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Swimming Upstream: FERC's Failure To Protect Anadromous Fish

F. Lorraine Bodi*
Eric Erdheim**

INTRODUCTION

Anadromous fish are an important renewable resource. Salmon, steelhead trout, shad, striped bass, alewives, smelt, and other species of anadromous fish contribute to sizable commercial and recreational fisheries and shape cultural, social, and aesthetic values wherever they are found. Persistent human encroachment on anadromous fish populations, however, through water pollution, alteration of fishery habitat, and creation of barriers to migration, has reduced significantly the abundance of some species and completely eliminated others.

1. Anadromous fish hatch in freshwater, spend most of their adult life in the ocean, and then return to freshwater to spawn.

Water resource development is underway at an extremely rapid rate in the United States. It must be emphasized that the very heavy use and misuse of water throughout the Nation comprises a real threat to the maintenance of significant levels of our remaining fish populations. Impairment of water quality, depletion of streamflow,
The construction and operation of hydroelectric power plants on the rivers where anadromous fish spawn and develop are primary causes of the reduction of these fish populations. Hydroelectric projects often degrade water quality and alter such important river characteristics as volume of water flow and water temperature. Projects may also affect insect populations and gravel conditions. Individually and in combination, these changes can impair the reproductive success and ultimately the productivity of anadromous fish.

Hydroelectric dams can also create physical barriers to migrating fish. The dams form reservoirs which delay the migrations of the fish and subject them to predation. Some dams, such as the Grand Coulee on the Columbia River, completely block fish migration to miles of upstream habitat. Finally, hydroelectric plants can directly kill juvenile fish that pass through the power generating turbines. Each dam can kill fifteen to thirty percent of migrating fish, a loss which cumulates where one river basin contains multiple hydropower projects.

The adverse effects of hydroelectric development and operation can

and elimination of water areas essential to one or more life stages of our anadromous fish species are all occurring at a rapid pace.

Id. at 3840.

Twenty-one years ago, Congress recognized the importance of anadromous fish and the threats to their survival by passing the Anadromous Fish Conservation Act of 1965. Pub. L. No. 89-304, 76 Stat. 1126 (codified as amended at 16 U.S.C. §§ 757a-757f (1982)). Under the Act, the Secretaries of Commerce and the Interior may provide funding for activities involving the development, conservation, and enhancement of anadromous fish including surveys, research, hatchery construction and operation, stream clearance, and construction and operation of structures facilitating free migration of fish.

The purpose of the Act is to conserve, develop, and enhance anadromous fish stocks which Congress found were being reduced by water resource developments and other causes. 16 U.S.C. § 757a (1982); see S. Rep. No. 860, supra, at 3842-44, 3848-50 (discusses the decline of anadromous fish in all areas of the country).

Congress also recognized the importance of anadromous fish when it adopted the Magnuson Fishery Conservation and Management Act of 1976. Pub. L. No. 94-625, 90 Stat. 331 (codified as amended at 16 U.S.C. §§ 1801-1882 (1982)). In this Act, Congress found that anadromous fish constitute valuable and renewable resources which contribute to the food supply, enhance economic development, and provide recreational opportunities. 16 U.S.C. § 1801(a)(1).


5. A QUESTION OF BALANCE, supra note 4, at 5-7; NMFS RECOMMENDATIONS, supra note 4, at 56-60, 441-42.

6. Id.

7. NMFS RECOMMENDATIONS, supra note 4, at 441-42.

8. Id.


10. Id. at 6; NMFS RECOMMENDATIONS, supra note 4, at 158-62.
be prevented, or at least ameliorated, through the use of appropriate mitigation and compensation measures. First, and most important, projects should be located in areas where they will not interfere with fish production. Failing this, mitigation techniques should be implemented to lessen the impact of a project located in a fish habitat. Such techniques include installation of fish ladders for passage of adult fish returning to their spawning grounds, fish bypass systems or spill operations to deflect migratory juvenile fish safely around the turbines of dams, and controls on water flow and temperature. Where these measures cannot prevent all fish losses, careful hatchery and other production assistance programs should be used to compensate for the remaining losses, although these programs alone are not a satisfactory substitute for successful mitigation measures.

When properly sited and subject to appropriate mitigation measures, hydropower provides a relatively clean and environmentally benign form of energy. Mitigation and compensation measures can be expensive, however, and may result in reduced power generation. Thus, conflicts can arise between federal and state fishery agencies and others who want hydropower developers to install or provide mitigation and compensation measures and project developers and operators who often resist such requests. The federal arbiter of such disputes between fishery interests and hydroelectric developers is the Federal Energy Regulatory Commission (FERC), which is responsible for overseeing and licensing hydropower development on a national level.

The interrelationship between hydropower and fish production has gained public attention recently because of the resurgence of interest both in encouraging small hydropower production and in restoring depleted anadromous fish runs. On the one hand, Congress encouraged substantial new hydroelectric development, particularly small

11. NMFS RECOMMENDATIONS, supra note 4, executive summary at 9; NORTHWEST POWER PLANNING COUNCIL, COLUMBIA RIVER BASIN FISH & WILDLIFE PROGRAM §§ 600, 1200 (1982) [hereinafter cited as COLUMBIA PROGRAM].

12. NMFS RECOMMENDATIONS, supra note 4, executive summary at 7; COLUMBIA PROGRAM, supra note 11, §§ 400, 1200.

13. A QUESTION OF BALANCE, supra note 4, at 5-7; NMFS RECOMMENDATIONS, supra note 4, at 156-60, 441-42; COLUMBIA PROGRAM, supra note 11, §§ 300, 1200.

14. NMFS RECOMMENDATIONS, supra note 4, executive summary at 11-12, 566-69.

15. Id. at 112-13.


17. COLUMBIA PROGRAM, supra note 11, § 105.

18. See infra text accompanying notes 70-72.

hydrodevelopment, by passing the Public Utilities Regulatory Policy Act of 1978 (PURPA).\textsuperscript{20} This Act and related legislation\textsuperscript{21} were spurred by the energy crisis of the late 1970's.

On the other hand, Congress also enacted several new laws designed to conserve and restore anadromous fish stocks. For example, in 1980, Congress passed the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act)\textsuperscript{22} and the Salmon and Steelhead Conservation and Enhancement Act,\textsuperscript{23} both addressing the protection of anadromous fish species in the Pacific Northwest. The Northwest Power Act mandated the development of a detailed fish and wildlife restoration program for the Columbia River basin\textsuperscript{24} and the establishment

\begin{enumerate}
\item \textsuperscript{20} Pub. L. No. 95-617, 92 Stat. 3117 (codified as amended at 16 U.S.C. §§ 823a-825s, 2601-2645, 2701-2708 (1982)). PURPA directs the Secretary of Energy to encourage the development of small hydroelectric power projects at existing dams which are not being used to generate electric power. 16 U.S.C. § 2701 (1982). It authorizes exemptions from licensing for certain small hydroelectric projects. \textit{id.} § 823a. The Act also imposes requirements for purchase of power from "small power production facilities," \textit{id.} § 824a-3; for interconnection to transmission lines for small facilities, \textit{id.} § 824i; and for wheeling of power from such facilities across utility transmission lines, \textit{id.} § 824j. The House of Representatives recently passed legislation, H.R. 44, which would limit some incentives in PURPA to encourage new dam construction which adversely affects fish and wildlife resources. \textit{H.R. REP. No. 507, 99th Cong., 2d Sess. 42-45 (1986).}
\item \textsuperscript{21} For example, the Energy Security Act of 1980 extended the small hydro exemption program to dams using natural water features without dams or impoundments. 16 U.S.C. §§ 2705(d), 2708(b) (1982). \textit{See infra} notes 52-53 and accompanying text. The Crude Oil Windfall Profit Tax Act of 1980 established a business energy tax credit for certain hydro-power projects and provided tax credits and depreciation allowances for capital investments. 26 U.S.C. § 48(f)(13) (1982). For statistics on the increase in hydroelectric applications over the last few years, see \textit{infra} note 106.
\item \textsuperscript{22} Pub. L. No. 96-501, 94 Stat. 2697 (codified as amended at 16 U.S.C. §§ 839-839h, 837, 838(i), 838(k) (1982)). \textit{See also infra} text accompanying notes 97-98. One of the purposes of the Act is:

\begin{itemize}
\item to protect, mitigate and enhance fish and wildlife, including related spawning grounds and habitat, of the Columbia River and its tributaries, particularly anadromous fish which are of significant importance to the social and economic well-being of the Pacific Northwest and the Nation and which are dependent on suitable environmental conditions substantially obtainable from the management and operation of the Federal Columbia River Power System and other power generating facilities on the Columbia River and its tributaries.
\end{itemize}

\item \textsuperscript{24} The program was to consist of "measures to protect, mitigate and enhance fish and wildlife . . . while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply." 16 U.S.C. § 839b(h)(5) (1982). It was developed following a lengthy public review process, subject to numerous statutory standards. \textit{Id.} § 839b(h). The Northwest Power Planning Council adopted the plan in 1982. \textit{NORTHWEST POWER PLANNING COUN-
of more general fish and wildlife protection measures to be included in electric power projects throughout the Pacific Northwest. The Salmon and Steelhead Conservation and Enhancement Act encouraged a new management structure and enhancement planning process to coordinate the activities of the various fishery management authorities in the Pacific Northwest. Congress also enacted two laws in response to the rapid decline of Atlantic coast striped bass, one supporting research and the other mandating a reduced harvest of the fish. Other federal and state programs for the restoration of anadromous fish are also underway. The combination of renewed support for hydrodevelopment on the one hand and improved fish production on the other has led to intensified conflict and controversy. As the regulator of the nation’s hydropower projects, FERC is at the center of this storm.

...
This Article describes and analyzes FERC's regulatory program for hydroelectric development and operation in terms of its effect on anadromous fish. Section I describes the FERC regulatory process. Section II evaluates FERC's reluctance to comply with the statutory standards for protecting anadromous fish when FERC issues exemptions for small hydropower projects, preliminary permits, and licenses for major hydropower projects. Section III discusses FERC's troubled relationship with federal and state fish and wildlife agencies. Section IV analyzes how the Federal Water Pollution Control Act and the National Environmental Policy Act affect FERC's regulatory process. Finally, Section V briefly describes FERC's approach to the issuance of exemptions for small hydropower projects. As this Article will demonstrate, FERC's policy has been to encourage and promote hydroelectric development at the expense of anadromous fish. FERC has failed to meet its statutory obligations to consider and protect these important fish populations.

I

FERC'S REGULATORY ROLE

A. Procedures for Approving Hydropower Projects

The Federal Power Act (FPA)\(^30\) authorizes FERC to regulate the construction, operation, and maintenance of hydroelectric projects.\(^31\) Under the FPA, FERC can issue three types of approvals for hydroelectric projects: licenses, preliminary permits, and exemptions. These procedures are described briefly below.

1. Licenses

FERC can issue a license for a hydroelectric project, valid for up to fifty years,\(^32\) subject to certain information requirements\(^33\) and statutory standards.\(^34\) FERC is authorized to approve a license application only if the proposed project will benefit the public.\(^35\) Under section 10(a) of the FPA, FERC must review each project in light of a "comprehensive plan" for improving waterways for both water power development and "other beneficial public uses."\(^36\) In *Udall v. FPC*,\(^37\) the Supreme Court held that

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\(^{32}\) Id. § 799.

\(^{33}\) Id. § 802; 18 C.F.R. §§ 4.32, 4.41, 4.51, 4.61 (1985).


\(^{35}\) California v. FPC, 345 F.2d 917, 923 (9th Cir.), cert. denied, 382 U.S. 941 (1965).

\(^{36}\) 16 U.S.C. § 803(a) (1982). To issue a license, FERC must find: That the project . . . will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for use or benefit of interstate or foreign commerce, for the improvement and utilization of waterpower development, and for other beneficial public uses, including recreational purposes . . . .
Federal Power Commission (the predecessor to FERC)\textsuperscript{38} must address all factors relevant to the public interest, including "future power demand and supply, alternate sources of power, ... preserving reaches of wild rivers and wilderness areas, the preservation of anadromous fish for commercial, and recreational purposes, and the protection of wildlife" in its review of a project.\textsuperscript{39} In addition, section 4(e) of the FPA, directs FERC to include in licenses those conditions that other federal agencies have determined as necessary to protect federal reservations.\textsuperscript{40} Section 18 requires that licensees provide fishways prescribed by the Secretary of the Interior or the Secretary of Commerce.\textsuperscript{41}

When a license for a hydroelectric project expires, FERC must decide whether to issue a new license for the continuing operation of the project. The Commission makes this relicensing decision on a clean slate.\textsuperscript{42} Section 15 of the FPA provides that such new licenses must be

\begin{itemize}
  \item \textsuperscript{37} 387 U.S. 428 (1967).
  \item \textsuperscript{38} See supra note 19.
  \item \textsuperscript{39} Id. at 450. \textit{See also Scenic Hudson Preservation Conference v. FPC}, 354 F.2d 608, 620 (2d Cir. 1965) (FPC must consider totality of a project's immediate and long-range effects in a licensing proceeding), \textit{cert. denied sub nom.} Consolidated Edison Co. v. Scenic Hudson Preservation Conference, 384 U.S. 941 (1966); Confederated Tribes and Bands of the Yakima Indian Nation v. FERC, 746 F.2d 466, 471 (9th Cir. 1984) (FERC must study effects of a hydropower project on fisheries and consider possible mitigative measures), \textit{cert. denied sub nom.} Public Util. Dist. No. 1 of Chelan County, Washington v. Confederated Tribes and Bands of the Yakima Indian Nation, 105 S. Ct. 2358 (1985).
  \item \textsuperscript{40} 16 U.S.C. § 797(e) (1982). Federal reservations include national forests, tribal lands within Indian reservations, military reservations, and other lands and interests in lands owned by the United States which have been withdrawn, reserved, or withheld from private appropriation and disposal under public land laws. Reservations also include lands and interests in land acquired and held for any public purpose. National monuments and national parks, however, are federal reservations not subject to FERC control under the FPA. \textit{Id.} § 796(2).
  \item \textsuperscript{41} Id. § 811. \textit{See infra} text accompanying notes 150-51.
  \item \textsuperscript{42} There is much debate over whether FERC should give preference to public entities or to existing licensees when making relicensing decisions. Two bills were introduced in the 99th Congress to give preference to the previous licensees. S. 403, 99th Cong., 1st Sess. (1985); H.R. 1959, 99th Cong., 1st Sess. (1985). Other bills would give priority to public utilities. S. 1219, 99th Cong., 1st Sess. (1985); H.R. 1815, 99th Cong., 1st Sess. (1985).
  \item The Senate recently passed S. 426, the Electric Consumers Protection Act of 1985. 132 CONG. REC. S4445-51 (daily ed. Apr. 17, 1986); \textit{see also} S. REP. No. 161, 99th Cong., 1st Sess. (1985). This bill would give a preference to existing licensees, but would assure some competition by providing that FERC must grant the new license to a new applicant if that applicant's plans would serve the public interest better than the plans of the existing licensee. \textit{Id.} at 8-9.
  \item The House also passed an Electric Consumers Protection Act, H.R. 44. 132 CONG. REC. H2010 (daily ed. Apr. 21, 1986); \textit{see also} H. REP. No. 507, 99th Cong., 2d Sess. (1986). H.R. 44 would amend the FPA to require FERC to alter its procedural and substantive requirements in order to address more adequately fish and wildlife concerns. H. REP. No. 507, 99th Cong., 2d Sess. 17-18 (1986). Section 4 of the House bill establishes standards for relicensing designed to encourage competition. \textit{Id.} at 15.

  From the viewpoint of fish and wildlife interests, more competition among applicants is preferable on the theory that it will lead to better projects with better fish protection. \textit{See Hydropower Relicensing: Hearings on S. 403, S. 426, S. 1219, and S. 1260 Before the Subcomm. on Water and Power of the Senate Comm. on Energy and Natural Resources, 99th
issued “upon such terms and conditions as may be authorized or re-
quired under the then existing laws and regulations.” 43 In essence,
FERC must make “the same inquiries on relicensing as on initial licens-
ing.” 44 The statute provides no entitlement or presumption that a new
license will be issued to the original licensee. When the original license
expires, the United States may take over the project, 45 FERC may issue
the license to a new licensee, 46 or FERC may license all or part of the
project for beneficial public uses other than power generation. 47

2. Preliminary Permits

Pending issuance of a license for a proposed water-power project,
FERC may grant a preliminary permit of up to three years’ duration, 48
“for the purpose of enabling applicants for a license . . . to secure the data
and to perform the acts required” for the license application. 49 Once
issued, a preliminary permit maintains the priority of an application for a
license over other applications while FERC and the applicant collect and
evaluate data for the license application. 50 A permittee must file a license
application before the permit expires in order to preserve priority over
other applicants. 51

3. Exemptions

FERC may exempt from the licensing requirements of the FPA cer-
tain small hydroelectric projects that qualify under the Public Utilities
Regulatory Policy Act of 1978 (PURPA) 52 or the Energy Security Act of
1980. 53 FERC has discretion in determining the scope of the exemption
program. The Commission determines what provisions of the FPA are
subject to exemptions, the duration of the exemptions, information re-

44. Yakima Indian Nation, 746 F.2d at 470.
46. Id. § 808(a).
47. Id. § 808(b).
48. Id. § 798.
49. Id. § 797(l).
50. Id. § 798; 18 C.F.R. § 4.80 (1985). If a permit application has been filed, but no
permit has yet been issued, FERC will accept “competing” applications for exemptions or
51. 18 C.F.R. § 4.83(b) (1985).
52. PURPA authorizes exemptions from licensing for manmade water conduits whose
primary purpose is water distribution, not hydroelectric power generation. 16 U.S.C. § 823a
(1982).
53. The Energy Security Act authorizes exemptions for projects at existing dams or
projects using natural water features without a dam or impoundment, provided those projects
produce five megawatts or less. Id. §§ 2705(d), 2708.
There are two primary limits on FERC's discretion to issue exemptions. First, FERC may not exempt a project from requirements imposed by laws other than the FPA, such as the National Environmental Policy Act (NEPA)\(^ {55}\) or the Fish and Wildlife Coordination Act (FWCA).\(^ {56}\) Second, exemptions must be issued subject to terms and conditions established by fish and wildlife agencies to prevent loss of or damage to fish and wildlife resources.\(^ {57}\)

Within these limits, FERC has chosen to authorize an expansive use of exemptions for small hydroelectric projects. FERC's current regulations authorize exemptions from virtually all of the requirements of the FPA, creating in effect a "short-form" license for small hydroprojects.\(^ {58}\) This practice is especially significant because FERC's exemptions, unlike licenses, do not expire, but are perpetually valid.\(^ {59}\)

**B. Environmental Considerations**

FERC's authority to issue preliminary permits, licenses, and exemptions under the FPA is tempered by its obligations under environmental protection statutes which supplement and define the requirements of the FPA. In addition to the requirements of NEPA and the FWCA,\(^ {60}\) FERC's authority is affected by obligations imposed by the Endangered Species Act,\(^ {61}\) the Wild and Scenic Rivers Act,\(^ {62}\) and the Northwest Power Act.\(^ {63}\) FERC's authority under the FPA, and its role in hydro-power regulation, must be construed in light of all of these statutes.\(^ {64}\) As this Article will describe, FERC's enthusiasm for promoting hydroelec-

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54. See infra text accompanying notes 263-94.
56. 16 U.S.C. §§ 661-667 (1982). Under the FWCA, FERC must consult with federal and state fish and wildlife agencies and must consider fish and wildlife resources equally with other project purposes in its licensing actions. See infra text accompanying notes 65-74.
57. Id. §§ 823(e), 2705(d) (1982).
60. See infra text accompanying notes 198-221.
62. Id. § 1278(a) (restrictions on construction projects licensed by FERC).
63. The Act requires that federal agencies responsible for Columbia River hydroelectric facilities provide equitable treatment for fish and wildlife with the other purposes for which the facilities are managed. Id. § 839b(h)(11)(A). A saving provision of the Act preserves the validity of any existing license, permit, or certificate issued by any federal agency pursuant to any federal law. Id. § 839g(i).
64. Udall v. FPC, 387 U.S. at 433, 438
tric development often has far outweighed its zeal for protecting fish and wildlife.

II

THE STANDARDS FOR LICENSING HYDROELECTRIC FACILITIES

A. Equal Consideration for Fisheries Under the FWCA and the FPA

The Fish and Wildlife Coordination Act (FWCA)\(^65\) establishes a national policy of protection and enhancement for fish and wildlife resources which may be affected by federally constructed and licensed water resource development projects, including hydroelectric facilities authorized by FERC.\(^66\) The FWCA provides that fish and wildlife resources be accorded "equal consideration" with hydropower and other purposes of water resource development.\(^67\) The requirement for equal consideration is read into, and to some extent overlaps with, the public interest standards of the FPA.\(^68\)

Equal consideration under the FWCA is achieved primarily through a consultation process.\(^69\) FERC must seek out the recommendations of the United States Fish and Wildlife Service (FWS),\(^70\) the National Marine Fisheries Service (NMFS),\(^71\) and state fish and wildlife agencies on project approvals, "with a view to the conservation of [fish and] wildlife resources."\(^72\) The consultation obligation gives these agencies special standing before FERC.\(^73\) Based on the agencies' recommendations, FERC may condition or deny hydropower licenses to protect or enhance fish and wildlife resources.\(^74\)

The FWCA and the FPA have not always accomplished their mu-

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68. As the Court observed in Yakima Indian Nation: "We have no doubt that if FERC failed its Federal Power Act obligation to consider fishery issues prior to licensing, it concomitantly failed to meet its obligation to give fish 'equal consideration' under the FWCA." 746 F.2d at 473-74.
69. Id. at 473. See infra text accompanying notes 168-97.
71. The National Marine Fisheries Service (NMFS) was created by Reorganization Plan No. 4 of 1970, 35 Fed. Reg. 15,627 (1970), reprinted in 1970 U.S. CODE CONG. & AD. NEWS 6326, which also consolidated several agencies, including NMFS, into the National Oceanic and Atmospheric Administration. Almost all of the authority of the FWS' Bureau of Commercial Fisheries, including the Bureau's FWCA authority, was transferred to NMFS.
74. Cf. Zabel v. Tabb, 430 F.2d 199, 209 (5th Cir. 1970) (holding that a federal licensing agency may consider FWS' recommendations under section 2 of the FWCA when reviewing a license application), cert. denied, 401 U.S. 910 (1971).
tual objective of fish and wildlife protection. Nowhere is this more ap-
parent than in FERC’s hydroelectric approval process. Almost two
decades of litigation reveal that FERC has given inadequate considera-
tion to fish and wildlife issues in its licensing decisions. FERC has been
reluctant to impose license conditions for protection of fish and wildlife,
and it has favored hydroelectric development over conservation of fish
and wildlife.75

The key judicial interpretation of FERC’s obligation under the
FWCA and the FPA to provide equal consideration of fish and wildlife is
the 1967 United States Supreme Court decision in Udall v. FPC.76 In
that case, the Federal Power Commission77 had issued licenses for hydro-
power projects at High Mountain Sheep, a site in the Columbia River
basin. FPC issued the licenses despite objections by the Department of
the Interior to the potential destruction of anadromous fish runs and de-
spite the Commission’s own conclusion that the project could cause “real
damage” to the fish runs.78 The Supreme Court found that the Commis-
sion had not adequately evaluated the effect of the proposed hydroelec-
tric project on anadromous fishery resources. The Court held that the
Commission must develop a record, fully consider the project’s impact
on fish and wildlife, balance potential harm against the need for power,
and consider energy alternatives and differing arrangements for owner-
ship and operation of the project.79 The Court found that the Commis-
sion had based its decision “simply on whether the project would be
beneficial to the licensee,”80 and, therefore, the Court invalidated the
project license and remanded the license applications for “an exploration
of these neglected phases of the cases, as well as the other [fishery] points
raised by the Secretary [of the Interior].”81

Scenic Hudson Preservation Conference v. FPC,82 decided by the Sec-
ond Circuit Court of Appeals in 1975, revealed a similar deficiency in the
Commission’s licensing of the Storm King Project on the Hudson River.
In response to serious questions about the project’s effects on migratory

75. See generally Blumm, Beyond Mitigation—Restoring Federally Damaged Salmon
Runs Under the Columbia Basin Fish and Wildlife Program, 14 ENVT. L. REP. (ENVT. L.
INST.) 10,011 (1984); Reisner, Power, Profit and Preservation: The Invasion of Small Hydra-
power, WILDERNESS, Fall 1984, at 26-30. H.R. 44 would require FERC to give adequate
76. 387 U.S. at 428. See also Comment, Of Birds, Bees and the FPC, 77 YALE L.J. 117-38
(1967).
77. See supra note 19.
78. 387 U.S. at 443.
79. Id. at 450.
80. Id.
81. Id. After remand, alternative project plans for a two-dam complex were condition-
ally approved by the presiding administrative law judge. However, after Congress enacted
legislation that prohibited licensing of the project, FERC dismissed the license application for
82. 354 F.2d 608 (2d Cir. 1965). This controversy was contemporaneous with Udall.
and spawning anadromous fish, the Commission concluded that the project would "not adversely affect the fish resources of the Hudson River, provided adequate protective facilities were installed." \(^{83}\) In reaching this conclusion, however, the Commission failed to examine whether the protective measures suggested by fishery experts were adequate. \(^{84}\) The Second Circuit remanded the license application to the FPC to "take the whole fisheries question into consideration before deciding whether the Storm King project is to be licensed." \(^{85}\) The court also directed reexamination of several other points on which the record was deficient, including costs, necessity, reasonable alternatives, and public convenience. \(^{86}\) After a series of lawsuits, \(^{87}\) proponents of the project finally abandoned it as part of a settlement of another power plant controversy on the Hudson River. \(^{88}\)

Despite the decisions in *Udall* and *Scenic Hudson*, FERC did not substantially modify its practices. Instead, the Commission has simply deferred consideration of the effects of the project on fish until after it has approved projects. Rather than defining fishery license conditions before issuing licenses, FERC reserved a "reopener condition," under which it reserved the right to make "reasonable modifications" to the licenses in order to protect fish and wildlife resources. \(^{89}\)

FERC used this approach recently in issuing a new forty-year li-
license for the Rock Island Dam on the Columbia River. Because the dam has no fish-diversion facilities, significant numbers of juvenile salmon and steelhead trout die each year passing through its turbines. The Yakima Indian Nation, the National Wildlife Federation, and state and federal fish and wildlife agencies all requested that the new license include conditions to protect migratory fish. FERC, however, conducted no inquiry, hearing, or evaluation to consider project impacts on fish and wildlife. Instead of including specific fish protection conditions in the new license, FERC relied on its standard "reopener condition" and indicated that fish and wildlife issues would be addressed in a separate, ongoing proceeding involving five dams on the main stem of the Columbia River, including the Rock Island Dam.

In response, the fishery groups concerned about project impacts sued the Commission in 1983. In Yakima Indian Nation v. FERC, the Ninth Circuit rejected the Commission's argument that its deferral of fishery issues for the Rock Island Dam satisfied the requirements of the FWCA and the FPA. The court found that FERC's reliance on the "reopener condition" violated its "well defined" obligations under these statutes. "Prior to issuance of a new license," the court held, "FERC must study the effect of a project on the fishery resource and consider possible mitigative measures." The court set aside the license for the Rock Island Dam because FERC had deferred full consideration of fishery impacts and mitigative measures.

Yakima Indian Nation underscores the tension between FERC's interest in encouraging hydroelectric development and its legal obligation to consider all of the fish and wildlife implications of such development.

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90. Yakima Indian Nation, 746 F.2d at 466.
91. In fact, FERC did not require the applicant to submit the Fish and Wildlife Report required under its own regulations. 746 F.2d at 474. FERC did not prepare an environmental impact statement or an environmental assessment for the new license. Id. at 475-76.
92. The reopener clause stated:
   The licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the conservation, maintenance and operation of, such reasonable modifications of the project structures and operation as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of the State in which the project or a part thereof is located, after notice and opportunity for hearing.


Section 6 of the FPA provides that a license cannot be altered during its term except "upon mutual agreement between the licensee and the Commission." 16 U.S.C. § 799 (1982). The Ninth Circuit, however, approved the use by FERC of a reopener clause to fine-tune fish and wildlife conditions imposed when the license was issued. California v. FPC, 345 F.2d 917 (1965).
93. 746 F.2d at 469.
94. Id. at 471.
95. Id.
96. Id. at 477.
before approving a license. If past experience provides any lessons, it appears that FERC's consideration of fish and wildlife will require continuing careful scrutiny by fishery agencies and the courts to ensure compliance with the FPA and the FWCA.

FERC's recalcitrance has led Congress to give FERC more explicit and specific directions for at least one region of the country. The Northwest Power Act adds procedural and substantive reinforcement to FERC's FWCA and FPA responsibilities in the Columbia River basin, the site of the projects involved in Udall and Yakima Indian Nation. FERC's reluctance to consider and protect fish and wildlife in its hydropower decisions may lead to similar directives for other regions of the country.

B. Comprehensive Planning and Cumulative Effects

1. FPA's Planning Requirement and FERC's Response

Rather than establishing a case-by-case, project-by-project licensing scheme, the Federal Power Act requires FERC to consider the cumulative effects of the projects it approves. The Act authorizes FERC to license a project only when it finds that project to be "best adapted to a comprehensive plan for improving or developing a waterway or waterways." Congress imposed the comprehensive planning requirement in response to the piecemeal, single-use licensing approach in effect before enactment of the FPA. The requirement reflects the view that any

98. 746 F.2d at 473. Federal agencies are required to exercise their responsibilities in a manner consistent with the purpose of the Northwest Power Act, i.e., to protect and enhance fish and wildlife populations and their habitat, providing equitable treatment for such resources. 16 U.S.C. § 839(b)(11)(A) (1982). Federal agencies must take into account the fish and wildlife protections mandated by the plan to the fullest extent practicable. Federal agencies must also consult with FWS, NMFS, and state fish and wildlife agencies in carrying out their responsibilities. Id. § 839(b)(11)(B).
99. For example, S. 426 would amend the FPA to make explicit that, in deciding whether to issue a license, FERC must consider "adequate protection, mitigation and enhancement of fish and wildlife." In addition, S. 426 would establish statutory requirements for consultation with fish and wildlife agencies. S. REP. No. 161, 99th Cong., 1st Sess. 8-9 (1985). H.R. 44 would provide even stronger protections by ensuring "to the greatest extent possible" that fish and wildlife resources are as well off after hydropower operations as before. Section 3 of the proposed bill requires FERC to give "equitable treatment" to fish and wildlife conservation and enhancement by resolving conservation and other non-power issues prior to license issuance. Section 3 also requires FERC to condition or deny applications so that fish and wildlife resources are adequately protected from project impacts. H. REP. No. 507, 99th Cong., 2d Sess. 30-31 (1986).
100. 16 U.S.C. § 803(a) (1982). Section 4(a) of the FPA gives FERC the necessary investigative authority to develop comprehensive plans. Id. § 797(a) (1982).
101. See generally Kerwin, Federal Water Power Legislation (1926); Pinchot, The Long Struggle for Effective Federal Water Power Legislation, 14 Geo. Wash. L. Rev. 9 (1945). The Supreme Court described the fundamental purpose of the FPA as promotion of "the comprehensive development of water resources of the Nation ... instead of the piecemeal.
particular use of water resources, such as hydropower generation, should be evaluated in the context of other possible and actual uses of the river and regulated to assure multiple use of river resources.102

Although FERC has stated that comprehensive planning and consideration of each river basin as a unit is the “backbone” of the FPA,103 the Commission has failed to develop comprehensive basin plans to guide its licensing.104 In rare cases, FERC has consolidated its review of multiple hydroelectric projects,105 but generally it has reviewed project applications on a case-by-case basis. This procedure may have been partially justified several years ago when there were few instances of multiple projects in a single river system.106 Since 1978, however, federal tax and regulatory incentives107 have spurred thousands of new applications for hydroelectric development. In several river basins, as many as twenty to seventy new projects have been proposed.108 Nonetheless, even in the face of this explosion of applications, FERC until recently109 has steadfastly declined to alter its traditional case-by-case approach. The Com-

restrictive, negative approach of the Rivers and Harbors Act and other federal laws previously enacted.” First Iowa Hydro-Electric Cooperative v. FPC, 328 U.S. 152, 180 (1946).

102. The concept of a comprehensive plan originated in the General Dam Act of 1910, ch. 360, 36 Stat. 593 (1910), which required consideration of the impact of a project on a comprehensive plan, and in legislation seven years later which established a Waterways Commission “to formulate . . . comprehensive . . . plans for the development of waterways and the water resources of the United States . . . for every useful purpose.” Act of Aug. 8, 1917, ch. 49, 40 Stat. 269 (1919).

FERC’s comprehensive planning responsibilities under the FPA are reinforced by the environmental review requirements of NEPA, 42 U.S.C. §§ 4321-4361 (1982), and implementing regulations promulgated by the Council on Environmental Quality (CEQ). 40 C.F.R. §§ 1500-1507 (1985). The Council’s regulations provide that “[a]gencies shall integrate the NEPA process with other planning at the earliest possible time,” id. § 1501.2; that proposals “related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement,” id. § 1502.4(a); and that environmental impact statements must consider connected actions which are similar in nature or have cumulatively significant impacts, id. §§ 1508.25(a), 1508.27(b)(7). See also infra text accompanying notes 198-221.


104. Apparently in 1922, FPC developed at least one such plan, for the Deschutes River in Oregon. FED. POWER COMM’N BD. OF ENG’RS, REPORT TO THE FEDERAL POWER COMMISION ON USES OF DESCHUTES RIVER, OREGON (1922).


107. See supra notes 20-21 and accompanying text.

108. FERC itself has stated that there are at least 67 river basins where more than five small hydroelectric projects are proposed. Small Hydro Hearings, supra note 106, at 84 (letter of Raymond O’Connor, Chair of FERC).

109. See infra text accompanying notes 131-35.
mission has refused to develop comprehensive plans to evaluate the siting and operation of multiple hydroelectric proposals.\footnote{See, e.g., Lester Kelley, 25 F.E.R.C. \textsection{} 61,410 (1983), \textit{reh'g denied}, 26 F.E.R.C. \textsection{} 61,330 (1984), \textit{appeal pending sub nom.} National Wildlife Fed'n v. FERC, No. 84-7325 (9th Cir. argued July 11, 1985). Ironically, in \textit{Yakima Indian Nation}, FERC argued that it delayed its consideration of fishery issues for the Rock Island Dam until it could complete a separate proceeding on the cumulative effects of dams on the mid-Columbia River. 746 F.2d at 472. FERC argued that this procedure best comported with its responsibility to evaluate applications based on comprehensive plans. \textit{Id}. The court agreed with the need to take a comprehensive approach but concluded that the FPA required FERC to conduct such analysis \textit{before} issuing a license. \textit{Id}.} In many river basins, such as the Salmon in Idaho and the Snohomish in Washington, state and federal fish and wildlife agencies, Indian tribes with treaty fishing rights, and citizen groups have requested that FERC consolidate its review of multiple hydroelectric proposals. These fish and wildlife interests want FERC to assess the cumulative adverse effects of dams on wildlife and fish, particularly anadromous fish, and to prepare comprehensive plans identifying in each basin appropriate and inappropriate sites for hydroelectric development.\footnote{See, e.g., James B. Howell, 26 F.E.R.C. \textsection{} 61,286 (1984) (Nez Perce Tribe and other parties petitioned to intervene in Salmon River basin FERC proceedings); Letter from William Wilkerson, Director of Washington Department of Fisheries, to Kenneth Plumb, Secretary of FERC (May 29, 1985) (request for comprehensive planning of hydroelectric development in the Snohomish River basin with a summary of previous motions and petitions requesting such planning from other agencies and Indian tribes) (letter on file with authors).} In response to such requests for comprehensive planning, FERC finally held public meetings in 1983 to discuss basinwide development issues of the Salmon River\footnote{Meeting Notice, 48 Fed. Reg. 28,541 (1983) (FERC announced a public meeting to discuss hydroelectric development in the Salmon River basin).} and the Snohomish River.\footnote{Meeting Notice, 48 Fed. Reg. 30,749 (1983) (FERC announced a public meeting in order to receive comments and data which would allow a comprehensive evaluation of hydropower development in the Snohomish River basin, as requested by Indian tribes and fish and wildlife agencies).} In conjunction with the Argonne National Laboratory, FERC prepared four technical documents outlining an approach to cumulative impact assessment, comprehensive planning, and basinwide studies.\footnote{\textit{Fed. Energy Regulatory Comm'n, Salmon River Basin Guidelines for Resource Studies by Applicants} (Sept. 1983); B. Horak, E. Vlachos & E. Whippo Clime, \textit{Cumulative Impact Study Methodology} (1983) (available from Dept't of the Interior); \textit{Fed. Energy Regulatory Comm'n, Annotated Outline for a Comprehensive Study Plan} (1983); \textit{Fed. Energy Regulatory Comm'n Div. of Hydropower Licensing, A-B-C System for Hydroelectric Projects} (Draft, Sept. 15, 1983).} Shortly after public comment on these draft documents, however, FERC abruptly abandoned its comprehensive planning efforts and started to issue project approvals on an individual basis.\footnote{See, e.g., Olympus Energy Corp., 26 F.E.R.C. \textsection{} 61,407 (1984) (FERC issued individual exemption); City of Seattle, Washington, 26 F.E.R.C. \textsection{} 61,406 (FERC issued individual license in Snohomish River basin), \textit{motion to stay license granted pending reh'g}, 28 F.E.R.C. \textsection{} 61,015 (1984); Weyerhaeuser Co., 26 F.E.R.C. \textsection{} 61,405 (1984) (FERC issued license to Wey-}
in those basins in order of appropriateness for hydroelectric development.

2. **FERC's Avoidance of Comprehensive Planning in Application Proceedings**

In an effort to support its narrow view of the directives of the FPA, FERC has tried to defer or to avoid comprehensive planning altogether by considering project applications on a piecemeal basis. First, FERC has not required coordinated studies of basinwide cumulative impacts at the preliminary permit stage. The Commission maintains that "coordinated studies geared toward cumulative environmental impacts . . . would be extremely costly and time consuming" and might be useless if a permittee abandoned its project. Accordingly, FERC has imposed no more than its standard-form preliminary permit conditions in the Salmon and Snohomish basins. It believes these are "adequate to enable the permittees to prepare acceptable license applications." FERC's failure to require cumulative impact studies at the permit stage, however, means that it will not have cumulative impact information when the permittee files its license application.

Many of the preliminary permits that FERC has issued in river basins where multiple proposals are pending have been appealed to the federal courts and are awaiting decision. The National Wildlife Federation and the Nez Perce Tribe have challenged permits issued in the Salmon River basin, where approximately fifty small hydroprojects are proposed. The Washington Departments of Fisheries and Game and the Tulalip Tribe are appealing permits issued for sites along the Snohomish River, where more than seventy projects are proposed.

FERC has also ruled that small hydro exemptions are not subject to FPA requirements and, therefore, the Commission need not consider cumulative impacts to fish and wildlife posed by small hydro exemption.


117. Id. Two Circuits have held that FERC has limited responsibility to evaluate projects at the preliminary permit stage. Sierra Club v. FERC, 22 Env’t Rep. Cas. (BNA) 2024, 2026 (9th Cir. 1985) (EIS not required for preliminary permits); City of Bedford v. FERC, 718 F.2d 1164, 1168 (D.C. Cir. 1983) (FERC need not determine at preliminary permit stage whether potential licensee meets all qualifications for license). But see Anadromous Fish Law Memo, July 1985, at 5-8 (FERC should include preliminary permits in a cumulative impact study because subsequent FERC actions are reasonably foreseeable and impacts on fish and wildlife resources can be predicted).


119. Washington Dep’t of Fisheries v. FERC, No. 84-7669 (9th Cir.), argued sub nom. National Wildlife Fed’n v. FERC (9th Cir. July 11, 1985) (now a companion case to National Wildlife Fed’n v. FERC, No. 84-7325 (9th Cir., argued July 11, 1985)). See supra note 118.
FERC maintains that state and federal fish and wildlife agencies have the exclusive responsibility for assessing the impacts of small hydro exemption projects on fish and wildlife and for mandating mitigation procedures as conditions for granting exemptions. This ruling ignores the fact that the very statute that authorizes exemptions also expressly requires FERC to comply with the requirements of the FWCA and NEPA.

Under the FWCA, FERC must consult with the United States Fish and Wildlife Service, the Department of the Interior, and state wildlife agencies before issuing an exemption permit. The purpose of the consultation is to determine measures for mitigating damage to wildlife resources. Although the FWCA does not expressly require comprehensive planning, state and federal wildlife agencies maintain that damages to wildlife, including anadromous fish, cannot be properly assessed unless FERC provides the agencies with a comprehensive assessment of hydropower projects in a given river basin. NEPA also requires that FERC consult with federal wildlife agencies concerning the environmental impact of hydropower projects. By refusing to include small hydro exemption projects in a comprehensive basinwide analysis, FERC prevents wildlife agencies from properly assessing the effects of these projects on anadromous fish as required by the FWCA and NEPA.

Finally, FERC has attempted to avoid comprehensive planning even

120. See Middle Fork Irrigation District, 30 F.E.R.C. ¶ 61,258 (1985) (comprehensive plan requirement does not apply to exemptions in Middle Fork Irrigation District).

121. Olympus Energy Corp., 26 F.E.R.C. ¶ 61,407 (1984). The Olympus decision, however, is no longer a valid interpretation in light of the decision in Steamboaters v. FERC, 759 F.2d 1382, 1394 (court determined that FERC must "independently assess the consequences" of operation of Winchester Dam). See also Lester Kelley, 27 F.E.R.C. ¶ 61,051. Based on its decision involving the issuance of a small hydro exemption for the Winchester Dam, FERC considers NMFS to have no authority to issue binding terms and conditions for small hydro exemptions. See infra notes 284-88.


123. Id. § 662.

124. See, e.g., David Cereghino, 30 F.E.R.C. ¶ 61,256 (1985) (FWS contended that FERC did not provide sufficient information for FWS to determine whether the potential cumulative impacts of projects in the Snohomish River basin pose an unacceptable threat to fish and wildlife resources in the basin); Olympus Energy Corp., 26 F.E.R.C. ¶ 61,407 (1984); Weyerhaeuser Co., 26 F.E.R.C. ¶ 61,405 (1984).


126. FERC's refusal to include small hydro exemptions in a comprehensive assessment of cumulative impacts may deter rather than expedite small hydro development. The Commission has ruled that if a fish and wildlife agency determines that potential adverse environmental impacts threatened by a small hydro project cannot be mitigated, then FERC must deny the exemption permit. Douglas Water Co., 26 F.E.R.C. ¶ 61,409 (1984). The Commission has further ruled that if a fish and wildlife agency determines it cannot assess the potential harm because of the agency's finding that FERC has not provided sufficient information about cumulative impacts, then FERC must deny the exemption permit. David Cereghino, 30 F.E.R.C. ¶ 61,256 (1985).
when issuing licenses. For example, FERC has issued two licenses in the Snohomish River basin for new hydroelectric projects with potentially significant impacts on anadromous fish.\textsuperscript{127} Neither license was accompanied by an environmental impact statement, as required by NEPA, or an explanation of why FERC would not prepare a comprehensive plan before issuing the license.\textsuperscript{128} Neither proposal was studied as part of a cumulative impact analysis, and neither was consolidated for evaluation with other projects in the Snohomish basin. FERC explained its issuance of the licenses only briefly, stating that there was an "insufficient relationship" between the projects and other proposals in the basin to warrant an assessment of cumulative impacts to fisheries.\textsuperscript{129} FERC did state, however, that it might prepare a cumulative impact analysis if it found a "cluster" of license applications in the region.\textsuperscript{130}

FERC has used its permitting procedures to approach hydropower projects in a case-by-case, piecemeal manner. Using this approach, FERC has refused fully to acknowledge and assess the cumulative effects on anadromous fish resources which may result from hydroelectric projects proposed for the Salmon, Snohomish, and other river basins.


Almost a year after FERC issued the two Snohomish basin licenses in 1984, the Commission proposed the Cluster Impact Assessment Procedure (CIAP) to review pending license applications in three river basins: the Snohomish, the Salmon, and the Owens in California. FERC adopted CIAP unanimously on December 20, 1984, but then decided to provide for public comment on the approach.\textsuperscript{131} Many parties submitted

\begin{itemize}
\item \textsuperscript{127} City of Seattle, Wash., 26 F.E.R.C. \textsection 61,406 (1984); Weyerhaeuser Co., 26 F.E.R.C. \textsection 61,405 (1984).
\item \textsuperscript{128} The Weyerhaeuser license merely states, for example, that "subject to the terms and conditions of this license, the project will be best adapted to a comprehensive plan for development of the river basin for all beneficial public purposes." 26 F.E.R.C. \textsection 61,405 (1984). No further explanation of comprehensive planning is provided.
\item \textsuperscript{129} \textit{Id.} FERC's determination that a cumulative impact analysis was unnecessary is inconsistent with NEPA and the CEQ regulations requiring consideration of cumulative impacts. \textit{See} Anadromous Fish Law Memo, July 1985, at 3. The regulations require consideration of:
\begin{enumerate}
\item All past, present, and reasonably foreseeable actions;
\item Both federal and non-federal actions;
\item Independently minor but collectively significant actions; and
\item Direct and indirect effects.
\end{enumerate}
40 C.F.R. \textsection \textsection 1508.7-8 (1985). The regulations focus on the effects of the projects, not the relationship among the projects.
\item \textsuperscript{130} City of Seattle, Wash., 26 F.E.R.C. \textsection 61,406, \textit{order staying license}, 26 F.E.R.C. \textsection 61,406 (1984) (FERC has stayed the license and ordered the city to provide further information on the effect of the proposed project on the stream's long-term flow regime).
\item \textsuperscript{131} Procedures for Assessing Hydropower Projects Clustered in River Basins; Requests for Comments, FERC Docket No. EL 85-19-000, 50 Fed. Reg. 3385 (1985).
\end{itemize}
extensive comments, and almost all requested modification of details of CIAP.\textsuperscript{132} Despite these criticisms, FERC adopted CIAP without modification in April, 1985 and directed its staff to implement CIAP for pending license applications.\textsuperscript{133} In response to comments, FERC said only that “[a]ll comments have been carefully reviewed by the staff and will be taken into account as warranted; most of the points raised do not require discussion here.”\textsuperscript{134}

Pursuant to the Commission’s directive, FERC staff have implemented CIAP. The procedure has been continuously and unanimously criticized by fish and wildlife agencies and Indian tribes for defects in its scope, method, and adequacy.\textsuperscript{135} The California Department of Fish and Game has gone so far as to boycott FERC meetings regarding CIAP.\textsuperscript{136} The fish and wildlife interests believe that CIAP does not ask the right questions for comprehensive analysis and will not result in informed decisions. The procedure, for example, does not require FERC to consider all present and reasonably foreseeable projects in a basin, and it does not require independent data collection. Moreover, CIAP tends to average rather than add cumulative impacts.\textsuperscript{137} These flaws make CIAP unacceptable as a substitute for comprehensive planning.

4. FERC’s Disregard for Other Comprehensive Plans

FERC’s dislike of comprehensive plans extends to those developed by individual states. The Commission has either completely ignored or dismissed as “advisory” state comprehensive plans that balance fish and

\textsuperscript{132} See, e.g., Letter from Carl Myers on behalf of hydropower developers on the lower Salmon River to Kenneth Plumb, Secretary of FERC (Feb. 22, 1985); Letter from Terence L. Thatcher, National Wildlife Federation, to Plumb (Feb. 26, 1985); Letter from Charles Collins, Chair of the Northwest Power Planning Council, to Plumb (Feb. 26, 1985); Letter from William Gordon, Department of Commerce Administrator for Fisheries (Administrator of NMFS) to Plumb (Feb. 28, 1985); Comments of Friends of the Earth, Sierra Club, and the Environmental Policy Institute submitted to Plumb (Feb. 28, 1985); Letter from Gordon Snow, California Assistant Secretary for Resources, to Plumb (Mar. 1, 1985); Comments of American Public Power Association to Plumb (Apr. 22, 1985) (documents on file with authors).

\textsuperscript{133} 50 Fed. Reg. 20,281 (1985) (ordering CIAP for Owens River in California and Salmon River in Oregon); \textit{id.} at 20,282 (ordering CIAP for Snohomish River in Washington).

\textsuperscript{134} Commission Directive to Staff, 31 F.E.R.C. \textsection 61,095 (1985).

\textsuperscript{135} See, e.g., Letter from Robert Grant, Seattle Audubon Society, to Kenneth Plumb, Secretary of FERC (June 12, 1985); Letter from William Wilkerson, Washington Department of Fisheries, to William McDonald, Executive Director of FERC (May 29, 1985); Letter from Dale Evans, National Marine Fisheries Service to McDonald (June 10, 1985); Letter from Jack Parnell, Director of California Department of Fish and Game, to Plumb (July 12, 1985) (letters on file with authors).

\textsuperscript{136} Inyo Register, Sept. 22, 1985, at 1, col. 1.

\textsuperscript{137} See generally Anadromous Fish Law Memo, July 1985, at 2-11 (describes method of determining cumulative impacts under CIAP).
wildlife concerns with the need for hydroelectric development. For example, FERC refused to follow a plan developed by Maine that ranks all of the state's rivers and streams in terms of their hydropower potential, evaluates competing uses, and designates appropriate and inappropriate areas for hydroelectric development. Similarly, FERC resisted efforts by the Pacific Northwest Power Planning and Conservation Council to implement its Columbia River Basin Fish and Wildlife Program and its Regional Power Plan. The Council is an investigative body created by federal statute and appointed by the governors of Washington, Oregon, Idaho, and Montana. The Council's Program and Plan require agencies reviewing hydroelectric proposals in the area of its jurisdiction to balance fish and wildlife concerns with power considerations. Despite the clear congressional intent to implement basinwide planning in this region, FERC has disregarded both plans—an especially illogical action in light of its failure to develop its own programs.

FERC's unwillingness to develop comprehensive plans for multiple river uses or to apply comprehensive state-developed plans has prompted several proposals for corrective legislation. The most recent proposal is a bill passed by the Senate that would require FERC, when evaluating a project proposal, to determine whether the project is "best adapted" to any comprehensive plans prepared by appropriate agencies. In partic-

139. *STATE OF MAINE, COMPREHENSIVE HYDROPOWER PLAN* (Oct. 1, 1982); *Small Hydro Hearings*, supra note 106, at 25 (statement of Joseph Brennan, Governor of Maine). The National Governor's Association has endorsed Maine's approach, and other states are now following suit. 130 CONG. REC. S1892 (daily ed. Feb. 28, 1984).
141. See generally id. §§ 839b(d)-839b(f).
142. Id. §§ 839a-839h.
144. Id. §§ 839b(e)(2), 839b(h)(5). The Power Council has undertaken a million dollar project which will assess the entire region's rivers and streams and identify their appropriateness for hydroelectric development based on fish and wildlife considerations. *NORTHWEST POWER PLANNING COUNCIL, NORTHWEST CONSERVATION AND ELECTRIC POWER PLAN* 10-20 (1983). The Power Council's fish and wildlife program specifies that multiple hydroelectric developments in the Columbia basin must be reviewed collectively. *NORTHWEST POWER PLANNING COUNCIL, COLUMBIA BASIN FISH & WILDLIFE PROGRAM*, measure 1204 (1982).
145. See generally 16 U.S.C. §§ 839b(g), 839b(h) (1982) (Northwest Power Act provisions which require the Council to inform the public of major regional power issues and to receive public commentary about such issues).
146. S. REP. No. 161, 99th Cong., 1st Sess. 8 (1985). Previous proposals included one by Senator Mitchell of Maine that would require FERC to act consistently with state comprehensive plans, provided that the plans met certain standards, including identification of fishery management objectives and provision for sites where no new dams would be allowed. S. 2361,
ular, the bill would require FERC to solicit comments from the preparers of the plan and to offer a written explanation for any rejection or modification of license terms recommended by the preparers. The House Energy and Commerce Committee has also conducted oversight hearings on FERC's hydropower decisions, and it has strongly recommended that FERC increase its use of comprehensive planning.

Additional legislative or judicial action may be necessary to force FERC to undertake the comprehensive planning needed to establish priority uses within river basins and to designate appropriate sites for hydroelectric development. How such planning would affect siting decisions for the hundreds of hydroelectric projects now before FERC remains to be seen.

III
THE ROLE OF THE FISH AND WILDLIFE AGENCIES

A. The Installation of Fishways

1. License Conditions

Under FPA section 18, the Secretary of the Interior or the Secretary of Commerce can prescribe the construction of fishways needed to protect anadromous fish at hydropower projects. Once a Secretary has called for a fishway, FERC must impose conditions in the license that require the licensee to install the fishway.

Both the plain language of section 18 and its legislative history indicate that FERC's duty to impose


In addition, Senators Evans and Gorton of Washington introduced a bill in 1984 to prohibit FERC from approving any projects in the Columbia River basin until the Commission developed procedures to implement the Northwest Power Act and addressed the cumulative impacts of multiple projects. S. 3006, 98th Cong., 2d Sess., 130 CONG. REC. S11,447 (daily ed. Sept. 19, 1984). In 1985, Senator Evans introduced S. 1260, 99th Cong., 1st Sess., 131 CONG. REC. S7705 (daily ed. July 7, 1985), requiring FERC, in evaluating applications for relicensing, to consider applicants' plans to adapt their projects to applicable state or regional comprehensive plans.

148. See, e.g., Small Hydro Hearings, supra note 106; Anadromous Fish Law Memo, Sept. 1985, at 9-10. The House Committee on Energy and Commerce, in reporting out H.R. 44, recommended that the FPA's planning requirement be maintained and that FERC base plans on a thorough assessment of river basin resources and an evaluation of existing and expected demands on the resource. H. REP. No. 507, 99th Cong., 2d Sess. 22 (1986). The Committee also urged FERC to revise its CIAP to provide "an assessment of combined effects of all projects on a waterway, including projects exempted from licensing." Id. at 21.

149. See Anadromous Fish Law Memo, July 1985, at 10 (proposal for an improved comprehensive cumulative effects analysis).


151. "The Commission shall require the construction, maintenance, and operation by a licensee at its own expense of . . . such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce . . . ." Id.
conditions in such instances is nondiscretionary. Nonetheless, FERC consistently has ignored this duty.

FERC maintains that when the Secretaries of Commerce or Interior prescribe a fishway, FERC must assess the need for such a fishway independently. The Commission has stated that in making this assessment it considers all relevant factors to determine what action will further the public interest. As a result FERC typically defers evaluation of the desirability of fishways by inserting in all licenses its standard reopener clause. The clause reserves to FERC the authority to make future decisions on fishways rather than requiring projects developers to include them in initial construction.

In 1984, the Supreme Court rejected by implication FERC's position on fishways in *Escondido Mutual Water Co. v. La Jolla Band of Mission Indians*. Escondido involved FPA section 4(e), which requires FERC to include in its hydroelectric facilities on federal public lands and

152. The Federal Power Act (FPA) was originally enacted as the Federal Water Power Act (FWPA), ch. 285, 41 Stat. 1063 (1920). FWPA section 4(d) authorized the Federal Power Commission to issue licenses, and section 18 included language authorizing maintenance and operation of fishways prescribed by the Secretary of Commerce. Id. at 1068, 1073. Section 25 provided that willful violations of regulations or orders by the Secretary of Commerce concerning fishways would be subject to criminal penalties. Id. at 1076. See also H.R. REP. No. 61, 66th Cong., 1st Sess. 9 (1919) ("Section 18 . . . provides for such fishways as may be required by the Secretary of Commerce."); S. REP. No. 180, 66th Cong., 1st Sess. 8 (1919). The authority of the Secretary of Commerce under this section was confirmed in a statement by Representative John T. Esch, Chair of the House Committee on Water Power, during the floor debate on the Act. Responding to a question concerning the penalty provisions of section 25, Representative Esch stated:

Under a previous section of the Act the Secretary of Commerce has authority to order the installation of fishways at the time the original dam is constructed or at any time thereafter. Hence if any order of the Secretary of Commerce is not obeyed it comes under the penalty provisions of section 25.

58 CONG. REC. 2247 (1919).


153. *Small Hydro Hearings*, supra note 106, at 72 (letter of Raymond O'Connor, Chair of FERC). If FERC determines that installation of a fishway at the time established by the Secretary is contrary to the public interest, FERC can either order a hearing to consider the issue, order an alternative timetable, or condition a license to allow FERC to consider the issue in the future. *Id.*


155. *See supra* note 92 and accompanying text.

reservations such conditions as the Secretary of the Interior determines are necessary to protect these areas.\textsuperscript{157} FERC had issued a license for a powerhouse on an Indian reservation under the supervision of the Secretary of the Interior without the conditions specified by the Secretary.\textsuperscript{158} FERC asserted that while it had to give great weight to the Secretary's conditions, it retained ultimate authority to determine what conditions the licenses would include.\textsuperscript{159} The Supreme Court rejected FERC's argument, ruling that the plain language of the Federal Power Act required FERC to include the Secretary's conditions, even if it disagreed with them.\textsuperscript{160} The Court also rejected FERC's argument that the Secretary's authority to impose conditions would conflict with FERC's authority to determine whether a project is best adapted to a comprehensive water development plan.\textsuperscript{161} The Court held that the Secretary's power to condition licenses is limited to conditions supported by evidence in the record and "reasonably related to the protection of the reservation."\textsuperscript{162} Therefore, if FERC does not wish to include the required conditions, its only option is to refuse to issue the license.\textsuperscript{163}

FERC's arguments for not complying with section 4(e), which were rejected by the Supreme Court, are equally deficient when applied to its section 18 duty to include fishway conditions. Unless FERC reverses its view of that duty in light of the Escondido decision, it will continue to delay and avoid imposing fishway conditions in contravention of the FPA and the directive of the United States Supreme Court.

2. Upstream vs. Downstream Fish Passage

In addition to allowing itself independent review to avoid fishway conditions prescribed by the Interior and Commerce Departments,

\textsuperscript{157} Section 4(e) of the FPA states:
[L]icenses shall be issued within any reservation only after a finding by the Commission that the license will not interfere or be inconsistent with the purpose for which such reservation was created or acquired, and shall be subject to and contain such conditions as the Secretary of the Department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservation.

\textsuperscript{158} 16 U.S.C. § 797(e) (1982).

\textsuperscript{159} 466 U.S. at 770.

\textsuperscript{160} The Court said it would use the plain language of the Act to interpret section 4(e) unless it found in the legislative history a clearly expressed contrary intent. The Court examined the history and not only found a lack of such clear contrary intent but also determined that the legislative history supported the plain meaning of the Act. \textit{Id.} at 779.

\textsuperscript{161} \textit{Id.} at 778-79. \textit{See also supra} text accompanying notes 36-39 (FERC's authority under section 10(a) of the FPA to review each project in light of a comprehensive plan).

\textsuperscript{162} 466 U.S. at 777.

\textsuperscript{163} \textit{Id.} at 778. The Court concluded that because the Act requires FERC to impose the Secretary's conditions, FERC does not have the authority to review the conditions. Review authority is vested in the appropriate court of appeals, pursuant to 16 U.S.C. section 825l (b). \textit{Id.} at 777.
FERC has narrowed fish passage protection by treating fishways for upstream and downstream fish migration differently.\(^{164}\) FERC may even try to exclude downstream passageways from its interpretation of FPA requirements. This would be an improperly restrictive definition.

The uncertainty in interpretation arises because neither the FPA nor its legislative history defines “fishway.” Further, when the FPA was passed, fisheries experts were concerned with upstream, not downstream, migration problems.\(^{165}\) Since enactment of the FPA, it has become clear that downstream passage of anadromous fish is also an important concern.

FERC should interpret fishways to include downstream as well as upstream passageways for two reasons. First, when Congress enacted section 18 in 1920, it was concerned with the impact of hydroelectric facilities on fish passage generally. Therefore, as a matter of statutory construction, “fishways” should be interpreted to apply to the subsequently recognized problem of downstream passage, as well as to upstream passage.\(^{166}\)

Second, it would make no sense for the federal fish and wildlife agencies to require fishways for upstream passage if FERC had ultimate authority to disregard mitigation of hazards to downstream passage when approving hydropower projects. NMFS and FWS have the expertise to address all fish passage problems in a comprehensive manner. Requiring FERC to mitigate upstream migration hazards but not downstream hazards would undercut efforts to protect fishery resources adequately because the effectiveness of upstream fishways can be reduced significantly by inadequate downstream facilities.\(^{167}\) FERC should not circum-

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\(^{164}\) For example, the Commission in Bangor Hydro-Electric Company discusses separately the need for upstream and downstream fishways and allowed the applicant to defer the construction of downstream fishways. 27 F.E.R.C. \(\ddagger \) 61,467 (1984). This procedure is contrary to article 15 of the Standardized Conditions for Inclusion in Preliminary Permits and Licenses issued under Part I of the Federal Power Act. Article 15 requires that fish passage features be considered as a whole. See supra note 92 and accompanying text.

\(^{165}\) Telephone interview with Dale R. Evans, NMFS, Envtl. Technical Services Div., Portland, Ore.

\(^{166}\) It is a general rule of statutory construction that a statute is interpreted to apply to situations that come into existence only after the statute was enacted. “[A] statute expressed in general terms and words of present or future tense, will be applied, not only to existing but also prospectively to future things and conditions.” 2A N. Singer, Sutherland Statutory Construction \(\ddagger \) 49.02 (rev. 4th ed. 1984). See also Vermilya-Brown Co. v. Connell, 335 U.S. 377, 389, 390 (1948) (relying on legislative intent, as expressed in the purpose and definitions of the Fair Labor Standards Act, to apply the Act to United States leaseholds in Bermuda, in the absence of explicit statutory language or legislative history concerning such leaseholds because such leaseholds did not exist at the time the Act was passed).

\(^{167}\) The adverse impacts of a project must be considered at every stage of a fish’s life. Saving substantial numbers of adult fish going upstream is useless if most young fish going downstream are destroyed by hydropower projects.
vent the FPA’s fish passage protection provisions by treating the fishway systems differently.

B. Consultation

The Fish and Wildlife Coordination Act (FWCA) requires federal licensing agencies such as FERC to consult with NMFS, FWS, and the appropriate state fish and wildlife agencies during the licensing process to ensure the conservation of fish and wildlife resources.\(^\text{168}\) Congress saw this consultation requirement as necessary to achieve the Act’s goal of giving fish and wildlife conservation equal consideration with other projected benefits of proposed hydroelectric projects.\(^\text{169}\) The courts interpreted this consultation requirement to mean that a licensing agency must seek out fish and wildlife agency views early in the decisionmaking process\(^\text{170}\) and give those views great weight.\(^\text{171}\) The licensing agency must respond to issues raised by the fish and wildlife agencies\(^\text{172}\) and may be required to meet with those agencies to discuss issues that concern them.\(^\text{173}\) Merely sending out license applications to fish and wildlife agencies for comment does not comply with the consultation require-

\(^{168}\) 16 U.S.C. § 662(a) (1982) (requires that federal agencies consult with FWS, NMFS, and state fish and wildlife agencies concerning mitigation of damage to fish and wildlife before impounding streams or other bodies of water). The Northwest Power Act contains a similar consultation requirement. \(\text{id.} \) § 839 b(h)(11)(B) (1982). Likewise, the Energy Security Act, \(\text{id.} \) § 2705, and the Federal Power Act, \(\text{id.} \) § 823a(c), require FERC to consult with state and federal fish and wildlife agencies regarding small hydro exemptions pursuant to the Fish and Wildlife Coordination Act, \(\text{id.} \) § 662.

\(^{169}\) Zabel v. Tabb, 430 F.2d 199, 209 (5th Cir. 1970), cert. denied, 401 U.S. 910 (1971). Consultation helps ensure the integrity of the decisionmaking process by providing that fish and wildlife agencies alert the decisionmaker to the fish and wildlife aspects of the proposed activity and to the means to avert adverse effects. Udall v. FPC, 387 U.S. at 443-44; Warm Springs Dam Task Force v. Gribble, 621 F.2d 1017, 1021 (9th Cir. 1980); Environmental Defense Fund v. Froehlke, 473 F.2d 346, 356 (8th Cir. 1972). Consultation also enables courts to examine whether federal decisionmakers have made a good faith effort to achieve the FWCA’s goals. Sierra Club v. United States Army Corps of Engineers, 701 F.2d 1011, 1030 (2d Cir. 1983); Silva v. Lynn, 482 F.2d 1282, 1284 (1st Cir. 1973). In \textit{Yakima Indian Nation}, the Ninth Circuit observed that the “consultation requirements are the primary means by which FERC is to comply with its duty to examine fishery issues prior to licensing.” 746 F.2d at 474.


\(^{171}\) Missouri v. Department of the Army, 672 F.2d 1297, 1303 (8th Cir. 1982) (recommendations must be given full consideration); Sierra Club v. Alexander, 484 F. Supp. 455, 460 (N.D.N.Y.), \textit{aff'd}, 633 F.2d 206 (2d Cir. 1980) (recommendations must be given serious consideration); Akers v. Resor, 339 F. Supp. 1375, 1380 (W.D. Tenn. 1972) (recommendations must be given due consideration).


ment.174 FERC must carry out the consultation in good faith.175

Despite these requirements, FERC does not routinely consult with fish and wildlife agencies. Instead, it gives applicants responsibility for consulting with the agencies.176 And until recently, FERC regulations only required applicants to demonstrate that they had made minimal contact with the agencies.177 The FERC regulations did not specify what this consultation should involve, did not require applicants to respond to agency comments or to work with the agencies to resolve differences, and did not say what weight FERC should give fish and wildlife agency views. FERC rejected applications because of inadequate consultation in only a few instances, generally in cases where the applicant either failed to consult,178 failed to document the consultation,179 or submitted a completely inadequate application for consultation.180

In March 1985, FERC updated its regulations to require more specific information and studies on the impacts of the proposed projects.181 The new regulations require applicants to respond to certain fish and wildlife agency comments182 and to describe how the proposed projects comply with comprehensive plans.183 Despite these improvements, it is

174. Yakima Indian Nation, 746 F.2d at 475; Sun Enterprises v. Train, 532 F.2d 280, 290 (2d Cir. 1976).

According to FERC, the consultation process should contain three steps: (1) an initial contact to identify problems and define studies prior to preparing an application; (2) a formal preapplication request for consultation, including a detailed description of the project and the results of any studies; and (3) documentation of consultation. Eastern Sierra Energy Development, 20 F.E.R.C. ¶ 61,348 (1982). In another case, FERC determined that consultation is adequate if fish and wildlife agencies are given 30 days to comment on an application for a small hydro exemption and the applicant includes in his application documentation showing it attempted to consult. Potter Instrument Co., 19 F.E.R.C. ¶ 61,299 (1982).

177. Applicants need only attach letters from each agency consulted. If no agency submits comments, the applicant must prepare a summary of the consultation. 18 C.F.R. § 4.38 (1985). See also Small Hydro Hearings, supra note 106, at 338 (FWS statement that FERC never responds to Department of Interior’s mitigation requests).
179. See, e.g., Eastern Sierra Energy Development, 20 F.E.R.C. ¶ 61,348 (1982). The application revealed only that the applicant had spoken on the telephone with a Fish and Wildlife Service staff person. Further, the applicant had filed the application 23 days after it had initiated consultation, seven days short of the 30-day requirement of 18 C.F.R. § 4.107(e)(3) (1985). In Douglas Water Power Company, 25 F.E.R.C. ¶ 61,034 (1983), the applicant failed to document adequately consultation with the FWS.
180. See, e.g., Joseph M. Keating, 26 F.E.R.C. ¶ 61,294 (1984). The applicant failed to submit information on the types of fish in the stream on which the dam was planned. In Douglas Water Power Company, 25 F.E.R.C. ¶ 61,034 (1983), the environmental documentation was only 5-1/2 double-spaced pages and contained virtually no information about fish in the subject stream, the impact of the project on fish, or proposed mitigation measures.
183. Id. § 4.38(f).
still the applicant and not FERC that must consult. Further, applicants have only a limited responsibility to respond to fish and wildlife agency views or work with those agencies to resolve problems. The regulations still do not require FERC to give great weight to fish and wildlife agency views except for their comments on what studies are required. Thus, while the regulations are an improvement, they still are not adequate to comply with the FWCA.

Two examples demonstrate FERC's indifferent attitude toward its responsibility to consult with the fisheries agencies. In *Yakima Indian Nation*, FERC issued a license while deferring consideration of fisheries issues to a separate proceeding. NMFS and the Washington Departments of Fisheries and Game intervened in the license proceeding. Even so, FERC limited its consultation to a request for comments on an inadequate application. FERC never contacted these agencies after this request for comments. It did not even schedule a hearing so that the intervening fisheries agencies could help develop a record on the fisheries question. In rejecting the agencies' administrative appeals of FERC's decision to issue the license, FERC said it had fulfilled its consultation responsibilities by providing an opportunity to comment on the application. The Ninth Circuit rejected FERC's position, concluding that "[i]t is not enough that FERC gave notice of [the] applications to the agencies . . . . [T]he consultation obligation is an affirmative duty."

In a second case, NMFS and the Washington State Departments of Fisheries and Game attempted to appeal to FERC the issuance of a preliminary permit for a project in Washington. The agencies had intervened in the permit proceedings and requested that the permit include certain conditions. FERC denied the request and then failed to send prompt notice of its decision to the agencies. The Washington Departments received the permit decision twenty-two days after it was issued, and NMFS never received the decision from FERC. These agencies then filed a Motion to File a Late Appeal and an Appeal with FERC one working day after the thirty-day appeal period. FERC rejected the appeal, arguing that no extraordinary circumstances existed in the case. FERC said the decision had been available for review in its offices in Washington, D.C. on the day it was issued and that the agencies could

184. 746 F.2d at 468-69.
185. Under FERC regulations, an application must include an exhibit detailing the project's effect on fish and wildlife. In *Yakima Indian Nation*, FERC granted the license even though the applicant had failed to provide this exhibit. *Id.* at 474-75.
187. 746 F.2d at 475.
189. *Id.*
have found out about the decision by either subscribing to a service which disseminates a list of decided cases or calling FERC every day for a recorded message of the day’s decisions.\textsuperscript{190} Despite these agencies’ explicit statutory role, despite uncontroverted evidence that notice of FERC’s decision reached these agencies late or not at all, and despite the filing of the appeal only one working day late, FERC refused to hear the fish and wildlife agencies’ appeal.\textsuperscript{191}

Moreover, FERC treats “consultation” as ending once a license or exemption application is filed. Its regulations allow the fish and wildlife agencies to request a hearing when an application does not address fish and wildlife concerns adequately.\textsuperscript{192} FERC, however, very rarely grants such hearings,\textsuperscript{193} and thus it deprives the fish and wildlife agencies and other interested groups of the opportunity to develop a record that demonstrates the inadequate consideration given to fish and wildlife values. In those few cases where FERC conducts hearings after an application is filed, the final terms of the permit or license may still not adequately protect these values. FERC regulations do provide for administrative appeal of decisions, but only by those who have formally intervened in a

\textsuperscript{190} FERC’s action in this case not only demonstrates the Agency’s lack of seriousness about its consultation responsibility but also violates the Administrative Procedures Act (APA). The APA provides, in part: “Prompt notice shall be given of the denial in whole or in part of a written application, petition, or other request of an interested person made in connection with any agency proceeding.” 5 U.S.C. § 555(e) (1982).

In Gardner v. Federal Communications Commission, 530 F.2d 1086 (D.C. Cir. 1976), the Federal Communications Commission had failed to give the petitioner notice of its decision adverse to petitioner. Petitioner requested reconsideration of the decision after the expiration of the statutory period. The Commission refused to reconsider. The Court of Appeals for the District of Columbia Circuit found the petitioner to be entitled to notice under 5 U.S.C. section 555(e) and the Commission’s regulations. Even though the petition was late, the court held that the Commission had abused its discretion in refusing to hear the petition on the ground of untimeliness. 530 F.2d at 1092.

Likewise, in \textit{W.P., Inc.}, FERC should have heard petitioners’ appeal because it was at fault in not giving notice and because the petitioner, who found out about the decision nine days before the end of the appeal period, acted promptly. 28 F.E.R.C. ¶ 61,243 (1984). \textit{See also} Turner v. Watt, 566 F. Supp. 87 (D. Utah 1983).

\textsuperscript{191} Another recent example of FERC’s deficient “consultation” with fish and wildlife agencies is its failure to send agencies copies of correspondence and notices of meetings between FERC staff and applicants, even when the correspondence and meetings relate to issues raised by the agencies. \textit{See} Letter of F. Lorraine Bodi, Office of General Counsel, National Oceanic and Atmospheric Administration, to Kenneth Plumb, Secretary of FERC, Re: Project No. 2062 (Mar. 5, 1985); Letter of Benjamin Rosenthal, Office of General Counsel, National Oceanic and Atmospheric Administration, to Plumb, Re: Project No. 7114 (May 24, 1985) (letters on file with the authors).

\textsuperscript{192} 18 C.F.R. § 385 (1985).

\textsuperscript{193} For example, between 1977 and 1983, FERC received applications for 4425 preliminary permits, 1100 exemptions, and 803 licenses. During this period, FERC held hearings on no preliminary permits, two exemptions, and 16 license applications. \textit{Small Hydro Hearings, supra} note 106, at 66 (letter of Raymond O’Connor, Chair of FERC).
Thus, unless the fish and wildlife agencies intervene in every FERC proceeding, FERC procedures will prevent them from ensuring protection of fish and wildlife in hydropower project licensing and permit decisions.

FERC’s failure to consult properly with fish and wildlife agencies is particularly surprising because FERC itself does not have a staff large enough to properly address fishery and other environmental concerns. Given this inadequate staffing, FERC logically should rely heavily on fish and wildlife agencies to help it meet its statutory obligations. Both the Senate and the House have passed legislation mandating that FERC consult with fish and wildlife agencies. FERC’s failure to embrace its consultation responsibilities under these circumstances is yet another indication of FERC’s predilection toward placing power development over fishery concerns.

IV

COMPLIANCE WITH OTHER ENVIRONMENTAL LAWS

A. The National Environmental Policy Act

Under the National Environmental Policy Act (NEPA), all federal agencies must, to the fullest extent possible, interpret and administer their regulations and obligations in accordance with federal policies of environmental protection. NEPA requires each federal agency to pre-

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194. 18 C.F.R. §§ 385.214, 385.713(b) (1985). FERC regulations do not affirmatively allow nonintervenors to file a late intervention and an appeal simultaneously. Id. § 385.1902.
195. The fish and wildlife agencies may refrain from routinely intervening because they expect to have sufficient input into the licensing process through consultation with FERC and applicants. The agencies often assume, contrary to actual practice, that FERC will accept their written comments. FERC-DOI JOINT REPORT, supra note 154, at 10. Under FERC regulations, however, state public utility commissions and the Department of Energy can intervene in all proceedings by filing a notice of intervention within the specified filing period. 18 C.F.R. §§ 385.214(a)(1), 385.214(a)(2) (1985).
196. FERC’s staff includes only 35 environmental specialists who are responsible for reviewing all the environmental information in over 1000 applications each year. Small Hydro Hearings, supra note 106, at 114-28 (statement of Raymond J. O’Connor, Chair of FERC). Environmental issues other than fish protection include water use and quality, historic and archeological resources, geologic and soil resources, recreational and aesthetic resources, and land use. FERC received over 1000 applications per year for permits, licenses, and exemptions in fiscal years 1981, 1982, and 1983. Id. at 39 (letter of Raymond O’Connor, Chair of FERC).
197. Section 3(3) of S. 426 would require FERC to solicit recommendations from the agencies and Indian tribes upon receipt of application for a hydropower license. FERC must explain in writing its reasons for rejecting or modifying any proposed recommendation. S. REP. NO. 161, 99th Cong., 1st Sess. 8-9 (1985). The proposed House legislation is stronger. H.R. 44 would require FERC to impose conditions recommended by NMFS, the FWS, and state fish and wildlife agencies, unless FERC determines after attempting to resolve differences with agencies that a recommendation is inconsistent with the FPA. FERC must publish findings and support for its decision which are subject to judicial challenge. H. REP. NO. 507, 99th Cong., 2d Sess. 31-32 (1986).
199. Id. § 4332(1).
pare detailed environmental impact statements (EIS's) when it considers "major federal actions significantly affecting the quality of the human environment," and to protect and enhance the environment in other ways.

The Council on Environmental Quality (CEQ) has promulgated regulations to implement the NEPA requirements. These CEQ regulations apply to all federal agencies, including FERC, and are entitled to "great deference" as interpretations of what NEPA requires. The regulations describe the threshold for preparation of an EIS, prescribe the use of environmental assessments (EA's), and provide for preparation of findings of no significant impact (FONSI's) where there is no need to prepare an EIS. The regulations also define the individual and cumulative impacts an EA or EIS must assess. CEQ has directed each federal agency to adopt its own NEPA procedures in conformity with the CEQ standards.

FERC has shown a marked tendency to sidestep the environmental review requirements under NEPA and the CEQ regulations. Most significantly, the Commission has failed to incorporate into its own regulations the key concepts and dictates of the CEQ regulations. FERC's regulations implementing NEPA were promulgated for the most part in 1972 before the current CEQ regulations were published. The

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200. *Id.* § 4332(2)(C). The EIS must discuss the environmental impacts of and alternatives to the proposed action. The responsible federal agency must consult with other federal agencies which have special expertise with respect to any environmental impact involved prior to issuing the EIS, and the EIS must be made available to the public.

201. For example, federal agencies must study and develop alternatives to any proposal which involves "unresolved conflicts concerning alternative uses of available resources," 42 U.S.C. § 4332(2)(E), and federal agencies must utilize ecological information in planning projects, *id.* § 4332(2)(H).


204. *Sierra Club,* 442 U.S. 347; *Warm Springs Task Force,* 417 U.S. at 1301.

205. 40 C.F.R. § 1501.4 (1985) (discusses whether to prepare an EIS); *id.* §§ 1508.14, 1508.18, 1508.25, 1508.27 (define, respectively, the terms "human environment," "major Federal action," "scope," and "significantly").

206. *Id.* § 1501.3 (discusses whether to prepare an environmental assessment); *id.* § 1508.9 (defines the term "environmental assessment").

207. *Id.* § 1501.4(e) (discusses preparation of a FONSI); *id.* § 1508.13 (defines the term "finding of no significant impact"). For a comprehensive discussion of the FONSI process, see Herson, *Project Mitigation Revisited: Most Courts Approve Findings of No Significant Impact Justified by Mitigation,* in this issue of *ECOLOGY LAW QUARTERLY.

208. *Id.* § 1502.16 (discusses the environmental consequences which must be considered in an EIS); *id.* §§ 1508.7, 1508.8 (define, respectively, the terms "cumulative impacts" and "effects").

209. *Id.* § 1507.3.


211. The regulations were adopted originally approximately one year after the enactment
FERC regulations do little more than specify that FERC will prepare an EIS when there is a major federal action significantly affecting the quality of the human environment.\textsuperscript{211} They do not mention EA's, FONSI's, or the impacts to be assessed in an EA or an EIS.

In 1979, FERC did propose extensive revisions to its regulations that would have adopted most of the CEQ regulations in their entirety.\textsuperscript{212} The proposed revisions, however, were never promulgated. FERC apparently put them on indefinite hold.\textsuperscript{213} Consequently, FERC's NEPA procedures are established primarily by practice, rather than by written directive or regulation. This approach provides FERC with maximum flexibility in implementing NEPA, but has led to continuing court challenges.

The earliest challenge to FERC's failure to comply with NEPA arose shortly after its enactment. The Second Circuit Court of Appeals ruled in Greene County Planning Board \textit{v. FPC}\textsuperscript{214} that the FPC did not comply with its independent responsibilities under NEPA when it failed to prepare an EIS for proposed transmission lines near Albany, New York. The court dismissed the record on environmental issues which the FPC compiled as "inadequate." The record consisted of a statement of environmental impacts prepared by the applicant, the Power Authority of the State of New York (PASNY), and comments by agencies with environmental expertise. The court stated that the FPC could not simply "collate" records developed by other parties but must prepare its own EIS before giving initial approval of power facilities.\textsuperscript{215}

Since \textit{Greene County}, FERC has prepared its own EIS's, but only in

\begin{thebibliography}{9}
\bibitem{211} See 18 C.F.R. §§ 2.80(b), 2.81(b) (1985).
\bibitem{212} Docket No. RM79-69, 44 Fed. Reg. 50,052 (1979). "Although the Commission, as an independent regulatory agency, is not bound by the CEQ regulations, it concurs in the policies reflected in the CEQ regulations." \textit{Id.} at 50,053.
\bibitem{213} \textit{Small Hydro Hearings, supra note 106, at 88 (letter of Raymond O'Connor, Chair of FERC).} "The Commission, however, is examining whether its existing environmental requirements procedures continue to be adequate and whether the 1979 proposed rule should be issued as a final rule." \textit{Id.}
\bibitem{214} \textit{Id.} at 412. The "umpire" reference derives from \textit{Scenic Hudson}, 354 F.2d 608 (2d Cir. 1965), a pre-NEPA case which found that FPC could not meet its affirmative obligations under the FPA by acting as an umpire "blandly calling balls and strikes for adversaries appearing before it." \textit{Id.} at 620.
\end{thebibliography}
a few instances. Between 1978 and 1983, FERC issued 1933 preliminary permits, 348 licenses, and 529 exemptions. For these actions, FERC by its own account prepared thirty-eight EIS's. All of the EIS's were prepared for licenses; none were prepared for permits or exemptions.

Often when FERC declines to prepare an EIS, it also fails to prepare an EA or a FONSI. Instead, FERC staff conducts an internal "environmental review" and prepares analyses and recommendations for the Commission. These staff reviews and analyses have not customarily been made available to the public for review and comment. They are reflected only in brief conclusions in FERC Orders regarding applications for permits, licenses, and exemptions. The sole recourse for an interested party in such circumstances is to appeal the FERC Order.

For example, in Yakima Indian Nation, FERC declined to prepare either an EA or an EIS when it approved a new forty-year license for the Rock Island Dam, despite public controversies over the potential impact of the dam on anadromous fish. FERC's "environmental assessment" for the new license, reminiscent of the "collating" approach used in Greene County, consisted of four sentences in the Order Issuing License: "On the basis of the record, including agency and intervenor comments and staff's independent analyses, it is found that issuance of a license for this project, as conditioned, is not a major federal action significantly affecting the quality of the human environment."

The Ninth Circuit Court of Appeals in Yakima found that FERC's cursory conclusion violated NEPA. The court did not address FERC's failure to prepare an EA but held that FERC's decision not to prepare an EIS was unreasonable. It found that issuance of a new license for the Rock Island Dam involved a new commitment of water resources and

218. Id. at 89 (includes both draft and final EIS's).
219. Id.
220. Id. at 86-88. This approach presents not only problems of compliance with the requirements for EA's and FONSI's but also problems of demonstrating that the threshold tests for preparation of an EIS have been met. Maryland-National Capital Park & Planning Comm'n v. United States Postal Service, 487 F.2d 1029, 1040 n.10 (D.C. Cir. 1973). To meet these tests, an agency must "affirmatively develop a reviewable environmental record" and "statement of reasons." Hanly v. Kleindienst, 471 F.2d 823, 827 (2d Cir. 1972), cert. denied, 412 U.S. 908 (1973); Hanly v. Mitchell, 460 F.2d 640, 647 (2d Cir. 1972), cert. denied, 409 U.S. 990 (1972). See also Scientists' Inst. for Pub. Information v. Atomic Energy Comm'n, 481 F.2d 1079, 1094-95 (D.C. Cir. 1973) (agency must develop reviewable environmental record or statement of reasons).
221. FERC's approach is inconsistent with CEQ's NEPA regulations which require federal agencies to allow environmental agencies, applicants, and the public to participate in preparation of EA's "to the extent practicable." 40 C.F.R. § 1501.4(b) (1985).
222. See 5 FERC Monitor Newsletter, Sept. 19, 1985 at 5.
224. Id.
that FERC's licensing decision required consideration of alternatives such as non-power operations and license conditions to protect anadromous fisheries.\textsuperscript{225}

In another recent case, \textit{Steamboaters v. FERC},\textsuperscript{226} the Ninth Circuit again held that FERC's failure to prepare an EA or an EIS violated NEPA. In this case, a fishing group and NMFS challenged FERC's issuance of a perpetual small hydro exemption for the Winchester Dam Hydropower Project in Oregon, which is located at an existing dam across an important anadromous fish migration corridor.\textsuperscript{227} FERC maintained that the fish protection conditions recommended by NMFS were not binding on FERC or the applicant.\textsuperscript{228} The court agreed, but invalidated the exemption on three grounds. First, FERC failed to prepare an EA, as required by NEPA regulations; second, FERC did not adequately explain its decision not to prepare an EIS; and third, FERC did not comply with a NEPA requirement to consider carefully each of NMFS's recommended conditions.\textsuperscript{229}

Additional appeals of FERC's failure to undertake EIS's are still pending. In two cases before the Ninth Circuit, fishery agencies, environmental groups, and Indian tribes are challenging FERC's failure to prepare an EIS assessing cumulative impacts and siting alternatives for multiple hydroelectric proposals in the Salmon and Snohomish river basins.\textsuperscript{230}

In the midst of continuing controversy, FERC appears to be making minor improvements in its NEPA compliance procedures. First, in recent cases FERC has not argued that it is not bound by CEQ regulations, an assertion the Commission has made in the past.\textsuperscript{231} In addition, FERC has recently prepared EA's and EIS's for several projects and made these

\textsuperscript{225} 746 F.2d at 475-77. FERC cited a number of cases holding that an EIS is not required when the action is part of a continuous activity and environmental conditions have not changed. The court distinguished the Rock Island Dam litigation from these other cases because of the section 15 provision that licenses be issued according to the legal requirements at the time the license is considered. The court said relicensing was more an irretrievable and irreversible commitment of resources than a continuation of the status quo. \textit{Id.}

\textsuperscript{226} 759 F.2d 1382 (9th Cir. 1985). \textit{See infra} text accompanying notes 284-89.

\textsuperscript{227} \textit{Id.} at 1385.

\textsuperscript{228} \textit{Id.} at 1387.

\textsuperscript{229} \textit{Id.} at 1392-94.

\textsuperscript{230} The cases have been combined in National Wildlife Fed'n v. FERC, Nos. 84-7325, 84-7669 (9th Cir. argued July 11, 1985). \textit{See supra} notes 118-19 and accompanying text. \textit{But see} Sierra Club v. FERC, 22 Env't Rep. Cas. (BNA) 2024 (9th Cir. 1985) (FERC need not prepare an EIS for a preliminary permit) (cumulative effects were not at issue in \textit{Sierra Club}).

\textsuperscript{231} For a discussion of the assertion that CEQ regulations are not binding, see \textit{supra} note 213. For cases in which FERC did not so argue, see \textit{Steamboaters}, 759 F.2d at 1392 and \textit{Yakima Indian Nation}, 746 F.2d at 466. In \textit{Steamboaters}, the court stated that the CEQ regulations were applicable to FERC, and FERC did not request reconsideration on this point. 759 F.2d at 1392-93. \textit{See City of Seattle, Wash.,} 26 F.E.R.C. ¶ 61,406 (1984); Weyerhaeuser Co., 26 FERC ¶ 61,405 (1984).
documents available to the public. The documents, however, are not made public until FERC announces its decisions, and the Commission has made no provision for public comment on the documents. Moreover, FERC does not distribute EA's to the parties involved in a proceeding but only sends out notice of their availability. If these small improvements are to be meaningful, they should be followed by more significant reforms, not the least of which is the revision of FERC regulations to put the Commission in compliance with CEQ and NEPA requirements.

B. Federal Water Pollution Control Act

The Federal Water Pollution Control Act (FWPCA) establishes a comprehensive program of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters. Sections 404 and 401 of the Act contain important mechanisms for controlling the impact of hydroelectric facilities on the nation’s waters, and hence on anadromous fish.

1. Section 404

Section 404 of the Act requires the United States Army Corps of Engineers to establish a permit system for the disposal of dredged or fill material into the nation’s waters. This section also requires the Environmental Protection Agency (EPA) to establish “guidelines” for the Corps to follow in issuing permits for such disposal and authorizes EPA to “veto” permits the Corps proposes to issue. In *Scenic Hudson*, the Second Circuit Court of Appeals held in 1974 that the FWPCA applies to hydroelectric facilities. Congress has subsequently exempted the maintenance of dams from section 404 permit requirements, but it has not expressly exempted the construction of hydroelectric projects. Section 404, therefore, would seem to bind FERC

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234. *Id.* § 1251(a).

235. *Id.* §§ 1344(a), 1344(d).


238. *Id.* § 1344(c) (authorizing EPA to prohibit any discharge that “will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas”).


240. 33 U.S.C. § 1344(f) (1982). Congress added a specific exemption in 1977 which excludes the disposal of material to maintain serviceable structures such as dams from section 404 requirements. *Id.* § 1344(f)(1)(B). Congress included a specific exemption for mainte-
with respect to discharges of dredged or fill material in connection with the construction of hydroelectric facilities.

The United States District Court for the District of Columbia Circuit, however, ruled in *Monongahela Power Co. v. Alexander* in 1980 that section 404 does not apply to discharges related to construction of hydroelectric facilities licensed by FERC. The court held that the Supreme Court's decision in *Train v. Colorado Public Interest Research Group* overruled *Scenic Hudson* by implication. In *Train*, the Supreme Court found that the legislative history of the FWPCA expressly indicated that radioactive materials regulated under the Atomic Energy Act were not included in the FWPCA regulatory scheme. The Court added that given the pervasive regulatory scheme in the Atomic Energy Act which predated the FWPCA, Congress would have to indicate a clear legislative intent to alter that scheme—an intent not found in the FWPCA's legislative history.

In *Monongahela*, unlike in *Train*, the district court found no express intent in the FWPCA's legislative history to preserve or to change FERC's jurisdiction over permits for dam construction. The court then reasoned that, in the absence of clear legislative intent, the FWPCA would repeal FERC's exclusive authority to license hydroelectric facilities only if the authorizing statutes were irreconcilable and repugnant. The court concluded that the FPA, giving FERC licensing authority, and the Corps' section 404 regulations were not repugnant or irreconcilable because both statutes required balancing of similar relevant factors in ruling on permit applications. The court held that, in the absence of a clear legislative intent, the FWPCA did not disturb the FERC's regulatory authority which was established before passage of the FWPCA. In effect, the court repealed the Corps' and EPA's authority under section 404 to affect the licensing of hydropower projects on the basis of the FWPCA's environmental standards.

In fact, the Corps' section 404 regulations do not involve balancing environmental and non-environmental factors. The Corps has authority for a number of permit programs, and the regulations cited by the District Court were the provisions of the Corps' regulations applying to all

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244. 426 U.S. at 11-23.
245. Id. at 24.
246. 507 F. Supp at 390.
247. Id. at 390-92.
248. Id. at 391-92.
of its programs. For section 404, however, the Corps has specific requirements that supersede its other regulations. The Corps’ regulations make clear that section 404 permit applications will be reviewed in accordance with the EPA guidelines and that applications will be denied if they are inconsistent with the EPA guidelines on disposal of fill. These guidelines emphasize environmental considerations and require the denial of a permit to discharge materials where the discharge would have certain negative, unmitigated impacts on the environment. Thus, the Corps’ section 404 requirements are inconsistent with FERC’s balancing approach under the Federal Power Act. The court’s erroneous analysis in Monongahela of the similarity of the Corps’ and FERC’s regulations led the Court to an incorrect conclusion. The section 404 permit process and, in particular, EPA’s guidelines for FWPCA section 404(b)(1) should be reaffirmed as an important tool for the protection of fish and wildlife from many of the deleterious effects of hydroelectric facilities.

2. Section 401

The states’ regulatory authority over hydroelectric facilities was significantly eroded by the Supreme Court’s 1946 decision in First Iowa Hydro-Electric Cooperative v. FPC, which struck down a state law regu-


250. At the time of Monongahela, the applicable regulation was found at 33 C.F.R. section 325.5(a). The regulations are now at 33 C.F.R. sections 320.4(a)(1) and 326(a). See 49 Fed. Reg. 39,478 (1984).

251. The guidelines prohibit disposal when:

1. There is a practicable alternative to the discharge having less adverse effect on the aquatic environment and not having other significant adverse environmental consequences;
2. The discharge results in significant degradation of waters of the U.S.;
3. The discharge would be done without all practicable measures to minimize harm to the aquatic environment; and
4. There is insufficient information to make a determination about compliance with the guidelines.


252. Although the two regulatory schemes are different, they can be reconciled without repeal of either one. Section 404(b)(1) requires applicants to meet the minimum standards found in the Act’s guidelines. If the applicants do meet the standards, they may then obtain a license if their applications are consistent with the FERC regulatory scheme.

253. The Army Corps of Engineers has issued a general permit for several small hydro facilities. Id. § 330.5(a)(17). Section 404(f) exempts maintenance of dams from the section 404 permit process under certain conditions. 33 U.S.C. § 1344(f).

The discharge of pollutants other than dredged or fill material from a point source is regulated under the FWPCA’s National Pollution Discharge Elimination System permit program. Id. § 1342. Discharges of pollutants from dams, however, do not need such a permit. National Wildlife Fed’n v. Gorsuch, 693 F.2d 156 (D.C. Cir. 1982).
lating hydroelectric development. The section 401 certification process, however, still provides a relatively untapped source of control for states over the impacts of hydroelectric facilities. Section 401 requires any applicant for a federal license or permit which may lead to a discharge into the waters of the United States to provide the federal licensing or permitting agency with a certification from the state of origination of the discharge that the discharge will comply with the FWPCA’s standards. Thus, as long as there is any discharge, states can deny a certification if a project would result in a violation of a state water quality standard established under the FWPCA.

States also can use the certification process under section 401(d) to condition federal permits and licenses to comply with any “appropriate requirement of State law set forth in such certification.” The meaning of this section was addressed in 1982 by the First Circuit Court of Appeals in *Roosevelt Campobello International Park v. EPA.* This case involved an application for a section 402 permit for an oil terminal and refinery in Maine. EPA refused to condition the permit to include conditions imposed by Maine under its section 401 certification for the permit. The court, citing the plain language of section 401(d), prior EPA interpretations, and numerous court decisions, held that EPA has no authority to review state agency certifications and that such review can only be accomplished under state law. The court did not indicate what limits state law might impose on certifications. Thus, a state certification

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254. 328 U.S. 152 (1946). One commentator has argued persuasively that recent Supreme Court decisions provide a number of ways in which states may control certain aspects of hydroelectric development. Arnold, *Emerging Possibilities for State Control of Hydroelectric Development,* 13 ENVTL. L. REP. (ENVTL. L. INST.) 10,135 (1983).

255. FERC does not require section 401 certification for small hydro exemptions. *Small Hydro Hearings,* supra note 106, at 94 (letter of Raymond O’Connor, Chair of FERC). The Administrative Procedure Act, however, defines the term “license” as including a statutory exemption. 5 U.S.C. § 551(8) (1982).

256. 33 U.S.C. § 1341(a) (1982). Water quality standards under section 303(c)(2) of the FWPCA, *id.* § 1313(c)(2), must protect public health and welfare, enhance water quality, and foster the Act’s objectives. Standards include designated uses of waters of the United States and the criteria necessary to allow such uses to exist.

257. The term “discharge” includes, but apparently is not limited by, the phrase “discharge of a pollutant.” 33 U.S.C. § 1362(16) (1982). Thus, the determination of the Court of Appeals for the District of Columbia Circuit that discharges from dams are not “discharges of a pollutant” does not apply to the section 401 test of “any discharge.” *National Wildlife Fed’n v. Gorsuch,* 693 F.2d 156 (D.C. Cir. 1982).


259. 684 F.2d 1041 (1st Cir. 1982).

260. *Id.* at 1056-57.

261. *Id.* at 1056. The petitioners argued that Maine’s permit conditions were designed to minimize the risk of an oil spill and were, therefore, related to water quality. One commentator has argued that such conditions need not be related to water quality standards. Arnold, *supra* note 254, at 10,139-40. EPA regulations allow state certifications to include any conditions determined necessary by the certifying agency, 40 C.F.R. § 121.2(a)(4) (1985), but apparently limit EPA certifications to ensuring that water quality standard violations will not occur.
appears to bind FERC, unless challenged under state law.

FERC must include in its licenses any condition found in section 401 certifications, and federal law is unavailable to challenge such certifications. Indeed, FERC has recently dismissed without prejudice license applications for projects denied section 401 state certification. In sum, section 401 represents a potentially powerful tool for states to control the impacts of hydroelectric facilities on water quality, including fishery values dependent on water quality.

V

THE UNIQUE PROBLEMS WITH SMALL HYDRO FACILITIES

The small hydro exemption process enacted in the Public Utility Regulatory Policy Act of 1978 and the Energy Security Act of 1980 triggered an unprecedented and controversial rush of applications for construction of hydroelectric facilities nationwide. Numerous issues involving the effects of such facilities on anadromous fish have arisen during the short period these provisions have been in effect. The issues include the role of state fish and wildlife agencies in the exemption process, FERC's use of categorical exemptions, the need to consider the cumulative effects of numerous projects in a river basin, enforcement of exemption conditions, FERC's decision to require the fish and


264. Id. §§ 2705, 2708.

265. More than 1000 exemption applications were filed between October 1, 1981 and September 30, 1984. Small Hydro Hearings, supra note 106, at 39 (letter of Raymond O'Connor, Chair of FERC). For a summary of the fisheries problem caused by small hydro projects, see Reisner, supra note 75; Johnson, The Small Hydro Invasion, 50 OUTDOOR AMERICA 6 (1985).

266. State fish and wildlife agencies have complained that the 30 days FERC affords them to establish terms and conditions for exemptions is inadequate. Small Hydro Hearings, supra note 106, at 72-73 (letter of Raymond O'Connor, Chair of FERC). See also id. at 6-7 (letter of William Wilkerson, Director of Washington Department of Fisheries); id. at 190 (testimony of Raymond O'Connor, Chair of FERC, acknowledging that states have inadequate time to review exemption applications).

267. In 1982, FERC issued a rule which exempted certain categories of small hydro facilities under certain circumstances. 18 C.F.R. §§ 4.109-4.113 (1985). As the result of a lawsuit filed against FERC which challenged these categorical exemptions, FERC stayed the effectiveness of these exemptions until further notice. 48 Fed. Reg. 29,474 (1983).

268. See supra note 230; Small Hydro Hearings, supra note 106, at 83-85 (letter of Raymond O'Connor, Chair of FERC). See also supra text accompanying notes 100-48.

269. Johnson, supra note 265, at 9; see Order Rejecting Applications for Rehearing, 29 F.E.R.C. ¶ 61,327 (1984) (FERC acknowledges having a request for enforcement of exemption conditions under consideration for eleven months, at the same time asserting that no appeals can be made because the agency has not yet issued an order). See also Small Hydro Hearings, supra note 106, at 237 (statement of Rolf Wallenstrom, Acting Director of the United States Fish and Wildlife Service that FERC has not made clear the role of fish and wildlife agencies
wildlife agencies to prepare fish and wildlife analyses,\textsuperscript{270} and improper siting of facilities.\textsuperscript{271} The small hydro regulation process has generated so much controversy that some have suggested that FERC turn the program over to the states.\textsuperscript{272} These issues warrant more detailed examination, but they can be examined only briefly here.

The Energy Security Act authorizes FERC to exempt from the Federal Power Act licensing requirements any small hydroelectric power project with an installed capacity of 5000 kilowatts or less which is located at an existing dam\textsuperscript{273} or that uses a natural water feature without a dam or impoundment.\textsuperscript{274} In implementing this provision, FERC at first maintained it could grant an exemption for any project using a diversion or intake structure up to ten feet high and retaining as much as two acre-feet of water. FERC said a structure of this size was not a "dam" and did not create an "impoundment."\textsuperscript{275}

This FERC policy was challenged in \textit{Tulalip Tribes of Washington v. FERC}.\textsuperscript{276} Appellants argued that FERC's interpretation violated the plain language of the statute by authorizing exemptions for projects at natural water features which would utilize a dam or an impoundment. The Ninth Circuit Court of Appeals found that FERC was indeed proposing to issue exemptions for projects in contravention of the Energy Security Act.\textsuperscript{277} The court disagreed with FERC's contention that interpreting "dam" according to its plain meaning would frustrate congressional intent to encourage small hydro development and found that FERC's interpretation was unsupported by the Act or its legislative history.

\begin{thebibliography}{99}
\bibitem{enforcing} See supra text accompanying notes 121-26.
\bibitem{siting} Siting considerations are at the heart of the appeals filed in \textit{National Wildlife Fed'n v. FERC}, Nos. 84-7325, 84-7669 (9th Cir. argued July 11, 1985). See supra notes 118-19 and accompanying text.
\bibitem{jeffords} Representative Jeffords of Vermont introduced a bill in 1984 which would require FERC under certain conditions to delegate to any state the authority over small hydro projects entirely within the state. H.R. 6198, 98th Cong. 2d Sess. (1984). Jeffords said he introduced the bill because FERC is not giving enough attention to state concerns. 130 \textit{Cong. Rec.} E3717-18 (1984). The Chair of FERC has suggested that Congress may not want to consider total delegation of small hydro projects to the states. \textit{Small Hydro Hearings, supra note} 106, at 13 (statement of Raymond O'Connor, Chair of FERC).
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The court held that Congress intended to expedite the development of only those small hydroelectric energy projects which would not have adverse effects on natural water features and the environment. Thus, it was consistent with the congressional intent behind the Energy Security Act to interpret "dam" literally and to deny exemptions for the projects FERC proposed to exempt. This case, which the court disposed of rather summarily, indicates that FERC was attempting to support energy development in a manner that went far beyond what Congress anticipated in passing the Energy Security Act.

FERC's response to *Tulalip* was less than enthusiastic. Faced with numerous exemptions which it had issued while the appeal was pending, FERC determined that the decision in *Tulalip* should not be applied retroactively. FERC thus would have made perpetually valid the exemptions that were contrary to the Energy Security Act in the first place, using as justification its own failure to stay actions pending the appeal. FERC also stated that it would not consider certain undefined diversion structures to be dams, so that it could issue exemptions for those projects. Numerous parties immediately challenged these FERC responses to *Tulalip*, and FERC later modified its initial position and dropped many of the projects it had proposed as retroactively valid exemptions.

In *Steamboaters v. FERC*, the small hydro exemption applicant opposed the imposition of NMFS mandatory terms and conditions which were designed to protect migratory salmon and steelhead trout from passage losses at the project site. Despite its established interpretations and regulations indicating that NMFS had authority to impose binding conditions on exemptions, FERC agreed with the applicant that NMFS lacked statutory authority to establish binding conditions. FERC indicated that it could waive its regulation giving NMFS such authority, but it did not actually do so. Instead, FERC simply chose not to enforce NMFS conditions for the project. Thus, in this case, FERC

278. Id. at 1454-55.
279. Id. at 1455.
283. Id.
284. See supra text accompanying notes 226-27.
286. See supra text accompanying note 57.
288. See Reisner, supra note 75, at 26-30; Johnson, supra note 265, at 6. As a result of
did not consider the need for NMFS conditions or address in any way the substantial fishery issues raised by NMFS and the petitioners. Moreover, FERC issued the exemption without following NEPA procedures or preparing NEPA review documents.289

Although the Ninth Circuit in *Steamboaters* agreed with FERC that NMFS conditions were waivable, the court invalidated the exemption because of FERC's failure to comply with NEPA. The court found that FERC "inexplicably failed to prepare an Environmental Assessment before making its decision."290 The court noted that NMFS retained an "active advisory role" for exemptions291 and criticized FERC's failure to take a "hard look" at the fishery issues and conditions posed by NMFS.292 The court said FERC should have discussed "the specific conditions proposed by NMFS and whether they are necessary to prevent adverse impacts."293

FERC's actions in *Tulalip* and *Steamboaters* demonstrate the extent to which the Commission has been willing to foster small hydro development at the expense of anadromous fish conservation. FERC's policies are designed to exempt the maximum possible number of facilities. FERC has inadequately responded to unfavorable court decisions and manipulated regulations to minimize protection afforded to fish and wildlife. FERC's attitude on small hydro exemptions has been consistent with its position on issuing licenses: power first and fish last.294

**CONCLUSION**

Anadromous fish conservation faces an upstream struggle in FERC

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FERC's action in this case, the House Energy and Commerce Committee amended S. 1132, which would have amended the FPA to specify annual charges for use of federal dams in projects licensed by FERC. The amendment to S. 1132 would have clarified that NMFS as well as the FWS could specify terms and conditions for exemptions. See H.R. No. 1052, *supra*, at 2, 5-6. S. 1132 passed the House. 130 CONG. REC. H10,512-14 (daily ed. Oct. 1, 1984). The Senate passed S. 1132 again but deleted the provision dealing with NMFS. 130 CONG. REC. S14,184-85 (daily ed. Oct. 10, 1984). Then, the bill died on the House floor. 130 CONG. REC. H12,198-99 (daily ed. Oct. 12, 1984).

The House Energy and Commerce Committee pledged to continue monitoring the small hydro program. *REPORT ON THE ACTIVITY OF THE COMMITTEE ON ENERGY AND COMMERCE FOR THE 98TH CONGRESS*, H.R. REP. NO. 1178, 98th Cong. 2d Sess. 103 (1984). Representative Dingell, Chair of the House Energy and Commerce Committee, introduced H.R. 2605 in the 99th Congress. This bill again would specify that NMFS is authorized to set terms and conditions for hydro exemptions.

289. *See supra* text accompanying notes 226-29.
290. 759 F.2d at 1393.
291. *Id.* at 1389.
292. *Id.* at 1393-94.
293. *Id.* at 1394 n.5. Section 6a of the proposed H.R. 44 would overrule *Steamboaters* by giving NMFS the same authority as the FWS to impose conditions on projects exempted from licensing. H. REP. NO. 507, 99th Cong., 2d Sess. 41-42 (1986).
decisionmaking. First, despite its statutory obligation to protect anadromous fish, FERC’s priority is to approve hydroelectric applications even at the expense of significant anadromous fishery losses. Second, despite its staff limitations, FERC is unwilling to defer to the expertise and recommendations of state and federal fishery agencies and Indian tribes with treaty fishing rights. FERC refuses to accord the agencies any special status. Third, FERC procedures do not promote full exploration of fishery issues. The procedures make it difficult for fishery agencies to have meaningful participation in the administrative process. Finally, FERC has proven reluctant to reform its practices even after courts explicitly reject its practices which favor power development.

The net result of FERC’s reluctance to comply with federal statutes applicable to its activities is frequent litigation which ultimately serves neither the interests of hydropower developers nor the interests of fishery organizations. Developers find themselves faced with uncertainty, conflict, and delay, while fishery resources and the socioeconomic interests they support suffer inequitable treatment. Both sides experience frustration and must bear substantial litigation costs. The Senate and the House recently passed two bills, S. 426 and H.R. 44, which add new emphasis and definitions to FERC’s fishery responsibilities. Perhaps these statutory revisions will provide the impetus FERC needs to reform its practices and improve protection of anadromous fish. Although, FERC has the authority to resolve this situation voluntarily, to date, the Commission has demonstrated only a stubborn unwillingness to cease its practice of a multitude of regulatory misdeeds.