1-1-1994

PUD No. 1 of Jefferson County v. Washington Dep't of Ecology

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An ongoing debate in the San Francisco Bay / Sacramento-San Joaquin Delta water quality standards setting process has been the degree to which the Clean Water Act allows California (or, in default of state action, the Federal Environmental Protection Agency [hereinafter EPA]) to regulate stream flows into and through the estuary to protect aquatic biota. The State Water Resources Control Board [hereinafter SWRCB], in its seven-year long effort to set water quality standards for the estuary, has stumbled over the effect that implementation of these standards would have on existing water rights. Its failure to finalize standards has compelled the EPA to step in and promulgate federal replacement water quality standards, which are to be finalized pursuant to court order by December 15, 1994. Just in time to illuminate some of the pivotal issues still outstanding in this matter, the recent United States Supreme Court decision in PUD No. 1 of Jefferson County and City of Tacoma v. Washington Dept' of Ecology sanctions the view that the CWA gives the states (and possibly the EPA) a great deal of latitude in implementing water quality standards to protect important environmental resources, even if this results in limitations on the use of water rights.

This Article examines the ramifications and potential scope of the PUD No. 1 decision. It begins by briefly summarizing the factual background and holdings of PUD No. 1. Next, it outlines the potential effect of the decision's holdings in several areas. With respect to hydropower licensing, PUD No. 1 alters the balance of state and federal prerogatives in resolving the conflict between instream values and power generation. The decision also suggests that states can protect use designations under the CWA directly and independently of water quality criteria; it eliminates the artificial distinction between regulation of water quality and regulation of water quantity as this relates to protection of designated uses. Finally, the decision affirms that water quality regulation may incidentally restrict water use, notwithstanding state primacy over water allocations. This Article concludes by examining the impact of the holdings of PUD No. 1 on the restoration of aquatic resources in the Bay-Delta region.

I. Summary of Facts and Holding

The issue in PUD No. 1 was whether the State of Washington could condition a license for a hydroelectric project on the maintenance of minimum stream flows to protect salmon and steelhead runs. This project was proposed to be located on the Dosewallips River, classified as an "extraordinary" water by the State of Washington.
Among the water quality uses of this river designated by the state pursuant to the CWA was salmonid migration, rearing, spawning, and harvesting. The Dosewallips River supports two species of salmon (Coho and Chinook) and steelhead trout. In addition to water quality standards, the state had also adopted a statewide antidegradation policy pursuant to the CWA.4

The project would have diverted water from a 1.2-mile reach of the river through penstocks and a power plant before releasing the water back into the river, reducing the minimum streamflow from 149-738 cubic feet per second [hereinafter cfs] to 65-155 cfs.5 Because the proposed hydroelectric project would result in "discharges" of dredge and fill material and of flows from the tailrace into the Dosewallips River, the project proponents (the petitioners in the Supreme Court case) were required to obtain state certification of the project pursuant to section 401 of the CWA.6 As part of the 401 certification process, the State imposed a minimum streamflow condition on the project which required maintenance of between 100 and 200 cfs, depending upon the season.7

The principal issue on appeal to the Supreme Court was whether this instream flow requirement was a permissible condition in a 401 certification.8 The Court answered this question in the affirmative, reasoning that section 401(d) authorizes a state to impose additional conditions and limitations on a proposed project once the threshold requirement of a discharge is satisfied. The Court's reasoning can be broken down as follows.

First, the Court held that the "other limitations" clause of section 401(d) authorizes conditions designed to ensure compliance with the state's water quality standards adopted pursuant to section 303 of the CWA.9 The Court next considered whether the minimum instream flow requirement qualified as a condition or limitation designed to ensure compliance with the state's water quality standards. Answering this question in the affirmative, the Court relied primarily on the state's determination that the construction and operation of the project as planned would be inconsistent with the designated salmonid migration, rearing, spawning, and harvesting. The Court noted that this designated use directly furthered the CWA's goals and policies.10

The Court rejected the petitioners' argument that the instream flow requirement could not be based on the designated use but only on the water quality criteria adopted by the state under section 303 of the CWA11 to achieve the designated uses.12 Instead, the Court read section 303 and its implementing EPA regulations as allowing a state to require a project to be consistent with both designated uses and water quality criteria.13 To require the states to enforce only the water quality criteria component of their water quality standards, the Court said, would "require [them] to study to a level of great specificity each individual surface water to ensure that the criteria applicable to that water are sufficiently detailed and individualized to fully protect the water's designated uses."14

The Court also held that the minimum instream flow requirement was a permissible application of state and federal antidegradation regulations, which require existing instream water uses to be maintained and protected.15

Finally, the Court rejected petitioners' argument that the instream flow requirement was impermissible because the CWA is concerned only with "water quality," not "water quantity," noting that such a distinction is "artificial."16 In many cases, "water quantity is closely related to water quality; a sufficient lowering of water quantity in a body of water could destroy all of its designated uses...."17 Moreover, the Court stated, the CWA


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4. Id. at 1905-07.
5. Id. at 1908.
6. That section provides, in pertinent part, that:
(a) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State... that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title.
(d) Any certification provided for under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations under section 1311 or 1312 of this title.... and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.
7. 114 S. Ct. at 1907-08.
8. Id. at 1908.
9. Id. at 1908-09.
10. Id. at 1910.
12. 114 S. Ct. at 1910-12.
13. Id. at 1910.
14. Id. at 1912.
15. Id.
16. Id.
17. Id. at 1912-13.
itself embodies a broad concept of pollution, which includes changes in the "movement, flow[,] or circulation of any navigable waters."\textsuperscript{18}

The Court disposed of the assertion that its holding would abrogate or conflict with sections 101(g) and 510(2) of the CWA,\textsuperscript{19} which in essence reserve to the states the right to allocate quantities of water within their borders. It stated that these provisions "preserve the authority of each State to allocate water quantities as between users; they do not limit the scope of water pollution controls that may be imposed on users who have obtained, pursuant to state law, a water allocation."\textsuperscript{20} According to the Court, the section 401 instream flow requirement did not violate the state's water rights authority because it did not purport to determine petitioners' proprietary right to water; rather, it merely determined "the nature of the use to which that proprietary right may be put under the CWA...."\textsuperscript{21}

II. Notable Features of the PUD No. 1 Decision

A. In Hydropower Licensing, PUD No. 1 Radically Alters the Balance of State Versus Federal Prerogatives in Resolving the Competition Between Instream Values and Power Generation, at Least in the Absence of Actual Conflict Between States and the Federal Energy Regulatory Commission.

In California v. Federal Energy Regulatory Comm'n,\textsuperscript{22} the so-called "Rock Creek" case, the Court unanimously held that the SWRCB was preempted under the Federal Power Act, as read through the Supremacy Clause, from mandating fishery releases from a federally licensed dam, where that requirement was more demanding than the terms imposed by the federal license.\textsuperscript{23} The Court held, in effect, that, where a regulatory judgment is made by Federal Energy Regulatory Commission [hereinafter FERC], an inconsistent state regulatory requirement is preempted.\textsuperscript{24}

If the "Rock Creek case" relegated the states to the periphery in the process of balancing power generation against downstream fishery protection, the subsequent Ninth Circuit decision in Sayles Hydro Ass'n v. Maughan\textsuperscript{25} appeared to remove states from the field entirely. Sayles resolved the question of whether the "Rock Creek" case's preemption of state regulation was limited to actual conflicts with FERC determinations, or whether FERC's authority over fishery releases from federally licensed dams under the Federal Power Act was so complete as to "occupy the field" and thereby preclude any role for the state regulators. Interpreting the "Rock Creek" rationale to imply total preemption, the Sayles Court held that the SWRCB lacks the power to do anything respecting fishery releases except determine proprietary water rights.\textsuperscript{26}

PUD No. 1 resets the balance by giving the state primacy over instream flow requirements pursuant to its authority under the CWA to protect water quality by issuing certifications to applicants for federal licenses for activities which may result in discharges to navigable waters.

In the PUD No. 1 case, the Court noted that the hydro project would result in two types of "discharges" that would trigger the certification requirement: the discharge of dredge and fill material and the discharge of water from the tailrace back into the Dosewallips River.\textsuperscript{27} Hydroelectric projects necessarily involve release of either stored or diverted water back into the water body. Leaving aside for a moment the issue of whether dam releases can be considered "discharges," the PUD No. 1 case strongly suggests that off-stream power generation projects will routinely invoke the certification requirement. While the era of large-scale hydropow-

\textsuperscript{18} Id. at 1913 (quoting 33 U.S.C. § 1314(f) (1994)).
\textsuperscript{19} 33 U.S.C. §§ 1251(g), 1370 (1994).
\textsuperscript{20} 114 S. Ct. at 1913 (emphasis added).
\textsuperscript{21} Id.
\textsuperscript{22} 495 U.S. 490, 506 (1989).
\textsuperscript{23} Id. at 506.
\textsuperscript{24} But, the Court suggested, state administration of proprietary interests in water would not be disturbed by the federal licensing authority. Id. at 501. This suggests that if the fishery had been protected by conferring an environmental water right, it would not have been preempted.
\textsuperscript{25} 935 F.2d 451 (9th Cir. 1993) [hereinafter Sayles].
\textsuperscript{26} Id. at 456. The court noted that the Federal Power Act is capable of different interpretations concerning the preemption issue, especially section 821, which reads:

[nothing contained in this chapter shall be construed as affecting or intending to affect or in any way to interfere with the laws or the respective States relating to the control, appropriation, use or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein.]
\textsuperscript{27} 114 S. Ct. at 1903.
\textsuperscript{28} However, the implications of the PUD No. 1 opinion on this issue are broad. "Discharges" back into a river that has been diverted through a generator and tailrace would seem to be indistinguishable from "discharges" of flows that have been stored behind an on-stream dam and released back into the river through a generator. This raises the question whether PUD No. 1 undermines the holding in Natural WILDFED v. Gorsuch, 693 F.2d 157 (D.C. Cir. 1982) [hereinafter Gorsuch], that dam releases are not "dis-
er development is probably behind us, the state certification requirement applies to applications for relicensing of existing dams. There will be hundreds of these proceedings in the next decade. At present, some 231 applications are pending before FERC. Thus, PUD No. 1 is bound to have wide application.

In PUD No. 1, the Supreme Court determined that when a "discharge" triggers the state certification requirement, section 401 empowers the state to impose conditions to protect designated water quality uses. Importantly, it held that these conditions are not confined to effluent limitations, but can also include minimum stream flow prescriptions.

Thus, as the dissent in PUD No. 1 bemoans, under that case a state may use its water quality certification authority to accomplish what SWRCB was unable to do under its powers to administer water rights under the holding in California v. FERC:

Because of section 401(d)'s mandatory language, federal courts have uniformly held that FERC has no power to alter or review section 401 conditions, and that the proper forum for review of those conditions is state court. Section 401(d) conditions imposed by States are therefore binding on FERC. Under the Court's interpretation, then, it appears that the mistake of the State in California v. FERC was not that it had trespassed into territory exclusively reserved to FERC; rather, it simply had not hit upon the proper device—that is, the section 401 certification—through which to achieve its objectives.

How could a 7-2 decision in 1994 be so diametrically different from a unanimous decision four years earlier? Justice O'Connor distinguishes the cases on the basis that the state certification in PUD No. 1 was not incompatible with any licensing requirement imposed by FERC. If a license is issued and if its terms conflict with the state minimum stream flow prescriptions, the issue of whether section 401 of the CWA takes precedence over the grant of exclusive licensing authority to FERC under the Federal Power Act can be resolved later.

The stage is now being set for such a conflict in FERC license order in the matter of Tunbridge Mill. In this licensing order, FERC has reserved to itself the decision as to whether stream flow and fishery protection conditions issued by Vermont were properly within the section 401 certification authority, including whether the section 401 conditions are sufficiently connected with the state's water quality standards. FERC believes this is a federal question which it must in the first instance answer. It abrogates this jurisdiction to itself on the basis of the congressional decision reflected in the Federal Power Act to give FERC the paramount role in hydrolicensing.

FERC rejected the following state certification conditions in this case:

1. Vermont sought to require that significant changes in the project or its operations be submitted to the state for review and approval. FERC rejected this condition because, in its view, section 401(a)(3) provides that the federal licensing agency is to determine whether proposed license amendments require new water quality certification.

2. The certification conditions prescribed certain bypass flows, the development of a monitoring plan, the development of an erosion control plan, and the construction of downstream fish passage facilities. Vermont sought to condition commencement of construction upon the state agreeing that compliance with these conditions was proper. FERC's view is that the state has no authority to halt or order construction. After the state issues its certification, FERC believes that it alone is responsible for imposing and policing the conditions.

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29. Id.
30. Id.
31. Id. In reaching this conclusion, the Court found the EPA's policy that "[a]ctivities, not merely discharges must comply with state water quality standards" was entitled to deference.
32. Id. at 1920 (Thomas, J., dissenting). In the main, the dissent is based on very mechanical construction rules (deference to agency interpretations permissible only where statute is ambiguous, the ejusdem generis rule, the dictionary definition of "discharge"), whereas the majority opinion is based on reasoning to effectuate the overall purpose of the Clean Water Act: to protect beneficial uses of water subject to human alteration—including physical alteration.
33. Id. at 1914.
34. Id.
35. Id.
36. Id.

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3. The state included a reopener provision that would allow it to alter the terms and conditions as future circumstances suggest is necessary. FERC was concerned that this provision would give the state unilateral authority to alter its certificate.

In the case of another project in Michigan, FERC rejected a liquidated damages provision for violation of the terms of settlement because it impinged on FERC’s enforcement authority.\(^\text{37}\)

These licensing orders will present two issues on appeal: does FERC have the authority to second guess a state’s decision as to whether particular conditions are needed to protect designated water quality uses and, the bigger issue, how to resolve actual conflict regarding conditions properly within scope of the certification. On the latter, the trade press speculates that FERC will likely draw the line at state conditions that are so onerous as to make the hydropower facility uneconomical.\(^\text{38}\)

Two observations seem pertinent to the further resolution of these issues. First, it is notable that a 1986 amendment to the Federal Power Act sets out a process for resolving disputes between state (or federal) resource agencies and FERC regarding proposed licensing terms and conditions to protect fisheries.\(^\text{39}\) The Electric Consumers Protection Act at section (j)(2) reads:

Whenever the Commission believes that any [fish and wildlife protection, mitigation, and/or enhancement] recommendation referred to in paragraph (1) may be inconsistent with the purposes and requirements of this subchapter or other applicable law, the Commission and the agencies referred to in paragraph (1) shall attempt to resolve any such inconsistency, giving due weight to the recommendations, expertise, and statutory responsibilities of such agencies. If, after such attempt, the Commission does not adopt in whole or in part a recommendation of any such agency, the Commission shall publish each of the following findings (together with a statement of the basis for each of the findings):

(A) A finding that adoption of such recommendation is inconsistent with the purposes of this Part or with other applicable provisions of law.

(B) A finding that the conditions selected by the Commission comply with the requirements of paragraph (1).\(^\text{40}\)

Notably, this dispute resolution process does not say that FERC can override a conflicting state recommendation when it finds that it is inconsistent with the Federal Power Act. After PUD No. 1, as long as the state recommendation is consistent with the CWA certification process to protect water quality, it seems highly questionable that FERC could override. Paragraph (a)(1) of section 401 states explicitly that “[n]o license or permit shall be granted until the certification required by this section has been obtained or has been waived.... No license or permit shall be granted if certification has been denied by the State....”\(^\text{41}\)

Second, with respect to the economic infeasibility test, it is notable that this position is in stark contrast to the policy of the CWA, which excludes considerations of economic or technical feasibility in establishing water quality standards (although it is pertinent to the issuance of individualized permits to attain the standards).\(^\text{42}\)

The setting of water quality standards is the foundation of a state’s water quality control process under the CWA.\(^\text{43}\) Water quality standards are comprised of two elements: “designated uses” and “water quality criteria.”\(^\text{44}\) The EPA’s numerous regulations and guidelines to the states regarding the adoption and implementation of water quality standards\(^\text{45}\) give the states a moderately free hand in designating uses for a given water body. The state may designate uses for a water body based upon a

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\(^{37}\) FERC Hydro Orders Attempt to Grapple with High Court Ruling, 22 Energy Rep. 27, July 18, 1994.

\(^{38}\) Id.


\(^{40}\) Id.


\(^{42}\) 45 C.F.R. § 79.319 (1994).


\(^{44}\) Section 303(c)(2) of the CWA provides that.

\(^{45}\) Water quality standard[s] shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public health or welfare, enhance the quality of the water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

\(^{46}\) 33 U.S.C. § 1313(c)(2) (1994). “Criteria” are defined as “elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports particular use. When criteria are met, water quality will generally protect the designated use.” 40 C.F.R. § 131 3(b) (1994)

balancing of social and economic factors, provided that "existing uses" are preserved.\textsuperscript{46} Once uses are designated for a particular water body, "states must adopt those water quality criteria that protect the designated use."\textsuperscript{47} "Criteria" are chemical, physical, or biological characteristics of a water body,\textsuperscript{48} which, when attained, protect the designated uses.\textsuperscript{49} Water quality criteria must be established on a defensible scientific basis\textsuperscript{50} as contrasted to considerations of economic or technological feasibility.\textsuperscript{51} That the EPA is not to consider water supply impacts of its standard setting is reinforced by the recent Fourth Circuit decision in \textit{James City and County, VA. v. EPA.}\textsuperscript{52}

What about the other policy concern of the dissent that PUD No. I would allow parochial state interests in fishery protection to upset the broader national interest in power generation?

First, it is not at all clear that fishery conservation subordinates broad public values to narrow local concerns. Indeed, the opposite is indicated by the usual alignment of parties in FERC proceedings, where local power companies are usually arrayed against national conservation organizations.

Second, as the majority point out, conflict between state prescriptions and FERC fishery release requirements is far from inevitable in view of the 1986 amendment to the Federal Power Act which now requires FERC to give fishery conservation "equal consideration" with power generation in its licensing decisions.\textsuperscript{53} Logically, FERC should oppose state minimum flow prescriptions only when they are so onerous as to make the project forevermore infeasible, not just more expensive, and not just uneconomical at today's power rates.

Moreover, in California, there is little prospect of the SWRCB exercising its water quality authority in an unbalanced manner. The SWRCB's proceedings to protect the Bay-Delta estuary have suffered, since their inception seven years ago, from the SWRCB's signalled intent to strike a balance between the competing demands for Bay-Delta waters among beneficial uses: environmental versus consumptive, and in-estuary versus export uses. The implication is that the level of protection attainable for the in-estuary beneficial uses, i.e., the fisheries, is a function of the needs of the water exporters. The problem with this approach is that it fails to comport with the SWRCB's obligations under the CWA to exclude consideration of economics in setting water quality standards, as discussed above.

B. The Decision Suggests that the CWA Permits States (and Perhaps the EPA) to Enforce Measures to Protect use Designations Directly and Independently of Water Quality Criteria.

Before PUD No. I, the conventional view was that enforceable, individualized obligations to prevent impairment of water quality were the product of a sequence of administrative steps, proceeding from planning to permitting. As discussed above, first, the state goes through a planning process to designate the "uses" of the water body that it wants to protect. This includes both consumptive and environmental uses. Second, the state adopts water quality criteria or objectives. These are either numerical or narrative prescriptions of the chemical, physical, or biological characteristics of the water body which the state deems sufficient to protect the designated uses. Usually, they are stated as constituent concentration limits. Then, the state develops an implementation program which may include: Best Management Practices for non-point sources; a program to issue National Pollutant Discharge Elimination System permits to limit individual discharges into the water body; or, in the case of use impairment due to flow alteration or depletion, orders restricting or constraining the exercise of water rights. It is only at the last stage that water quality obligations are particularized and become enforceable.

PUD No. I collapses this sequential process by holding that the regulated project is required to operate in a manner that is consistent with the designated use directly:

\begin{itemize}
\item \textsuperscript{46} 40 C.F.R. §§ 131.10(a), 131.10(h)(l) (1994).
\item \textsuperscript{47} 40 C.F.R. § 131.11(a) (1994). Significantly, the EPA deleted weaker language from an earlier regulation, which stated that criteria had to be "compatible with" protecting designated uses, on the grounds that the "compatible with" language was confusing and misleading. 48 Fed. Reg. 51,402 (1983).
\item \textsuperscript{48} 33 U.S.C. § 1362(18) (1994).
\item \textsuperscript{49} 40 C.F.R. § 131.3(b) (1994).
\item \textsuperscript{50} 40 C.F.R. §§ 131.10, 131.11(a)(1), 131.11(b) (1994).
\item \textsuperscript{51} 45 Fed. Reg. 79,319 (1980) (emphasis added). That economic factors have no place in setting water quality criteria was firmly established in \textit{Mississippi Comm'n on Natural Resources v. Costle}, 625 F.2d 1269 (5th Cir. 1980). In this case, the court expressly rejected the argument that a state has discretion to consider economic and social factors in setting water quality criteria. Id. at 1276. The court pointed out that Congress recognized the distinction between designation of uses and setting of criteria "by placing with EPA the duty to develop and publish water quality criteria reflecting the latest scientific knowledge." Id. Although consideration of economic factors is relevant to the designation of uses, these factors were irrelevant to the scientific and technical factors to be considered in setting criteria to meet those uses.
\item \textsuperscript{52} 12 F.3d 1330, 1335-36 (4th Cir. 1993).
\item \textsuperscript{53} \textit{See Electric Consumers Protection Act.} 16 U.S.C. §§ 797(e), 803(a)(1) (1994).
\end{itemize}
[A] project that does not comply with the designated use of the water does not comply with the applicable water quality standards. Consequently, pursuant to § 401(d), the State may require that a permit applicant comply with both the designated uses and the water quality criteria of the state standards.54

There are many interesting implications of this interpretation of the CWA. It would seem to imply, for instance, that, without amending the existing water quality criteria, a state can impose more demanding requirements where it determines that the criteria are in fact insufficient to protect a designated use. Does this apply to all dischargers, or just to applicants for a federal permit? And does it apply only to states, or also to the EPA when it is acting in lieu of a state in setting water quality standards?

Where the designated use is very broadly stated, for instance, "estuarine habitat," the latitude this interpretation gives to the regulatory agencies is potentially breathtaking. The only effective limit of this approach would seem to be that the requirement must be designed to protect the designated use.

C. The Case Eliminates the Artificial Distinction Between Regulation of Water Quality and Regulation of Water Quantity as they Pertain to Protection of Designated Uses of the Water.

Historically, water quality and water quantity regulation were viewed as running on separate tracks. Water quantity administration is concerned with allocating supply for consumptive uses, a function in which the state has enjoyed primacy. Water quality regulation, by contrast, was conventionally viewed as a matter of restricting the discharge of contaminants into rivers or lakes at levels that would adversely affect designated uses of the watercourse. The regulatory agencies that administer the CWA have become adept at fashioning waste discharge permits to assure that the requisite water quality characteristics—parameters such as temperature, oxygen, turbidity, and chemical concentrations—are attained. Thus administered, water quality is maintained by controlling what goes into a watercourse. Further, the legal mandates are driven primarily by federal law.

PUD No. 1 explicates the other dimension of the water quality problem: the impairment of designated uses as a result of withdrawals of water from the watercourse. One physical characteristic of water that is vitally important to the well-being of aquatic ecosystems is the physical availability of the water itself, that is, of minimum streamflows. The case makes clear that water quality planning is also a function of what is taken out of a waterbody, that diversions of water are subject to regulation under the CWA.

The interrelationship between water quality and water quantity has been debated and disputed in no forum more contentiously than in the proceedings of the SWRCB to adopt a water quality plan for the San Francisco Bay/Sacramento-San Joaquin Delta estuary. The Bay-Delta conflict raises in sharp relief the extent to which federal laws that govern state water quality planning permit the states to calibrate water quality standards to economic and social factors having to do with the consumptive use of that water.

The SWRCB escalated this debate in developing its 1991 water quality plan for the estuary when it refused to consider freshwater inflows as a parameter controllable under its water quality administration. The SWRCB issued a water quality control plan that eliminated from consideration, ab initio, the one water quality parameter most closely associated with protection of estuarine resources, that is, the physical availability of the water itself, the form of freshwater inflows. The SWRCB premised its decision to exclude consideration of freshwater needs, inter alia, on the exhortation of the State Court of Appeal in United States v. State Water Resources Control Bd. 55 In reviewing the SWRCB's previous attempt to set water quality standards for the estuary, the court held that the SWRCB had been "unwise" in combining water quality regulation and water rights administration in the same proceeding.56 The SWRCB reasoned that it did not have the legal authority to reallocate water rights within a water quality proceeding. This led the SWRCB to adopt a water quality plan in 1991 that disregarded the instream requirements of the fisheries and other aquatic resources and that, in effect, subordinated the environmental water demand to the already established pattern of water exports from the estuary.57 The resultant water quality plan was stated that the SWRCB unlawfully placed this burden only on the water rights permit holders, whereas the responsibility actually belonged to all water users.

54. 114 S. Ct. at 1910.
56. The SWRCB, however, misapprehended the court's point, which was that combining the two phases tended to narrow impermissibly the universe of water users responsible for complying with inflow requirements to meet water quality standards. The court stated that the SWRCB unlawfully placed this burden only on the water rights permit holders, whereas the responsibility actually belonged to all water users.
57. The SWRCB has taken the position that, in setting water quality standards for the Bay-Delta region, it is permitted to balance the benefits of protecting the estuary's fish and wildlife...
so obviously deficient in its protection of fishery and other environmental values that the EPA declared it inadequate and proceeded to adopt federal replacement water quality standards which should be finalized by December 15, 1994.

In PUD No. 1, the Court explicitly recognized that “a sufficient lowering of the water quantity in a body of water could destroy all of its designated uses.”38 By section 304 of the CWA, the Court held that the type of “pollution” regulated by the CWA is the man-made alteration of the chemical, physical, biological, and radiological integrity of the water body and that flow depletion is a type of physical alteration.39 Thus, impairment of designated uses may result from “changes in the measurement, flow, or circulation of any navigable waters...including changes caused by the construction of dams.”50

This view of the CWA leads to intriguing questions of its application beyond the section 401 certification process. For instance, does the integration of water quantity regulation with water quality regulation extend to EPA replacement standard setting under section 303 of the CWA, such that the EPA could regulate flows and diversions directly in the Bay-Delta system instead of just regulating salinity?

Whatever the doctrinal answer, this is unlikely to happen. The CWA requires states to adopt implementation plans,61 but does not authorize the EPA to do so when the state defaults. Thus, the EPA cannot directly regulate water use. This is a matter relegated to the states. Note, however, that federal facilities must comply with federal and state water quality standards under the CWA. It is at least arguable that, under this decision, the EPA could directly regulate the operations of the Bureau of Reclamation’s Central Valley Project as it affects attainment of the designated “estuarine habitat” use of the Bay-Delta estuary.

D. Water Quality Regulation by Either the State or Federal Governments May Restrict Water Use, Notwithstanding the State Primacy Over Water Allocations.

In abrogating the regulatory barrier between water quality and water quantity regulation, PUD No. 1 affects the states’ administration of water rights and the allocation of water. The decision rejected the view that section 101(g) of the CWA prohibits the water quality regulators from mandating that certain minimum flows be left instream, at least when the state is that regulator. It held that the minimum stream flow prescription did not “determine [any] proprietary right to water;” rather, “it determines the nature of the use to which that proprietary right may be put under the [CWA].”62 Thus, the Court limits the application of section 101(g) to preserving the authority of each state to allocate water quantity as between users.63 This reservation of state prerogative does not apparently extend to the question of the allocation of water as between the rights holder and the environment. The reservation protects state primacy over priority of use, but not over total quantities available for diversion.

This approach seems consonant with both the text of section 101(g) and its legislative history. This section, adopted as part of the 1977 amendments to the CWA, reads as follows:

It is the policy of Congress that the authority of each State to allocate qualities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this chapter. It is the further policy of Congress that nothing in this chapter shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.64

Section 101(g) was introduced by Senator Wallop, who stated:

This amendment...seek[s] to clarify the policy of Congress concerning the proper role of Federal water quality legislation in relation to state water law. Legitimate water quality measures authorized by this act may at times have some effect on the method of water usage. Water quality standards and their upgrading are legitimate and neces-

59. Id. at 1913 (citing 33 U.S.C. § 1314 (1994)).
60. Id. (quoting 33 U.S.C. § 1314 (1994)).
62. 114 S. Ct. at 1913.
63. Id.
64. 33 U.S.C. § 1251(g) (1994).
sary under this act. The requirements ... may incidentally affect individual water rights.... It is not the purpose of this amendment to prohibit those incidental effects.

... It is the purpose of this amendment to ensure that State allocation systems are not subverted, and that effects on individual rights, if any, are prompted by legitimate and necessary water quality considerations.... It is designed to protect historic rights from mischievous abrogation by those who would use an act, designed solely to protect water quality and wetlands, for other purposes. It does not interfere with the legitimate purposes for which the act was designed.

The courts have not limited federal water quality requirements to those that can be achieved without affecting water rights. The District of Columbia Circuit Court of Appeals grappled with this question in Gorsuch, in the context of defining EPA and U.S. Army Corps of Engineers authority to regulate dam operation. The court recognized that section 101(g) is a "specific indication ... that Congress did not want to interfere any more than necessary with state water management...." However, the court recognized Senator Wallop's statement that section 101(g) was not intended to take precedence over "legitimate and necessary water quality considerations" and allows the EPA to take measures necessary to implement the CWA even when such actions may have an incidental effect on water rights.

Other cases reinforce this conclusion. The Tenth Circuit, in Riverside Irrigation District v. Andreasons, concluded that section 101(g), did not preclude EPA denial of a nationwide permit that would admittedly result in interference with the state's allocation plan: "[a] fair reading of the statute as a whole makes clear that, where both the state's interest in allocating water and the federal government's interest in protecting the environment are implicated, Congress intended an accommodation." It is clear in light of the legislative history and cases that have addressed section 101(g), that the section should not be interpreted to countenance a lower level of protection of environmental resources in cases where water rights must be altered to attain it than in other cases. Section 101(g) was included to reassure states, in particular, California, that the CWA could not be used as a tool to unnecessarily impair the state's authority to allocate water. However, Congress understood full well that activities required to protect aquatic resources would impact state authorized water rights. Such "incidental" effects are not prohibited under section 101(g).

It is interesting to note, however, that Justice O'Connor's opinion in PUD No. 1 (that the minimum stream flow requirement did not determine proprietary rights to water but merely determined the nature of the use to which those rights could be put under the CWA) potentially allows states to go beyond the "incidental effects" test when implementing water quality standards to protect designated uses. Taken literally, the implication seems to be that section 101(g) does not limit the authority of state (or federal) regulators to reallocate water from existing uses to the environment, so long as they respect the state's administration of the relative and correlative rights of those water users. Operationally, water supply reductions resulting from regulatory reallocations of water to the environment would be treated within the state water rights administration system just as any other reduction would, such as drought. In a sense, the decision can be read as giving the environment a first priority to the available water supply, leaving the remainder to be allocated according to state principles. Stated another way, section 101(g) reserves to the states the decision on how to apportion the obligation among water rights holders to relinquish water to meet instream flows required by the CWA; but it does not restrict the state (or federal) regulators regarding the amount of flow or relinquishment that is required to protect designated water quality uses.

Thus read, the extent of a state's ability to interfere with vested water rights is potentially unlimited. A state could, for example, require a holder of a consumptive water right to dedicate his or her entire right to instream use, provided such dedication is for the purpose of protecting the stream's designated uses under the CWA, and the amount of the water right holder's allocation under state law is not changed. This may seem inconsistent with the proscription the Court recognizes in PUD No. 1 against changing proprietary rights to water in order to implement water quality standards under the CWA. There is a way to avoid this inconsistency, however. The extent to which consumptive water
rights are actually affected by an instream flow requirement depends upon the nature and extent of those rights and how they are defined under state law. As explained in Lucas v. South Carolina Coastal Council, if the "background principles" of state property and nuisance law restrict the uses to which property may be put, then there is no state law property right to use one's property for these restricted purposes to begin with.

In California, there are numerous well-established common law doctrines and statutory provisions that significantly limit the nature and extent of property interests in water. These include the reasonable and beneficial use doctrine, the public trust doctrine, the doctrine of public ownership of fish and water resources, and state nuisance law. These various laws and doctrines establish that water rights in California have always been uncertain and subject to substantial alteration and regulation to meet changing public needs. Today, these public needs include the need to protect the public trust resources of the Bay-Delta estuary through increased outflows. Thus, it can be argued that implementation of instream flow requirements to meet water quality standards in California does not violate PUD No. 1's or section 101(g)'s proscription on significant alteration of water rights allocations, because, under California law, holders of consumptive water rights have never had an unqualified property interest.

III. Conclusion: Why is PUD No. 1 Important to Restoration of Aquatic Resources in California?

We know that minimum streamflow prescriptions are insufficient at this time to protect, much less restore, the public trust values of California's watercourses. A 1992 report of the California Policy Seminar of the University of California found that:

The problem of biodiversity loss is particularly severe in freshwater habitats. Although the loss of biodiversity in aquatic systems is presumably occurring among all groups of organisms, only fish are well enough studied to provide a good idea of the actual trends.

California has 116 kinds of native fishes. Of these, 8 are extinct, 15 are formally listed as threatened or endangered, 28 qualify for listing but are not yet listed, 21 are declining, occur in small isolated populations or otherwise need to be managed to keep from becoming candidates for listing, and 44 do not appear to be in any immediate danger. In short, 62 percent of the native fishes are in need of immediate special protection.

Extinctions of fish taxa are now occurring at the rate of one every six years.

Thus, sixty-two percent of the higher trophic levels of aquatic species in California are either lost or in need of immediate protection.

The causes of decline are various and complex. In all cases, however, alteration and diminution of natural stream flows are part of the causal dynamic. Yet, even when the direct cause of declines is some other chemical, physical, or biological agent, depleted streamflows is almost always an exacerbating factor. The situation in the Bay-Delta estuary is instructive. The extreme modifications of the structure, hydraulics, and hydrology of the estuary are the dominant reasons behind the decline of all of the delta-dependent species, causing loss of spawning habitat, nursery habitat, and the safety of migratory pathways. Massive diversions of water from the southern delta to the Central Valley and southern California and the consequent reductions


82. The most significant changes began in the 1850's and are continuing to this day. Early changes in the estuary were primarily caused by diking and filling of more than 90% of wetland habitats, sedimentation and other disruptions caused by hydraulic mining in the Sierras, and the introduction of exotic species. The first observed signs of the harm being done to the estuary were declining fisheries. By the 1880's the Dungeness crab fishery moved offshore. Next to be eliminated from the Bay were the commercial fisheries of large predatory fishes such as salmon and sturgeon. Today only herring and anchovies, small planktivorous species that move into the estuary from the ocean, are harvested commercially in the Bay.
in Delta outflow to the Bay (by more than fifty percent of historic levels in many months) continue to cause major disruptions in this ecosystem. The operation of water projects in a manner heedless of the consequences to aquatic resources was epitomized in 1989; despite being in the third year of a drought and in the face of plummeting fish populations, the Central Valley Project and State Water Project were allowed to divert more water from the Delta than in any other year in history.

How did we get to this pass? In a word, the old water allocation rules have not proven workable for meeting modern environmental demands. This is the legacy of a century and a half of conversion of public asset into private property.

California Water Code section 102 provides that "all water within the State is the property of the people of the State, but the right to the use of water may be acquired by appropriation in the manner provided by law." But, until recently, the "manner provided by law" has been physical diversion or control of the water, not instream use. As a result, water resources have been largely acquired before the public, to whom they belong, gets a share.

By freeing minimum streamflow prescriptions from the shackles of FERC pre-emption and water right protection, the Supreme Court in PUD No. 1 has created new opportunities to address the systemic asymmetry in the allocation of a public resource for the ultimate public purpose: protecting aquatic diversity for the benefit of future generations.


84. In recognition of these distressing facts, the California Legislature last term enacted a provision, codified as § 1707 of the Water Code, to authorize the SWRCB to approve petitions by existing water rights holders to transfer their water to instream and other environmental uses if other legal users and the public interest are protected. By permitting water to be transferred on a voluntary basis only from an existing user to the environment, this section of the Water Code provides an attractive alternative to the involuntary reallocation of water that will otherwise be necessary to protect aquatic resources under existing state and federal laws. Cal. Water Code § 1707 (West Supp. 1993)

85. This was made clear in two California Court of Appeal decisions in 1979: Fullerton v. State Water Resources Control Bd., 90 Cal. App. 3d 816 (1979), holding private parties may not appropriate water for instream uses.