

Final Examination
Environmental Law & Policy
Professor Rechtschaffen
Fall 2005

INSTRUCTIONS

1. You have **three (3) hours** to complete this exam.
2. This is a **closed** book exam.
3. This exam consists of three (3) essay questions, including subparts. The questions are *not* of equal weight, so please be sure to carefully follow the time allocated for each question. Please make sure to fully answer all parts of each question.
4. Please take your time to think about each question before answering it. I am more interested in how you apply and analyze various rules and principles than in having you simply repeat the rule back to me. Please also keep in mind that I expect you to discuss general statutory and regulatory provisions (not necessarily precise sections or subparts). If there are insufficient facts for you to give a more definitive answer, please state what additional facts you would need to answer the question more completely.
5. Please write your response in the blue books provided. Please write clearly. Write on every other line and every other page to permit instructor comments. Typed answers also should be double spaced.
6. Write your exam number on your exam envelope. Put your student exam # at the top of this page, each page of questions, and each blue book. **Do not** use your name, student ID number or Social Security Number on any exam materials.
7. At the conclusion of the exam, return all test materials, including blue books, scratch paper, and this exam packet to the envelope and submit it to the proctor. **DO NOT** seal the envelope. Students who do not return all exam materials at the end of the exam may not be graded.

GOOD LUCK!

Question I (60 minutes)

This Question has a Part A and Part B.

The Port of Oakland, a private corporation, owns several hundred acres of property in West Oakland. Included in this property are 40 acres of tidal wetlands, located adjacent to San Francisco Bay (a tidal wetland is one covered daily by the tides throughout the year). The wetlands, which support wetland plants known as saltmarsh cordgrass, are habitat for the California long tern, a bird listed as endangered under the Endangered Species Act (ESA). Because the wetlands are right next to the Bay, they also serve to control flooding from the Bay during storms, and to help filter out pollutants before they enter the Bay. The area near Oakland has lost 90% of its historic tidal wetlands. The Port has proposed filling the 40 acre wetlands site to construct a hotel and industrial park, which will be home to several national corporations.

The project would result in the destruction of nesting habitat for the long tern, and the death of two pairs of long terns. The tern is found solely within northern California. School children from Oakland regularly visit the site on field trips to view the tern. Birders also come from other parts of California, and occasionally from other states, to observe the tern at this and other sites. The tern never has been the object of any scientific or medical research.

Part A

Please evaluate whether it violates the U.S. Constitution for the federal government to require the Port to comply with section 9 of the ESA for this project. Please explain your answer.

Question I, Part B

The Port has applied for a permit to fill the wetlands under Clean Water Act section 404(b). As mitigation for filling the wetlands, the Port has proposed to do all of the following:

1. Purchase and dedicate to the U.S. National Wildlife Refuge 20 acres of tidal wetlands, located on private property in Hayward adjacent to the Bay, about 15 miles south of the Port. The wetlands currently are home to 1 pair of the long tern. If not purchased by the Port, the owner of the Hayward site plans to build a large subdivision on it; and
2. Restore 20 acres of degraded seasonal wetlands (wetlands covered by water for variable periods during the rainy season but dry other times, and that support seasonal wetland plants like reeds and rushes) in Modesto, an area 60 miles east of the Port. The wetlands are not located near any water bodies. When restored, the wetlands will be habitat to a number of rare plants and animals, including the

delta green beetle, also listed as endangered under the ESA, but will not be suitable habitat for the long term. The area near Modesto has lost 60% of its historic seasonal wetlands; and

3. Create 25 acres of new tidal wetlands on the Port's property from an existing upland area, about 1 mile north of the project site and also adjacent to the Bay. The newly created wetland will attempt to replicate the wetlands being filled, although the technology for doing this on areas (such as the replacement site) with a low water table is somewhat uncertain.

Please analyze whether the Port's proposed mitigation plan meets the requirements of the Clean Water Act for wetland fill projects. Please explain your answer.

Question II

(One Hour, 15 minutes)

This Question has a Part A and Part B.

Cowfarm has proposed to open a dairy farm in the Central Valley of California. The area is zoned agricultural. Until the past few years the area was largely residential and rice fields, but now contains close to a dozen dairy farms. The proposed farm will consist of 600 dairy cows confined in two large buildings (also known as a concentrated animal feeding operation, or CAFO). The cattle will produce hundreds of thousands of gallons of liquid waste manure- which will accumulate in open-air pits near the building. The waste will release hazardous air pollutants such as ammonia with short term respiratory impacts, as well as volatile organic compounds (which contribute to ozone). The Central Valley is a severe nonattainment area for ozone under the Clean Air Act.

Waste from the pits will be regularly emptied and sprayed as fertilizer onto nearby rice fields, and during winter rain storms, will run off into the Centralia River, where it will adversely impact water quality and likely cause some fish kills. The designated uses of the Centralia River include recreation and habitat for fish and wildlife. California has not set a numeric standard for pollutants from dairy farm waste to protect the designated uses of rivers such as the Centralia River.

Cowfarm has applied for a federal license from the U.S. Department of Energy (DOE) to conduct an experimental energy-recovery project on the farm (burning cow manure to recover energy). DOE thus is the lead agency for the entire project, and will carry out any required environmental review for the proposed Cowfarm dairy farm.

Part A

Please analyze the following two questions:

(1) What requirements, if any, does the Clean Water Act impose on the Cowfarm project? Please discuss.

(2) Is an Environmental Impact Statement (EIS) for the Cowfarm project required, and if so, what are the potentially significant environmental impacts that it should discuss?

Question II, Part B

Assume for purposes of this part that Cowfarm has received all the requisite approvals and is operating its facility. The farm employs 25 workers and generates tens of thousands of dollars in tax revenue for the county annually. Rick and Sharon live with their family approximately 400 yards downwind from Cowfarm. After the farm opens, they complain of constant odors, headaches, and fatigue. They say they feel a gag reflex when they are out in the yard during heavy odor periods; their children complain about feeling nauseous when they play outside.

Because of runoff of the waste into the Centralia River during the rainy season, the water in the river has become muddy and smells foul. Rick and Sharon no longer allow their children to play in the river near their home, as they did before Cowfarm opened. In addition, two months ago during an exceptionally heavy wind and rainstorm, waste from Cowfarm was transported 10 miles downstream, and redeposited on the banks above the river, resulting in damage to a feeding area used by the California red-legged frog, and the death of 3 individual red-legged frogs. The California red-legged frog is listed as endangered under the Endangered Species Act (ESA). Rick and Sharon frequently have taken their children on trips to observe the frogs.

Rick and Sharon would like to sue Cowfarm for the damage it is causing to their family's health and to the environment. Please evaluate whether Rick and Sharon can bring a common law claim, and a claim under the ESA, against Cowfarm, and their likelihood of success on each of these claims. Please include in your discussion whether Rick and Sharon would have standing to sue on on their claims.

Question III

(45 minutes)

The State of New Union is out of compliance with the National Ambient Air Quality Standard (NAAQS) for ozone. It has recently enacted a State Implementation Plan (SIP) for ozone that contains the following provisions:

- a. For all large fleets of private vehicles in the state, at least 25% of the new vehicles purchased after 2007 must use some type of existing hybrid technology (i.e. be a hybrid car).
- b. In the state's three large cities, owners of private vehicles who drive into the city's central business district must pay a daily entrance fee of \$50 per vehicle.
- c. Although New Union is classified as a serious nonattainment area for ozone, all new or modified sources subject to new source review in New Union must obtain the higher level of offsets required for new or modified sources in extreme nonattainment areas (a worse nonattainment classification).
- d. All existing facilities with fewer than 25 employees are exempt from Reasonably Available Control (RACT) measures for ozone-causing pollutants;
- e. Measures (a) through (d), along with other measures in the SIP, will reduce ozone-forming compounds by 190 tons per year by 2010. This is 20 tons per year short of the level needed to achieve compliance with the NAAQS for ozone by that date. The State of New Union will develop additional measures by 2008 to remedy this 20 tons per year gap.

With respect to each of the above provisions (a) through (e), please analyze whether the State of New Union is authorized under the Clean Air Act to adopt these measures in its SIP. Please explain why or why not.

END OF EXAM