert* (1976) (fn4p858): the Devil's Hole case, where the Court said that Congress impliedly reserved enough water to keep a particular fish--mentioned in the reservation--alive. But, the Court said, the reservation was limited to the amount necessary to keep the pool at the *minimum* level that would keep the fish alive.
  - ii) Here, the reservation is for a national forest. The Court looks first at the Organic Administration Act, which said national forests were only for preserving and protecting the forest and to secure favorable water flows and to furnish timber. This, the Court said, means that national forests aren't for "aesthetic, environmental, recreational, or wildlife-preservation purposes" (compare NPS), and so the only water reserved is for preserving timber. Otherwise the U.S. has to get water like everyone else does.
  - iii) As for the Multiple-Use Sustained-Yield Act, which said that national forests are for outdoor recreation, range, timber, watershed, wildlife and fish purposes, the Court said that Congress didn't intend by MUSYA to expand the U.S.'s reserved water rights-- it was rather simply to change the administration of the forests.
  - iv) The "sensitivity doctrine" comes from the dissent etc.: that the implied reservation doctrine should be applied with sensitivity to the impact it will have on those who have already obtained water rights under state law.

(3) Enforcement: *Sierra Club v. Yeutter* (10th Cir. 1990) (p866): private organization's attempt to get the U.S. to claim federal reserved water rights in a state adjudication fails, because not ripe--the federal agency's conduct in not seeking reserved rights wasn't final (fitness prong) and it's not substantial hardship to wait for a more imminent threat (hardship prong).

(4) **Idaho**

(a) *Sawtooth National Recreation Area Claims* (Idaho 2000) (134 Idaho 940): the Idaho Supreme Court says that the SNRA does not have any federal reserved water rights. The court first finds no express reservation, and then look for an implied reservation.

i) Noting, from *Cappaert*, that "the need for the water must be so great that, without the water, the purposes of the reservation will be entirely defeated," that court says that the purpose of SNRA, both from the plain language and legislative history, is to protect the SNRA from unregulated development and mining (even though the language says "preservation and protection of the natural, scenic, historic, pastoral, and fish and wildlife values and to provide for the enhancement of the recreational values associated").

ii) The court then admits that fish need water, but reiterates that the need for water must be so great that without it the reservation purposes will be *entirely* defeated-- and that the SNRA's purpose wasn't *just* for fish. Furthermore, the court points out, protection from unregulated development and mining will help the fish.

(b) *Wild & Scenic Rivers Claims* (Idaho 2000) (134 Idaho 912): the Idaho Supreme Court says that the Wild & Scenic Rivers Act contains an *express* reservation of water rights (language: "Reservation of waters for other purposes or in unnecessary quantities prohibited. Designation of any stream shall not be construed as a reservation of the waters for purposes other than those specified or in quantities greater than necessary").

i) The court says it wouldn't make much sense if Congress wanted to preserve the rivers but not reserve the water in them. The court looked at the plain language, legislative history, and also to secondary sources.

ii) However, the quantity of the reservation is limited to the minimum amount necessary to fulfill the purposes of the Wild & Scenic Rivers Act.

(c) *Hell's Canyon National Recreation Area Claims* (Idaho 2000) (134 Idaho 916):

i) Original, Silak opinion (Idaho 1999) (1999 WL 778325): this is a good, step-by-step analysis of federal water right reservation.

a. Step zero: determine the purposes of the Act.

1) Wilderness areas: Silak says the purposes here were to preserve wilderness.

2) HCNRA: preserve natural beauty, historical and archeological and recreational and ecologic values.

- b. Step one: determine whether there has been a reservation of land.
    - 1) Wilderness areas: yes-- even though Congress didn't say "reserve," it doesn't have to. "Designation" and the like can be enough.
    - 2) HCNRA: yes.
  - c. Step two: determine whether Congress expressly reserved water.
    - 1) Wilderness areas: no.
    - 2) HCNRA: yes-- "shall comprise the lands and waters . . . ."
  - d. Step three: if no express reservation, determine whether Congress impliedly reserved water. Reservation will be implied if water is necessary for the primary purposes of the reservation and if, without water, the purposes of the reservation will be entirely defeated.
    - 1) Wilderness areas: yes-- prior appropriation would "clearly defeat the congressional purpose of preserving the wilderness character of the Wilderness Areas."
  - e. Step four: determine the quantity reserved.
    - 1) Wilderness areas: *all* the unappropriated water in each Wilderness Area. Unlike, e.g., *Cappaert*, Congress with the Wilderness Areas wanted the land to remain unimpaired, and water is needed to keep the areas in their pristine condition.
    - 2) HCNRA: all unappropriated water-- no need to look at what is necessary when you have an express reservation (as with implied reservations).
- ii) Rehearing opinion (Idaho 2000):
- a. Wilderness Areas: the court says there are no implied water rights for the Wilderness Areas, distinguishing *Cappaert*, *Winters*, and *Arizona* as cases where Congress gave some indication in their purposes that water would be necessary. Plus, the court says, the Wilderness Acts gave no standard for quantification of the amount of water. And, there are upstream appropriators and Congress was aware of this, as evidenced by the legislative history; thus, "the creation of the wilderness was not intended to strangle the economic life from areas outside the wilderness."
    - 1) The majority analogizes to MUSYA (from *New Mexico*), which only changed the area's administration, not the water rights. The court also, of course, employs the sensitivity doctrine from the *New Mexico* dissent.
    - 2) Cosens asks: does the majority analysis leave any room for an implied reservation at all?
  - b. HCNRA: the court agrees that Congress expressly reserved water for the HCNRA, but does not agree that all the unappropriated water is necessarily the correct amount reserved. Rather, the court remands for a factual inquiry, a la *Cappaert*, into how much water is necessary to fulfill the act's purposes.

#### 4. Public Rights

- a) Public ownership of beds: the sovereign is entrusted with submerged lands underneath "navigable" water. "Navigability" really means "navigability for title," which looks backwards to the condition of the river or lake at statehood (one sheep boat was enough, e.g., for the Court to say that the Great Salt Lake was navigable).
- b) Equal footing doctrine: states that came into the union after the original thirteen succeed to full sovereignty over submerged lands-- the federal government held the land in trust for the states and couldn't grant away the land to private individuals (*Shively v. Bowlby* (1894) (p395)).
  - (1) *Hughes v. Washington* (1967) (p397): the Court says that the rights of a federal patentee are to be determined by federal, not state, law. The federal law here is that ocean-front property owners have a right to accretions.
    - (a) Facts: a private individual has land on the Washington coast that had been privately owned (by federal patent) since before Washington was a state. Before statehood, there was a common law right to any accretion built up by the ocean. Then the Washington constitution denied ocean-front property owners the right to any further accretion.
    - (b) *Corvallis Sand & Gravel* (1977) (p401x): state law alone governs post-statehood title disputes. The equal footing doctrine (a creature of federal law) applies just once, fleetingly, to determine boundaries-- then state law applies ever after. Itc. may overrule *Hughes*.
- c) Public trust doctrine: (1) public waters are subject to a public servitude for navigation, commerce, and fisheries (and possibly other uses, see n3p410), (2) the public owns beds of submerged waters, (3) the state must use the submerged lands only for trust purposes.
  - (1) *Illinois Central Railroad Co.* (1892) (p405): the Court says that the state holds title to lands under navigable waters, but that the title is held in trust for the people of the state for navigation, commerce, and fishing-- thus, the state can only give the lands away for those purposes, and in any case it retains power to revoke its grant. That is, as the Court says, the lands can't be "placed entirely beyond the direction and control of the State."
    - (a) Facts: Illinois gave part of Lake Michigan in the Chicago harbor to a railroad. Then the legislature repealed the act, sought to quiet title and won. The railroad appealed.
  - (2) *National Audobon Society* (Cal. 1983) (p414): the court says that the public trust doctrine bars the Department of Water and Power of Los Angeles from appropriating nearly all the flow into Mono Lake once it is clear that those diversions harm interests protected by the public trust. The court's analysis looks to (1) the purpose then (2) the scope of the public trust, and then to (3) the duties of the state.
    - (a) Facts: Mono Lake's level has dropped and birds that live on it could lose their habitat. The Audubon Society sues claiming that this violates the public trust doctrine.
    - (b) Trust purposes: the court says the public trust purposes include navigation, commerce, fishing, hunting, bathing, boating, general recreation,

anchoring, standing, etc. The court says that it is no longer limited to navigation, commerce, and fisheries.

(c) State duties: the state has an affirmative duty to take the public trust into account when planning and allocating water resources and to protect public trust uses whenever feasible. And, the public trust imposes a duty of continuing supervision and the state has the power to reconsider its past decisions.

(3) Idaho: Idaho has adopted the public trust doctrine, but has said that a conservation organization had no standing to assert public trust values in SRBA; and in 1996 Idaho enacted legislation making it very difficult for the state to assert the public trust (n2p421).

## B. GROUNDWATER

### 1. Hydrology

a) Groundwater moves slowly, which means it's hard to do prior appropriation and hard to understand the connection between surface and groundwater.

b) Groundwater provides the base flow for rivers, and it is found in cracks, not in pools.

(1) Porosity is a measure of how much space there is in the cracks.

(2) Permeability is a measure of how connected the cracks are.

c) Head is a measure of pressure.

d) Recharge may or may not occur; it mostly occurs along mountain fronts.

### 2. Legal approaches

a) The English rule: absolute ownership, incident to land ownership. This means you could build a huge well and extract from an entire aquifer. Most states don't follow this rule.

b) Reasonable use: like riparian rights; reasonableness depends on both your use and the uses around you-- shortages are shared.

(1) *Higday v. Nickolaus* (Missouri 1971) (p550): the court adopts a reasonable use regime for groundwater, rejecting precedent. Reasonable use is a factual inquiry, the court says, and looks at several factors. Here, a city could not take out groundwater and transport it for another use away from the land where it came from because it impaired the use of adjoining landowners.

(a) Facts: farmers on a 6000 acre farm start losing their groundwater to a city which has 17 acres over the same aquifer and has drilled huge wells to take water for municipal use. The city argues for the English rule based on precedent.

(b) Reasonable use factors:

i) Persons involved

ii) Relative positions of the persons

iii) Nature of the uses

iv) Comparative value of their uses

v) Climatic conditions

vi) All other relevant facts and circumstances

vii) Whether the water is used on the land from which it was taken-- "The

fundamental measure of the overlying owner's right to use the groundwater is whether it is for purposes incident to the beneficial enjoyment of the land from which it was taken."

- (c) The court rejects precedent because of a greater understanding of groundwater and the connection between groundwater and surface water.
  - (d) The city could remedy here by providing water to the farmers, drilling deeper wells for the farmers, or condemning the farmers' lands.
  - (e) Note that the farmers etc. are using subirrigation, which is where the water table is at root level. This doesn't count as a diversion capable of establishing a water right in most states.
- c) Prior appropriation: like we know and love. Montana, Idaho, and Washington use this, and require a permit.
- (1) *Wayman v. Murray City Corp.* (Utah 1969) (p558): the court says, applying a "rule of reasonableness," that users don't have a right to a particular pressure from their wells. "All users are required where necessary to employ reasonable and efficient means in taking their own waters in relation to others to the end that wastage of water is avoided and that the greatest amount of available water is put to beneficial use." Thus, users with shallow wells will have to drill deeper wells on their own dime.
    - (a) Facts: homeowners have shallow wells, just deep enough to draw water; the city, however, has a deep well, which creates a cone of depression and pulls the water table down near the well (and, if it draws out water faster than the recharge rate, the entire water table will go down).
    - (b) Reasonableness factors:
      - i) Quantity of water available
      - ii) Average annual recharge
      - iii) Existing rights and priorities
    - (c) A lot of western states follow this "rule of reasonableness"-- it favors growth.
  - (2) *Baker v. Ore-Ida Foods* (Idaho 1973) (p571): the court adopts a reasonableness rule for dealing with conflicting ideas in the Idaho Groundwater Act: on the one hand, there's first in time, first in right; but on the other hand, "reasonable exercise of this right shall not block full economic development of underground water resources." Thus, seniors are not absolutely protected in their historic water level or historic means of diversion; but rather, it will be necessary sometimes to modify rights in order to promote full economic development. Seniors can only call juniors if the juniors are mining the aquifer or if they force the seniors below reasonable pumping levels. IDWR gets to determine the reasonable pumping levels.
    - (a) The court also recognizes the the Groundwater Act prohibits mining of aquifers.
  - (3) *Mathers v. Texaco* (N.M. 1966) (p575): the court says that because the Ogallala aquifer does not recharge, it must give a time-limit to use of the aquifer-- it picks 40 years. The lowering of the aquifer, then, is the inevitable result of beneficial use, and so seniors who have to spend money to lower

their wells are not entitled to anything.

(a) Facts: Texaco is mining the Ogallala aquifer to flood oil out of the ground (a beneficial use in N.M.).

(4) Special groundwater management districts

(a) *Fundingsland* (Colo. 1970):

**d) Conjunctive management**

(1) *Musser v. Higginson* (Idaho 1994) (p6:18p): the Idaho Supreme Court says that IDWR must enforce a call by senior surface water users against junior ground water pumpers. Thus, conjunctive management is required.

(2) *A&B Irrigation District* (Idaho 1998) (p6:19p): in a SRBA subcase, the court determines that water in the Snake River system is interconnected, and so the relative priorities of both surface and ground water users and the extent of interconnection must be determined. Thus, the subcase was remanded for a factual inquiry into the proposed provisions for management were proper given this interconnection.

(a) The court also notes that IDWR's conjunctive management rules don't necessarily have anything to do with SRBA, because those rules have to do with handling calls, not adjudicating water rights.

**(3) IDWR Conjunctive Management Rules**

(a) Rule 10: Definitions

i) Area having a common ground water supply: where the ground water affects the surae water.

ii) Full economic development of underground water resources: diversion of groundwater in the public interest, not mining the aquifer, not materially injuring seniors, and furthers reasonable use of both ground and surface water.

iii) Reasonable ground water pumping level: IDWR gets to set this on a case-by-case basis to protect seniors against *unreasonable* lowering of ground water levels by surface and ground juniors.

(b) Rule 20: Purposes and policies

i) 020.03: establishing a policy of reasonable use, which recognizes all of:

a. Priority

b. Reasonable use

c. Optimum development of water resources in the public interest

d. Full economic development

(c) Rule 30: Response to calls in areas that aren't water districts or designated ground water management areas or in water districts without conjunctive management.

i) Here, a senior can call and petition, and IDWR will do a contested case. The petition can ask for creation of a water district, a move to conjunctive management in an existing water district, or designation of a ground water management area. IDWR has a number of options for its order (see 030.07).

- (d) Rule 31: Determining areas having a common ground water supply.
- (e) Rule 40: Response to calls in areas in a water district having a common ground water supply.
  - i) Here, IDWR can either regulate in priority (with a phase-in if the effect is long range) or allow out-of-priority diversion pursuant to a mitigation plan (see Rule 43). In making this choice, IDWR must consider efficiency, waste, and the goal of reasonable use (see Rule 42).
- (f) Rule 41: Administration of designated ground water management areas.
  - i) Here, IDWR can regulate in priority, considering any approved mitigation plan, or require metering.
- (g) Rule 42: Determining material injury and reasonableness.
  - i) To determine reasonableness and material injury, IDWR can consider:
    - a. Amount available
    - b. Effort and expense of diversion
    - c. Whether juniors are affecting the quantity, timing, and cost to seniors
    - d. Rate versus acreage served
    - e. Annual volume diverted
    - f. Efficiency of diversion and conveyance
    - g. Method of irrigation
    - h. Amount actually diverted versus total right
    - i. Whether there's any metering
    - j. Whether the seniors' rights could be met with reasonable and efficient diversion, conveyance, and conservation methods
    - k. Whether the seniors' rights could be met by alternate reasonable means of diversion or alternate points of diversion
- (h) Rule 43: Mitigation plans
  - i) This rule sets out a number of factors that IDWR can consider when considering a mitigation plan.

## C. ADJUDICATION

### 1. Idaho

#### a) Private adjudication

##### (1) Statutory provisions

- (a) I.C. s 42-602: IDWR is to supervise water distribution within water districts, by means of watermasters.
- (b) I.C. s 42-607: watermasters are to distribute water at IDWR's direction, and in priority; but anybody who claims priority but doesn't have a permit or decree is subsequent to everyone who does have a permit or decree. Also, there's no adverse possession of water rights as long as a watermaster is in charge.
- (c) I.C. s 42-1404: "Any claimant may file suit in the district court for the county in which the point of diversion or place of use of the claimed right

is located for the purpose of adjudicating rights to the use of water from any water system for which a general adjudication has not been commenced or completed."

(2) *Nettleson v. Higginson* (Idaho 1977) (p3:7p): where there are a bunch of unrecorded water rights, I.C. 42-607 says those with the unrecorded rights will be treated by the watermaster as junior. (This policy makes administration consistent and unconfusing-- but it does go against the you-take-the-river-as-you-find-it idea.)

(a) Also etc. are constitutional claims:

- i) Procedural due process: a watermaster can shut off your water without a predeprivation hearing, the court says, because this is a *Fuentes* extraordinary situation. (This may be an extreme position, Cosens thinks.)
- ii) Equal protection: the court says the classification into recorded and unrecorded is rationally related to a legitimate state objective.
- iii) Takings: the court says there's no taking because "the right of appropriation does not carry with it an unconditional guarantee of water regardless of the supply of water available."

## b) General Adjudication

### (1) Statutory provisions

- (a) I.C. 42-1405: a general adjudication can be initiated by IDWR if it determines either on its own or after a petition by five or more or a majority of users in a system that the public interest and necessity will be served by an adjudication.
- (b) I.C. 42-1406A: commencement of SRBA statute.
- (c) I.C. 42-1408: once an adjudication is commenced by district court order, IDWR is to notice the adjudication.
- (d) I.C. 42-1410: once an adjudication is commenced, IDWR is to examine the water system, and it has authority to enter lands to do this.
- (e) **I.C. 42-1411**: IDWR is to prepare a report on all the water rights on the system and file it with the district court. The report is prima facie evidence of the water rights, and any claimant has the burdens of proof and going forward in proving otherwise.
- (f) I.C. 42-1412: objectors must file their objection with the district court, which must hear the objections by trial without a jury.
- (g) I.C. 42-1420: the decrees in an adjudication are conclusive.
- (h) I.C. 42-1424: supplemental adjudications-- where certain rights weren't determined in the adjudication, there can be a supplemental adjudication to determine those rights.
- (i) I.C. 42-1425 and 42-1426: changes and enlargements prior to the beginning of SRBA get a waiver from the statutory change and enlargement requirements if there was no injury or, if there was injury with an enlargement, you mitigate.
- (j) I.C. 42-1427: old water rights inadequately described can be fixed in the adjudication, and IDWR can recommend these fixes in its report.

## (2) SRBA

### (a) How SRBA works:

- i) Claimants file claims (except for de minimis domestic and stockwatering claims).
- ii) IDWR investigates the claim (this can be formal and on-the-ground, but isn't always). Except with federal claims, there's no investigation-- they are reported as claimed (and for each federal claim there is an evidentiary hearing, usually done by affidavit).
- iii) IDWR issues a director's report. The director is the court's expert (see IRE 706).
- iv) There's an objection and response period, but the IDWR report has prima facie weight.
- v) The special masters handle any subcases, and issue a recommendation to the SRBA court. These recommendations can be challenged, and the challenges are handled like appeals.

### (b) *Idaho Power Co. v. State* (the Swan Falls case) (Idaho 1983) (p1:1p): this case sets out the history that led to SRBA:

- i) The first hydropower application in the basin was in 1901, for 8400 cfs. That meant that if the flow dropped below 8400, upstream users would get nothing. So, there was a push to subordinate hydropower rights. The subordination caused power rates to go up. Ratepayers sued Idaho Power for not protecting its rights from subordination; Idaho Power then sues to protect its rights. And, etc., the court says that the Swan Falls project's rights will not be subordinated. Then, Idaho, faced with this mess, agreed with water users to start an adjudication.

### (c) *Walker v. Big Lost River Irrigation Dist.* (Idaho 1993) (p3:10p): the court says that water users in the SRBA system can't get their water rights adjudicated in a private adjudication-- the trial court lacks jurisdiction to do that, only the SRBA court does.

### (d) *Fremont-Madison Irrigation Dist. v. Idaho Ground Water Appropriators* (Idaho 1996) (p3:22p): the court says that the amnesty statutes (I.C. 42-1425 and 42-1426) are constitutional because of the no-injury and mitigation provisions.

## D. INTERSTATE ALLOCATION

### 1. Adjudication

#### a) **Between diverse users**

- (1) Options for adjudication: a downstream user in state B could go into state court in state A or federal court in state A or B and get personal jurisdiction on the upstream user.
- (2) *Bean v. Morris* (1911) (p915): the Court says that it will presume that states with the same water allocation regimes will ignore boundaries, thus allowing a user (upstream or downstream) in state A to maintain his priority over a user in state B. The presumption, the Court suggests, might be overcome by state legislation exercising authority to do something else.

**b) Between states**

**(1) Equitable apportionment**

**(a)** The *Wyoming v. Colorado* factors (p929x):

- i)** State law (prior appropriation)
- ii)** Physical and climatic conditions
- iii)** Consumptive use
- iv)** Nature and rate of return flows
- v)** Established uses
- vi)** Storage water availability
- vii)** Effect of wasteful uses on downstream areas
- viii)** Damage to upstream areas

**(b)** *Kansas v. Colorado* (1906) (p917): the Court equitably apportions the Arkansas river between Kansas (a riparian state) and Colorado (a prior appropriation state), saying that neither is Kansas entitled to the continuous flow nor is Colorado entitled to appropriate the flow before it reaches Kansas. The Court looks at state law, population, and crop success and determines that Colorado isn't seriously hurting Kansas, and that the detriment it is causing is balanced by a benefit in Colorado. So, the Court doesn't disturb the status quo. It notes, however, that "if the depletion in Colorado continues to increase there will come a time when Kansas may justly say that there is no longer an equitable division of benefits and may rightfully call for relief against the action of Colorado."

- i)** State law: the Court notes that Kansas is a riparian state that subjects riparians to equitable division, and so Kansas won't be heard to complain about getting the same treatment here.
- ii)** Population: the Court looks at population and notes that Colorado is developing faster than Kansas.
- iii)** Crops: the Court looks at whether the crops in Kansas are suffering because of Colorado's irrigation.

**(c)** *New Jersey v. New York* (1931) (p922): the Court uses equitable apportionment to settle New Jersey's dispute with New York, which is diverting a bunch of water from the Delaware to supply NYC. The Court basically adopts the special master's findings, that the dams and diversions won't impair the navigability of the river, its sanitary condition, its ability to provide water for municipal, industrial, and agricultural uses, or its fisheries. There will be some injury to recreational uses and oystering, and that this injury is enough for the Court to limit New York's diversion and order it to build a treatment plant and release water when the river falls below a certain level.

- i)** The Court notes: "Different traditions and practices in different parts of the country may lead to varying results, but the effort always is to secure an equitable apportionment without quibbling over formulas."

**(d)** *Colorado v. New Mexico I* (1982) (p929): the Court sets out principles of equitable apportionment before remanding for a determination based on them.

- i) Facts: a dispute over water in the Vermejo River, which New Mexico farmers have diverted for a long time, but Colorado has never used.
  - ii) The Court says: "Just apportionment of interstate waters is a question of federal law that depends upon a consideration of the pertinent laws of the contending States and all other relevant facts."
  - iii) Principles of equitable apportionment:
    - a. Reasonable use
    - b. No waste
    - c. Affirmative duty to conserve and augment interstate streams: thus, the Court considered whether N.M. could conserve to help Colorado and whether Colorado could conserve to minimize its need.
    - d. Weighing of harms and benefits
    - e. Future uses: these can be considered
  - (e) *Colorado v. New Mexico II* (1984) (p934): the Court says it needs more and better evidence to equitably apportion: "A state can carry its burden of proof in an equitable apportionment action only with specific evidence about how existing uses might be improved, or with clear evidence that a project is far less efficient than most other projects." Thus, states must develop concrete plans: "We have only required that a State proposing a diversion conceive and implement some type of long-range planning and analysis of the diversion it proposes."
- c) The impact of the commerce clause**
- (1) *Sporhase v. Nebraska* (1982) (p1002): the Court says that although water is unique (it's usufructary and a necessity), it is an article of commerce because it's used to produce articles of commerce (e.g., agriculture) and because there's a national interest in its use. Thus, the Court must consider whether Nebraska's permit requirement for out-of-state water use is an impermissible burden on interstate commerce under the dormant Commerce Clause. The Court concludes that restriction of out-of-state water use is not an impermissible burden, given the state's interest in conservation of a scarce resource. However, Nebraska's requirement that water can't be used in states that don't reciprocate in allowing their water to be used in Nebraska fails because there's not even a legitimate state interest in doing that.
    - (a) Facts: a private water user in Nebraska has land on both sides of the NE-CO border. He's drawing water from a well in Nebraska and using it in Colorado, but a Nebraska law says he can't use his water in Colorado without getting a permit.
    - (b) Dormant Commerce Clause analysis:
      - i) There must be a legitimate state interest in restricting use.
      - ii) If there's a legitimate state interest, then the burden imposed on other states cannot be excessive in comparison to the benefits to the home state.

## 2. Compacts

- a) U.S. Const. art. I, s 10, c 3: No state shall, without the consent of congress . . .

enter into any agreement or compact with another state . . . .

(1) Not every agreement between states is a "compact" requiring congressional consent-- agreements that don't exercise the political power of states may not be "compacts," the Court said in *Virginia v. Tennessee* (1893) (n3p953).

b) *Dyer* (1951) (p949): the Court takes a middle path between complete state control and complete federal control of interstate compacts: namely, the Court says that it gets to review compacts and determine what the law of the compact is. Thus, here, the Court looks at the West Virginia constitution to determine whether the compact is in conflict with the state constitution, and determines that it is not.

(1) Facts: several states enter a compact, approved by congress, regarding water quality of the Ohio River (pre-CWA), establishing an interstate commission. West Virginia's new administration won't pay for the commission. The U.S. argues that states should be able to unilaterally pull out of compacts; the other states argue that once a compact is approved by congress, the compact is federal law and a state can't pull out.

c) *Intake Water Co.* (9th Cir. 1985) (p955): the court says that provisions of interstate compacts can't impermissibly burden interstate commerce because due to Congressional consent, the compacts are federal law.

(1) Facts: Montana, Wyoming, and North Dakota enter the Yellowstone River Compact to set water usage on from the Yellowstone Basin among them.

### 3. Congressional apportionment

a) *Arizona v. California* (1963) (p973): the Court says that Congress has apportioned the Colorado through the Boulder Canyon Project Act, because it gave the Secretary of the Interior authority to make contracts for water delivery. That is, equitable apportionment doesn't apply because Congress has otherwise spoken. Furthermore, the Court determined that Congress intended Arizona to get its tributaries, because the BCA dealt only with "water of and from the Colorado River," not the "Colorado River System." For shortages, the Court said the BCA gave the Interior Secretary broad authority, in making contracts, to deal with them-- his authority limited only by standards set out in the BCA.

(1) Congressional authority to Congressionally apportion (n\*p975): "The BCA was passed in the exercise of congressional power to control the navigable water for purposes of flood control, navigation, power generation, and other objects, and is equally sustained by the power of Congress to promote the general welfare through projects for reclamation, irrigation, or other internal improvements."

(2) The Colorado River: Arizona, New Mexico, Colorado, Utah, California, and Nevada, all prior appropriation states, are on the river. Only a small part is in California, but California makes the most use of water from the river. If the water rights were settled by equitable apportionment, California would probably get nearly all the water.

(a) Upper and Lower Basins:

i) The Upper Basin: Utah, Colorado, Arizona, and New Mexico.

ii) The Lower Basin: California, Nevada, Arizona, and New Mexico.

(b) The Colorado River Compact (p959): this compact, which Arizona

refused to ratify, apportioned water from the entire "River system," not just the mainstem-- 7.5 maf to each basin. Thus, Arizona's tributaries, most importantly the Little Colorado and Gila Rivers, were allocated amongst the all the states.

i) Mexico: under the compact, U.S. treaties with Mexico would be satisfied by any surplus, and if no surplus by equal amounts from the Upper and Lower Basins.

(c) The Boulder Canyon Project Act (1928) (p967): this federal act would apportion Colorado River water amongst the states, and was conditioned on approval of the Colorado River Compact-- either within six months or, then, by six of the seven states. Another condition required California to agree to limit its use to 4.4 maf (very hard for California to do, and in fact it was only held to this limit recently). Arizona would get 2.8 maf plus half the surplus and its tributaries. Nevada would get only 300K af.

(d) The Central Arizona Project (p983): following *Arizona*, Arizona established the CAP to get water where it needed it from the Colorado. To get California's support, though, Arizona agreed that the CAP would be junior to all of California's rights.

#### 4. Cooperative agreements

a) [see p999]

### E. INTERNATIONAL WATER LAW

#### 1. Hot spots

a) The Nile River: with two tributaries-- the White and Blue Niles. The Aswan Dam was build in 1902 and enlarged in the 1970s. The big conflict is over upper basin (poor countries') water development, which is being sacrificed for lower basin (more powerful countries') water development.

b) Palestine and Israel: while Palestinians get 30% less water per capita than the WHO recommends, Israelis are getting 200% of the WHO recommendation. Water is a major sticking point-- it's not just religion and land.

c) The Aral Sea: in 1994, the sea had shrunk to half its former size, all from diversions.

d) The Colorado River: see *Arizona v. California* (1963), in the Interstate Allocation: Congressional Apportionment section above.

e) The Mekong River: China refused to join a 1995 treaty apportioning water on this southeast Asian river.

f) The Danube River: Romania spilled cyanide into the river in 2000.

#### 2. The law

a) Sources of international law: international law is voluntary, first of all.

(1) Treaty

(2) Custom:

(a) Trail Smelter Arbitration: a country may not use its territory in a way that significantly harms another country's territory.

(b) Chernobyl: a country must provide notice of impending harm (e.g., Romania needed to warn of its cyanide spill into the Danube).

- (c) Persistent objector: a country can opt out of customary law by objecting to it (except for jus cogens).
- b) International water law approaches: these are much the same as in interstate allocation.
  - (1) Absolute sovereignty: that upstream nations can appropriate all the water.
  - (2) Absolute territorial integrity: that downstream nations have the right to the natural flow (i.e., riparian doctrine).
  - (3) Prior appropriation
  - (4) Limited territorial sovereignty: i.e., equitable apportionment.
  - (5) Sustainable development: where concern for future uses is incorporated into the equitable apportionment analysis (this emerged from a separate opinion in the *Gabcikovo-Nagymaros* case (p1031)).
- c) *Lac Lanoux Arbitration* (1957) (p1030): Spain could not object to France's decision to construct a hydropower project which would raise a transboundary lake. Note that if Spain could object, it would have a kind of sovereignty over France.
- d) *The Gabcikovo-Nagymaros Project* (1997) (p1031): although the court acknowledges that ecological concerns can be important enough to prompt a "state of necessity," here the concerns were not imminent or grave enough to convince the court that a state of necessity did exist.
  - (1) Facts: Hungary and Slovakia entered a treaty for development on the Danube in 1977. Hungary unilaterally suspended work on the development in 1989, after breaking from the USSR, citing "mistake," and then unilaterally terminated the treat in 1992 and justified its 1989 suspension as an "ecological state of necessity."
  - (2) "State of necessity": this is defined in the Articles on the International Responsibility of States-- it can only be invoked to justify acts that are the only means of safeguarding an essential interest of the invoking state from imminent peril and don't impair an essential interest of the other state, and it can't be invoked if the invoking state contributed to the occurrence of the state of necessity.

## II. ENVIRONMENTAL REGULATION

### A. STATE LAW

- 1. Nuisance
- 2. Trespass
- 3. *Thomas Solvent* (Mich. 1985) (p651): the court determines that (1) the harm to the public from contaminants outweighed cleanup costs the the company, (2) that the leaked contaminants did in fact come from the defendant company, and (3) CERCLA did not preempt states from imposing or duplicating liability for contamination that CERCLA covers.
  - a) Facts: df. solvent company had leaked contaminants into the groundwater, so badly that EPA designated the area a CERCLA (superfund) site. The state sued the company for violation of a state water statute and common law nuisance.

### B. FEDERAL STATUTES

- 1. **Endangered Species Act**

**a) Key Sections**

**(1) Section 4** (16 USC 1533): Listing and critical habitat designation

**(a)** Endangered and threatened (likely to become endangered) determination: factors:

- i)** Habitat curtailment and destruction
- ii)** Overutilization for commercial, recreational, or educational purposes
- iii)** Disease and predation
- iv)** Inadequacy of existing recovery
- v)** Anything else (a catchall)

**(b)** The implementing agency must determine critical habitat or all endangered and threatened species, which includes the geographic area of the species plus areas outside of that geographic area that are essential to recovery.

**i)** *Sierra Club* (5th Cir. 2001) (p1243Goble): the court says that an FWS and NMFS decision that the section 7 jeopardy consultation would be enough, and that therefore there was no need to designate critical habitat (section 4) (reasoning that any agency action that would jeopardize would also adversely modify critical habitat), was arbitrary and capricious.

**a.** The court notes that "the destruction/adverse modification standard focuses on the action's effects on critical habitat," whereas "the jeopardy standard addresses the effect of the action itself on the survival and recovery of the species." These are two different standards, the court says.

**b.** Furthermore, the critical habitat standard is about "conservation," i.e. recovery," whereas the jeopardy standard is about survival.

**(c)** "Conservation" means that all endangered and threatened species should be delisted.

**(d)** Implementing agencies:

- i)** For terrestrial species, it's the Fish & Wildlife Service.
- ii)** For ocean and anadromous fish, it's NOAA Fisheries.

**(2) Section 6:** this allows for cooperative agreements between state governments and the federal government, so that the state can implement the ESA.

**(3) Section 7:** no jeopardy-- but only for federal actions.

**(a)** Agencies must confer with FWS or NOAA. The agency must prepare a BA (biological assessment). Then FWS or NOAA must do a BiOp (biological opinion). If the BiOp reveals a problem, FWS or NOAA must come up with a reasonable and prudent alternative (RPA), which the agency can follow or not-- but it ignores it at its peril.

**i)** *Defenders of Wildlife* (D.D.C. 2001) (p1238Goble): the court says that under the ESA, FWS has to analyze in its BiOp the cumulative effects, both past and present, of all federal activities (the single agency BAs, though, do not have to evaluate cumulative effects). The cumulative effects requirement comes in in the "environmental baseline" analysis,

rather than directly from the "cumulative effects" analysis (which only concerns non-federal actions). This cumulative effects in the environmental baseline has to be more than just a listing of activities-- it has to treat the impacts of those activities.

- a. Facts: a bunch of federal agencies are involved (DOD, INS, DLM, DOI, NPS, DOJ, Border Patrol), in actions that could affect the Sonoran pronghorn, a listed species. Thus, the agencies must prepare BAs and consult with FWS, which must prepare a BiOp. Defenders sues, claiming that the BAs and BiOp didn't analyze cumulative impacts (under 7(a)(2)), that FWS's recovery plan (under 4(f)) was inadequate, and that all the dfs. didn't implement programs for recovery (under 7(a)(1)).
  - (4) Section 9: no take-- this if for everyone. "Take" includes significant habitat modification.
  - (5) Section 10: this allows for incidental takes (such as for housing developments), but the prospective taker must develop a habitat conservation plan (HCP).
- b) *Riverside Irrigation District* (10th Cir. 1985) (p683): the court determines that the Corps must look at "all the effects on the aquatic environment," including indirect effects (like depleted stream flow effecting ESA critical habitat), before issuing a CWA permit. This is true even in light of the Wallop Amendment to the CWA, which says the CWA is not to impair states' rights to allocate water within their borders.
  - (1) Facts: pfs. want to build a dam and need a CWA permit from the Corps of Engineers to do it. They seek a "nationwide permit," which is an automatic permit for activities that cause only minimal adverse effects on the environment-- one can't be had where the activity will destroy a listed species or adversely modify a critical habitat. Pfs.' dam, however, will reduce stream flow, which in turn would adversely effect the whooping crane's critical habitat.
- c) *Tulare Lake* (Ct. Cl. 2001) (p523): the court says that an RPA which deprived water districts of water is a *physical taking*-- because a mere restriction on water right use "completely eviscerates the right itself since the plaintiffs' sole entitlement is to the use of the water." Thus, the federal government must pay for the water deprived by the RPA to preserve the fish, despite the public trust doctrine and reasonable use requirement, because the water districts had the water they had as a result of contracts which had not been changed or the water reallocated by a state determination of public trust violation or unreasonableness.
  - (1) Facts: NMFS develops an RPA to protect salmon from California's Central Valley Project (CVP) and State Water Project (SWP). The pf. water districts claimed that the RPA, which lessened the amount of water available to the districts, were takings.
- d) Salmon in the Northwest (Steve Katz lecture)
  - (1) Impacts on salmon (the 3 Hs, plus):
    - (a) Hydropower
    - (b) Hatcheries: which dilute genetic diversity and produce fish which are

vectors for disease and outcompete wild fish.

(c) Habitat degradation

(d) Climate change

(e) Exotic species

(2) The ESA process: someone petitions the regulatory authority for listing; the RA makes a determination of risk; the RA develops a recovery plan and BiOp; if section 7 agencies are involved, there's remediation, risk removal, and action identification; then there's recovery, finally.

(a) But you never get to the last two steps, because of litigation.

2. **Clean Water Act:** the CWA is actually a series of acts, passed over time. Its goals are to eliminate all discharges and make water safe for almost everything, including swimming.

a) Federal-State Implementation: the state can do CWA implementation, or else the federal government will.

(1) Setting standards: the standards must be based on designated uses-- the state can designate these, but EPA will review them. (Generally, the state will just designate uses based on the existing water rights.)

(2) Issuing permits: anyone who discharges a "pollutant" from a "point source" must get a permit.

(a) "Point sources" are discrete points of discharge. Agricultural and urban runoff are not point sources.

(b) *PUD No. 1 v. Washington Dep't of Ecology* (1994) (p674): the Court says that a state can impose a minimum stream flow condition when certifying a federal hydropower license, under CWA section 401(d). Whereas 401 (a) allows conditions on the discharge, 401(d) allows conditions on the applicant, the Court says, and those conditions can come from section 303, which requires projects to comply with both designated uses and water quality criteria, and expresses an antidegradation policy. And, regulation of water *quantity* is a part of regulating water quality, the Court says, as the CWA is broad and even recognizes the reduction in stream flow can be water pollution. Finally, although FERC can preempt a state from imposing conflicting conditions, FERC only preempts when it has actually specified conditions itself.

i) State certification: CWA section 401 requires states to provide a water quality certification before a federal license of permit can be issued for activities that may result in any discharge.

(3) Enforcement: enforcement can be done privately, because the CWA has a citizen-suit provision.

b) *Arkansas v. Oklahoma* (1992) (p938): the Court says that EPA can require, in issuing an NPDES (National Pollution Discharge Elimination System) permit, an upstream state's discharge to comply with downstream states' water quality standards.

c) *Idaho Sportsmen's* (W.D. Wash. 1996) (p10:2p): the court determines that Idaho is not complying with the CWA and orders EPA to work with Idaho to develop a schedule for compliance.

(1) Facts: Idaho DEQ designated uses and regulated point sources, but there were still quality problems. Thus, the CWA required Idaho to determine WQLSs (water quality limited segments) and TMDLs (total maximum daily loads) for each WQLS. Idaho found 36 WQLSs, but EPA, after it was ordered to step in, found 962.

(a) Note that developing WQLSs and TMDLs is hard because of the huge amount of data needed and the seasonal and even daily changes that must be accounted for. Everyone had a hard time with this. (Plus, there are regulatory implications and you're going to be sued no matter what you do with these.)

(b) No state met the 1976 deadline for WQLSs and TMDLs-- and even though this court (and others) recognize that WQLSs will change over time, the CWA does have "margin of safety" language which should mean that states are to develop the WQLSs quickly accounting for this margin (this is an example of the "precautionary principle").

d) Wetlands Regulation: the Corps of Engineers has grown its jurisdiction to handle a lot of wetlands regulation. We now understand that wetlands are natural filters that improve water quality.

(1) *Riverside Bayview Homes* (1985) (p663): the Court says that the Corps definition of "navigable waters" to include wetlands is valid, given the broad purpose of the CWA, Congress's recognition of hydrologic cycles when enacting the CWA, and Congress's acquiescence to the Corps' interpretation.

(a) Facts: pf. developer wants to fill a wetland without a permit. The Corps has a regulation which requires a permit when wetlands are filled. Thus, pf. challenges the validity of the regulation.

e) Salinity: [see p991]

### 3. CERCLA

a) Glossary

(1) "Removal": an immediate response, which is often temporary.

(2) "Remediation": a long-term solution, intended to be permanent.

(3) NRDs: natural resource damages-- CERCLA provides not only for recovery for cleanup costs and damages, but also for these "damages for injury to, destruction of, or loss of natural resources."

b) *Kennecott Corp.* (D. Utah 1992) (p654): the court determines that a proposed CERCLA NRDs consent decree is deficient because (1) there's not sufficient support that the groundwater can't be restored (which is relevant because CERCLA is intended to be remedial), (2) it fails to require protection from future contamination (which is relevant because CERCLA requires restoration and *protection*), and (3) because the damage measure didn't include all the damages the state has and will suffer (such as existence, option, and loss of value measures).

(1) Facts: a mining company determined that it had significantly contaminated the groundwater, and the state sues under CERCLA for NRDs. The state and the company negotiated and developed a proposed consent decree, which they presented to the court. The Salt Lake City Water Conservancy District

intervened to oppose the decree, having an interest in future development of the groundwater.

4. **Federal Power Act:** the FPA requires any who wants to do a hydropower project to get a license from FERC, and FERC is required by the FPA to consider effects on fish and wildlife.
  - a) *Udall v. FERC* (1967) (p669x): the Court says that FERC must find that licensed projects are "best adapted to a comprehensive plan for improving or developing a waterway, and for other beneficial public uses, including recreational purposes."
    - (1) FERC's requirement to consider environmental concerns has been strengthened by the Fish and Wildlife Coordination Act, the Electric Consumers Protection Act, and an amendment to the FPA itself (p670x).
  - b) *National Wildlife Federation v. FERC* (9th Cir. 1986) (p670): the court says that while FERC may not always need to develop a comprehensive plan, require permittees to study impacts, or collect baseline environmental data before issuing permits, it has to at least give some good reasons for not doing those things. The court also said that FERC violated that Northwest Power Act.
    - (1) Facts: FERC issued seven licenses for projects in central Idaho without developing a comprehensive plan, requiring permittees to study impacts, and collecting baseline environmental data.
5. **Reclamation Act:** this act subsidizes irrigation (and, since 1939, other water related) projects: the federal government develops water and provides it to users who later repay project costs in interest-free installments. This revolving fund has never actually materialized, and now the act is under fire for being far too generous. Over 500 dams have been built under the act.
  - a) **Section 8:** this section requires the federal government to acquire water rights under state law.

*Comment: Nothing in this Act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any States of Territory relating to the control, appropriation, use or distribution of water used in irrigation . . . and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with such laws.*
  - (1) *California v. U.S.* (1978) (p804): the Court says that the states can impose conditions on Bureau of Reclamation permits unless the conditions are directly in conflict with congressional provisions that authorize the project. The Court expressly disavows previous "dicta" that said otherwise.
    - (a) Facts: the Bureau of Reclamation goes to California to get a permit for water that it would impound with the New Melones dam it was going to build. California imposed 25 conditions to the permits, including conditions prohibiting full impoundment of water until the Bureau can show firm commitments for the use of the water and imposing minimum flows.
6. **NEPA:** this requires environmental impact statements for many federal projects.
7. **Northwest Power Act:** the NWPA was adopted to "protect, mitigate and enhance the fish and wildlife, including relate spawning grounds and habitat, of the Columbia River and its tributaries," and it requires that fish and wildlife be given "equitable treatment." See *National Wildlife Federation v. FERC* at p673.