



Northwestern School of Law
of Lewis & Clark College

ENVIRONMENTAL LAW

**Essential Fish Habitat:
Does Calling it Essential Make it So?**

*Kristen M. Fletcher
Sharonne E. O'Shea*

Reprinted from
Environmental Law
10015 S.W. Terwilliger Blvd.
Portland, Oregon 97219
(503) 768-6700
E-mail: envtl@clark.edu
Volume 30, Number 1 Copyright © 2000

ARTICLES

ESSENTIAL FISH HABITAT: DOES CALLING IT ESSENTIAL MAKE IT SO?

BY

KRISTEN M. FLETCHER* AND SHARONNE E. O'SHEA**

In 1996 Congress amended the Magnuson-Stevens Fishery Conservation and Management Act with the Sustainable Fisheries Act (SFA), adopting language that some predict will change fisheries management. Through the SFA, and its "essential fish habitat" (EFH) provisions, Congress sought to increase the attention fisheries managers and other federal coastal zone users pay to habitat. But what exactly do the EFH provisions mean? This Article addresses that question by following the evolution of previous Magnuson Act habitat provisions and by describing EFH statutory and regulatory provisions. The Article compares the EFH provisions to similar provisions in the Endangered Species Act, National Environmental Policy Act, and Fish and Wildlife Coordination Act. It then applies lessons learned from these founding environmental statutes to the future implementation of the EFH provisions in the hope that successes may be repeated and failures avoided. The Article concludes by attempting to comfort those affected by the EFH requirements and by examining the EFH debate within the larger context of governmental regulatory successes and failures.

* Director, Mississippi-Alabama Sea Grant Legal Program; LL.M. 1998, Environmental and Natural Resources Law, Northwestern School of Law of Lewis & Clark College; J.D. 1996, University of Notre Dame Law School; B.A. 1993, Auburn University.

** Coordinator, Louisiana Sea Grant Legal Program; J.D. 1996, University of Oregon; B.A. 1992, Alma College. This work is a result of research sponsored in part by the National Oceanic and Atmospheric Administration (NOAA), United States Department of Commerce under Grant Numbers NA56RG0129 and 167-13-5103, the Mississippi-Alabama Sea Grant Consortium, the Mississippi Law Research Institute at the University of Mississippi Law Center, and the Louisiana Sea Grant College Program (a part of the National Sea Grant College Program, maintained by NOAA and the State of Louisiana). The views expressed herein are the authors' own.

I. INTRODUCTION

The United States Congress opened the proverbial can of worms in 1996 when it amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Act)¹ with the Sustainable Fisheries Act (SFA),² adopting language that some predict will change fisheries management. Through the SFA, and its "essential fish habitat" (EFH) provisions, Congress sought to increase the attention fisheries managers and other federal coastal zone users pay to habitat.³ Since its adoption, EFH has elicited numerous reactions including curiosity, satisfaction, elation, and fear. The variety of reactions can leave one wondering whether the comments all refer to the same legislation. What exactly do the EFH provisions of the SFA mean?

Ronald Baird, Director of the National Sea Grant College Program of the National Oceanic and Atmospheric Administration (NOAA) explains that

[the SFA] is the most significant piece of environmental legislation since the Clean Water Act of 1972. The law now mandates not only the management of the harvest of commercial species, but the environment necessary for the reproduction, feeding and growth of those species as well. The full implications of essential fish habitat are not widely appreciated by the public. They will be shortly.⁴

These unidentified "full implications" are alarming coastal development and fishery representatives. One critic has noted that

even though there are no substantive conservation obligations imposed on permitting agencies, the expansive nature of EFH designations, threat identification and conservation recommendations [suggest] the very real possibility of conflict between [the National Marine Fisheries Service (NMFS)] and Federal permitting agencies, with the concomitant risk of delay for many new projects in the coastal and marine environment.⁵

The perceptions of environmentalists represent a middle ground of sorts, because they are pleased about the new emphasis on habitat protection, but they are concerned with careful implementation and meaningful protections. One environmental representative notes that

[i]t cannot be denied that habitat is essential to healthy fish populations. . . . However, traditional management practices have neglected and continue to

¹ 16 U.S.C. §§ 1801-1883 (1994 & Supp. IV 1998).

² Pub. L. No. 104-297, 110 Stat. 3559 (1996) (amending 16 U.S.C. §§ 1801-1883 (1994)).

³ See 16 U.S.C. § 1801(a)(6) (1994 & Supp. IV 1998) (declaring the Act's purposes and policy); 50 C.F.R. § 600.10 (1999) (defining essential fish habitat); *id.* §§ 600.805-600.930 (implementing EFH provisions).

⁴ Ronald Baird, Comments to the American Fisheries Society Annual Meeting (Aug. 26, 1998); see also Proceedings of the American Fisheries Society Symposium 22, Sea Grant Symposium on Fish Habitat (Aug. 26-27, 1998), in AMERICAN FISHERIES SOCIETY, FISH HABITAT: ESSENTIAL FISH HABITAT AND REHABILITATION (Lee R. Benaka ed., 1999); *Major Two-Day Panel to Look at Essential Fisheries Habitat Issue*, U.S. Newswire, Aug. 25, 1998, available in 1998 WL 13604786.

⁵ Eldon V.C. Greenberg, "Essential Fish Habitat": Coastal Development and Habitat Protection 13 (Mar. 25, 1999) (unpublished manuscript presented at the 1999 National Fishery Law Symposium, on file with authors).

ignore threats to important fish habitat. The essential fish habitat (EFH) provisions . . . present an unprecedented opportunity to develop habitat-based management approaches to protect and restore important fish habitats in the ocean and in vital estuarine areas. This is not to say the EFH provisions . . . are a panacea for habitat protection. For example, there is no enforceable mechanism for preventing activities that destroy areas of EFH. Nonetheless [if properly implemented] the EFH provisions of the [SFA] can go far in achieving the intended results. . . . [NMFS] and the regional fishery management councils must be required to take full advantage of this unique opportunity.⁶

The EFH provisions require the regional fishery management councils (the Councils or FMCs) and the Secretary of Commerce to identify essential habitat, assess adverse impacts to it, and communicate any concerns to federal agencies planning activities that may affect the habitat.⁷ The EFH assessment and consultation provisions have been compared to those of the Endangered Species Act of 1973 (ESA).⁸ This comparison has resulted in anxiety in both the development and fishing industries, because ESA provisions have already adversely affected their methods and actions.⁹ Although the EFH consultation process parallels that of ESA section 7,¹⁰ the similarities end there. The EFH provisions impose no substantive obligations on the action agency to avoid adverse effects—they only impose certain procedural requirements.¹¹ For this reason, the EFH provisions more closely mirror the report-driven statutes, such as the National Environmental Policy Act of 1969 (NEPA)¹² and the Fish and Wildlife Coordination Act (FWCA).¹³ These comparisons, however, fail to adequately clarify the procedures and requirements of EFH, leaving many fisheries managers wading through muddy waters.

So, just what is EFH, and what does its presence mean for fisheries management, coastal development, and the habitat itself? Part II of this Article addresses these questions by discussing the evolution of the 1976 and 1986 Magnuson Act habitat provisions and the effect that these measures had on fisheries habitat. It then defines and describes EFH statutory and regulatory provisions in light of the "interim final" regulations currently used

⁶ Cynthia M. Sarthou, *An Environmentalist's Perspective on Essential Fish Habitat*, in AMERICAN FISHERIES SOCIETY, *supra* note 4, at 11, 11. For one NMFS representative's response to the concerns of both the environmental community and the fishing community, see *On the Line with NMFS and EFH, Interview with Thomas E. Bigford*, 19:2 WATER LOG 8 (1999).

⁷ See 50 C.F.R. § 600.805 (1999) (describing the purpose and scope of EFH).

⁸ 16 U.S.C. §§ 1531–1544 (1994).

⁹ See Jim Hiney, *Home is Where the Essential Habitat Is*, TEXAS SHORES, Winter 1999, at 2; Greenberg, *supra* note 5, at 2 ("If experience is any guide, it is almost sure that the introduction of this new and complex regulatory process will be marked by confusion, uncertainty and missteps . . . and [will] create significant new hurdles, at least in the short term, for coastal development.")

¹⁰ 16 U.S.C. § 1536 (1994) (requiring federal agencies to consult with NMFS or the Fish and Wildlife Service (FWS) concerning impacts of federal actions on endangered or threatened wildlife).

¹¹ See 16 U.S.C. §§ 1853, 1855 (1994 & Supp. IV 1998).

¹² 42 U.S.C. §§ 4321–4370(d) (1994 & Supp. III 1997).

¹³ 16 U.S.C. §§ 661–668ee (1994 & Supp. IV 1998).

by NMFS to implement EFH. Readers familiar with the ESA, NEPA, and the FWCA will recognize some similarities between the EFH provisions and those pillars of modern environmental law. Part III compares EFH provisions with the ESA, and Part IV compares them with similar provisions in NEPA and the FWCA. To the extent that implementation lessons have been learned from these founding environmental statutes, this Article then applies those lessons to the future implementation of EFH, in the hope that successes can be repeated and failures avoided. Finally, Part V concludes by offering words of comfort to those parties caught in the EFH vortex by placing the EFH uproar within the larger context of government regulatory successes and failures.

II. HABITAT JOINS THE MAGNUSON ACT

Reacting to heavy fishing of foreign vessels off U.S. coasts, Congress passed the Fishery Conservation and Management Act (Magnuson Act)¹⁴ to eliminate foreign fishing within two hundred nautical miles of all U.S. coasts.¹⁵ The Act successfully lowered the foreign vessel harvest¹⁶ but did little to address continued domestic overfishing, which resulted from the historical, yet incorrect, view that marine fishery resources are so vast that fishing could not have a major effect.¹⁷

The Magnuson Act established eight regional fishery management councils that were given the authority to manage fisheries through the creation of fisheries management plans (FMPs).¹⁸ The Councils are responsible for meeting the larger goal of preventing overfishing while still achieving optimum yields from each fishery.¹⁹ This is done through various techniques, including seasonal closures, quota limitations, gear restrictions,

¹⁴ Pub. L. No. 94-265, 90 Stat. 331 (1976) (codified as amended at 16 U.S.C. §§ 1801-1883 (1994 & Supp. IV 1998)). The Fishery Conservation and Management Act later became the Magnuson Fishery Conservation and Management Act (Pub. L. No. 96-561, 94 Stat. 3299 (1980)) and then was renamed the Magnuson-Stevens Fishery Conservation and Management Act (Pub. L. No. 104-208, 110 Stat. 3009-41 (1996)). For purposes of this Article, we will refer to this statute as the Magnuson Act.

¹⁵ This resource zone later became known as the exclusive economic zone (EEZ). The EEZ is a 200-nautical-mile-wide marginal zone within which an adjacent country has the exclusive privilege of exploitation of marine resources. JOHN R. CLARK, COASTAL ZONE MANAGEMENT HANDBOOK 307 (1995).

¹⁶ "Foreign catches in the U.S. Exclusive Economic Zone in 1989 were on the order of one percent of what they had been in 1976," while commercial domestic landings had doubled. JOHN P. WISE, FEDERAL CONSERVATION & MANAGEMENT OF MARINE FISHERIES IN THE UNITED STATES at vii (1991).

¹⁷ Gary C. Matlock, *Management History, Management Future, in SUSTAINABLE FISHERIES FOR THE 21ST CENTURY?* 9, 9 (1998).

¹⁸ 16 U.S.C. § 1852(a) (1994 & Supp. IV 1998).

¹⁹ See *id.* § 1851(a)(1). Optimum yield is that which provides the "greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities," and is based on the maximum sustainable yield (MSY) of a fishery. *Id.* § 1802(21)(a) (Supp. IV 1998). "MSY is the largest average catch that can be captured from a stock under existing environmental conditions." NATIONAL RESEARCH COUNCIL, IMPROVING FISH STOCK ASSESSMENTS 9 (1998).

and other limited entry techniques.²⁰ The regulations and the science they were based on were—and still are—often criticized. Andrew Sansom, the Executive Director of the Texas Parks and Wildlife Department, recently explained, “We’ve got a problem with relying on statistical uncertainties that will damage an industry that contributes several hundred million dollars to the Texas economy. We’re supposed to be running these fisheries like a business and you don’t run a business by going out of business.”²¹ This perspective is not new. One critic notes that although “[t]he Magnuson Act, as envisioned by its sponsors, was primarily a conservation-oriented statute, focused upon the biological aspects of managing fish stocks, . . . the focus of managers has been on the social and economic interests of the users.”²²

The business of managing fisheries did not include significant habitat considerations under the 1976 Magnuson Act.²³ Originally, the Magnuson Act called for the National Marine Fisheries Service, the federal agency responsible for assisting the Councils in fishery management, to “initiate and maintain’ a comprehensive fisheries research program, including research on the effects of habitat degradation and improvements on fish populations.”²⁴ Yet, Congress stopped short of requiring the incorporation of such research into FMPs, treating habitat as a research issue, not a management issue. Furthermore, the Councils were never granted the authority to halt development actions that might adversely impact a fishery.

This separation of harvest and habitat took its toll. By the late 1980s a large portion of traditional and highly prized species were overfished, or at least fully harvested, and signs that harvests had exceeded capacity were common.²⁵ On a national and international level, parties began demanding that habitat degradation, especially of the coastal environment, become a higher priority issue.²⁶

A. *The 1986 Predecessor to EFH*

Congress took note of the declining habitat conditions. In deliberation before the vote on the 1986 Magnuson Act reauthorization bill, Congressperson Henry Douglas Bosco (D-Cal.) explained the original hope for the Magnuson Act and the resulting failure:

²⁰ For a review of these techniques and how they fit into fisheries management, see Shi-Ling Hsu & James E. Wilen, *Ecosystem Management and the 1996 Sustainable Fisheries Act*, 24 *ECOLOGICAL L.Q.* 799, 807–08 (1997).

²¹ Texas Parks and Wildlife Department, *Texas to Reopen Red Snapper Fishing in State Waters*, TEXAS SHORES, Winter 1999, at 24, 24.

²² Eldon V. C. Greenberg, *The Magnuson Act After Fifteen Years: Is it Working?* B9 (Oct. 15, 1992) (unpublished manuscript, presented at the 1992 National Fishery Law Symposium, on file with authors).

²³ Helen M. Kennedy, *The 1986 Habitat Amendments to the Magnuson Act: A New Procedural Regime for Activities Affecting Fisheries Habitat*, 18 *ENVTL. L.* 339, 342 (1988).

²⁴ *Id.* (citing 16 U.S.C. § 1854(e) (1982)).

²⁵ See generally WISE, *supra* note 16, at 1–11 (describing the implementation of the Magnuson Act and its effects on harvesting and overfishing).

²⁶ *Id.*; see also NATIONAL FISH AND WILDLIFE FOUNDATION, *NEEDS ASSESSMENT OF THE NATIONAL MARINE FISHERIES SERVICE* 271 (1990).

With its passage in 1976, many felt the [Magnuson Act] would provide an effective and responsive regulatory mechanism for managing the fishery resources of the United States within our 200-mile zone. Unfortunately, almost 10 years later, it has proven itself neither effective in protecting the resource nor responsive in addressing the concerns of affected fishermen and coastal areas.²⁷

Congressperson Bosco recognized the "virtual silence in addressing fishery habitat needs . . . despite the fact that habitat protection and enhancement are vital to maintaining adequate fishery production" and criticized federal agencies for ignoring comments from NMFS on potentially habitat-damaging activities.²⁸ Bosco put great hope in the 1986 reauthorization of the Magnuson Act to correct these problems by authorizing the Councils to comment on activities that may affect fishery resources and by allowing "both fishery managers and the general public an opportunity to more clearly evaluate the relationship between agency activities, habitat conditions, and allocation decisions."²⁹

In fact, the 1986 amendments added two habitat provisions to the Act that required NEPA-like review.³⁰ First, they required habitat assessments to be included in fishery management plans. Specifically, FMPs were required to include "readily available information regarding the significance of habitat to the fishery and assessment as to the effects which changes to that habitat may have upon the fishery."³¹ Fishery management councils were to use this information to comment on proposed federal activities that may impact the habitat.³² The House Report explains the significance of the added section:

Many fisheries managed under FMPs, such as shrimp and salmon, are dependent upon fishery habitat such as coastal wetlands, estuaries, and inland rivers. To appreciate this fact one has only to consider the fact that over 90 percent of all the fish landed in the southeast region of the United States are dependent upon coastal wetlands and estuaries during some point in their life history. If the Councils are to adequately manage and conserve the fisheries under FMPs, an awareness of both the quantity and quality of fishery habitat must be maintained.³³

Second, the amendments mandated a new federal responsiveness to fishery management council recommendations.³⁴ The amendments gave the

²⁷ 132 CONG. REC. 21,051 (Aug. 12, 1986) (statements of Rep. Bosco).

²⁸ *Id.* at 21,052.

²⁹ *Id.* Bosco also stated, "The reauthorization process this year offers us an important opportunity to address these problems." *Id.* at 21,051.

³⁰ See Pub. L. No. 99-659, §§ 104, 105, 100 Stat. 3700, 3709-12 (1986).

³¹ *Id.* § 105(a)(7), 100 Stat. at 3711 (codified as amended at 16 U.S.C. § 1853(a)(7) (1994 & Supp. IV 1998)).

³² *Id.* § 104, 100 Stat. at 3709-11 (amending 16 U.S.C. § 1853 (1982)).

³³ H.R. REP. NO. 99-165, at 13 (1985), reprinted in 1986 U.S.C.C.A.N. 6240, 6253.

³⁴ Pub. L. No. 99-659, § 104(h)(2)(i), 100 Stat. at 3706 (amending 16 U.S.C. § 1852(i) (1982)).

The new section specified that

[e]ach Council may comment on, or make recommendations concerning, any activity undertaken, or proposed to be undertaken, by any State or Federal agency that, in the view of the Council, may affect habitat of a fishery resource under its jurisdiction. Within 45 days after receiving such a comment or recommendation from a Council, a Federal

Councils the right to comment when they believed an activity, or proposed activity, might affect the habitat of a fishery within their jurisdictions. The federal action agency was required to respond to these comments or recommendations in writing within forty-five days, explaining whether it agreed or disagreed as to the habitat effects, its intent to conform the activity to the recommendations, and if not, why not.³⁵

In 1988 Helen Kennedy published an analysis of these often-overlooked 1986 amendments that, in her opinion, had the potential to "foster more sensitive decisions in planning activities that affect fisheries habitat."³⁶ Kennedy properly recognized the amendments as unique, explaining that they created a new regime for assessing habitat impacts in our modern fisheries management arrangement. By adding habitat concerns, the amendments brought U.S. fisheries management into the modern environmental era, but still failed to reach the same level of protection and consideration for habitat that other environmental statutes like the ESA and NEPA had.

Habitat concerns also arose in the 1990 Magnuson Amendments.³⁷ The 1990 amendments provided that a Council "shall comment on and make recommendations concerning" any state or federal action that "is likely to substantially affect the habitat of an anadromous fishery resource under its jurisdiction."³⁸ The 1990 amendments responded to concerns of California salmon fishers and was "intended to increase the Council's participation and influence in decisions affecting habitat critical to the survival of anadromous species."³⁹

In 1996 Congress made another attempt to address fish habitat, this time through the SFA,⁴⁰ which mandated increased attention to fisheries habitat under a new name: essential fish habitat. EFH quickly became a top priority for the Councils, which were given the tasks of identifying the habitat that is "essential" for managed fish stocks and encouraging the conservation and enhancement of the habitat.⁴¹ Once EFH is identified, the

agency must provide a detailed response, in writing, to the Council regarding the matter.

Id. (codified as amended at 16 U.S.C. § 1852(h) (1994 & Supp. IV 1998)).

³⁵ *Id.*

³⁶ Kennedy, *supra* note 23, at 363.

³⁷ Pub. L. No. 101-627, 104 Stat. 4436.

³⁸ *Id.* § 108(h)(1)(B), 104 Stat. at 4446 (amending 16 U.S.C. § 1852(i) (1988)). This provision has since been amended by Pub. L. No. 104-297, § 305(b)(3)(B), 110 Stat. 3559, 3589 (codified at 16 U.S.C. § 1855(b)(3)(B) (1994 & Supp. IV 1998)).

³⁹ H.R. REP. NO. 101-393, at 26 (1989).

⁴⁰ Pub. L. No. 104-297, 110 Stat. 3559.

⁴¹ *See id.* §§ 108, 305(b), 110 Stat. at 3574, 3588 (codified at 16 U.S.C. §§ 1853, 1855(b) (Supp. IV 1998)). In response to the Advanced Notice of Proposed Rulemaking by the National Marine Fisheries Service, 61 Fed. Reg. 57,843, 57,843 (Nov. 8, 1996), several Councils included EFH in public meeting agendas shortly thereafter. *See* Mid-Atlantic Fishery Management Council, Notice of Public Meeting, 61 Fed. Reg. 63,830, 63,830 (Dec. 2, 1996); Gulf of Mexico Fishery Management Council, Notice of Public Meeting, 61 Fed. Reg. 66,018, 66,018 (Dec. 16, 1996); North Pacific Fishery Management Council, Notice of Public Meeting, 62 Fed. Reg. 3010, 3010 (Jan. 21, 1997); New England Fishery Management Council, Notice of Public Meeting, 62 Fed. Reg. 3495, 3495 (Jan. 23, 1997).

Councils must then comment on federal activities that may adversely affect this habitat, and federal agencies must respond.

The 1996 amendments creating EFH built upon and strengthened the existing 1986 requirements. Yet, Congress ultimately failed to move beyond rhetoric to give the provisions "teeth." The EFH provisions are essentially replications of the 1986 habitat amendments. Both the 1986 and 1996 provisions lay out a broad policy mandate: increase attention to and consider effects on fish habitat.⁴² Neither contain any legal consequences for ignoring this mandate. The EFH provisions provide a more specific plan to implement this policy, but fail to take the additional step to *require* habitat preservation, conservation, or even mitigation. The provisions also stop short of giving citizens the right to challenge federal agency decisions to move ahead with a project even though it destroys EFH.

B. Introduction to Essential Fish Habitat

In amending the Magnuson Act, Congress stated that

[o]ne of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats. Habitat considerations should receive increased attention for the conservation and management of fishery resources of the United States.⁴³

Unlike its 1986 predecessor, the SFA mandated this "increased attention" by requiring the Councils to amend existing fishery management plans. These public documents 1) describe and identify essential fish habitat; 2) minimize, where practicable, adverse effects on essential fish habitat caused by fishing; and 3) identify other actions that should be considered to encourage the conservation and enhancement of essential fish habitat.⁴⁴ In addition, Congress intended to "promote the protection of essential fish habitat in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat."⁴⁵ To carry out this policy, Congress directed the Secretary of Commerce (the Secretary), through NMFS, to assist in the identification, conservation, and enhancement of essential fish habitat through consultation with Councils and federal agencies.⁴⁶ Congress called for compliance within two years of the enactment of the SFA.⁴⁷

⁴² See Pub. L. No. 99-659, § 104(b)(j), 100 Stat. 3706, 3710; Pub. L. No. 104-297, §§ 108, 305(b), 110 Stat. 3574, 3688 (codified as amended at 16 U.S.C. §§ 1853, 1855(b) (1994 & Supp. IV 1998)).

⁴³ Pub. L. No. 104-297, § 101(a)(9), 110 Stat. at 3560 (amending 16 U.S.C. § 1801(a)(9) (1994)).

⁴⁴ 16 U.S.C. § 1855(b)(1)-(4) (Supp. IV 1998).

⁴⁵ *Id.* § 1801(b)(7).

⁴⁶ *Id.* § 1801(b).

⁴⁷ See *id.* § 1855. This two-year deadline expired on October 11, 1998.

1. Identification of EFH

After the SFA was passed, identification of EFH was the first hurdle for NMFS and the Councils.⁴⁸ The Councils took on the challenge of reviewing scientific information and data and establishing just which habitat in each region is "essential" to managed fish stocks. To help in this process, the Secretary was to assist the Councils in the "description and identification of essential fish habitat in fishery management plans (including adverse impacts on such habitat) and in the consideration of actions to ensure the conservation and enhancement of such habitat."⁴⁹ In addition, "EFH that is judged to be particularly important to the long-term productivity of populations of one or more managed species, or to be particularly vulnerable to degradation, should be identified as 'habitat areas of particular concern' (HAPC) to help provide additional focus for conservation efforts."⁵⁰ NMFS's responsibilities included providing recommendations and information regarding each fishery to the Councils through scientific studies and consultation with fisheries participants.⁵¹ NMFS has composed a guidance document to synthesize information and answer frequently asked questions.⁵²

EFH is defined as those "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."⁵³ The NMFS guidance document notes that

[f]or the purpose of interpreting the definition of [EFH,] "waters" includes aquatic areas and their associated physical, chemical, and biological properties that are used by fish, and may include areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means the

⁴⁸ The Councils were required to submit FMP amendments to the Secretary to implement the EFH requirements by October 11, 1998, then face NMFS review and approval. See *supra* note 47 and accompanying text. As of July 1999, the following amendments had been submitted for NMFS review: 1) the New England FMC Omnibus Amendment, 63 Fed. Reg. 66,110 (Dec. 1, 1998) (submitted for review); 64 Fed. Reg. 19,503 (Apr. 21, 1999) (approved); 2) the Gulf of Mexico FMC Generic Amendment, 63 Fed. Reg. 60,287 (Nov. 9, 1998) (submitted for review); 64 Fed. Reg. 13,363 (Mar. 18, 1999) (partially approved); 3) the North Pacific FMC Individual Amendments, 63 Fed. Reg. 56,601 (Oct. 22, 1998) (submitted for review); 64 Fed. Reg. 20,216 (Apr. 26, 1999) (approved); 4) the Caribbean FMC Generic Amendment, 63 Fed. Reg. 64,463 (Nov. 20, 1998) (submitted for review); 64 Fed. Reg. 14,884 (Mar. 29, 1999) (partially approved); 5) the Mid-Atlantic FMC Individual Amendments, 64 Fed. Reg. 4065 (Jan. 27, 1999) (submitted for review); 64 Fed. Reg. 16,891 (Apr. 7, 1999) (proposed for implementation); 6) the Pacific FMC Amendment 8, 64 Fed. Reg. 12,279 (Mar. 12, 1999) (submitted for review); 64 Fed. Reg. 20,216 (Apr. 26, 1999) (approved); and 7) the Western Pacific FMC Individual Amendments, 63 Fed. Reg. 59,758 (Nov. 5, 1998) (submitted for review); 64 Fed. Reg. 19,067 (Apr. 19, 1999) (approved).

⁴⁹ 16 U.S.C. § 1855(b)(1)(A) (Supp. IV 1998).

⁵⁰ Magnuson-Stevens Act Provisions; Essential Fish Habitat (EFH), 62 Fed. Reg. 66,531, 66,531 (Dec. 19, 1997) (codified at 50 C.F.R. § 600.815(a)(9)(1999)).

⁵¹ 16 U.S.C. § 1855(b)(1)(A), (B) (Supp. IV 1998).

⁵² NATIONAL MARINE FISHERIES SERV., TECHNICAL GUIDANCE TO IMPLEMENT THE ESSENTIAL FISH HABITAT REQUIREMENTS FOR THE MAGNUSON-STEVENS ACT (1999).

⁵³ 16 U.S.C. § 1802(10) (Supp. IV 1998).

habitat required to support a sustainable fishery and a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle.⁵⁴

These waters include both federal and state waters.⁵⁵ The identification of EFH in state waters, which are generally those three miles from the coastline, presents an interesting limitation, because the Councils and NMFS have limited jurisdiction to manage fisheries in state waters.⁵⁶

The vast charge to identify EFH has proven to be difficult, as evidenced by the broad definition for EFH created by Congress and the NMFS guidance standards. Recognizing that, from the broadest perspective, fish habitat is the geographic area where the species exists at any time during its life, the guidance document identified the "basic" information needed for identification of EFH. The Councils were responsible for ascertaining information, within all habitats occupied by the managed species, on current and historic stock size, geographic range, temporal and spatial distribution, and major life history stages.⁵⁷ As a result, EFH is a multi-dimensional concept. Habitat can be identified for a specific species in a certain geographic area, in a particular level of the water column, and during a certain time of year.

NMFS instructed the Councils to use the best available information, including testimony of fishers with local or traditional knowledge of the status and trends in particular fisheries, and nontraditional data collection such as workshops with fishers.⁵⁸ Some Councils were able to take advantage of numerous long-standing studies, while others relied on anecdotal evidence at best. For instance, the New England Fishery

⁵⁴ NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 1. Under "Additional Information," the guidance document also states that

[e]xamples of "waters" that may be considered EFH include open waters and wetlands, estuarine and riverine habitats, [and] wetlands hydrologically connected to productive water bodies. Water quality is interpreted to be a component of this definition. EFH should consider water to provide the appropriate parameters of quality such as physical, chemical, and biological properties. This may address nutrient levels, oxygen concentrations, [and] turbidity levels, among others. The interpretation of "substrate" includes artificial reefs and shipwrecks if those areas provide EFH. Substrate may also include entirely or partially submerged structures, such as jetties. "Biological Communities" could include mangroves, tidal marshes, mussel beds, cobble with attached fauna, mud and clay burrows, coral reefs, and submerged aquatic vegetation. Migratory routes such as rivers and passes serving as passageways to and from anadromous fish spawning grounds should be considered EFH. The definition of EFH may include habitat for an individual species or an assemblage of species, whichever is appropriate within each FMP.

Id.

⁵⁵ *Id.*

⁵⁶ See 50 C.F.R. § 600.925 (1999) (allowing the Councils to provide conservation recommendations to state agencies).

⁵⁷ *Id.* § 600.815(a)(2)(B). This proved especially challenging for the Gulf of Mexico Fishery Management Council because it manages over 450 species of fish. See GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, GENERIC AMENDMENT FOR ADDRESSING ESSENTIAL FISH HABITAT REQUIREMENTS 24 (1998).

⁵⁸ NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 5.

Management Council used several sources of data from both the state and federal levels, including studies spanning four decades.⁵⁹ On the other hand, the Caribbean Fishery Management Council recognized "the large gaps in the data to fulfill the detailed requirements," but noted that "the Council has also taken action throughout its history to protect habitats even in the absence of complete data sets or information."⁶⁰ NMFS acknowledged the potential lack of information early in the EFH process. It directed the Councils to "err on the side of inclusiveness" in cases where little information is available.⁶¹

The Councils may include more information in their EFH amendments than required by regulations. An FMP may include a description and identification of, and contain management measures to protect, the habitat of species under the authority of the regional council but not specifically managed under the FMP.⁶² For example, the habitat of an unmanaged prey species might be described and identified in the FMP, although not a part of EFH.⁶³

The Councils have approached this directive in three ways. Some Councils have drafted individual EFH amendments for the FMPs for specific fisheries, such as the North Pacific Fishery Management Council Document,⁶⁴ while others drafted generic EFH amendments for all managed fisheries in a particular region. For example, the Gulf of Mexico Council decided that "a single, generic amendment was the only practical means of meeting the requirement to amend all seven FMPs by the October 1998 deadline."⁶⁵ Finally, because some species occur in two or more regional areas, some amendments must be jointly prepared to address these

⁵⁹ The sources of distribution and abundance data included a NMFS bottom trawl survey covering 1963-1997; a NMFS marine resources monitoring, assessment, and prediction ichthyoplankton survey covering 1977-1987; a Massachusetts inshore trawl survey covering 1978-1997; a Long Island Sound survey covering 1990-1996; and NOAA's Estuarine Living Marine Resources Program. NEW ENGLAND FISHERY MANAGEMENT COUNCIL, FINAL AMENDMENT #11 TO THE NORTHEAST MULTISPECIES FISHERY MANAGEMENT PLAN, AMENDMENT #9 TO THE ATLANTIC SEA SCALLOP FISHERY MANAGEMENT PLAN, AMENDMENT #1 TO THE MONKFISH FISHERY MANAGEMENT PLAN, AMENDMENT #1 TO THE ATLANTIC SALMON FISHERY MANAGEMENT PLAN, COMPONENTS OF THE PROPOSED ATLANTIC HERRING FISHERY MANAGEMENT PLAN FOR ESSENTIAL FISH HABITAT at xi (1998).

⁶⁰ CARIBBEAN FISHERY MANAGEMENT COUNCIL, ESSENTIAL FISH HABITAT GENERIC AMENDMENT TO THE FISHERY MANAGEMENT PLANS OF THE U.S. CARIBBEAN 4 (1998).

⁶¹ NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 3. The guidance document also recommends that the "guidelines be sufficiently broad for many different species in many different areas." *Id.*

⁶² 50 C.F.R. § 600.815(b) (1999).

⁶³ NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 19-20.

⁶⁴ See NORTH PACIFIC FISHERY MANAGEMENT COUNCIL, DRAFT ENVIRONMENTAL ASSESSMENT FOR AMENDMENT 55 TO THE FMP FOR THE GROUND FISH FISHERY OF THE BERING SEA AND ALEUTIAN ISLANDS AREA, AMENDMENT 55 TO THE FMP FOR GROUND FISH OF THE GULF OF ALASKA, AMENDMENT 8 TO THE FMP FOR THE KING AND TANNER CRAB FISHERIES IN THE BERING SEA/ALEUTIAN ISLANDS, AMENDMENT 5 TO THE FMP FOR SCALLOP FISHERIES OFF ALASKA, AND AMENDMENT 5 TO THE FMP FOR THE SALMON FISHERIES IN THE EEZ OFF THE COAST OF ALASKA (1998).

⁶⁵ GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, *supra* note 57, at 24.

comanaged species. For instance, the New England and Mid-Atlantic Councils jointly prepared an amendment to the Monkfish FMP.⁶⁶

2. Identification of Adverse Effects

In addition to designating EFH, an FMP must include potential adverse effects to EFH, from both fishing and nonfishing related activities. These activities are mapped in order to establish a visual depiction of potentially cumulative effects. The regulations broadly identify nonfishing related activities to include dredging, fill, excavation, mining, impoundment, discharge, runoff, the introduction of exotic species, and the conversion of aquatic habitat that may eliminate, diminish, or disrupt the functions of EFH.⁶⁷ In addition, the Councils should indicate the EFH most likely to be affected by these activities and explain the expected deleterious effects.⁶⁸ Finally, the FMPs "should provide a scientific basis for concluding that the potential or known adverse effects are a result of the identified activities."⁶⁹ The guidance document indicates that the range of potential adverse effects includes carcinogenic effects, bioaccumulation of toxic materials, clogged gills, reduced visibility, or reduced cover from predators.⁷⁰

Scientists are not only scrambling for information about habitat and species' use but also about potential and recurring adverse impacts to habitat. The lack of data on adverse impacts may render preventative measures inadequate. For example, information about the impacts of bottom-trawling gear is scarce for some types of habitat, including soft bottom habitat.⁷¹ In describing the fishing-related impacts, the Caribbean EFH Amendment explains that

[a]t this time, there is no evidence that the effects caused by fishing under these FMPs are adversely affecting the EFH to the extent that detrimental effects can be identified on the habitat or the fisheries . . . [given] the lack of

⁶⁶ Fisheries of the Northeastern United States; Northeast Monkfish Fishery; Amendment 1 to the Monkfish Fishery Management Plan (FMP) to Designate Essential Fish Habitat (EFH) for Monkfish, 64 Fed. Reg. 32,825 (June 18, 1999) (to be codified at 50 C.F.R. pt. 648). This particular amendment is part of an omnibus amendment for EFH which also includes Amendment 11 to the Northeast Multispecies FMP, Amendment 9 to the Atlantic Sea Scallop FMP, and Amendment 1 to the Atlantic Salmon FMP. For approval of the Monkfish Amendment, see *id.* For approval of the remaining amendments, see Fisheries of the Northeastern United States; Northeast Multispecies Fishery, Atlantic Sea Scallop Fishery; Fishery Management Plan (FMP) Amendments to Designate Essential Fish Habitat (EFH), Atlantic Salmon Overfishing Definition, and Aquaculture Framework Specification Process, 64 Fed. Reg. 19,503 (Apr. 21, 1999) (to be codified at 50 C.F.R. pt. 648).

⁶⁷ 50 C.F.R. § 600.815(a)(5) (1999).

⁶⁸ *Id.*

⁶⁹ NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 11.

⁷⁰ *Id.* at 12.

⁷¹ See *Trawl Nets Blamed for Fishery Decline*, SEATTLE POST-INTELLIGENCER, Dec. 17, 1998, at B4. The impacts of trawling have captured the attention of several environmental groups that liken the impacts to that of clearcutting, but on a larger, global scale. *Id.* Trawling is also a primary topic in the first EFH lawsuit. See *infra* note 109.

information regarding the location, distribution, and extent of these habitats. . . . Additional study will be recommended. . . .⁷²

The Northeast EFH Amendment concedes that "[t]here is very little information on impacts to habitat associated with several gear types used in the New England region" and that the cumulative effects of gear types is unknown.⁷³ Similarly, the Gulf of Mexico FMC gives a cursory overview of potential adverse impacts, dedicating three of the seven pages that discuss fishing-related impacts to a review of the economic importance of the fisheries in the Gulf of Mexico.⁷⁴ In contrast, the Gulf of Mexico FMC takes thirty-seven pages to discuss nonfishing activities.⁷⁵ This is perhaps surprising, because the Councils have jurisdiction only over fisheries and not other activities.

Once threats are identified, the Councils must recommend actions required to counter these threats, as well as actions to conserve, restore, and enhance EFH.⁷⁶ Actions may consist of measures that minimize adverse effects from fishing activities, such as fishing gear restrictions, time and area closures, and harvest limits.⁷⁷ Loss of prey species is an adverse effect; therefore, EFH designation requires identification of major prey species in the FMPs, description of the location of prey species' habitat, and examination of the threats to that habitat from both fishing and nonfishing activities.⁷⁸ Finally, the Councils must identify vulnerable EFH considering the habitat's sensitivity to human-induced environmental degradation, susceptibility to development and induced stress, and rarity.⁷⁹

3. Conservation, Enhancement, and Review

The Councils must also take a proactive role in pinpointing conservation and enhancement measures for EFH as well as avoidance and minimization of adverse impacts. The NMFS guidance document clearly indicates a preference for enhancement, then restoration, and finally, creation of new habitat.⁸⁰ Toward this end, FMPs must include options to minimize adverse effects.⁸¹ These options may include recommendations for

⁷² CARIBBEAN FISHERY MANAGEMENT COUNCIL, *supra* note 60, at 99.

⁷³ NEW ENGLAND FISHERY MANAGEMENT COUNCIL, *supra* note 59, at xii.

⁷⁴ GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, *supra* note 57, at 119-22.

⁷⁵ *Id.* at 123-60.

⁷⁶ 50 C.F.R. § 600.815(a)(7) (1999).

⁷⁷ *Id.* § 600.815(a)(4)(i)-(iii). Councils may also use research closure areas and other measures to evaluate the impact of any fishing activity that physically alters EFH. *Id.* § 600.815(a)(3)(ii).

⁷⁸ 16 U.S.C. § 1853 (1994 & Supp. IV 1998). The habitat of the prey species is not included as EFH for managed species but should be identified to help in determining if there are activities that would adversely affect the habitat of the prey and consequently, their availability as a food source for the managed species. NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 19.

⁷⁹ 50 C.F.R. § 600.815(a)(9) (1999).

⁸⁰ NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 10.

⁸¹ 16 U.S.C. § 1853(a)(7) (Supp. IV 1998).

"environmentally sound engineering and management practices,"⁸² restoration of riparian and shallow coastal areas, habitat restoration in upland areas, water quality efforts, watershed analysis and subsequent watershed planning, and habitat creation.⁸³ NMFS and the Councils must periodically review these initial determinations in order to prepare an FMP amendment in the event that new information becomes available.

Moreover, NMFS must assist the Councils in obtaining from other federal and state agencies pertinent habitat information, including 1) current and probable future habitat conditions; 2) life history requirements of the species under management; and 3) recommended measures to conserve, restore, or enhance habitat essential to fishery production.⁸⁴ Once the EFH and adverse effects are identified, the Councils must map the distribution and geographic limits of the EFH for each life history stage.⁸⁵

4. Consultation and Recommendations

Congress assigned certain consultation and recommendation duties to the Secretary, the Councils, and federal agencies. The Secretary must provide information to the Councils to determine the actions necessary to ensure conservation and enhancement of EFH⁸⁶ and must "coordinate with and provide information to other Federal agencies to further the conservation and enhancement of essential fish habitat."⁸⁷ Congress also directed the Councils and federal agencies to consult with the Secretary, sometimes as a mandatory requirement and other times as a discretionary option. A Council "may comment on and make recommendations to the Secretary and any Federal or State agency concerning [an activity that it deems] may affect the habitat . . . of a fishery resource under its authority."⁸⁸ However, the Councils shall make recommendations if an activity is "likely to substantially affect the habitat, including essential fish habitat, of an anadromous fishery resource under its authority."⁸⁹

Congress required federal agencies to consult with the Secretary regarding federal actions that may adversely affect EFH.⁹⁰ Upon receiving

⁸² 50 C.F.R. § 600.815(a)(7)(ii) (1999). The FMPs may go so far as to list specific mechanisms, such as seasonal restrictions, dredging methods, and disposal options. *Id.* § 600.815(a)(4)(ii).

⁸³ *Id.* § 600.815(a)(7)(iii)(A)-(D). The regulation explains that "[u]nder appropriate conditions, habitat creation . . . may be considered as a means of replacing lost or degraded EFH. However, habitat creation at the expense of other naturally functioning systems must be justified . . ." *Id.* § 600.815(a)(7)(iii)(D).

⁸⁴ See *id.* § 600.815(a)(2)(i) (information requirements); *id.* § 600.815(a)(10) (research and information needs); *id.* § 600.815(d) (relationship to other fishery management authorities).

⁸⁵ *Id.* § 600.815(a)(2)(ii). Ultimately, the "data should be incorporated into a geographic information system." *Id.*

⁸⁶ 16 U.S.C. § 1855(b)(1)(B) (Supp. IV 1998).

⁸⁷ *Id.* § 1855(b)(1)(D).

⁸⁸ *Id.* § 1855(b)(3)(A) (emphasis added).

⁸⁹ *Id.* § 1855(b)(3)(B) (emphasis added).

⁹⁰ *Id.* § 1855(b)(2). The actions triggering this requirement are "any action[s] authorized,

information regarding an action that would adversely affect EFH, the Secretary must then recommend agency measures to conserve the habitat.⁹¹ Within thirty days, the federal agency must respond to the Secretary and the appropriate Council(s) with a description of measures that will be taken to avoid, mitigate, or offset the impact of the activity on the habitat.⁹² When a federal agency response is inconsistent with the recommendations of the Secretary, the agency must explain its reasons for not following the recommendations.⁹³ Finally, the Secretary is responsible for review of programs administered by the Department of Commerce to ensure that any relevant programs further the conservation and enhancement of EFH.⁹⁴

The consultation process for state agency activities poses some potential problems. While the Magnuson Act calls for the Councils to consult and comment on state activities that may adversely impact EFH, it does not require state agencies to afford the Councils or NMFS notice of such activities.⁹⁵ Interestingly, under the statute, the Councils have a mandatory duty to comment on state activities that are likely to substantially affect the habitat, including EFH, of an anadromous fishery resource under its authority.⁹⁶ But without a notice requirement for state agencies, regional councils must either rely upon state agencies to voluntarily offer notice of their activities or collect this information via the EFH grapevine. The Councils are hard pressed to carry out this mandatory duty without being afforded sufficient notice.

5. *The Goals and Effectiveness of EFH Provisions*

Few question the need for habitat provisions in the Magnuson Act. Hal Osburn, Director of the Texas Parks and Wildlife Department's Coastal Fisheries Division and new chairman of the Gulf of Mexico Fishery Management Council, explains that he

can't think of much habitat that isn't important at some point, and that's good, that's common sense. What part of your body do you want to give up? None, because it's all essential. We may not like the implications of not being able to mess up any one part, but I think as a society we benefit ourselves in the long-term by being real clear eyed about how the ecosystems work as very large units.⁹⁷

funded, or undertaken, or proposed to be authorized, funded, or undertaken" by the federal agency. *Id.*

⁹¹ *Id.* § 1855(b)(4)(A).

⁹² *Id.* § 1855(b)(4)(B).

⁹³ *Id.*

⁹⁴ *Id.* § 1855(b)(1)(C).

⁹⁵ See *id.* § 1855 (b)(3)(A)-(B).

⁹⁶ *Id.* § 1855 (b)(3)(B).

⁹⁷ Hiney, *supra* note 9, at 6 (quoting Hal Osburn). Osburn also explains that "[u]nless you've got an endangered species involved, it's pretty hard for any one entity to come in and mandate how this thing will be." *Id.* at 4.

Moreover, many of the identified threats fall outside of the Councils' jurisdiction. The Councils have the authority to regulate and limit fishing activities, including gear usage, fishing effort, and catch limits, but *not* other activities that may adversely impact habitat, such as oil and gas development or dredging. Effectiveness of the voluntary provisions depends not only on the efforts of the Councils but also on the ultimate goals of the EFH provisions. Congress intended that the EFH provisions would "promote the protection of essential fish habitat in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat."⁹⁸ Thus, the amendments to the FMPs must "identify essential fish habitat, . . . minimize . . . adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitat."⁹⁹ The FMP amendments did not undertake to create a tangible benefit to EFH or the fisheries dependent upon EFH. Rather, the NMFS rule advances these ideals by recognizing that "management of fishing practices and habitat protection are both necessary to ensure long-term productivity of our Nation's fisheries."¹⁰⁰ In order to fulfill this ideal, the rule proclaims that the regional councils "should protect, conserve, and enhance adequate quantities of EFH to support a fish population that is capable of fulfilling all of those other contributions that the managed species makes to maintaining a healthy ecosystem as well as supporting a sustainable fishery."¹⁰¹

The New England Fishery Management Council perceives its function under this direction as "assum[ing] an active role in the protection and enhancement of habitats"¹⁰² and as carrying out the following policy objectives:

1. Maintain and enhance the current quantity and quality of habitats supporting harvested species, including their prey base;
2. Restore and rehabilitate fish habitats which have already been degraded;
3. Create and develop fish habitats where increased availability of fishery resources will benefit society; and
4. Modify fishing methods and create incentives to reduce the impacts on habitat associated with fishing.¹⁰³

The EFH provisions exist in order to effectively shift attention away from fish harvests and toward the necessary habitat components of fisheries management. In other words, "fish need a place to call home."¹⁰⁴ Ronald

⁹⁸ 16 U.S.C. § 1801(b)(7) (Supp. IV 1998) (emphasis added).

⁹⁹ *Id.* § 1853(a)(7) (emphasis added).

¹⁰⁰ Magnuson-Stevens Act Provisions, Essential Fish Habitat, 62 Fed. Reg. 66,531, 66,531 (Dec. 19, 1997) (codified at 50 C.F.R. pt. 600).

¹⁰¹ *Id.*

¹⁰² NEW ENGLAND FISHERY MANAGEMENT COUNCIL, *supra* note 59, at 4.

¹⁰³ *Id.*

¹⁰⁴ *The Environment Show* (Earthwatch Radio broadcast, Sept. 15, 1998), audio file available at <<http://www.enr.com/enr-multimedia-archive/1998/09/091598/091598esho.asp>>.

Baird has explained that "we're no longer concentrating on the harvest practices of specific species, but we're now bringing into the management equation the whole structured function of biological systems."¹⁰⁵

Whether this shift of attention will make a difference depends upon the role the Councils assume as well as the wills of agencies authorizing particular projects. Tom Bigford, a NMFS habitat specialist, has explained that fisheries managers can use information compiled by the Councils to advise agencies about what government projects might damage areas important to habitat. Recognizing that the agencies are not required to follow this advice, he has explained that

Congress and a lot of outside groups are going to be watching, and all of that is going to be adding just a little bit more pressure for people to take this whole process seriously and make sure that fish and fish habitat perhaps get a little bit more weight in decisions than they have in the past.¹⁰⁶

These hopeful words stem from the reality that, even after the SFA amendments, the Councils' authority remains limited. One explanatory note to the Guidelines for Fishery Management Plans stated that

[NOAA] recognizes that a decline in stock size or abundance may occur independent of fishing pressure and that adverse changes in essential habitat may increase the risk that fishing effort will contribute to a stock collapse. Regardless of the cause of a decline, however, the Act limits a Council's authority in addressing the situation. The only direct control available under the Act is to adjust fishing mortality. . . . If man-made environmental changes are contributing to the downward trends, in addition to controlling effort Councils should recommend restoration of habitat and other ameliorative programs, to the extent possible. . . .¹⁰⁷

Nationwide, fishing communities are particularly cognizant of the Councils' limited authority and are aware that "[u]nless the Council asserts . . . that reduced fishing effort would not alleviate the problem, [an] FMP must include measures to reduce fishing mortality regardless of the cause of the low population level."¹⁰⁸ Some fear that this obligation may manifest itself in significant restrictions on the use of some fishing gear, including trawls. This fear is not without cause. The first EFH-related lawsuit charges that the EFH amendments by the Gulf of Mexico, New England, Caribbean, Pacific, and North Pacific Councils were unlawfully prepared and approved in reliance on inadequate environmental analyses and in violation of the specific requirements of the Magnuson Act.¹⁰⁹ The

¹⁰⁵ Baird, *supra* note 4.

¹⁰⁶ *The Environment Show*, *supra* note 104 (statement of Tom Bigford of the NMFS Office of Habitat Conservation).

¹⁰⁷ 50 C.F.R. § 602, subpt. B, app. A (1995). Section 602 was removed by Magnuson Act Provisions; Consolidation and Update of Regulations; Collection-of-Information Approval, 61 Fed. Reg. 32,538, 32,577 (June 24, 1996).

¹⁰⁸ 50 C.F.R. § 602.11(c)(7)(ii) (1995).

¹⁰⁹ See Second Amended Complaint for Declaratory, Mandatory, and Injunctive Relief, *American Oceans Campaign v. National Oceanic & Atmospheric Admin.*, No. 1:99CV00982 ¶ 1 (D.D.C. 1999) (on file with authors).

Earthjustice Legal Defense Fund is challenging continued fishing activities, asserting that they produce adverse effects on EFH. These activities include shrimp trawling in the Gulf of Mexico, bottom trawling off the coast of New England, and bottom trawling off the Pacific Coast.¹¹⁰

Even though increased attention to habitat has been considered a breakthrough in fisheries management paradigms, the requirements of the Magnuson Act still amount to a voluntary and generally unenforceable scheme. Bigford explains, however, that "outside groups" may put additional pressure on FMCs to modify particular projects.¹¹¹ It appears as though the fate of EFH may be in the hands of the political process and outside groups such as the Earthjustice Legal Defense Fund.

III. ESSENTIAL FISH HABITAT AND THE ENDANGERED SPECIES ACT

The Magnuson Act's EFH provisions are most often compared to similar provisions in the ESA. Since its enactment in 1973, the ESA has been acclaimed as the "flagship enactment on wildlife protection"¹¹² as well as criticized for its failure to balance landowners' rights with species conservation.¹¹³ Also, the statute has been questioned for its inability to reduce the number of species listed as endangered and threatened.¹¹⁴ These critiques provide a framework for comparison to EFH provisions. From the roadblocks, bumps, and outright failures of comparable ESA provisions, we can glean warnings and projections for EFH.

As shown below, the conservation goal of the ESA is loftier than that of the EFH provisions. The ESA strives to conserve and recover endangered and threatened species, in part by limiting land use activities that would harm the species, while the EFH provisions merely hope to increase consultation and awareness. To the extent that the ESA and the EFH provisions exhibit similarities, the following critiques of the ESA may prove instructive for successful implementation of the EFH provisions.

¹¹⁰ *Id.* ¶ 5.

¹¹¹ *The Environment Show*, *supra* note 104 (statement of Tom Bigford of the NMFS office of Habitat Conservation).

¹¹² WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW 994 (1994).

¹¹³ Jon Margolis, *Critics Say "No Surprises" Means No Protection*, HIGH COUNTRY NEWS, Aug. 4, 1997, at 10; see Nancie G. Marzulla, *Endangered Breed: Those Who Own Land*, AUSTIN AM.-STATESMAN, Nov. 22, 1995, at A9 (examining the impacts of the Endangered Species Act on private property owners and arguing that unless the Act is revised, landowners themselves will become extinct).

¹¹⁴ ALEXANDER F. ANNETT, REFORMING THE ENDANGERED SPECIES ACT TO PROTECT SPECIES AND PROPERTY RIGHTS, HERITAGE FOUNDATION, REPORT NO. 1234, at 1 (1998), available in LEXIS, News Library, Heritage Foundation Reports File; Sterling Burnett & Bryon Allen, *Should Congress Renew the Endangered Species Act?*, THE IDAHO STATESMAN, Nov. 1, 1998, at 7B; *Shoot, Shovel, and Shut Up*, INVESTOR'S BUSINESS DAILY, Aug. 12, 1997, at B1.

A. Critical Habitat Meets Essential Fish Habitat

In 1966 the Endangered Species Protection Act¹¹⁵ set forth a "broad but toothless policy"¹¹⁶ of species protection and recovery that included meager habitat protection provisions.¹¹⁷ It provided that "insofar as is practicable and consistent with the primary purposes of such bureaus, agencies, and services, [they] shall preserve the habitats of such threatened species on lands under their jurisdiction."¹¹⁸ Congress amended this statute in 1969 and extended these protections to invertebrates, but failed to allow true authority for the protection of habitat for endangered species.¹¹⁹

The 1973 overhaul¹²⁰ provided the current structure of the ESA, including procedures for the listing of species and the subsequent designation of critical habitat, but its language left problems. In acting on their authority to designate lands as critical habitat for listed species, the Secretaries of Interior or Commerce¹²¹ were directed to consider various economic and practical considerations.¹²² Specifically, each Secretary is to designate critical habitat "to the maximum extent prudent and determinable" at the time of listing.¹²³ The legislative history reveals that Congress envisioned exceptions "only in rare circumstances where the specification of critical habitat concurrently with the listing would not be beneficial to the species."¹²⁴ When this decision-making ability led the Secretary to determine that the designation of critical habitat was not prudent in forty-one of forty-five final listings in 1986, critics noted that the Secretary's discretion was too

¹¹⁵ Pub. L. No. 89-669, 80 Stat. 926 (1966) (repealed 1973).

¹¹⁶ DANIEL ROHLF, *THE ENDANGERED SPECIES ACT: A GUIDE TO ITS PROTECTIONS AND IMPLEMENTATION* 21 (1989).

¹¹⁷ See Pub. L. No. 89-669, § 2, 80 Stat. at 926-27.

¹¹⁸ *Id.* § 1(b), 80 Stat. at 926.

¹¹⁹ Act of Dec. 5, 1969, Pub. L. No. 91-135, 83 Stat. 275 (repealed 1973). Instead, Congress extended the Secretary's authority to acquire lands for the purpose of endangered species protection. *Id.* § 12, 83 Stat. at 282.

¹²⁰ Endangered Species Act of 1973, Pub. L. No. 93-205, 87 Stat. 886 (codified as amended at 16 U.S.C. §§ 1531-1544 (1994)).

¹²¹ The ESA uses the term "Secretary" to refer to the Secretaries of both Interior and Commerce, as appropriate. Nathan Baker, *Water, Water, Everywhere, and at Last a Drop for Salmon?* NRDC v. Houston *Heralds New Prospects Under Section 7 of the Endangered Species Act*, 29 ENVTL. L. 607, 611 n.27 (1999). Throughout this Article, the term "Secretary," when used in the context of the ESA, refers to either the Secretary of Interior or the Secretary of Commerce, or both, as appropriate. In the context of the Magnuson Act, "Secretary" refers to the Secretary of Commerce alone.

¹²² The House Report on the 1978 ESA amendments reveals that members of Congress believed that

[i]n effect, then, the Secretary is given broad power to grant exemptions to the Endangered Species Act through a simple, unilateral administrative determination of his or her own. This is a process which stands in sharp contrast to the laboriously constructed exemption process, with its clear standards and procedural safeguards.

H.R. REP. NO. 95-1625, at 63, *reprinted in* 1978 U.S.C.C.A.N. 9453, 9483.

¹²³ 16 U.S.C. § 1533(a)(3) (1994).

¹²⁴ H.R. REP. NO. 95-1625, at 17; *see also* ROHLF, *supra* note 116, at 50-51.

broad and contradicted the language and history of the critical habitat sections.¹²⁵

Once the Secretary determines a listed species's needs, the ESA grants the Secretary broad discretion in designating critical habitat. Critical habitat is the geographical area containing physical or biological features essential to the conservation of a listed species—essentially, the area necessary to prevent extinction.¹²⁶ The Secretary may determine that areas outside those presently occupied by the species may be essential to conservation at the time of listing and may determine that critical habitat includes areas that the species could potentially occupy.¹²⁷ Finally, after listing of an endangered species or after designation of its critical habitat, any person may petition the Secretary to revise a critical habitat designation.¹²⁸

Although designation of both EFH and critical habitat are forms of zoning mother nature, the statutory structure of EFH differs significantly from that of critical habitat.¹²⁹ First, the definition of EFH is strikingly more broad in its language and application. As discussed above, EFH is defined as waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.¹³⁰ This definition covers all periods of a fish's life, including those areas that a fish may occupy at only one life stage. In contrast, critical habitat "shall not include the entire geographical area which can be occupied by the threatened or endangered species."¹³¹ In addition, NMFS has interpreted EFH to include artificial structures not naturally found in the waters.¹³² However, critical habitat includes the geographical area containing "physical or biological features" essential to the species's conservation, excluding consideration of artificial features.¹³³ Moreover, the Magnuson Act gives no discretion in designating some areas EFH and excluding others. If a managed species relies upon an area during its life cycle, it is essential and therefore must be identified as such.¹³⁴ This sharply contrasts with the built-in Secretarial discretion under the ESA, in which economic impacts, among others, may be considered when determining what habitat is critical.¹³⁵

Finally, the ESA allows parties to request revision of critical habitat.¹³⁶ The SFA authorizes and actually requires certain revisions of EFH as better scientific information becomes available.¹³⁷ However, the beleaguered

¹²⁵ See ROHLF, *supra* note 116, at 51.

¹²⁶ See 16 U.S.C. § 1532(5)(A) (1994).

¹²⁷ *Id.* § 1532(5)(A)(ii), (5)(C).

¹²⁸ *Id.* § 1533(b)(3)(D); see also Hiney, *supra* note 9, at 2.

¹²⁹ See NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 32–35 (comparing EFH and ESA provisions).

¹³⁰ See *supra* notes 53–66.

¹³¹ 16 U.S.C. § 1532(5)(C) (1994).

¹³² See NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 1 (providing the regulatory definition of EFH).

¹³³ 16 U.S.C. § 1532(5)(A)(i) (1994).

¹³⁴ 16 U.S.C. § 1851(a)(3) (1994).

¹³⁵ See *supra* notes 122–23 and *infra* notes 157–63.

¹³⁶ 16 U.S.C. § 1533(b)(3)(D)(i) (1994).

¹³⁷ 16 U.S.C. § 1851(a)(2) (1994).

Councils possess the discretion to determine whether and when better scientific information is available and to thereafter undertake the task of revising EFH.

Vagueness and immensity may also plague the EFH provisions. The Councils can write EFH amendments to be as expansive as the EFH regulations allow. For instance, the Gulf of Mexico Fishery Management Council has seven fishery management plans that cover between 350 and 400 species of marine life, including coral. None of these species individually use the entire Gulf of Mexico. Taken as a group however, the essential habitats for each species, each life stage, and each FMP encompass the entire gulf—at least to the 200-mile limit of the exclusive economic zone (EEZ)—implicating myriad activities and potential sources of impacts.¹³⁸

Given the broad definition of EFH, the extensive distribution of the managed species, and NMFS guidance to be risk averse in face of uncertainty, *all of the estuarine systems of the Gulf of Mexico are considered essential fish habitat for fish managed by the Gulf of Mexico Fishery Management Council.*¹³⁹

The EFH provisions also state that the habitat is "necessary" if it is "required to support a sustainable fishery and a healthy ecosystem."¹⁴⁰ This language may prove as divisive as the ESA's critical habitat provisions, because the Magnuson Act, its implementation regulations, and the guidance documents fail to define "healthy ecosystem"—a term with numerous potential standards.¹⁴¹

Like all environmental legislation, both the ESA and the Magnuson Act are affected by two competing concerns: the goal of extinguishing scientific uncertainty and the realization that as we continue to discover the habitat needs and impacts on wildlife and fisheries, we will always be learning "new" science. After attempting to manage species through concentrated efforts on individual species, scientists and policy makers have begun to realize the importance of ecosystem management.¹⁴² The ESA advocates these efforts, but often fails to overcome the inherent difficulty of managing endangered species in light of sometimes crippling scientific uncertainty. The EFH provisions may suffer similar results.

Scientific uncertainty plagues the very foundation of the ESA with the question, "What is a species?" Because "species" is the unit designated for

¹³⁸ See Hiney, *supra* note 9, at 2.

¹³⁹ GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, *supra* note 57, at 29.

¹⁴⁰ 50 C.F.R. § 600.10 (1999). The guidance document fails to further elucidate the definition of "necessary." See NATIONAL MARINE FISHERIES SERV., *supra* note 52.

¹⁴¹ There are established guidelines, however, for what constitutes a "sustainable fishery." Often, the goal for a sustainable fishery is determined by its maximum sustainable yield (MSY), which is the largest average catch that can be taken continuously (or sustained) from a stock under average environmental conditions. RICHARD K. WALLACE ET AL., FISHERIES MANAGEMENT FOR FISHERMEN: A MANUAL FOR HELPING FISHERMEN UNDERSTAND THE FEDERAL MANAGEMENT PROCESS 39 (1994).

¹⁴² See Katharine Simmons Yagerman, *Protecting Critical Habitat Under the Federal Endangered Species Act*, 20 ENVTL L. 811, 817-18 (1990) (discussing the increasingly important role of ecosystem management under the ESA).

protection under the ESA, scientists struggle to categorize what constitutes a species in light of various populations, locales, and adaptations.¹⁴³

When considering the need to list a population or species as threatened or endangered, several factors require examination, including the need for multiple populations in a particular area, the carrying capacity of the habitat, and any environmental or human-created resistance to the population in a particular habitat. These variables lend to the uncertainty in management.

Once a species is identified, it must be studied to determine whether it is endangered.¹⁴⁴ A species may become endangered because of natural environmental change or because of human activity.¹⁴⁵ This distinction becomes important in fisheries management, especially when determining sizes of fish stocks for quota purposes from year to year, because species may experience a natural rise and fall in population size.¹⁴⁶ A look at the deleterious impact humans have had on other species reveals that population decreases and species extinctions are commonly caused by human activities such as hunting or habitat modification.¹⁴⁷

While many uncertainties exist for EFH, the applicable populations are well established.¹⁴⁸ The definition of EFH does include economics, because EFH is identified only for managed species, meaning those species that are commercially valuable. Species that are not managed for commercial or recreational value do not have an EFH designation. Thus, economic considerations underlie the establishment of EFH rather than being incorporated into the EFH identification or definition. Congress defined "critical habitat" to mean the specific areas with physical or biological features essential to the conservation of the species and that may require special management considerations or protection.¹⁴⁹ Identifying the biological needs and niche¹⁵⁰ of a species has proven to be a weighty and

¹⁴³ See GARETH JONES ET AL., *THE HARPER COLLINS DICTIONARY OF ENVIRONMENTAL SCIENCE* 330 (1992). The ESA "defines" the term "species" to "include[] any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." 16 U.S.C. § 1532(16) (1994). Scientifically, a species is a group of organisms that can interbreed and produce offspring capable of reproduction. ELDON D. ENGER & BRADLEY F. SMITH, *ENVIRONMENTAL SCIENCE* 67 (1991). In this time of endangerment and extinction of flora and fauna, these definitions fail to adequately provide necessary understanding of the goals espoused in the ESA. In order to conserve endangered and threatened species, a keen comprehension of "species" is necessary, yet biology tells us that shifts in gene frequency and reproduction, as well as the continually changing environment, may yield subspecies or entirely new species. *Id.* at 250.

¹⁴⁴ 16 U.S.C. § 1532(6) (1994); see also JONES ET AL., *supra* note 143, at 133 (stating that an endangered species is "any plant or animal species that no longer can be relied on to reproduce itself in numbers ensuring its survival").

¹⁴⁵ JONES ET AL., *supra* note 143, at 134.

¹⁴⁶ For a discussion of stock assessments and natural mortality rates, see NATURAL RESOURCE COUNCIL, *SUSTAINING MARINE FISHERIES* 64 (1999).

¹⁴⁷ JONES ET AL., *supra* note 143, at 134.

¹⁴⁸ See generally 50 C.F.R. ch. VI (1999) (delineating the Councils and listing fishery populations according to Council).

¹⁴⁹ 16 U.S.C. § 1532(5)(A)(i), (ii) (1994).

¹⁵⁰ The niche is the functional role a species has in its surroundings. ENGER & SMITH, *supra* note 143, at 67.

time-consuming process.¹⁵¹ It often takes years to accomplish, it can be difficult to ascertain just how much habitat is critical, and it can be complicated by economic and political considerations.¹⁵²

Essential fish habitat designations are amendments to fishery management plans and consequently are completed only for those stocks under each Council's regulatory authority.¹⁵³ Management plans are established within one year of a determination by NMFS that the particular species is "overfished," "approaching a condition of being overfished," or not adequately "ending overfishing and rebuilding [population]."¹⁵⁴ NMFS also has authority to create management plans for highly migratory species.¹⁵⁵ A management plan can "describe, identify, and protect" the habitat of species not a part of a fisheries management unit; "however, such habitat may not be considered EFH"¹⁵⁶

Both EFH and critical habitat designations require use of the best scientific data available.¹⁵⁷ However, the ESA also requires consideration of economic and other impacts relevant to a critical habitat designation.¹⁵⁸ Moreover, the Secretary has discretion to exclude areas from critical habitat if the benefits of exclusion outweigh those of inclusion and if doing so will not result in extinction.¹⁵⁹ Only those economic impacts above and beyond those of the listing may be considered.¹⁶⁰ The SFA does not contain comparable caveats for economic considerations or cost-benefit analyses in either the statute or in the guidelines. Rather, when designating EFH, the Councils are instructed to "[err] on the side of inclusiveness to insure adequate protection for EFH of managed species."¹⁶¹ As noted in the technical guidance document published by NMFS, at the level of lowest data

¹⁵¹ The process has also been a political one that crippled the ESA early in its history. The listing procedure was linked to the critical habitat designation and economic considerations—requiring both time- and resource-intensive analyses—resulting in the withdrawal of approximately 2000 species proposed for listing in 1978 because of inadequate funding. See ROHLF, *supra* note 116, at 27.

¹⁵² See Rufus C. Young, Jr., 1996 Update: *The Endangered Species Act: Impacts on Land Use*, SB06/1 A.L.I.-A.B.A. 421, 432 (1996).

¹⁵³ 16 U.S.C. § 1865(b)(1)(A) (Supp. IV 1998).

¹⁵⁴ *Id.* § 1854(e)(1), (2), (7).

¹⁵⁵ See *id.* § 1854(g)(1) (discussing preparation and implementation of plan or plan amendment).

¹⁵⁶ Magnuson Act Provisions; Essential Fish Habitat (EFH), 62 Fed. Reg. 19,726, 19,727 (Apr. 23, 1997).

¹⁵⁷ 16 U.S.C. § 1533(b)(2) (1994) (stating that ESA critical habitat designations and revisions shall be based on the "best scientific data available"); 16 U.S.C. § 1851(a)(2) (1994) ("Conservation and management measures [for fisheries] shall be based upon the best scientific information available.").

¹⁵⁸ 16 U.S.C. § 1533(b)(2) (1994).

¹⁵⁹ *Id.*

¹⁶⁰ U.S. FISH AND WILDLIFE SERV., ENDANGERED SPECIES LISTING HANDBOOK: PROCEDURAL GUIDANCE FOR THE PREPARATION AND PROCESSING OF RULES AND NOTICES PURSUANT TO THE ENDANGERED SPECIES ACT 87-88 (1994).

¹⁶¹ 62 Fed. Reg. at 19,727. The codified rule includes the same instruction, framed in risk-averse language: "Councils should interpret this information in a risk-averse fashion, to ensure adequate areas are protected as EFH of managed species." 50 C.F.R. § 600.815 (1999).

availability, "the risk-averse approach is to define EFH as everywhere the species is likely to occur, noting any areas of known significance to reproduction, feeding, or growth to maturity."¹⁶² The EFH must contain at a minimum those areas listed as critical habitat, but may include more areas. Therefore, the SFA is likely to more effectively address recovery through habitat than the ESA, because the SFA provides room for a species to expand from its current, depleted range.¹⁶³

Another significant distinction between the two programs involves authority to resolve problems of insufficient data. The SFA acknowledges varying levels of knowledge about the habitat needs of fisheries.¹⁶⁴ The Councils are instructed to use available data in a precautionary fashion, erring on the side of inclusion, and must update EFH designations as more information becomes available.¹⁶⁵ In contrast, when designating critical habitat using limited scientific data, an agency may take additional time to collect the necessary information.¹⁶⁶ When sufficient information is not available to establish critical habitat, a "non-determinable" finding is made, and the agency then has two years to designate critical habitat, unless the designation is not prudent.¹⁶⁷

B. Implementation

The critical habitat provisions of the ESA are triggered only after the usually lengthy listing process.¹⁶⁸ The Secretary must review a petition for

¹⁶² NATIONAL MARINE FISHERIES SERV., *supra* note 52, at 8.

¹⁶³ *Id.* If a species faces extinction because of habitat loss, identification of an already insignificant area as critical habitat cannot be expected to allow the species to reestablish population levels above depleted existing sizes.

¹⁶⁴ 50 C.F.R. § 600.815(a)(2)(i)(A) (1999). These include presence/absence distribution; habitat-related densities; growth, reproduction or survival rates within habitats; and production rates by habitat. *Id.* § 600.815(a)(2)(i)(C)(1)-(4).

¹⁶⁵ 16 U.S.C. § 1855(b)(1)(A) (Supp. IV 1998).

¹⁶⁶ See Listing Endangered and Threatened Species and Designating Critical Habitat; Amended Procedures to Comply with the 1982 Amendments to the Endangered Species Act, 49 Fed. Reg. 38,900, 38,900 (Oct. 1, 1983) (noting that a "6-month extension is permissible only if there exists substantial disagreement among specialists regarding the sufficiency or accuracy of the required biological data. Extensions are not permissible to allow additional time to conduct economic or other analyses relating to Critical Habitat designations.") (codified at 50 C.F.R. pt. 424 (1999)).

¹⁶⁷ 16 U.S.C. § 1533(b)(6)(C)(ii) (1994).

¹⁶⁸ An interesting example of an effort to avoid the listing process involved the Oregon Salmon Negotiations and Oregon Governor John Kitzhaber's attempts to prevent federal listing of coho salmon by offering a state conservation plan. Kitzhaber was temporarily successful; the National Marine Fisheries Service decided not to list coho in light of state efforts. However, the NMFS eventually lost a legal battle over the decision, resulting in listing of the coastal coho. See Oregon Natural Resources Council v. Daily, 6 F. Supp. 2d 1139 (D. Or. 1998) (finding that NMFS decision not to list coho was arbitrary and capricious); Jonathan Brinckman, *Coast Coho on the Way to Federal Listing*, THE OREGONIAN, July 31, 1998, at A1 (explaining that the state salmon recovery plan is based on voluntary habitat restoration by private landowners and is financed by the timber industry); Jonathan Brinckman, *Kitzhaber Plan Commits State to Saving Fish*, THE OREGONIAN, Sept. 5, 1998, at D1 (outlining Kitzhaber's executive order and attempts to save salmon species without federal intervention); Marla Cone, *U.S. Protection of Coho Salmon*

listing a species and any scientific studies presented by the petitioner in order to determine the species's need for protection.¹⁶⁹ Once listing occurs, critical habitat is designated, which often takes years. In the meantime, destructive activities may continue in areas later designated as critical habitat. The critical habitat designation restricts uses of the land that may jeopardize the continued existence of the species.¹⁷⁰ Opponents of the ESA assert that it forces landowners, rather than the public at large, to carry the burden of achieving the national goal of conserving species.¹⁷¹

The identification phase of the EFH provisions follows scientific procedures similar to those used in designating critical habitat, but EFH identification is triggered during the early stage of adding a species to an FMP, not by a species approaching extinction. This distinction shows a clear difference in the procedure, as well as the goals, of the Magnuson Act and the ESA. The Magnuson Act charges the eight regional Councils with development of fishery management plans for fish species found within the Councils' respective geographic areas.¹⁷² The Councils prepare FMPs for those fisheries under their authority that require conservation and management. Fisheries may require management because of troubled stocks or simply because of the fishery's commercial value. Once a fishery reaches an overfished condition,¹⁷³ the Secretary of Commerce must notify the appropriate Council and request action to end overfishing through conservation and management measures aimed at rebuilding the affected stocks of fish.¹⁷⁴ The FMP for that species must also specify a time period for rebuilding the fishery, generally not to exceed ten years.¹⁷⁵ Unlike the Magnuson Act, the ESA only applies to species at or near the brink of extinction.¹⁷⁶

The Councils do not cease managing fisheries once they are rebuilt. On the contrary, once a fishery "recovers" as a result of conservation and management measures, it remains a managed fishery, reviewed by the Secretary for possible overfishing in later years and actively managed by the Council through closures, gear restrictions, or quotas.¹⁷⁷ According to the

Spawns Criticism, L.A. TIMES, Oct. 26, 1996, at A1 (stating that Governor Kitzhaber and timber industry representatives sought to delay the listing decision because of "new" evidence showing that the salmon were healthier than previously believed).

¹⁶⁹ 16 U.S.C. § 1533(b)(3)(A) (1994).

¹⁷⁰ *Id.* § 1536(a)(2).

¹⁷¹ See J. B. Ruhl, *Regional Habitat Conservation Planning Under the Endangered Species Act: Pushing the Legal and Practical Limits of Species Protection*, 44 SW. L.J. 1393, 1404 (1991).

¹⁷² See 16 U.S.C. § 1852 (1994 & Supp. IV 1998).

¹⁷³ The Magnuson Act states that "[a] fishery shall be classified as approaching a condition of being overfished if, based on trends in fishing effort, fishery resource size, and other appropriate factors, the Secretary estimates that the fishery will become overfished within two years." *Id.* § 1854(e)(1) (Supp. IV 1998).

¹⁷⁴ *Id.* § 1854(e)(2).

¹⁷⁵ *Id.* § 1854(e)(4).

¹⁷⁶ See generally 16 U.S.C. § 1533 (1994) (regarding determination of endangered or threatened status).

¹⁷⁷ See 16 U.S.C. § 1854(h) (Supp. IV 1998) (regarding provisions for termination of

Magnuson Act, the fishery remains "a major source of employment and contributes significantly to the economy of the nation."¹⁷⁸ Presumably, EFH designations last as long as species are managed, with possible modification in light of new scientific information. In contrast, once a species goes extinct or is delisted, the ESA's coverage essentially ends.¹⁷⁹

The difference in trigger points between the ESA and the Magnuson Act can be traced to the statutes' differing goals. The Magnuson Act was created as a management tool, because "fishery resources contribute to the food supply, economy, and health of the Nation and provide recreational opportunities."¹⁸⁰ The ESA, instead, was created to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved [and] to provide a program for the conservation of such endangered species and threatened species."¹⁸¹ The beneficiaries of the ESA's conservation scheme are not necessarily species with commercial value; rather, the species are those that are so "depleted in numbers that they are in danger of or threatened with extinction [and that are] of aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people."¹⁸² The differing goals of the two statutes result in the identification of essential habitat of managed fish species at a less urgent point than designation of critical habitat of species facing extinction.

C. *Misimplementation & Nonimplementation*

Practically, political and bureaucratic complications may result in misimplementation and nonimplementation of environmental statutory provisions. Misimplementation results from misguided or restrained interpretations of authority or from the twisting of provisions intended to provide flexibility into loopholes. Nonimplementation of statutory requirements like critical habitat and EFH can result from limited resources and increasing work loads.

1. *Agency Self-Restraint*

Agency self-restraint can result in misimplementation of an environmental statute. By employing self-restraint, agencies may forestall Congress from eliminating authority that, when exercised to its full potential, would result in controversy. An agency such as NMFS or the Fish and Wildlife Service (FWS) may succumb to political pressures and effectively amend its own authority. The pressure can manifest itself in

management plan).

¹⁷⁸ *Id.* § 1801(a)(3) (1994).

¹⁷⁹ See 16 U.S.C. § 1536(a)(2) (1994); 50 C.F.R. § 424.21 (1999) (allowing for a periodic review of species' status after delisting).

¹⁸⁰ 16 U.S.C. § 1801(a)(1) (1994 & Supp. IV 1998).

¹⁸¹ 16 U.S.C. § 1531(b) (1994).

¹⁸² *Id.* § 1531(a)(2), (3).

threats of substantive amendments to the statutory authority of an agency or in budget cuts that eliminate funding for programs.

A classic example of congressional retribution for the exercise of agency authority is the oft-repeated Tellico Dam/snail darter story. Congress appropriated more than \$110 million for the construction of a dam in Tennessee.¹⁸³ The dam was virtually completed, leaving only the gates to be closed and the reservoir to be filled, when a small endangered fish, the ESA, and the United States Supreme Court halted these last steps. The ESA's prohibition against damaging critical habitat prevented inundating the fish's critical habitat beneath the planned reservoir.¹⁸⁴ Throughout the litigation, various congressional committees supported the constructing agency's understanding that the ESA was not meant to apply "retroactively" to projects already underway when the law was enacted.¹⁸⁵ The Supreme Court disagreed and halted the project.¹⁸⁶ Following the Court's opinion, Congress amended the ESA. The newly amended ESA provided an exemption process,¹⁸⁷ required agencies to provide reasonable alternatives to proposed activities found to jeopardize a listed species,¹⁸⁸ and diluted the critical habitat provisions, changing them from a prohibition against destroying or modifying critical habitat¹⁸⁹ to a requirement that actions be unlikely to do so.¹⁹⁰ Additionally, the amendments mandated consideration of economic and other impacts during the designation of critical habitat.¹⁹¹

At least one author has suggested that the ESA's critical habitat provisions have fallen victim to congressional bullying and agency intimidation:

[The Department of] Interior has undertaken to define critical habitat in a way that greatly minimizes its importance. It has, moreover, for the great majority of species, simply refused to designate critical habitat at all. The effect of these actions is to eliminate the most objective and powerful requirement of the statute—that critical habitat not be modified—and allow Interior to administer the Act on the more uncertain and discretionary terrain of jeopardy.¹⁹²

The accuracy of this analysis is supported by the agency's own statements. "[B]ecause the protection that flows from critical habitat designation applies only to Federal actions, the designation of critical habitat provides little or no additional protection beyond the 'jeopardy' prohibition of section 7,

¹⁸³ See *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 200 n.6 (1978).

¹⁸⁴ See *id.* at 185-86.

¹⁸⁵ *Id.* at 163-65.

¹⁸⁶ *Id.* at 184.

¹⁸⁷ 16 U.S.C. § 1536(f)-(p) (1994).

¹⁸⁸ *Id.* § 1536(b)(3)(A).

¹⁸⁹ See 16 U.S.C. § 1536 (1976), amended by Authorization, Appropriations—Endangered Species Act of 1973, Pub. L. No. 96-159, § 4(C), 93 Stat. 1225, 1226 (1979).

¹⁹⁰ See 16 U.S.C. § 1536(a)(2) (1994).

¹⁹¹ See *id.* § 1533(b)(2); H.R. REP. NO. 95-1625, at 17 (1978), reprinted in 1978 U.S.C.C.A.N. 9453, 9467.

¹⁹² Oliver A. Houck, *The Endangered Species Act and Its Implementation by the U.S. Departments of Interior and Commerce*, 64 U. COLO. L. REV. 277, 297 (1993).

which also applies only to Federal actions."¹⁹³ Consequently, "[t]he Service has determined that in most cases no additional protection is gained by designating critical habitat for species already on the lists and the application of the Service's limited resources is best utilized to add new species to the lists."¹⁹⁴

The Department of Interior's interpretation ignores legal principles, however. First, critical habitat modification is found within a distinct provision of the law requiring an independent analysis.¹⁹⁵ Second, the separate restriction against habitat destruction has also been subsumed by the general prohibition against "taking."¹⁹⁶ Consequently, individuals may be liable under the Act for taking species through habitat modification; agencies are not the only entities liable for destruction of habitat.¹⁹⁷ In fairness to those people against whom criminal charges are brought under the ESA for "takes," habitat should be described and delineated.

The consequence of this interpretation is the devaluation and underprotection of areas for their functions as endangered species habitat. Instead, agencies' destruction of habitat is forbidden when it would jeopardize a species and individuals' destruction of habitat is forbidden when it would result in the taking of a species. Direct harm to a species must be likely before habitat-affecting activities are questioned under this scheme; habitat cannot be protected solely to provide an opportunity for recovery.

The SFA has no comparable prohibition against adverse modification of habitat. Rather, in a NEPA-like fashion, federal agencies must simply take into consideration the impact of their actions on EFH: "Federal agencies must consult with the NMFS regarding any of their actions authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect EFH."¹⁹⁸ This consideration may occur by virtue of compliance with other statutory schemes such as NEPA, the FWCA, and

¹⁹³ Proposed Listing Priority Guidance for Fiscal Years 1998 and 1999, 63 Fed. Reg. 10,931, 10,934 (Mar. 5, 1998).

¹⁹⁴ *Id.*

¹⁹⁵ Houck, *supra* note 192, at 299-301. The 1986 regulations define "destruction or adverse modification" to require an "alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species." This definition is exactly the same as that provided for "jeopardy" to the species itself: "to jeopardize the continued existence" of a species means "to reduce appreciably the likelihood of both the survival and recovery of a listed species." *Id.* at 299. "Interior's interpretation of the law violates [the principle of statutory construction that laws are interpreted to effect each portion of the law making no part superfluous or void] by removing independent legal meaning for the term 'critical habitat.'" *Id.* at 300. The regulations are also illegal because "they restrict 'critical habitat' to bare species survival, despite a legislative definition that requires considerably more." *Id.* "Congress afforded special protection to [habitat for both conservation and survival,] yet Interior has unilaterally chosen to protect only [that required for survival]." *Id.* at 301.

¹⁹⁶ 16 U.S.C. § 1538(a)(1) (1994).

¹⁹⁷ See *Babbitt v. Sweet Home Chapter of Communities for a Great Or.*, 515 U.S. 687, 696-708 (1995).

¹⁹⁸ 50 C.F.R. § 600.920 (1999).

others.¹⁹⁹ An agency may still harm or completely eliminate EFH *after* consideration and suffer no legal consequences.

Even for those fish stocks that are overfished, there is no mandatory duty of habitat protection for federal agencies. As the name implies, overfished species are those presumed to suffer from too much fishing,²⁰⁰ and thus the remedies lie with gear restrictions and catch requirements altering size or season, but not with habitat protection. Despite recognition that habitat degrading activities adversely affect population health, the Councils and NMFS have no jurisdiction over such activities unless they are attributable to fishing.²⁰¹ However, this is directly contrary to what some Councils are telling their constituencies: "The Fishery Management Councils could easily view Essential Fish Habitat . . . as a burden, but hopefully they will . . . view it as an opportunity. The opportunity is to achieve an increase in fish stocks for fishermen without placing the burden of the increase on fishermen."²⁰² This transfer of burden may prove difficult considering that NMFS's and the Councils' authority under the Magnuson Act lies in regulating fishing rather than activities such as fill disposal in a wetland or a timber sale in a national forest. The Councils can only make recommendations to NMFS on changes within the fishing industry and can only comment upon those projects brought to its attention. NMFS holds the authority to create fishing industry regulations, but neither NMFS nor the Councils have the power to require changes to nonfishing projects that

¹⁹⁹ The Essential Fish Habitat Interim Final Rule explains that

{because} it is NMFS' intention to use existing processes whenever appropriate, the interim final rule contains language strongly encouraging the use of existing consultation and environmental review processes to fulfill the EFH consultation requirements. The procedures will not be duplicative because only one review process will be used. Existing Federal statutes such as the FWCA, ESA, and National Environmental Policy Act (NEPA) already require consultation or coordination between NMFS and other Federal agencies. Therefore, the need for Federal agencies to evaluate the effects of their actions on fish and fish habitat is not a new requirement imposed by the Magnuson-Stevens Act.

62 Fed. Reg. 66,531, 66,543 (Dec. 19, 1997).

²⁰⁰ To "overfish" is defined as "to fish at a rate or level that jeopardizes the capacity of a stock or stock complex to produce [multiple sustained yield] on a continuing basis." 50 C.F.R. § 600.310(d)(1)(i) (1999). "Overfishing" is defined as occurring "whenever a stock or stock complex is subjected to a rate or level of fishing mortality that jeopardizes the capacity of a stock or stock complex to produce MSY on a continuing basis." *Id.* § 600.310(d)(1)(ii). "Overfished" is used

[f]irst, to describe any stock or stock complex that is subjected to a rate or level of fishing mortality [as defined above], and second, to describe any stock or stock complex whose size is sufficiently small that a change in management practices is required in order to achieve an appropriate level and rate of rebuilding.

Id. § 600.310(d)(1)(iii).

²⁰¹ "There are no new mandatory constraints placed on any activity, with the exception of adverse habitat impacts caused by fishing . . . Such new restrictions were not achievable in the political climate of the last Congress." Scott Burns, *Essential Fish Habitat, in SUSTAINABLE FISHERIES FOR THE 21ST CENTURY?*, *supra* note 17, at 67, 69.

²⁰² John Bryson, *Essential Fish Habitat: Burden or Opportunity?*, MID-ATLANTIC PERSPECTIVES (Mid-Atlantic Fishery Management Council, Dover, Del.), Dec. 1998, at 1, 1.

adversely affect EFH. The SFA only gives them the opportunity to prepare fishery management plans.²⁰³

EFH provisions are ideally suited to political contests, not legal battles. Because no legal consequences accrue for actions that harm EFH, the provisions are unlikely to generate the animosity that the ESA's flat prohibitions do. Moreover, they are unlikely to result in a comparable degree of litigation. If astutely managed, EFH can be a powerful public relations device to increase public awareness of activities that impair fish habitat, just as the Toxic Release Inventory has been a tool for publicizing toxic chemical releases.²⁰⁴ Depending upon the political makeup of a particular Council, however, its members may want to avoid the appearance of futility that comes from making unenforceable demands; thus, they may not want to take a hard-line approach. The sheer volume of work required to review each project and make recommendations probably discourages an enthusiastic embrace of EFH.²⁰⁵ The Councils may receive some insulation from the congressional pressure placed on FWS and NMFS under the ESA because of the regional nature of the Councils and the degree of discretion they retain. Political pressure to ratchet EFH one way or the other will likely come from regional influence on the Councils, not from Congress.

2. *Flexibility Gone Awry*

To gain flexibility in implementing a statute, an agency may prioritize such flexibility over the statutory purpose and goals. In the case of the ESA, for example, the agency can focus designation of critical habitat toward providing for the survival of species rather than the recovery.

Critical habitat is a discrete area within the geographic range occupied by the species, at the time it is listed, that contains physical or biological features essential to the conservation of the species and that requires special management efforts.²⁰⁶ Critical habitat may also include areas outside those locations occupied by the species if the Secretary determines these areas are essential to conserve the species.²⁰⁷ The Secretary may designate critical habitat outside the current occupied area "only when a designation limited to its present range would be inadequate to ensure the conservation of the

²⁰³ See 16 U.S.C. § 1852(h)(1) (Supp. IV 1998).

²⁰⁴ See Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. § 11023 (1994).

²⁰⁵ When Jeff Rester of the Gulf States Marine Fisheries Commission was asked why the Mississippi River was not designated as critical habitat in the Council's EFH proposal despite its influence on Gulf Coast fisheries habitat, he responded that doing so would require the Gulf Council to take on two-thirds of the United States. Conversation with Jeff Rester, Gulf States Marine Fisheries Commission, Presenter at Fish Forever Conference (Sept. 12, 1998). Thus, the Councils are already making EFH designations based on work load rather than on science and law. This is not to suggest that the Councils doom themselves to failure, but it does raise concerns that the magnitude and implications of EFH are being misrepresented, because work load issues are disguised as habitat science.

²⁰⁶ 16 U.S.C. § 1532(5)(A)(i) (1994); see also 50 C.F.R. § 424.02(d) (1999).

²⁰⁷ 16 U.S.C. § 1532(5)(A)(ii) (1994).

species.²⁰⁸ Unless specially determined by the Secretary, critical habitat is less than the area susceptible to habitation by the threatened or endangered species.²⁰⁹ The scope of critical habitat under these provisions is a function of that area necessary for the "conservation" of a species.

Effectively, however, critical habitat has become that habitat necessary for a species to survive rather than recover. The ESA further defines "conservation" as the "use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the [Act's protection is] no longer necessary."²¹⁰ Practically, that point is delisting by either recovery or extinction. Survival differs from recovery in that a surviving species is one that continues to invoke the ESA's protection. A surviving species may remain endangered indefinitely yet somehow manage to continue to exist. Agencies have consolidated "survival" and "recovery" under the ESA, however. The prohibition against "destruction or adverse modification" applies to activities that "appreciably diminish[] the value of critical habitat for *both* the survival *and* recovery of a listed species."²¹¹ As one scholar notes, "[t]hrough the addition of the term 'both' in the context of survival and recovery, the agencies intended to limit its focus to survival alone."²¹² Habitat protection thus becomes a function of the lowest common denominator—survival.

Critical habitat designations and final listing rules must be published concurrently, with two exceptions.²¹³ First, if the Secretary finds that prompt listing is essential to the survival of the species and that designation of critical habitat would delay the listing, or second, if the critical habitat is not determinable at the time, designation may be postponed.²¹⁴ When the habitat is not determinable, the Secretary has up to two years to gain the necessary data and designate the habitat "to the maximum extent prudent."²¹⁵ Practically, simultaneous designation is often preferable and can relieve some of the frustration associated with the ESA:

[L]eft unsatisfied are the property owners and developers seeking approval for projects after region-wide development is perceived to have crossed the "harm" line of cumulative adverse habitat impacts. Those projects, unlike earlier projects which are perceived as having slipped by, could face intensified standards... as the Service attempts through its cumulative impacts analysis to slow the tide of regional habitat loss. Hence, often a substantial portion of a community would prefer that the ESA review criteria

²⁰⁸ 50 C.F.R. § 424.12(e) (1999).

²⁰⁹ 16 U.S.C. § 1532(5)(C) (1994).

²¹⁰ *Id.* § 1532(3).

²¹¹ 50 C.F.R. § 402.2 (1999) (emphasis added).

²¹² Houck, *supra* note 192, at 299.

²¹³ 16 U.S.C. § 1533(b)(6)(C)(i)-(ii) (1994); 50 C.F.R. § 424.17 (b) (1999).

²¹⁴ 16 U.S.C. § 1533(b)(6)(C)(i)-(ii) (1994).

²¹⁵ *Id.* § 1533(a)(3). Factors tantamount to imprudence include potential taking, vandalism, lack of collecting prohibitions on nonfederal lands, difficulty in enforcing all taking and harm prohibitions, publicity, and a lack of benefit. Houck, *supra* note 192, at 304-05.

apply earlier in time to cover even the very first project in a listed species' behavioral habitat region.²¹⁶

Yet critical habitat designations for listed species remain an anomaly. As of March 31, 1999, of 1181 listed species, only 120, or slightly more than ten percent, had designated critical habitat.²¹⁷ Thus, it becomes evident that the exceptions have swallowed the rule.

The implementing agencies have determined that designation of critical habitat provides no benefit.²¹⁸ However, habitat preservation is key in preventing extinctions.²¹⁹ It can be difficult to conceive of a situation wherein designating critical habitat provides no benefit. One illustration occurs when a species lives on federal land and the land management agency already knows about the species. Presumably, no additional benefit accrues from designating habitat that did not exist at listing. This situation proves contrary to reality.²²⁰ "[C]ase law illustrates beyond question that the ESA's prohibition on modification of critical habitat is interpreted by courts as strong and unyielding; the prohibition on jeopardy is viewed as discretionary and flexible."²²¹ Moreover, this analysis rests upon the assumption that the federal agencies consistently follow the law, even when contrary to their own missions.

"[T]hose waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity" compose essential fish habitat.²²² Further, EFH is that amount of habitat "necessary to support a sustainable fishery and a healthy ecosystem."²²³ This amount would presumably be a larger area than that currently occupied by an overfished stock. Thus, EFH provides an opportunity for a species's recovery. Although neither EFH nor critical habitat should encompass the entirety of a species's range, the Department of Commerce envisions EFH as broader than critical habitat: "EFH will always be greater than or equal to the critical habitat for any managed species listed as threatened or endangered under the [ESA]."²²⁴ Moreover, when a species is recovering from overfishing or population decline, historic habitats "necessary to support the recovery of the population and for which restoration is feasible" are included within the designation.²²⁵ This

²¹⁶ Ruhl, *supra* note 171, at 1404.

²¹⁷ Division of Endangered Species, Fish & Wildlife Serv., *Endangered Species General Statistics* (visited Oct. 25, 1999) <<http://www.fws.gov/r9endspp/esastats.html>>.

²¹⁸ See *supra* notes 193-94 and accompanying text.

²¹⁹ ENGER & SMITH, *supra* note 143, at 256.

²²⁰ This is evidenced by the spotted owl litigation in which the United States Forest Service knew for years where the endangered owls were located, but still allowed logging in those areas. See *Northern Spotted Owl v. Lujan*, 758 F. Supp. 621, 627-28 (W.D. Wash. 1991); Houck, *supra* note 192, at 305.

²²¹ Houck, *supra* note 192, at 310.

²²² 16 U.S.C. § 1802(10) (1994 & Supp. IV 1998).

²²³ 50 C.F.R. § 600.815(a)(2)(ii) (1999).

²²⁴ *Id.* § 600.815(a)(2)(ii)(C).

²²⁵ *Id.* § 600.815(a)(2)(ii)(B).

phenomenon is evidenced by the designation of the entire Gulf of Mexico as essential fish habitat.²²⁶

Moreover, flexibility under the ESA can often metamorphose into an exception. An example of this kind of extreme flexibility is the determination that species protection is "warranted but precluded."²²⁷ The warranted but precluded category contains those species that meet the requisites for listing under the ESA, but remain unlisted.²²⁸ Originally conceived as an opportunity to prioritize species and address the most dire cases first, the category has grown into a manipulable purgatory where implementing agencies may place species that, if listed, would delay projects or generate conflict.²²⁹ Species may remain "warranted but precluded" for years.²³⁰ In short, the category may be used to avoid the unfavorable political consequences that may result from implementing the letter and spirit of the ESA through actual listing. The SFA contains no language analogous to "warranted but precluded."

Under the SFA, each fishery management plan is required to "describe and identify" EFH, "minimize to the extent practicable adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitat."²³¹ The SFA requires that EFH be included in all fishery management plans without exception and without Secretarial discretion.²³²

However, the Secretary may extend the deadline for identifying, and therefore implementing, EFH. The Gulf Council, for example, has identified EFH for one-third of the species under their jurisdiction,²³³ and "EFH for the remaining managed species, as well as additional refinement of the available information on the representative species, will be addressed in future [fishery management plan] amendments, as appropriate."²³⁴ Consequently, delay could practically function as the equivalent of warranted but precluded.

3. *Nonimplementation and Budgetary Concerns*

Nonimplementation varies slightly from misimplementation in that the particular provisions the agency is charged with faithfully executing are not

²²⁶ See *id.* § 622.

²²⁷ See Houck, *supra* note 192, at 285-86.

²²⁸ See *id.* at 296 (noting that, in 1993, more species were "warranted but precluded" than were actually listed).

²²⁹ *Id.*; see also Annual Description of Progress on Listing Actions and Findings on Recycled Petitions, 56 Fed. Reg. 58,664, 58,665 (Nov. 21, 1991) (listing warranted but precluded species).

²³⁰ See U. S. GEN. ACCOUNTING OFFICE, ENDANGERED SPECIES ACT: TYPES AND NUMBER OF IMPLEMENTING ACTIONS 23 (1992) (noting that, as of 1991, 56 species had been in the warranted but precluded category for eight years).

²³¹ 16 U.S.C. § 1853(a)(7) (Supp. IV 1998).

²³² Compare 16 U.S.C. § 1533(b)(2) (1994) (ESA), with 16 U.S.C. § 1853(a)(7) (Supp. IV 1998) (SFA).

²³³ GULF OF MEXICO FISHERY MANAGEMENT COUNCIL, *supra* note 57, at 22.

²³⁴ *Id.*

employed at all. There is no emasculating interpretation when applying the statute; the agency simply fails to implement the statute at all. Nonimplementation often occurs because of budgetary restraints and the exercise of "management" measures to avoid nondiscretionary duties.

While some listing activity under the ESA has taken place, the pace has been excruciatingly slow. Between 1987 and 1991 an average of forty-four species were placed on the endangered species list annually.²³⁵ At that rate, the approximately six hundred candidates in 1991 would not be listed until 2006.²³⁶ The rate becomes more dismal with the reality that additional species will become candidates; in 1991 approximately three thousand were identified as possibly threatened or endangered.²³⁷ Moreover, Congress has imposed periodic moratoriums on ESA activities, including listing and designation of critical habitat, which means that no listing occurred at all.²³⁸ In 1998, of the 1175 listed species, only 120 had designated critical habitat.²³⁹ In 1991, 105 listed species had designated critical habitat²⁴⁰; thus, only 15 designations have been completed during this seven-year period. Finally, even when critical habitat is designated, it is rarely done in a timely fashion.²⁴¹

Agency officials have given four reasons to explain this discrepancy:

- 1) critical habitat designations do not necessarily provide much benefit for the species; 2) compared with other ESA requirements, designating critical habitat is considered a low priority; 3) additional biological and economic data necessary to make sound critical habitat determinations are difficult to obtain; and, 4) critical habitat designations may expose species to collection or illegal taking by publicly identifying where they are located.²⁴²

In reality, the designations are a low priority because they are disfavored by Congress, inadequately funded, and resource intensive to develop.

When budgets do not meet the projected costs of implementation, some implementation goals will go unmet. The Service understands that the "numerous statutory responsibilities [it] bear[s] under the Act . . . do not come with an unlimited budget."²⁴³ Some may accuse Congress of inappropriately legislating through appropriations, effectively enacting an amendment that would never get a majority vote standing alone as a bill. Imagine that a bill that would eliminate twenty-five percent of an agency's

²³⁵ U. S. GEN. ACCOUNTING OFFICE, *supra* note 230, at 39.

²³⁶ *Id.*

²³⁷ *Id.*

²³⁸ See Proposed Listing Priority Guidance for Fiscal Years 1999 and 2000, 64 Fed. Reg. 27,596, 27,597 (May 20, 1999) (program to continue deferring certain types of listing activities allegedly because of previous congressional moratorium on listing and designation of critical habitat).

²³⁹ Division of Endangered Species, *supra* note 217. This figure represents 10% of all listed species. *Id.*; see also U. S. GEN. ACCOUNTING OFFICE, *supra* note 230, at 29.

²⁴⁰ U. S. GEN. ACCOUNTING OFFICE, *supra* note 230, at 29.

²⁴¹ Critical habitat designations represent 59% of rules that were issued more than six months past due. *Id.*

²⁴² *Id.* at 28-29.

²⁴³ 64 Fed. Reg. at 27,599.

enforcement authorities is brought to a vote in Congress. Justifying this decision might be difficult. Instead, Congress allocates only seventy-five percent of the agency's expected enforcement budget and hides behind "fiscal duty" when confronted about unexecuted portions of the law.

During the Bush Administration, the average cost of listing a species was \$60,000, and Congress allocated \$3.5 million per year for the process—roughly allowing the listing of sixty species per year.²⁴⁴ In 1995 and 1996 Congress rescinded \$1.5 million from the listing budget and the Emergency Supplemental Appropriations and Rescissions for the Department of Defense to Preserve and Enhance Military Readiness Act of 1995²⁴⁵ placed a complete moratorium on the listing of species and the designation of critical habitat by forbidding any remaining funds from being used for these purposes. The 1998 appropriations expressly limited spending on listing actions, including critical habitat designation, to \$5.19 million.²⁴⁶ Once funding resumed, however, an even larger than normal backlog existed because of the moratorium. In response, FWS developed a hierarchical priority system for use of the funds. The system placed emergency listings at the top and preparation of critical habitat designations at the bottom.²⁴⁷ Thus,

critical habitat designations during [fiscal year 1998] should not be expected. The . . . listing appropriation is only sufficient to support high-priority listing, candidate assessment, petition processing activities, and a minimal amount of high priority delisting/reclassification actions. A single critical habitat designation could consume up to twenty percent of the total listing appropriation, thereby disrupting the . . . biologically based priorities.²⁴⁸

During these years of fiscal conservatism, congressional cutbacks are partly responsible for the insidious demise of ESA implementation. However, agencies bear some culpability as well. These "biologically based priorities" give precedence to completion of a withdrawal of a proposed listing because

once a determination not to make a final listing has been made, publishing the withdrawal of the proposed listing takes minimal time and appropriations. Thus, it is more cost effective and efficient to bring closure to the proposed listing . . . For the same reasons . . . critical habitat prudence and determinability findings [are a higher priority than designating critical habitat.]²⁴⁹

This kind of rationale explains how agencies can fail to make realistic budget proposals and not even ask for the funds necessary to carry out their

²⁴⁴ Nancy Kubasek et al., *The Endangered Species Act: Time for a New Approach?*, 24 ENVTL L. 329, 336 (1994).

²⁴⁵ Pub. L. No. 104-6, tit. II ch. IV, 109 Stat. 73, 86.

²⁴⁶ See Final Listing Priority Guidance for Fiscal Years 1998 and 1999, 63 Fed. Reg. 25,502, 25,503 (May 8, 1998).

²⁴⁷ *Id.* at 25,502.

²⁴⁸ *Id.* at 25,509.

²⁴⁹ *Id.*

entire mission.²⁵⁰ Something is seriously awry when a program designed to protect species is prioritized in a way that emphasizes the withdrawal of protection over species listing and critical habitat designation. In the words of the Fish and Wildlife Service, "[c]ompletion of a withdrawal may not appear consistent with the conservation intent of this guidance."²⁵¹

Despite the unanimous approval and wide spread popularity of the SFA,²⁵² the same financial fate appears to have befallen EFH. President Clinton's proposed budget for fiscal year 1999 allocated \$4.85 million for implementation of EFH.²⁵³ Congress approved only \$750,000.²⁵⁴ Without resources to back the necessary research and review of proposed projects, EFH becomes hollow congressional rhetoric, as evidenced by the Committee on Appropriations Report of the 105th Congress:

The Committee is concerned that the National Marine Fisheries Service has exceeded the scope of congressional intent in implementing the essential fish habitat provisions of the 1966 Magnuson-Stevens Act. Further, the Committee questions the advisability of providing more funding for essential fish habitat programs in fiscal year 1999 than for the development and implementation of fishery management plans.²⁵⁵

D. Exceptions

Opponents of the ESA argue that, by requiring the designation of critical habitat, the ESA forces a few to bear the costs and responsibilities to preserve and protect species for the benefit of all. In 1982 Congress provided an alleviating mechanism by authorizing the habitat conservation plan (HCP) as a means to allow incidental takes of listed species.²⁵⁶ Prior to the HCP option the ESA absolutely precluded certain development where endangered species were present if there was a possibility of taking a member of the endangered species.²⁵⁷

A landowner can prepare an HCP to detail the impact of a proposed development on listed species, ways to mitigate harmful impacts, and

²⁵⁰ Houck, *supra* note 192, at 293-94.

²⁵¹ 63 Fed. Reg. at 25,509.

²⁵² See *CMC Hails Congress for Today's Passage of Sustainable Fisheries Act*, U.S. Newswire, Sept. 30, 1996, available in 1996 WL 12123158.

²⁵³ Telephone interview with Rick Reubsamen, Southeast Regional EFH Coordinator, National Marine Fisheries Service (Jan. 11, 1999).

²⁵⁴ *Id.*

²⁵⁵ S. REP. NO. 105-235, at 2 (1998).

²⁵⁶ 16 U.S.C. § 1539 (1994).

²⁵⁷ The ESA forbids "taking" by both private parties and federal agencies. The ESA defines "take" as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct" with respect to a protected species. *Id.* § 1532(19). NMFS and FWS issue incidental take permits to authorize lawful projects that may result in the taking of an endangered species. *Id.* § 1539. Private landowners without a federal nexus or connection were not eligible to apply for an incidental take permit until 1982 when Congress enacted section 10 of the ESA to make incidental take permits available to private parties, creating the HCP to offset the take. Albert C. Lin, *Participants' Experiences with Habitat Conservation Plans and Suggestions for Streamlining the Process*, 23 *ECOLOGY* L.Q. 369, 375 (1996).

methods to preserve habitat within the development.²⁵⁸ The landowner delivers the HCP to the Fish and Wildlife Service if the land in question includes wildlife and to the National Marine Fisheries Service if the land in question has fish-bearing streams.²⁵⁹ If FWS and NMFS determine that the HCP will not adversely affect the species and will adequately provide for the species' habitats, then the landowner applies for an incidental take permit (ITP). With an ITP in hand, a landowner may develop the property, as long as the activity will not render the species unrecoverable.²⁶⁰ According to FWS, Congress hoped this process "would encourage 'creative partnerships' between the public and private sectors and state, municipal, and Federal agencies."²⁶¹ The HCP has been both hailed as a balance between competing interests and criticized as a cave-in to development.²⁶² Few landowners attempted to use the HCP process until the Clinton Administration embraced HCPs as the balance between development and protection of species.²⁶³ Since then, the HCP has taken on a life of its own.

The HCP process became more attractive to developers in 1992 when the Clinton Administration announced its "no surprises" policy.²⁶⁴ Prior to this policy, HCPs included only listed species that actually inhabited the properties. Now, a landowner may provide survival and habitat standards for species other than the listed species found on the property and for any species that may occur later on the property.²⁶⁵ If a species occurring on the property is later listed, then the landowner's HCP already provides for the species and meets ESA requirements, and the landowner avoids repeating the HCP process for the newly listed species. The HCP shields the landowner for the approved time period of the HCP, sometimes up to 150 years.²⁶⁶

²⁵⁸ 16 U.S.C. § 1539(2)(B) (1994).

²⁵⁹ Generally, when an HCP includes anadromous fish, it will almost necessarily include other fish and riparian habitat wildlife. In this case, both NMFS and FWS are involved in the approval of the HCP. U.S. FISH & WILDLIFE SERV. & NATIONAL MARINE FISHERIES SERV., HABITAT CONSERVATION PLANNING HANDBOOK 1-3 (1996).

²⁶⁰ 16 U.S.C. § 1539(2)(B) (1994).

²⁶¹ U.S. FISH & WILDLIFE SERV. & NATIONAL MARINE FISHERIES SERV., *supra* note 259, at 1-2 (citing H.R. REP. 97-835, reprinted in 1982 U.S.C.C.A.N. 2860).

²⁶² See Paul Larmer, *Habitat Conservation Plans: Who Wins and Who Loses When Uncle Sam Cuts Deals with Landowners to Protect Endangered Species?*, HIGH COUNTRY NEWS, Aug. 4, 1997, at 1. Originally intended for smaller land owners so that they would not carry the burden of conservation for the public at large, HCPs have evolved into insurance-like tools for corporate interests to develop large tracts of land on which endangered species are found or may later be discovered. *Id.*

²⁶³ See Deborah Schoch, *Developer-Environmental Pact Policy is Challenged*, L.A. TIMES, Nov. 2, 1996, at B6 (noting that the United States Interior Secretary has cited the policy as proof that the Endangered Species Act is more flexible than critics claim).

²⁶⁴ Under the no surprises policy, FWS assures developers who create and implement HCPs that they will not be surprised with additional costs or rules during the life of the plan. *Id.*

²⁶⁵ *Protections for Rare Plants and Animals Have Increased Under "New" Endangered Species Act*, M2 Presswire, July 4, 1997, available in 1997 WL 11938177.

²⁶⁶ Lin, *supra* note 257, at 386; U.S. FISH & WILDLIFE SERV. & NATIONAL MARINE FISHERIES SERV., *supra* note 259, at 3-28 to 3-33.

From 1982 to 1992 only fourteen HCPs were approved.²⁶⁷ Since 1992 and the emergence of the no surprises policy, FWS has approved over two hundred HCPs.²⁶⁸ Several HCPs cover thousands of acres and rely upon an ecosystem analysis to manage the species.²⁶⁹ The use of the ecosystem basis and the increasing number of HCPs may suggest that HCPs will improve the status of endangered species. But the standards by which HCPs are approved are subjective and sometimes unclear, and the opposing camps are deeply entrenched. Members of the Clinton Administration and developers remain confident that the HCP offers a conservation-oriented approach to development.²⁷⁰ Despite the popularity of HCPs, most environmentalists remain skeptical of development in or near the habitat of an endangered species. They fear that endorsement by FWS or NMFS under the authority of the ESA yields a false sense of security about development and ignores the frailty of endangered species.²⁷¹

The evolving permission slip to develop within critical habitat provides lessons for EFH provisions and standards. Regulators claim that EFH provisions are not land use provisions. However, the HCP was not intended as a land use authorization either. Instead, it was a concession to small-scale development to protect individual landowners from footing the bill for the advancement of the national goal of protecting endangered species. Policy makers should be aware of the evolution of HCP provisions into land use licenses so as to avoid allowing similar exceptions in the management of EFH. These types of activities often appear individually benign, but can collectively pose a major threat to habitat.

²⁶⁷ Lin, *supra* note 257, at 383.

²⁶⁸ *Id.* at 383-84. As of 1997, 212 partnerships with private landowners have been completed and signed, and over 200 are at various stages of implementation. See *Protections for Rare Plants and Animals*, *supra* note 265, at *4.

By September 1997, 18.5 million acres of private land will be covered by [HCPs], including both preserve lands and those that will be actively managed for conservation or developed. These agreements will protect over 300 species, including state and federally listed species, candidates for listing and species of special concern. Only 14 habitat conservation plans were signed between 1982 and 1993, the year President Clinton took office.

Id.

²⁶⁹ Lin, *supra* note 257, at 383-84. See generally Oliver A. Houck, *On the Law of Biodiversity and Ecosystem Management*, 81 MINN. L. REV. 869 (1997) (discussing ecosystem management).

²⁷⁰ See *Protections for Rare Plants and Animals*, *supra* note 265, at *8.

"Secretary Babbitt's commitment to achieving the goals of the Endangered Species Act through Habitat Conservation Plans, backed by his No Surprises policy, has captured substantial enthusiasm and trust from many private landowners and resource users. The beneficiaries are species which would otherwise be unprotected, even as the sensible development of resources progresses and benefits the economy."

Id. at *5 (quoting Guy R. Martin, Western Urban Water Coalition and Bay-Delta Urban Coalition).

²⁷¹ See *Defenders of Wildlife Praises Bipartisan Effort to Reauthorize ESA*, U.S. Newswire, July 30, 1997, available in 1997 WL 5714484 (discussing reaction to ESA reauthorization).

E. Ecosystem Management

Among its purposes, the ESA states that it should "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved."²⁷² This statement of purpose reveals some of the fatal flaws in the ESA.

First, it is a statute aimed at protecting species only once their numbers become so depleted that they are threatened or endangered. Thus, it centers on the results of past exploitation and habitat destruction, entering the game at a very late stage. As a statute that waits for species to warrant help before the long administrative protection process may begin, it was designed to treat the symptoms rather than cure the causes of habitat loss and the resulting failing ecosystems.²⁷³ The authors of the unenacted 1990 National Biological Diversity Conservation and Environmental Research Act²⁷⁴ recognized this correlation, finding that "maintaining biological diversity through habitat preservation is often less costly and more effective than efforts to save species once they become endangered."²⁷⁵ However, as the Councils are learning with EFH, managing an entire ecosystem poses a daunting task, perhaps beyond the resources and capability of society.

Second, the ESA reveals an effort by Congress to shift attention toward species' habitat by designating critical habitat. Unfortunately, even with a critical habitat designation, the statute does not authorize recognition of the ecosystem as a whole. Instead, the designation is intended to protect the depleted, last-stand range of single species, and does not view species as links in a chain or provide for the host of interdependent species that may be destroyed as a result of one extinction.²⁷⁶

The flaws inherent in the ESA preclude it from recovering endangered species, because as written, it cannot preserve ecological communities, habitats, or biological diversity.

²⁷² 16 U.S.C. § 1531(b) (1994).

²⁷³ One example of the interdependence within ecosystems is that for every species that becomes extinct, an average of 30 other species dependent on that species move into the endangered category. JONES ET AL., *supra* note 143, at 134.

²⁷⁴ S. 2368, 101st Cong. (1989). The National Biological Diversity Conservation and Environmental Research Act has been introduced on four occasions—H.R. 305, 103d Cong. (1993); H.R. 585, 102d Cong. (1991); H.R. 1268, 101st Cong. (1990); and H.R. 4335, 100th Cong. (1988).

²⁷⁵ S. 2368, § 2(11), reprinted in 136 CONG. REC. 5916 (Mar. 29, 1990).

²⁷⁶ Christopher A. Cole, *Species Conservation in the United States: The Ultimate Failure of the Endangered Species Act and Other Land Use Laws*, 72 B.U. L. REV. 343, 345 (1992).

IV. EFH, NEPA, AND THE FWCA: THE CONSULTATION PROVISIONS

A. NEPA

The National Environmental Policy Act (NEPA)²⁷⁷ has been called many things during its three decades of existence—the Magna Carta of environmental law,²⁷⁸ the Sherman Act of environmental law,²⁷⁹ the centerpiece of environmental law,²⁸⁰ and the “most important [of our] environmental legislation.”²⁸¹ Enacted in 1969 with the inspiring goal to “create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans,”²⁸² NEPA “sets forth a ringing and vague statement of purposes.”²⁸³ This vagueness has grown into a powerful tool for environmentalists who seek to challenge federal actions that ignore potential environmental impacts.

Aside from its statements of policy objectives, NEPA’s “action-forcing” mechanism is in section 102, which requires all federal agencies to include detailed statements of the environmental impacts of major federal actions significantly affecting the human environment.²⁸⁴ A major federal action is one “that requires substantial planning, time, resources, or expenditure” that a federal agency proposes or permits.²⁸⁵ Through the environmental assessment (EA) and environmental impact statement (EIS)²⁸⁶ reviews,

²⁷⁷ For a thorough review of NEPA, see generally WILLIAM H. RODGERS, JR., *ENVIRONMENTAL LAW*, ch. 9 (1994). For samples of legal analysis of NEPA, see generally Michael C. Blumm, *A Primer on Environmental Law and Some Directions for the Future*, 11 VA. ENVTL. L.J. 381 (1992) [hereinafter Blumm, *A Primer on Environmental Law*]; Michael C. Blumm, *The National Environmental Policy Act at Twenty: A Preface*, 20 ENVTL. L. 447 (1990); Timothy Patrick Brady, “But Most of it Belongs to Those Yet to be Born”: *The Public Trust Doctrine, NEPA, and the Stewardship Ethic*, 17 B.C. ENVTL. AFF. L. REV. 521 (1990); Lynton K. Caldwell, *Beyond NEPA: Future Significance of the National Environmental Policy Act*, 22 HARV. ENVTL. L. REV. 203 (1998); Philip Michael Ferester, *Revitalizing the National Environmental Policy Act: Substantive Law Adaptations from NEPA’s Progeny*, 16 HARV. ENVTL. L. REV. 207 (1992); Mary K. Fitzgerald, *Small Handles, Big Impacts: When Should the National Environmental Policy Act Require an Environmental Impact Statement?*, 23 B.C. ENVTL. AFF. L. REV. 437 (1996); Robert P. Frank, *Delegation of Environmental Impact Statement Preparation: A Critique of NEPA’s Enforcement*, 13 B.C. ENVTL. AFF. L. REV. 79 (1985); Arthur W. Murphy, *The National Environmental Policy Act and the Licensing Process: Environmentalist Magna Carta or Agency Coup de Grace?*, 72 COLUM. L. REV. 963 (1972).

²⁷⁸ James W. Spensley, *National Environmental Policy Act*, in *ENVIRONMENTAL LAW HANDBOOK* 321, 321 (J. Gordon Arbuckle et al. eds., 12th ed. 1993).

²⁷⁹ RODGERS, *supra* note 277, at 801.

²⁸⁰ Blumm, *A Primer on Environmental Law*, *supra* note 277, at 382.

²⁸¹ Murphy, *supra* note 277, at 965.

²⁸² 42 U.S.C. § 4331(a) (1994).

²⁸³ RODGERS, *supra* note 277, at 801.

²⁸⁴ 42 U.S.C. § 4332 (1994 & Supp. III 1997).

²⁸⁵ See *Natural Resources Defense Council, Inc. v. Grant*, 341 F. Supp. 356, 366–67 (E.D.N.C. 1972); RODGERS, *supra* note 277, at 873–74.

²⁸⁶ An environmental assessment is a study performed to determine whether the project will cause a significant impact. If there is a finding of no significant impact (FONSI), the federal

agencies are forced to consider environmental impacts before action is taken. In addition, NEPA mandates coordination and collaboration between federal agencies. Specifically, "[p]rior to making any detailed statement, the responsible federal official shall consult with and obtain the comments of any federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved."²⁸⁷ This includes the Fish and Wildlife Service for freshwater and anadromous species and NMFS for marine and anadromous species.²⁸⁸

For practical purposes, that is where NEPA's mandates end. The Supreme Court has declared that NEPA's reach is procedural rather than substantive: NEPA cannot "mandate particular results but only prescribe the necessary process."²⁸⁹ Thus, once a federal agency has completed the "detailed statement" required by NEPA, it may then continue its proposed activity. Essentially, NEPA offers a procedural challenge that "merely prohibits uninformed—rather than unwise—agency actions."²⁹⁰

NEPA's consultation provisions and strictly procedural reach parallels the EFH provisions. But the Magnuson Act takes consultation one step further by requiring federal agencies to respond to NMFS in writing and to respond to the Councils' recommendations and comments within thirty days of receipt.²⁹¹ Even with the 1986 habitat amendments, one commentator notes, the Councils' comments have the potential to affect both the EA and EIS process by providing "evidence that a proposed activity may adversely affect fish habitat."²⁹² By requiring more detailed responses to comments and recommendations, the EFH provisions may improve decision making simply by forcing federal agencies to explain the rationale for continuing a project in the face of damage to or destruction of EFH. They also give the Councils commenting authority typically reserved for federal agencies.

agency's duty is complete. If there is a finding of significant impact, then the federal agency must take the next step and complete an environmental impact statement. See RODGERS, *supra* note 277, at 870.

²⁸⁷ 42 U.S.C. § 4332 (1994 & Supp. III 1997).

²⁸⁸ See National Environmental Policy Act (NEPA) Implementation Procedures; Appendices I, II, and III; Final Rule, 49 Fed. Reg. 49,750, 49,772-76 (Dec. 21, 1984).

²⁸⁹ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989); see also *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519, 548 (1978); *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976). The Court has also stated that

[o]nce an agency has made a decision subject to NEPA's procedural requirements, the only role for a court is to ensure that the agency has considered the environmental consequences; it cannot "interject itself within the area of discretion of the executive as to the choice of the action to be taken."

Strycker's Bay Neighborhood Council v. Karlen, 444 U.S. 223, 227-28 (1980) (quoting *Kleppe v. Sierra Club*, 427 U.S. at 410 n.21).

²⁹⁰ *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 351.

²⁹¹ *But see* 40 C.F.R. § 1507.3 (1999) (requiring agencies to adopt procedures necessary to supplement NEPA procedures including requiring agencies to respond to comments on the environmental assessment and draft environmental impact statements).

²⁹² *Kennedy, supra* note 23, at 354.

The EFH provisions also surpass NEPA's reach, because they apply to ongoing federal activities.²⁹³ NEPA only requires an EA or EIS for new or changing projects.²⁹⁴ However, federal projects are not "grandfathered in" under EFH; federal agencies must therefore respond to comments from the Councils and NMFS on both proposed and ongoing activities.²⁹⁵ The result is that even ongoing offshore oil and gas exploration, for instance, will now involve an additional obligation to respond to habitat destruction concerns.

Additionally, EFH provisions do not distinguish between "major" and "minor" impacts, technically requiring consultation on *any* project that may affect EFH.²⁹⁶ However, implementation of EFH may make the magnitude of the project irrelevant. Tom Bigford of the NMFS Office of Habitat Conservation explains that the EFH program focuses energies on "those actions that deserve attention."²⁹⁷ Thus, through administrative interpretation and implementation, EFH may effectively apply to "major" federal actions like its NEPA counterpart.

Because of the similarity between the two schemes' requirements and goals, the EFH provisions may be swallowed by NEPA procedures. In fact, regulators assure that the consultation called for in the SFA is not new. These analyses and consultations have been occurring under the guise of NEPA review for over twenty years. Only the requirement for federal agencies to respond to comments is new. All other consultation is already being done, only it is now known under a new name—EFH.²⁹⁸ As shown in the next section, this kind of incorporation of review and consultation requirements of NEPA and other statutes is not foreign to the courts.²⁹⁹

At this time, however, NMFS does not assume that action agencies are incorporating EFH analyses into their project reviews. In fact, if an action agency determines that a project has "no impact" on EFH, NMFS responds by forwarding information about EFH, hoping that the federal agency will

²⁹³ See *id.* at 355.

²⁹⁴ See 42 U.S.C. § 4332(C) (1994 & Supp. III 1997).

²⁹⁵ See 16 U.S.C. § 1855(b)(2) (1994 & Supp. IV 1998); Interim Final Rule, 62 Fed. Reg. 66,531, 66,532 (Dec. 19, 1997).

²⁹⁶ See 16 U.S.C. § 1855(b)(2) (1994 & Supp. IV 1998); 62 Fed. Reg. at 66,532.

²⁹⁷ Tom Bigford, Office of Habitat Conservation, National Marine Fisheries Service, *Overview of Essential Fish Habitat Legislation*, Comments made at Southeast Region National Marine Fisheries Service/Sea Grant Program Development Meeting on Essential Fish Habitat Collaboration (July 26, 1999).

²⁹⁸ *Id.* (July 27, 1999). Rick Ruebsamen, the NMFS Southeast Regional EFH Coordinator, has explained that EFH is a "new way to couch an old problem." Rick Ruebsamen, *Overview of the Essential Fish Habitat Legislation*, Comments made at Southeast Region National Marine Fisheries Service/Sea Grant Development Meeting on Essential Fish Habitat Collaboration (July 26, 1999). In addition, Andrew Kemmerer, Director of the NMFS Office of Habitat Conservation, has stated that "the only thing the mandate does *new* is to require the action agency to respond to the NMFS." Andrew Kemmerer, *National Marine Fisheries Service's Mandate in the Essential Fish Habitat Legislative Initiative: How NMFS Operates Their Research and Outreach Programs*, Comments made at Southeast Region National Marine Fisheries Service/Sea Grant Development Meeting on Essential Fish Habitat Collaboration (July 27, 1999).

²⁹⁹ See *infra* text accompanying notes 326-30 for a discussion of NEPA "swallowing" the requirements of the FWCA.

consider the EFH information and reassess possible impacts.³⁰⁰ If a federal agency "feels" that it will have an impact on the resource, it conducts an "abbreviated EFH assessment."³⁰¹

In addition, like NEPA, the EFH provisions are merely procedural. The purpose of EFH is to "increase attention to habitat," but like NEPA, EFH is not meant to force particular actions. NMFS claims that EFH was "not meant to act as a land use statute" or to restrict state or federal projects.³⁰² Procedurally, however, a "higher review" exists: NMFS can not only recommend conservation measures to an action agency, but can also forward concerns to NMFS headquarters and the action agency headquarters to attempt a compromise at this higher level.³⁰³ If this interpretation is challenged,³⁰⁴ courts will likely follow the language of the statute and find the EFH provisions procedural in nature only, imposing no real duty to mitigate impacts on EFH.

B. Fish and Wildlife Coordination Act

Even though the Fish and Wildlife Coordination Act (FWCA) dates back to the Depression Era, a surprisingly small amount of litigation and relatively little regulation exists under its auspices. The FWCA "provide[s] that wildlife conservation shall receive equal consideration and be coordinated with other features of water-resource development programs."³⁰⁵ While the FWCA is a "remarkably forward looking statute,"³⁰⁶ the proliferation of wildlife and fisheries conservation statutes and pollution control statutes in later years underscores its inadequacies.³⁰⁷ The FWCA is most decidedly not a land use statute and, like NEPA and the EFH provisions, only requires consultation.³⁰⁸

The FWCA requires consultation with state and federal wildlife managers when a federal agency acts or permits a project to impound, divert, deepen, or otherwise control or modify a water body.³⁰⁹ In contrast to laws like the ESA or NEPA, the FWCA has little application to most actions undertaken by the federal government. However, it does have tremendous implications for activities that may affect fisheries, and it applies regardless of whether the water-resource activity is "major." Thus, the FWCA applies to

³⁰⁰ Ruebsamen, *supra* note 298. Ruebsamen has stated that action agencies are making "appropriate responses to our recommendations." *Id.*

³⁰¹ *Id.*

³⁰² Conversation with Ronald L. Hill, Sea Grant Marine Policy Fellow, NOAA Office of Habitat Conservation, Marine Technology Society Annual Meeting, Baltimore, Maryland (Nov. 11, 1998).

³⁰³ Ruebsamen, *supra* note 298.

³⁰⁴ Like NEPA, the EFH provisions can only be challenged through the Administrative Procedure Act provisions. 5 U.S.C. §§ 551-559, 701-706, 1305, 3105, 3344 (1994 & Supp IV 1998).

³⁰⁵ 16 U.S.C. § 661 (1994).

³⁰⁶ MICHAEL J. BEAN & MELANE J. ROWLAND, *THE EVOLUTION OF NATIONAL WILDLIFE LAW* 404 (1997).

³⁰⁷ See *id.* at 404-16 (discussing the FWCA in general).

³⁰⁸ *Id.* at 405.

³⁰⁹ 16 U.S.C. § 662(a) (1994).

a group of smaller federal projects that may otherwise go unexamined under NEPA, but that could nevertheless negatively affect fish.

Consultation under the FWCA requires the Secretary of the Interior and state wildlife agencies to provide specific recommendations for conserving or developing wildlife resources or mitigating damage to wildlife attributable to the project.³¹⁰ These may include 1) varying the project to decrease adverse effects on fish and wildlife, 2) mitigation measures that compensate for unavoidable adverse impacts, or 3) studies to ascertain the extent of adverse impacts and the best means to compensate for them.³¹¹ Of these recommendations, the project plan shall include those justifiable means and measures that still allow maximum project benefits.³¹² Lands may also be acquired in order to protect habitat or provide for habitat mitigation.³¹³ The cost of planning and implementing the recommended conservation measures "constitute[s] an integral part of the cost" of the project.³¹⁴

The FWCA has its limitations as well. It is jurisdictionally limited and addresses only those fisheries managed by the Department of Interior.³¹⁵ Thus, fisheries under the jurisdiction of NMFS, which is located in the Commerce Department, are not required to be considered under the FWCA. By including a FWCA-like consultation in the EFH provisions, the SFA explicitly addresses marine species and makes some progress toward closing this gap in fisheries protection.³¹⁶

Unfortunately, in surveying FWCA implementation in the early 1970s, Congress discovered "failures at every step of the FWCA process."³¹⁷ Congress found that consultation was inadequate "and often glossed over or ignored impacts on wildlife," the FWS "lacked the funds necessary to make the reports," and no standards or criteria for evaluating wildlife factors existed.³¹⁸ Consequently, "water-resource projects continued to cause substantial losses of fish and wildlife. Furthermore, judicial enforcement . . . was virtually nonexistent."³¹⁹ In part, the failure can be considered a result of

³¹⁰ *Id.*

³¹¹ Michael Blumm, *Fulfilling the Parity Promise: A Perspective on Scientific Proof, Economic Cost and Indian Treaty Rights in the Approval of the Columbia Basin Fish and Wildlife Program*, 13 ENVTL. L. 103, 109-11 (1982).

³¹² 16 U.S.C. § 662(c) (1994).

³¹³ *Id.*

³¹⁴ *Id.* § 662(d).

³¹⁵ *Steamboaters v. Federal Energy Regulatory Comm'n*, 759 F.2d 1382, 1389 (9th Cir. 1985).

³¹⁶ See 16 U.S.C. § 1855(b)(2) (1994 & Supp. IV 1998); Magnuson-Stevens Act Provisions; Essential Fish Habitat (EFH), 62 Fed. Reg. 66,531, 66,532 (Dec. 19, 1997). Of course, neither NMFS nor FWS manages every fish species. However, in theory, to the extent that many fish species share similar needs and react negatively to certain activities by including both in land (FWS) and marine (NMFS) species that do receive management consideration, all fish should receive a measure of protection from the detrimental effects of projects.

³¹⁷ Michael Veiluva, *The Fish and Wildlife Coordination Act in Environmental Litigation*, 9 ECOLOGY L.Q. 489, 491 (1981).

³¹⁸ *Id.*

³¹⁹ *Id.* Regulations setting procedures and standards under the FWCA were drafted but later withdrawn under the Reagan Administration. See Fish and Wildlife Coordination Act, 47 Fed. Reg. 31,299, 31,299 (July 19, 1982). The summary stated that

the agencies' de facto authority to reject recommended mitigation measures if they are "unjustifiable" relative to maximizing "overall project benefits."³²⁰ Congress's goal of "internalizing fish and wildlife costs as an integral part of total project costs was thwarted by" agency discretion and the perception that mitigation conflicted with agencies' missions.³²¹ Moreover, quantifying the extent of impacts is much easier after project completion. Determining fish and wildlife losses and appropriate mitigation at the time of project approval, rather than completion, delayed effective mitigation, allowed low-ball estimations of costs, and frustrated many mitigation measures.³²² Additionally, federal agencies often proceed as if under a cost-benefit rubric, although cost-benefit analysis is "both unnecessary and undesirable" under the FWCA.³²³ An additional downfall of this approach is the failure to consider distribution of the costs and benefits and the "unrealistic burden of proof on the biological sciences."³²⁴ The General Accounting Office concluded in 1974 that the FWCA had not been effectively carried out, because consultation had not always occurred when required, effects had often been inadequately or untimely evaluated, and jurisdictional issues between FWS and NMFS had caused problems.³²⁵

The FWCA also suffers from an absence of judicial enforcement stemming in part from unfortunate precedent precluding citizen enforcement, despite the Administrative Procedure Act.³²⁶ In *Rank v.*

[o]n December 18, 1980, the Departments of the Interior and Commerce jointly proposed rulemaking to implement the Fish and Wildlife Coordination Act as per a Presidential directive of July 12, 1978. That proposal became subject to review by the Presidential Task Force on Regulatory Relief. This proposed rulemaking is hereby withdrawn in favor of administrative actions preparing memoranda of agreement and other Executive instructions.

Id. (citations omitted); see also Fish and Wildlife Coordination Act; Notice of Proposed Rulemaking and Availability of Draft Environmental Statement, 45 Fed. Reg. 83,412 (Dec. 18, 1980) (Notice of Proposed Rulemaking and Availability of Draft EIS to compose uniform procedures for federal agency compliance with the FWCA); Fish and Wildlife Coordination Act; Notice of Proposed Rulemaking, 44 Fed. Reg. 29,300 (May 18, 1979) (proposing changes in rules under FWCA in accordance with the President's Water Policy Message of June 6, 1978 and the President's Water Policy Memorandum of July 12, 1978).

³²⁰ Blument, *supra* note 311, at 109-11.

³²¹ *Id.* at 110.

³²² *Id.* at 109-10.

³²³ Robert C. Lothrom, *The Misplaced Role of Cost-Benefit Analysis in Columbia Basin Fishery Mitigation*, 16 ENVTL. L. 517, 533 (1986).

³²⁴ *Id.* at 534.

³²⁵ U.S. GEN. ACCOUNTING OFFICE, IMPROVED FEDERAL EFFORTS NEEDED TO EQUALLY CONSIDER WILDLIFE CONSERVATION WITH OTHER FEATURES OF WATER RESOURCE DEVELOPMENTS 16-16, 21-22, 39 (1974). The Army Corps of Engineers in their own regulations seek and recognize input from NMFS on fisheries habitat issues. See 33 C.F.R. §§ 320.3, 325 (1999). However, courts have read the FWCA literally to require only comments from FWS; thus, impacts to fish species under the jurisdiction of NMFS may not be given consideration. *Steamboaters v. Federal Energy Regulatory Comm'n*, 759 F.2d 1382, 1389 (9th Cir. 1985).

³²⁶ BEAN & ROWLAND, *supra* note 306, at 192-93; see 5 U.S.C. § 702 (1994) (providing a private right of action to any person "suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of the relevant statute").

Krug,³²⁷ a court denied standing to a private citizen attempting to enforce the FWCA's application to a Bureau of Reclamation project, stating that initiation of such an action is the responsibility of the state.³²⁸ Then, with enactment of NEPA, courts came to view the FWCA and NEPA as indistinct procedural requirements. In the opinion of several courts, compliance with the FWCA was virtually automatic if an agency complied with NEPA.³²⁹ One commentator suggests that the failure to distinguish between the two statutes may have eroded the FWCA as an "effective tool for judicial review of agency decisions."³³⁰ In reality, the NEPA review should now address not only NEPA concerns but also concerns expressed in the FWCA and the EFH provisions.

A unified perspective potentially ignores unique, substantive features of the FWCA and EFH provisions. For example, under the FWCA, FWS must respond to questions posed by the action agency, action agencies are explicitly required to prepare and implement mitigation plans with a specific class of resources as the objective, and projects may not proceed at the cost of wildlife resources.³³¹ Thus, the FWCA contains a greater focus on outcome than does a purely procedural statute like NEPA. In addition, the EFH provisions call for the Secretary to provide comments on how action agencies may conserve EFH and directs action agencies to respond to such comments.³³²

V. CONCLUSION

[U]nder our so-called federal system, the Congress is constitutionally empowered to launch programs the scope, impact, consequences and workability of which are largely unknown, at least to the Congress, at the time of enactment; the federal bureaucracy is legally permitted to execute the congressional mandate with a high degree of befuddlement as long as it acts no

³²⁷ 90 F. Supp. 773 (S.D. Cal. 1950).

³²⁸ *Id.* at 801.

³²⁹ See, e.g., *Environmental Defense Fund v. Froehlke*, 473 F.2d 346, 356 (8th Cir. 1972) ("[I]f the Corps complies with NEPA in good faith, it will 'automatically take into consideration all of the factors required by the Fish and Wildlife Act and it is not reasonable to require them to do both separately.'" (quoting *Environmental Defense Fund v. Corps of Engineers*, 325 F. Supp. 749, 754 (E.D. Ark. 1971))); *Missouri Coalition for the Env't v. Corps of Engineers*, 678 F. Supp. 790, 803 (E.D. Mo. 1988) ("[A]n agency's compliance with NEPA automatically satisfies the requirements of the FWCA."); *County of Bergen v. Dole*, 620 F. Supp. 1009, 1064 (D.N.J. 1985) (relying on Eighth Circuit precedent that compliance with NEPA automatically satisfies the factors required by the FWCA and citing *State of Missouri ex rel Ashcroft v. Department of the Army*, 526 F. Supp. 660, 677 (W.D. Mo. 1980)); *Missouri v. Corps of Engineers*, 526 F. Supp. 660, 667 (W.D. Mo. 1980) ("[I]t follows from the reasoning in [*Environmental Defense Fund v. Froehlke*] that the Corps has also met the requirements of the Fish and Wildlife Coordination Act."). *But see National Wildlife Fed'n v. Andrus*, 440 F. Supp. 1245, 1255 (D.D.C. 1977) (requiring strict compliance with the FWCA when FWCA policy was not duplicated in NEPA). See also *Veiluva*, *supra* note 317, at 493-94.

³³⁰ *Veiluva*, *supra* note 317, at 501.

³³¹ See *id.* at 505-07.

³³² 16 U.S.C. § 1855(b)(4)(A), (B) (1994 & Supp. IV 1998).

more befuddled than the Congress must reasonably have anticipated; if ultimate execution of the congressional mandate requires interaction between federal and state bureaucracy, the resultant maze is one of the prices required under the system.³³³

The author of this statement, Judge Robert J. Kelleher of the U.S. District Court for the Central District of California, wrote the statement in amazement over a case centering around NEPA and the Coastal Zone Management Act. In frustration over the intent and outcomes of these environmental statutes, he penned words that also adequately describe the befuddlement that fisheries managers, environmental and coastal industry groups, and even federal regulators feel with regard to EFH. The evolution of the Magnuson Act's habitat provisions has been slow. In 1996 the SFA and its EFH amendments changed the section numbers of the habitat provisions and added a minor hurdle in the form of paperwork. To those in the fishing community, the resultant maze of authority regarding EFH can be condensed into the fact that the only real tool that the Councils can use to address fishery habitat issues remains the regulation of fishing gear and levels of fishing effort; the Councils have an affirmative duty to minimize adverse effects to EFH caused by fishing, whereas federal action agencies have no corresponding duty to minimize their impact on EFH.

EFH is both a policy objective and a physical presence. It has already increased attention to habitat and will continue to do so through the assessment and consultation processes. Thus, the provision does meet one of the statutory goals set by Congress. In the physical sense, it represents the waters, substrate, time periods, and localities that fish call home. The act of identifying these physical areas and needs, while extremely challenging, also serves to increase awareness of the magnitude of habitat issues facing our nation's declining fisheries.

This Article examined the SFA's EFH provisions relative to three other environmental statutes—the ESA, NEPA, and the FWCA. This exercise makes clear the lack of legal consequence associated with fishery habitat destruction. And perhaps that is as it should be; certainly a fishery in decline fairs better than a species bordering on extinction. However, as the past decades have taught, the ESA's involvement at the brink of doom proves of little benefit for recovery for the vast majority of listed species. Maybe more should be done earlier. Perhaps it is this very realization that makes so many people so nervous about EFH. While the statute currently creates little more than paperwork hurdles that require no particular substantive outcome, it becomes incrementally stronger with each reauthorization and does not suffer from the ESA's deathbed weakness.

Yet, EFH has taken on a life of its own as a "new" policy, a "new" concept, and a "new" direction in fisheries management. For now, the congressional ideal of increasing attention to, not protection of, EFH means that EFH designation is less harmful to industry than their rhetoric indicates.

³³³ *American Petroleum Inst. v. Knecht*, 456 F. Supp. 889, 931 (C.D. Cal. 1978).

Additionally, it means that EFH designation is less effective as a mechanism for positive change in fisheries management than many might hope.