

FINAL EXAMINATION

WATER LAW

P.N. Davis

Tuesday, May 10, 1994

1:00 - 3:30 PM

THIS IS A TWO AND ONE-HALF (2½) HOUR EXAMINATION.

THIS EXAMINATION CONSISTS OF FOUR (4) PAGES.

THIS EXAMINATION CONTAINS TWO (2) QUESTIONS.

IA = 50 min. IB = 50 min. IC = 20 min.

II = 30 min.

FILL IN YOUR EXAMINATION NUMBER ON THE BLUEBOOK STICKER.

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THIS IS A CLOSED BOOK EXAMINATION.

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Instructions:

1. These questions will be graded on the basis of the times indicated with each questions. The indicated time for the questions total 2½ hours. You will be given 2½ hours to write the examination. Budget your time carefully or you may not finish.
2. Be sure to state a result whenever a question asks for one. Merely stating the arguments on both sides of a legal issue will result in only partial credit because you will not have completed the analysis required by that type of question.
3. If you find it necessary to make factual assumptions in order to answer a question, be sure to state the assumption.
4. Do not assume additional facts for the purpose of avoiding a legal issue or making its resolution easier.
5. Comment briefly on each legal issue reasonably raised by the questions and on each reason for your answer, even when you decide that one legal issue or reason controls the result.
6. The difference between triumph and disaster may lie in a careful reading of the questions.

I.
(120 minutes)

Beginning in 1984, the National Chemical Corporation began pumping millions of gallons of water per day from its wellfield in the Orson Bottoms. The water in the Orson Bottoms aquifer does not come from the Middle River, but from upland recharge areas. This pumped water flowed through a two-mile ditch to the Middle River. The ditch was located on an easement. The water flowed down the Middle River 50 miles to National's ethanol plant; the plant was located on the bank of the river. There the added flow was diverted, partly for use in the plant, partly for sale as drinking water to a nearby town located a mile from the river. The increase in flow in the 50-mile reach of the Middle River was 25 percent. The diversion at the plant was roughly equal to the amount of water added to the river from the wellfield.

The Middle River is a modest size river which has no commercial navigation above New Paris, which is downstream from National's plant. In the 18th and early 19th centuries, the entire river was used by Indian fur traders. The last use of the river by fur traders was 10 years before statehood. The river was not used by keelboats (floating produce to market) or log rafts after statehood. Today, there is a commercial tour boat at the historic town of Orson City, located just upstream from the Orson Bottoms wellfield ditch outlet. That boat gives 1½ hour tours, departing and arriving at its dock in Orson City.

Several parties were affected by this operation:

First, the pumping in the Orson Bottoms caused the water table to drop 20 feet before it stabilized. Several nearby farmers' shallow wells went dry, although deeper wells were unaffected. The farmers had to deepen those wells to retain their groundwater supplies.

Second, the increased river flow caused bank erosion at various places along the 50 mile reach of the Middle River between the wellfield ditch outlet and the plant; this resulted from the higher average flow in that reach of the river. Many farms located along the river lost from 5 to 20 acres of land cumulatively to erosion over 10 years. However, there was no increased flooding and land inundation during heavy rain periods because National reduced well pumping and river flow augmentation at those times.

Third, the State owns a migratory bird refuge in Goose Bottoms, located between the wellfield ditch outlet and the plant. That refuge has been operated by the State since 1975. The State has diverted a relatively fixed flow of water from the river to

inundate constructed wetlands to a depth of 2 feet for periods of several months duration each year. The increased height of the Middle River resulting from National's flow augmentation operation initially inundated the State's offtake structure, which was designed for a lower river level. In 1986, the State reconstructed the offtake to accommodate the higher river levels.

Fourth, during the drought of the late 1980s, National complained to the State that the State was diverting water to the bird refuge which National had added to the river and which was intended for diversion at its plant. The State diverted 20 percent more water than it could have before National's well pumping and flow augmentation operation began. In spite of the State's refuge diversion, National continued to divert from the river at the plant the amount of water it added at the wellfield ditch outlet. As a result, the amount of water flowing to irrigators downstream from the plant was reduced by 20 percent. Those irrigators had been diverting water since 1960.

Fifth, the increased flow in the river increased channel scouring, reducing fishing opportunities in the 50 mile reach of the Middle River between the wellfield ditch outlet and the plant. By contrast, the increased flow during low natural flow periods (as in late summer) reduced navigation problems for recreational boats.

Sixth, New Paris, a town located downstream from the plant, was unable to take advantage of the increased flow of the river upstream for developing a river port. It wished to have the increased flows in the river above the plant continue downstream to improve channel depth. Its diversion for municipal water supply was unaffected.

A. (50 minutes)

Assume that these events occurred in the State of Jefferson, an eastern state. What are the rights of the various parties? Discuss all relevant legal issues. State results for each party.

B. (50 minutes)

Assume that these events occurred in the State of Fremont, a western state. What are the rights of the various parties? Discuss all relevant legal issues. State results for each party.

C. (20 minutes)

What permits, if any, are required for National's operations from the state and federal governments? Discuss state permits for both the State of Jefferson and the State of Fremont scenarios.

II.

(30 minutes)

Briefly define the following:

1. common enemy doctrine
2. reserved rights doctrine
3. adjudication
4. *Appalachian Electric Power Co. v. United States*
5. equitable apportionment
6. drainway
7. *Tyler v. Wilkinson*
8. unity of title test
9. navigation servitude
10. salvaged water

WATER LAW W94 ANSWERS

IA. (50 minutes)

1. groundwater: choose between absolute ownership, American rule, comparative reasonable use rule
result: *absolute ownership*: no liability for water withdrawal
American rule: liability for adverse effects for taking water for use off-site; off-site use involved here
comparative reasonable use rule: off-site use OK if adverse effects are not unreasonable; water table drop affects only shallow wells, when water supplies for deeper wells not affected; liability only if imposing cost of deepening wells is not unreasonable
2. bank erosion: riparian rights apply: natural flow vs. comparative reasonable use
natural flow: increase in flow actionable *per se*, except for *de minimis* effects
reasonable use: bank erosion from increased flow probably unreasonable
- water for habitat maintenance OK under riparian law; other users must share water supply
- offtake: same result *re* reconstruction of state offtake structure (state as proprietor has same rights as private riparian)
4. irrigators: *natural flow*: no reduction in flow allowed, even during droughts
reasonable use: downstream irrigators entitled to reasonable amounts of water for irrigation; 20 percent reduction may or may not be unreasonable during drought
is National entitled to all the flow it added to the river? probably. but, sale of water to nonriparian town may not be permitted
unreasonable per se - Anaheim: such diversion unlawful
actionable only if actual injury - Stratton: since there was an actual reduction in flow to irrigation, probably actionable
- comparative reasonableness applies only to diversions to riparian land
5. public rights: public entitled to use of surface for navigation & fishery
public waters: commercial navigation & recreational boat tests
commercial navigation test: no commercial navigation today; was not commercially navigated at statehood; no public rights
recreational boat test: is traversable by recreational boats; public rights exist
fishing adversely affected; general public rights law does not address impairment
public trust: state must protect public rights of navigation & fishery; both state & members of public may enforce against

encroachment

- loss of fishery is violation of public trust

6. New Paris: entitled to natural flow, but not augmented flow, under any version of riparian doctrine; not entitled to relief

IB. (50 minutes)

all western states apply prior appropriation to groundwater; is integrated with surface watercourse appropriation system

- reasonable efficiency required; well owners not entitled to maintenance of shallow wells when water is not impaired when wells are deepened

2. bank erosion: prior appropriation law does not address bank erosion
usual riparian/nuisance principles apply; probably actionable
(bonus: not discussed in course)

3. bird refuge: diversion for wildlife not a reasonable beneficial use; no right to divert; hence, its 1975 priority date cannot prevail over National's 1984 priority date
but some states by statute allow state agencies to appropriate water for habitat purposes
bird refuge, in any event, is junior to downstream irrigators 1960s priority dates
reasonable efficiency required; *query* whether augments of water should pay for reconstruction

4. irrigators: irrigators have 1960s priority dates; National has 1984 priority date; National cannot impair irrigators' water diversions & must cut back diversions of natural flow (if any)
but, National's augmentation constitutes developed water (not salvaged water)
- define developed and salvaged water
- irrigators not entitled to developed water; so National need not cut back
- irrigators can require State to reduce diversions to bird refuge

5. public rights: prior appropriation system does not recognize public rights
public rights law generally deals with recreational navigation, not protection of fishery
public trust: Mono Lake requires protection of public rights under public trust doctrine
- here, problem is not reduction of flow (as in *Mono Lake*)
- management of appropriation flows must take public trust rights into account; loss of fishery may be actionable

6. New Paris: prior appropriation system does not recognize water rights for navigation purposes; not actionable

C. (20 minutes)

1. wells: *east:* no permit required; unless there is a permit statute
west: prior appropriation permit required in some states
federal: Corps § 10 permit required for ditch outlet into river
 - federal permit required only on "navigable waters of the United States"
 - definition: present uses, historic uses, susceptibility
 - here river historically was used by fur traders; is subject to federal jurisdiction
3. bird refuge: *east:* no permit required for diversion
west: if permitted, state prior appropriation permit required (only state agencies can appropriate water for habitat purposes)
federal: Corps § 10 permit required for diversion offtake structure
4. irrigators: *east:* no permit required for industry, irrigation, municipal water, unless there is a permit statute
 - eastern permit statutes do not create time priorities
 - in times of shortage, states can cut back diversions; statutes do not specify manner of cutback; on rare occasions that cutbacks have been ordered, they have been *pro rata**west:* prior appropriation permit required
federal: Corps § 10 permit required for National's offtake structure, and for irrigators offtake structures (if any)

II. (30 minutes)

1. common enemy doctrine
2. reserved rights doctrine
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4. *Appalachian Electric Power Co. v. United States*
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