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IS THERE A LEGAL AND CONSERVATION BASIS FOR INDIVIDUAL FISHING QUOTAS?

*George J. Mannina, Jr.**

I. INTRODUCTION

When Congress passed the Fishery Conservation and Management Act of 1976¹ (Magnuson-Stevens Act or Act), and subsequently amended the Act in 1996, it recognized the need to establish a comprehensive conservation and management program for the fisheries found off of the U.S. coast. Since enactment in 1976, there has been an expansion in the capacity of the U.S. fishing fleet, and there also has been a growing debate among fisheries managers about whether fishery management plans (FMP) should include provisions limiting U.S. fishing effort and allocating the fish among U.S. fishermen. The purpose of this Article is to examine the issues associated with one such allocation system—individual fishing quotas (IFQs).²

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1. 16 U.S.C. §§ 1801-1882 (1994). The Fishery Conservation and Management Act, renamed the Magnuson Fishery Conservation and Management Act in 1977, amended by the Sustainable Fisheries Act, Pub. L. No. 104-297, 110 Stat. 3559 (1996), which again renamed the statute the Magnuson-Stevens Fishery Conservation and Management Act. 16 U.S.C.A. §§ 1801-1883 (West 1985 & Supp. 1997).

2. An IFQ is an allocated privilege in the form of quota shares to harvest a determined portion of the total allowable catch (TAC) in the form of quota shares. These quota shares designate how the TAC is to be "subdivided into specified portions for individual quota holders." Eugene H. Buck, CRS Report 95-849 ENR, *Individual Transferable Quotas in*

This Article begins in Part II by outlining the legal framework for U.S. fisheries management. The Article then analyzes, through an examination of legislative history, case law, and governmental agency opinions, the legal basis for management-based IFQ plans. This analysis continues in Part III by discussing the various provisions of the Magnuson-Stevens Act, which have been involved in IFQ litigation and also discusses recent amendments to the Act that may be cited in future litigation. This Part discusses the legal arguments that have been made, and those that may be made in the future both for and against the legality of IFQ plans. Next, Part IV examines whether IFQs are an effective management tool by analyzing the three U.S. fisheries in which IFQ or ITQ plans have been established. Finally, this Article concludes that the legal precedent, legislation, surveys, and empirical data demonstrate that there is both a legal and conservation basis for IFQs.

II. U.S. FISHERIES MANAGEMENT

In the United States, the first serious attempt to address fisheries jurisdiction and conservation issues came in September 1945 with President Harry Truman's proclamation, *The Policy of the United States With Respect to Coastal Fisheries in Certain Areas of the High Seas*.³ President Truman declared:

In view of the pressing need for conservation and protection of fisheries resources, the Government of the United States of America regards it as proper to establish conservation zones in those areas of the high seas contiguous to the coast of the United States wherein fishing activities have been or in the future may be developed and

Fishery Management 1 (Sept. 25, 1995); See *infra* notes 25-28 and accompanying text. IFQs differ from individual transferable quotas (ITQs) in that under an IFQ program transferability of shares is an optional component of the FMP. Under an IFQ program that permits transferability of shares, transferability is restricted by several criteria. Buck, *supra* note 2, at 6 n.18.

Quota share management systems differ from traditional open access fisheries in which there is no limitation on who may catch fish. These programs also differ from fishery management programs that limit the number of licenses issued to participant fishermen. *Id.* at 1-2. See generally Anthony D. Scott, *Conceptual Origins of Rights Based Fishing*, in *RIGHTS BASED FISHING* 11, 31 (Philip A. Neher et al. eds., 1989); *LIMITED ENTRY AS A FISHERIES MANAGEMENT TOOL* (R. Bruce Rettig & Jay J.C. Ginter eds., 1978).

3. Proclamation No. 2668, 3 C.F.R. 68 (1943-1948 Compilation).

maintained on a substantial scale . . . and all fishing activities in such zones shall be subject to regulation and control. . . .⁴

However, President Truman's call for action was not fully implemented in the United States until passage of the Fishery Conservation and Management Act of 1976.⁵

A. *The Legal Framework of the Magnuson-Stevens Act*

The Magnuson-Stevens Act asserts U.S. fisheries management authority within the Exclusive Economic Zone (EEZ)⁶ extending 200 miles from the U.S. coast.⁷ The Act establishes a bifurcated decision-making process for managing fishery resources within the EEZ which calls for "basic policy determinations . . . and management strategies to rest with"⁸ the Regional Fishery Management Councils (Councils) created by the Act. The Magnuson-Stevens Act divides the United States into eight geographic regions and creates a Council for each region.⁹ Each Council is com-

4. S. REP. NO. 94-416 (1975), reprinted in STAFF OF SENATE COMM. ON COMMERCE AND NATIONAL OCEAN POLICY STUDY, 94TH CONG., A LEGISLATIVE HISTORY OF THE FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976 653, 660 (Comm. Print 1976) [hereinafter LEGISLATIVE HISTORY].

5. It is not the purpose of this Article to supply a detailed analysis of the Magnuson-Stevens Act and the historical development of U.S. fisheries legislation; for a thorough discussion, see FEDERAL FISHERIES MANAGEMENT, A GUIDEBOOK TO THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT 2 (J. Jacobson et al. eds., 1985 & Supp. 1991). See also LEGISLATIVE HISTORY, supra note 4; Warren G. Magnuson, *The Fishery Conservation and Management Act of 1976: First Step Toward Improved Management of Marine Fisheries*, 52 WASH. L. REV. 427, 430 (1977).

6. 16 U.S.C.A. § 1802 (West 1985 & Supp. 1997). When originally enacted in 1976, the Act created a "fishery management zone." See Fishery Conservation and Management Act of 1976, Pub. L. No. 94-265, § 101, 90 Stat. 331, 336 (1976). The zone was renamed as the exclusive economic zone when the Act was amended in 1986. Pub. L. No. 99-659, sec. 101, § 1811, 100 Stat. 3706, 3707 (1986).

7. 16 U.S.C.A. § 1811 (West 1985 & Supp. 1997).

8. William R. Rogalski, Note, *The Unique Federalism of the Regional Councils Under the Fishery Conservation and Management Act of 1976*, B.C. ENVTL. AFF. L. REV. 163, 171-72 (1980).

9. 16 U.S.C.A. § 1852(a)(1) (West 1985 & Supp. 1997). See generally Rogalski, supra note 8, at 163. The Councils' titles and geographic areas are: (1) New England-Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut; (2) Mid-Atlantic-New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, North Carolina; (3) South Atlantic-North Carolina, South Carolina, Georgia, Florida; (4) Caribbean-Virgin Islands, Puerto Rico; (5) Gulf-Texas, Louisiana, Mississippi, Alabama, Florida; (6) Pacific-California,

prised of voting and non-voting members¹⁰ who are charged with the responsibility of making "basic policy determinations such as optimum yield and management strategies."¹¹ The Act requires that the voting members of each Council be knowledgeable about the management, conservation or harvest of fishery resources.¹²

The primary responsibility for each of the Councils is to develop, and amend when necessary, an FMP for each fishery in its region that requires conservation and management.¹³ The Councils maintain no regulatory authority under the terms of the Act. Rather, the Secretary of Commerce (Secretary) is vested with the review and rulemaking authority. As such, Council's submit their proposed FMP to the Secretary for approval, disapproval, or partial disapproval.¹⁴ Upon approval, the Secretary implements the FMP by regulation.¹⁵ The Magnuson-Stevens Act also authorizes the Secretary to develop an FMP in the event that a Council fails to do so in a timely manner¹⁶ and permits the Secretary to promulgate emergency regulations when necessary.¹⁷

Oregon, Idaho, Washington; (7) North Pacific—Oregon, Washington, Alaska; (8) Western Pacific—Hawaii, American Samoa, Guam, and the North Marina Islands. 16 U.S.C. § 1852 (a)(1) (West 1985 & Supp. 1997).

10. 16 U.S.C.A. § 1852(b), (c) (West 1985 & Supp. 1997). The voting members of each Council are: (1) the appropriate regional director of the U.S. National Marine Fisheries Service (NMFS); (2) the principal state official with marine fisheries management responsibility for each coastal state in the Council's region; (3) individuals appointed by the Secretary from a list of people nominated by the Governor of each state who are knowledgeable with regard to the management, conservation, or harvest of fishery resources. *Id.* §1852 (b). The nonvoting members include: (1) the U.S. Fish and Wildlife Service's regional director; (2) the commander of the applicable Coast Guard district; (3) a State Department representative; and (4) the Executive Director of the Marine Fisheries Commission for the geographical area concerned, if any. *Id.* §1852 (c).

11. Rogalski, *supra* note 8, at 171-72. See also LEGISLATIVE HISTORY, *supra* note 4, at 492 (statement of Sen. Ted Stevens, Alaska).

12. 16 U.S.C.A. § 1852(b) (West 1985 & Supp. 1997).

13. *Id.* § 1852(h)(1). Other duties of the Councils include: (1) submitting periodic reports to the Secretary of Commerce; (2) reviewing and revising assessments of optimum yield and fishing allowances to foreign vessels; (3) encouraging public participation in the development of FMPs and the administration of the Act; (4) establishing scientific and statistical committees and advisory panels; and (5) other activities necessary to carry out the Act. Magnuson, *supra* note 5, at 436.

14. 16 U.S.C.A. § 1854(a)(1)(D), (b) (West 1985 & Supp. 1997).

15. *Id.* § 1854(b)(3).

16. *Id.* § 1854(c).

17. *Id.* § 1855(c).

In developing FMPs, the Councils are to be governed by ten national standards.¹⁸ These standards require that conservation and management measures: (1) prevent overfishing while achieving the optimum yield from the fishery; (2) be based on the best scientific information available; (3) manage fish as a unit to the extent practicable; (4) not discriminate between residents of different states and if it is necessary to allocate fish among fishermen the allocation is to be fair and equitable, promote conservation, and carried out so that no person acquires an excessive share; (5) consider efficiency where practicable; (6) take into account variations and contingencies in the fishery; (7) minimize costs and avoid unnecessary duplication where practicable; (8) take into account the importance of fishery resources to fishing communities; (9) minimize bycatch to the extent practicable; and (10) promote the safety of human life at sea to the extent practicable.¹⁹ The Act requires that all FMPs be

18. *Id.* § 1851.

19. *Id.* § 1851(a). The ten national standards are as follows:

(1) Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

(2) Conservation and management measures shall be based upon the best scientific information available.

(3) To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

(4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

(5) Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

(6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

(7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

(8) Conservation and management measures shall, consistent with the conservation requirements of this chapter (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to the fishing community in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

consistent with these national standards, as well as with other provisions of the Act and applicable law.²⁰

B. Fishery Management Plans and Individual Fishing Quotas

An FMP is comprised of "conservation and management" measures that are necessary and appropriate.²¹ However, the Act requires that every FMP contain certain provisions²² and makes other measures discretionary.²³ One of the most controversial discretionary provisions that may be included in an FMP are measures establishing a limited access system "in order to achieve optimum yield."²⁴ The 1975 Senate Commerce Committee Report, which contains virtually all of the discussion on limited access, described limited access as:

[A] management technique that is directed at economic as well as biological objectives. This technique is used to reduce the congestion and economic waste which often occurs from the "open access" condition of common property fisheries. There are three different

(9) Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

(10) Conservation and Management measures shall, to the extent practicable, promote the safety of human life at sea.

Id. § 1851(a).

20. *Id.* § 1854(a), (b)(1). In order to assist the Councils in their task, the Secretary has established guidelines based on the national standards. Guidelines for Fishery Management Plans, 50 C.F.R. pt. 602 (1995), removed by 61 Fed. Reg. 32,577, recodified at 50 C.F.R. pt. 600, see 61 Fed. Reg. 32,538-32,554 (1996).

21. 16 U.S.C.A. § 1853(a)(1)(A) (West 1985 & Supp. 1997).

22. *Id.* § 1853(a).

23. *Id.* § 1853(b).

24. *Id.* § 1853(b)(6). "Optimum" is defined as follows:

The term "optimum," with respect to the yield from a fishery, means the amount of fish which—

(A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;

(B) is prescribed on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant social, economic, or ecological factor; and

(C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

Id. § 1802(28).

techniques for limiting access. One is the use of licensing schemes which limits the number of units in a fishery. This might be a limit on the number of vessels, fishermen, nets, pots or other kind of inputs. The second technique is to control the amount of capital and labor through taxes or license fees in an amount sufficiently high to dissuade superfluous fishermen from entering the fishery. The third technique is to divide the total allowable catch into shares or quotas which are then distributed among the fisherm[e]n.²⁵

Since enactment, people have debated whether the Act authorized individual fishing quotas, and whether they are appropriate for fisheries conservation and management.²⁶ However, the Sustainable Fisheries Act,²⁷ signed into law by President Clinton on October 11, 1996, finally settled this debate over IFQs. The Sustainable Fisheries Act added the following definition of IFQs to the Magnuson-Stevens Act: "The term 'individual fishing quota' means a Federal permit under a limited access system to harvest a quantity of fish, expressed by a unit or units representing a percentage of the total allowable catch of a fishery that may be received or held for exclusive use by a person."²⁸ Although the addition of this definition makes it clear that IFQs are an authorized form of limited access, the Sustainable Fisheries Act also includes a section governing the development of IFQs and creates additional standards by which IFQs are to be measured.²⁹ Additionally, the Senate Report on the Sustainable Fisheries Act states that the "term 'individual transferable quota' would . . . mean a type of IFQ that is transferable,"³⁰ thereby officially acknowledging the transferability of IFQs. Given the historical and often heated debate about the legality of IFQs, the enactment and content of the Sustainable Fisheries Act raises the question: Is there any remaining basis to challenge an IFQ plan as exceeding the authority granted under the Magnuson-Stevens Act?

25. S. REP. NO. 94-416, (1975), reprinted in LEGISLATIVE HISTORY, *supra* note 4, at 691-92.

26. See *infra* Part III.

27. Pub. L. No. 104-297, 110 Stat. 3559 (1996). The Sustainable Fisheries Act amended and reauthorized provisions of the Magnuson-Stevens Act and the Atlantic Coastal Fisheries Conservation and Management Act.

28. 16 U.S.C.A. § 1802 (21) (West 1985 & Supp. 1997).

29. *Id.* § 1853(d).

30. S. REP. NO. 104-276, at 10 (1996).

III. POTENTIAL REMAINING BASIS TO CHALLENGE
IFQs AS EXCEEDING THE AUTHORITY GRANTED
UNDER THE MAGNUSON-STEVENSON ACT

IFQ opponents argue that IFQs are fundamentally inconsistent with the Magnuson-Stevens Act because the Act is intended to address fishery conservation issues and IFQs are simply a means of allocating economic benefits. This part of the Article will examine the legal basis for an IFQ plan utilized as a management measure without any biological conservation basis. The part will analyze whether management based IFQ plans: (1) fall within the purposes of the Act; (2) satisfy the Act's conservation and management definition; (3) conform with the Act's national standards; and (4) satisfy the Magnuson-Stevens Act's mandatory FMP provisions. This analysis of the language of the Act, legislative history, judicial precedent and legal opinions clearly demonstrates that if a management based IFQ plan is in accord with the Act, then a properly supported plan which blends biological, economic, and management objectives can withstand judicial scrutiny.

A. The Purposes of the Magnuson-Stevens Act.

The objectives of the Act define and limit the purposes for which FMP conservation and management measures, such as limited access systems, may be established. Although IFQ opponents correctly assert that fish conservation is the foundation of the Act, an IFQ plan without a biological conservation basis does not necessarily fall outside the Act's purposes, as the Act's findings, purposes, and policy section encompasses economic and social goals.³¹ This section provides that: fish off the coasts of the United States "contribute to the food supply, economy, and health of the Nation;"³² commercial fishing "constitutes a major source of employment and contributes significantly to the economy of the Nation;"³³ many coastal areas are "dependent upon fishing and related activities;"³⁴ a national fisheries development program for fisheries which are not fully utilized by U.S. fishermen is necessary "to assure that our citizens benefit from the employment, food supply, and revenue which could be generated there-

31. 16 U.S.C.A. § 1801 (West 1985 & Supp. 1997).

32. *Id.* § 1801(a)(1).

33. *Id.* § 1801(a)(3).

34. *Id.*

by;³⁵ Councils should prepare FMPs “which take into account the social and economic needs of the States;”³⁶ FMPs should be responsive to the needs of “interested States and citizens;”³⁷ a conservation and management program for fisheries is necessary to prevent overfishing;³⁸ and to achieve, on a continuing basis, the optimum yield from each fishery,³⁹ and, conservation and management programs shall consider efficiency, avoid the unnecessary waste of fish, minimize bycatch, and be workable and effective.⁴⁰

While these broadly stated principles of the Act do not reference allocations, let alone IFQs, a careful reading demonstrates that IFQs are consistent with the Act’s findings, purposes, and policies. Even when IFQs are helpful only in realizing such goals as promoting efficiency and accounting for local social and economic needs, quota programs are still in accord with the Act’s principles. In instances where an IFQ plan also intends to prevent overfishing,⁴¹ minimize bycatch,⁴² prevent waste, etc., it is even clearer that the plan is within the Act’s purposes.

This broad view of the Act’s purposes accords with the views of the Justice Department which has stated that the guiding purpose of the Act is to “protect the food supply of the United States, the national fishing industry, and dependent coastal economies from the stresses caused by overfishing in the seas adjacent to our territorial waters, to rebuild

35. *Id.* § 1801(a)(7).

36. *Id.* § 1801(b)(5).

37. *Id.* § 1801(c)(3).

38. *Id.* § 1801 (a)(6).

39. *Id.* § 1801(b)(4).

40. *Id.* § 1801(c)(3).

41. Following the enactment of the Sustainable Fisheries Act, “overfishing” is defined under the Magnuson-Stevens Act as: “a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.” *Id.* § 1802(29).

42. The following definition of bycatch was added to the Act by the enactment of the Sustainable Fisheries Act: “‘bycatch’ means fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program.” *Id.* § 1802(2). Economic discards are fish “which are the target of the fishery, but which are not retained because they are of an undesirable size, sex, or quality, or for other economic reasons.” *Id.* § 1802(9). Regulatory discard refers to those fish “harvested in a manner which fishermen are required by regulation to discard whenever caught or are required by regulation to retain but not sell.” Pub. L. No. 104-297, 110 Stat. 3561 § 102(33) (1996).

overfished stocks, to insure conservation, and to realize the full potential of the Nation's fishery resources."⁴³ Similarly, the courts view the Act's purposes as encompassing broad economic, social, and conservation goals. In *Stinson Canning Company, Inc. v. Mosbacher*,⁴⁴ the court found the relevant factors which could be examined to justify an FMP included: "[T]he provision of seafood at reasonable prices, satisfaction of consumer needs, encouragement of domestic markets, and the economies of coastal areas. . . ."⁴⁵

Based on the broad language of the Act's findings, purposes, and policy section, combined with the government's and court's expansive interpretation of the Act's purposes, it cannot be said that IFQs, even IFQs based exclusively on management needs, are *per se* inconsistent with the Act's findings, purposes and policies.

B. What is a Conservation and Management Measure Under the Magnuson-Stevens Act?

If management based IFQs are not precluded by the Act's purposes, the next level of analysis is whether such IFQs fit within the narrower definition of a conservation and management measure. The term "conservation and management" is defined in Section 3(2) of the Act as:

[A]ll of the rules, regulations, conditions, methods, and other measures (A) which are required to rebuild, restore, or maintain, and which are useful in rebuilding, restoring, or maintaining, any fishery resource and the marine environment; and (B) which are designed to assure that—

- i) a supply of food and other products may be taken, and that recreational benefits may be obtained, on a continuing basis;
- ii) irreversible or long-term adverse effects on fishery resources and the marine environment are avoided; and

43. Brief for Malcolm Baldrige, Secretary of Commerce, Federal Appellee at 6, *Alaska Factory Trawler Ass'n v. Baldrige*, 831 F.2d 1456 (9th Cir. 1987) (No. 86-4410). The court misspelled "Baldrige" in the case citation.

44. 731 F. Supp. 32 (D. Me. 1990).

45. *Id.* at 37.

- iii) there will be a multiplicity of options available with respect to future uses of these resources.⁴⁶

The question of whether an IFQ satisfies the Act's "conservation and management" requirement entails a two prong analysis, since clauses A and B are linked by the connector "and." If so, a proposal cannot be a valid conservation and management measure if its purpose is to confer economic or social benefits, because clause A requires that "conservation and management" measures contain a biological basis to "rebuild, restore, or maintain" a fishery resource and the marine environment.⁴⁷ This argument may be extended by asserting that each component of an FMP must have its own fish conservation basis. Under this view, an FMP is not to be judged as a whole, but each component must pass muster individually.

The biological basis argument is supported by references to the legislative history. The Senate Commerce Committee Report stated that the central purpose of the legislation was "to protect and conserve valuable and necessary fishery resources."⁴⁸ The bill approved by the Senate Commerce Committee contained a definition of "conservation" essentially identical to the final definition of "conservation and management" in section 3(2) of the Act.⁴⁹ The Senate Committee, in describing this definition, stated: "The term 'conservation' is interchangeable with the term 'management.'"⁵⁰ The final legislation adopted by Congress added the words "and management" as part of the basic term defined in section 3(2).⁵¹ The Conference Committee Report does not elaborate on the addition of the words "and management." Based on the original Senate Committee Report, it is argued that the words "conservation" and "management" are synonymous and that each component of an FMP must have a conservation basis.

In considering the Act's legislative history, it is important to recognize that the term "conservation and management" was developed by the House-Senate Conference Committee as a compromise between H.R. 200

46. 16 U.S.C.A. § 1802(5) (West 1985 & Supp. 1997).

47. *Id.*

48. S. REP. NO. 94-416, (1975), *reprinted in* LEGISLATIVE HISTORY, *supra* note 4, at 655.

49. *Id.* at 701-02.

50. *Id.* at 674.

51. S. REP. NO. 94-711, (1976), *reprinted in* LEGISLATIVE HISTORY, *supra* note 4, at 40.

and S. 961. H.R. 200, as originally passed by the House, required that FMPs contain "conservation *and* other measures."⁵² The Senate bill required each Council to "identify fisheries in need of conservation" and to prepare FMPs for those fisheries.⁵³ The restrictive Senate language limiting FMPs to fisheries in need of conservation was deleted by the Conference Committee and replaced with general authority for Councils "to develop fishery management plans" containing conservation and management measures, implying that conservation and management are separate concepts.⁵⁴

The interpretation of the term "conservation and management" was at issue in *National Fisheries Institute, Inc. v. Mosbacher*,⁵⁵ which involved a challenge to the Atlantic Billfish FMP. Plaintiffs advanced two arguments. First, they argued that a FMP must have a biological conservation basis.⁵⁶ The Justice Department responded by stating that the "clear language of the Act identifies conservation to be a separate concept from management of a fishery. Congress intended that fishery management plans do more than conserve a fishery."⁵⁷ Thus, the Justice Department's argument followed the concept implicit in the Conference Committee report.

In addressing this argument, the court recognized that conservation is an important element of any FMP promulgated under the Act.⁵⁸ However, the court rejected the plaintiffs' argument. The opinion states:

[T]he Court does not agree with the [plaintiffs'] argument that conservation is the *only* factor that the Secretary may consider in promulgating [Magnuson-Stevens] Act regulations [T]his conclusion comports with a common sense construction of the term "conservation and management," in which the two words do not have synonymous and redundant meanings. In light of the term's preva-

52. CONFERENCE POLICY ISSUES SUMMARY, *reprinted in* LEGISLATIVE HISTORY, *supra* note 4, at 106 (emphasis added).

53. *Id.* at 179.

54. S. REP. NO. 94-711, (1976), *reprinted in* LEGISLATIVE HISTORY, *supra* note 4, at 87.

55. 732 F. Supp. 210 (D.D.C. 1990).

56. *Id.* at 219.

57. Federal Defendant's Reply Memorandum Supporting Motion for Summary Judgment and Opposing Plaintiffs' Motion for Summary Judgment at 13, *National Fisheries Inst., Inc. v. Mosbacher*, 732 F. Supp. 210 (D.D.C. 1990) (No. 88-3103 CRR).

58. *National Fisheries Inst. Inc. v. Mosbacher*, 732 F. Supp. at 219.

lence throughout the Act, the Court does not believe that Congress intended the "management" part of it to be mere surplusage.⁵⁹

The plaintiffs also argued that each component of an FMP must be examined separately for a conservation basis. In response, the Justice Department said the Act directs Councils to develop comprehensive plans for fisheries conservation and management, and mandates that FMPs incorporate a broad range of considerations, including biological, economic, and social concerns.⁶⁰ The court agreed, stating:

The Court will not ignore certain conservation and management measures, as the plaintiffs urge, simply because the plaintiffs have not challenged these parts of the FMP. By only considering isolated provisions in a vacuum, the Court cannot determine whether the Secretary's decision to implement this *comprehensive* FMP was arbitrary or capricious, especially when . . . other provisions are highly relevant to the issues before the Court.⁶¹

The federal courts have also upheld FMPs that allocated fish among competing user groups without regard for the biological basis of the measures. *Louisiana v. Baldrige*⁶² upheld a management measure "to protect shrimp until they reach a more valuable size and thereby eliminate the wasteful practice of discarding undersized brown shrimp."⁶³ The challenged measure was not adopted for biological conservation purposes, but solely to enhance the economic value of the fishery. Similarly, in *Maine v. Kreps*,⁶⁴ the court resolved a dispute over an economically based allocation of herring and upheld the Secretary's decision to allocate fish to foreign fishermen. The court deferred to the Secretary's "substantial discretion in selecting the appropriate quota for a given fishery."⁶⁵

59. *Id.*

60. Federal Defendant's Memorandum Supporting Motion for Summary Judgment and Opposing Plaintiffs' Motion for Summary Judgment at 29, 31, National Fisheries Inst., Inc. v. Mosbacher 732 F. Supp. 210 (D.D.C. 1990).

61. National Fisheries Inst., Inc. v. Mosbacher, 732 F. Supp. at 221 n.15.

62. 538 F. Supp. 625 (E.D. La. 1982). The Secretary of Commerce was Malcolm Baldrige. The court misspelled Baldrige in the case citation. This text uses the court's spelling.

63. *Id.* at 627.

64. 563 F.2d 1052 (1st Cir. 1977).

65. *Id.* at 1055.

A National Oceanic and Atmospheric Administration (NOAA) General Counsel Opinion is also consistent with these judicial decisions. This Opinion construes "conservation and management" as allowing any purpose that can be inferred from the Act as the basis for an FMP provision.⁶⁶ The relevant portion of the opinion states: "We believe a strict reading of the definition of 'conservation and management' is inconsistent with the Act's many expressions of permissible economic and social goals."⁶⁷

Thus, the legislative history of the Magnuson-Stevens Act, judicial decisions, and opinions of NOAA General Counsel all acknowledge that IFQs can be justified under the Act as a management measure, even if such measures have no biological conservation purpose.

C. *The Act's National Standards*

If a proposal satisfies the definition of "conservation and management," the next issue is whether a management based IFQ can satisfy the national standards.⁶⁸ Although an FMP cannot violate any of the national standards,⁶⁹ National Standards 4 and 5 have presented special issues when an FMP establishes an IFQ system. This section will present an overview of National Standards 4 and 5 and will analyze court decisions in which plaintiffs have alleged violations of these particular national standards. Additionally, this section will examine National Standards 8, 9, and 10, which were added to the Magnuson-Stevens Act by the Sustainable Fisheries Act and discuss how these new standards may affect future IFQ litigation.

66. 80 Op. Off. Gen. Counsel, NOAA 8-11 (Aug. 28, 1979).

67. Op. Off. Gen. Counsel, NOAA 7 (Dec. 1, 1989).

68. Section 301(a) of the Act provides that: "[a]ny fishery management plan prepared, and any regulation promulgated to implement any such plan . . . shall be consistent with the . . . national standards for fishery conservation and management." 16 U.S.C.A. § 1851(a) (West 1985 & Supp. 1997).

The requirement for consistency with the national standards is repeated in § 303(a)(1)(C), regarding the contents of an FMP, and in § 304(a)(1)(A), specifying the basis for Secretarial review of an FMP. *Id.* §§ 1853(a)(1)(C), 1854(a)(1)(A).

69. *Id.* § 1851(a).

1. National Standard 4

National Standard 4 establishes two rules for conservation and management measures. The first rule forbids discrimination between residents of different states;⁷⁰ the second rule addresses the allocation of fishing privileges.⁷¹ When a conservation and management measure allocates fishery resources, the allocations must be: (1) "fair and equitable to all such fishermen,"⁷² (2) "reasonably calculated to promote conservation,"⁷³ and, (3) "carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges."⁷⁴ Although the two rules of National Standard 4 must be analyzed separately,⁷⁵ this Article separately discusses each of the three allocation requirements, and the extent to which each one meets requirements for an allocation set forth in the second rule of National Standard 4.

a. *The Fairness and Equity of an Individual Fishing Quota*

In determining the fairness and equity of an FMP, the guidelines (Guidelines),⁷⁶ published by the Secretary establish two tests. In June 1996, the guidelines were deauthorized. The first test stated that an allocation should be rationally connected with (1) achieving optimum yield or (2) the furtherance of a legitimate FMP objective. An allocation could satisfy the requirement by fulfilling either of the two prongs. The second test was whether the overall benefits of the allocation outweigh its burdens on the industry. This substantive standard is referred to as the comparative benefits test.⁷⁷

70. *Id.* § 1851(a)(4).

71. *Id.*

72. *Id.*

73. *Id.*

74. *Id.*

75. *National Fisheries Inst., Inc. v. Mosbacher*, 732 F. Supp. 210, 225 n.23 (D.D.C. 1990).

76. To provide guidance regarding the interpretation and application of the national standards, the Secretary has published advisory guidelines. 50 C.F.R. § 602 (1995), removed by 61 Fed. Reg. 32,577, recodified at 50 C.F.R. pt. 600, see 61 Fed. Reg. 32,538 (1996). Although the Guidelines are not binding, FMPs prepared by the Councils that are consistent with the guidelines must be approved by the Secretary. *Id.* § 602.10(a)(3) (1995), § 600.305(a)(1) (1996).

77. *Id.* § 602.14(c)(3)(i) (1995); § 600.325(c)(3)(i) (1996)

As to whether a management based IFQ meets the first test, the legal analysis need proceed no further then an analysis of plan objectives. The Guidelines stated:

In designing an allocation scheme, a Council should consider other factors relevant to the FMP's objectives. Examples are economic and social consequences of the scheme, food production, consumer interest, dependence on the fishery by present participants and coastal communities, efficiency of various types of gear used in the fishery, transferability of effort to and impact on other fisheries, opportunity for new participants to enter the fishery, and enhancement of opportunities for recreational fishing.⁷⁸

The analysis used in determining if an FMP objective was legitimate is identical to that used to determine if a proposal fits within the Act's purposes and policy. Thus, an FMP objective, and hence an IFQ objective, is legitimate if it furthers the purposes of the Act.

Additionally, an allocation scheme could satisfy this first test if a measure was rationally connected with achieving optimum yield. An IFQ plan which helped reduce bycatch, allowed for less discard wastage, or reduced the likelihood of overfishing would assist in achieving optimum yield. As discussed in Section IV, IFQ plans can achieve this objective, and an administrative record documenting these benefits will enable plan proponents to demonstrate the IFQ plan satisfies this National Standard 4 test.

When applying the second standard to an FMP, otherwise referred to as a comparative benefits test, the guidelines did not require that no group be disadvantaged. In fact, the guidelines recognized that the disadvantaging of one group is inherent in any fishery allocation. The guidelines establish a balancing test, which provided that an allocation "may impose a hardship on one group if it is outweighed by the total benefits received by another group or groups."⁷⁹ An allocation need not preserve the status quo to qualify as fair and equitable "if a restructuring of fishing privileges would maximize overall benefits."⁸⁰ In this regard, it was not necessary to show that the allocation was the only fair and equitable choice. Not

78. *Id.* § 602.14(c)(3)(iv) (1995); § 600.325(c)(3)(iv) (1996).

79. *Id.* § 602.14(c)(3)(i)(B) (1995); § 600.325(c)(3)(i)(B) (1996).

80. *Id.*

only might there be more than one allocation schedule which could be fair and equitable, but what is fair and equitable might change over time.

IFQ opponents argue that the use of the phrase "*all* [U.S.] fishermen" in National Standard 4 prohibits phasing out, terminating, or severely restricting any user group.⁸¹ Implicit in this reasoning is the argument that IFQs are incompatible with National Standard 4 because all fishermen have a right to participate in a fishery and an IFQ excludes certain fishermen, or even an entire class of fishermen, from an IFQ fishery. A survey of how the comparative benefits standard has been applied to the FMPs examined below shows that if an FMP establishing an IFQ plan has positive net benefits, the allocation will satisfy National Standard 4's fair and equitable requirement, even if it eliminates individuals or an entire user group from the fishery.

i. Gulf of Alaska Groundfish FMP

Amendment 14 to the Gulf of Alaska Groundfish FMP (Amendment 14) phased out pot fishing and restricted trawling in the groundfish fishery. Plaintiffs challenged Amendment 14 as inconsistent with National Standard 4's fair and equitable requirement. Opponents of Amendment 14 argued that it "effectively exclud[ed] pot fishermen and trawlers from this fishery."⁸² The North Pacific Fishery Management Council justified Amendment 14, in part, as a response to the adverse social and economic impacts on hook and line fishermen and on Alaska coastal communities because of the shift away from southeastern Alaska processing plants due to the rapidly increasing harvesting capacity of pot fishermen and trawlers.⁸³ Commenting on this justification, the Justice Department found that "such considerations are relevant and appropriate under the guidelines interpreting National Standard 4."⁸⁴ The court found the social and economic rationale for the FMP consistent with National Standard 4, even

81. Brief of Plaintiffs-Appellants at 17, *Alliance Against IFQs v. Brown*, 84 F.3d 343 (9th Cir. 1996) (No. 95-35077) (emphasis added).

82. Memorandum in Support of Plaintiffs' Motion for Partial Summary Judgment at 1, *Alaska Factory Trawler Ass'n v. Baldrige*, 831 F.2d 1456 (9th Cir.1987) (No. C85-2279).

83. 50 Fed. Reg. 43,196 (Oct. 25, 1985).

84. Brief for Federal Appellee at 37, *Alaska Factory Trawler Ass'n v. Baldrige*, 831 F.2d 1456 (9th Cir. 1987) (No. C85-2279).

though the complete phase-out of the pot fishery and the substantial restrictions on the trawlers might have "some discriminatory impact."⁸⁵

ii. Atlantic Billfish FMP

In *National Fisheries Institute, Inc. v. Mosbacher*, the plaintiffs challenged the Atlantic Billfish FMP, which effectively closed the Atlantic Ocean and Gulf of Mexico commercial Billfish fishery. The National Fisheries Institute argued that the exclusive allocation to recreational fishermen was "fundamentally incompatible with the 'fair and equitable' criterion."⁸⁶ The Justice Department responded by stating that the plaintiffs' argument was without merit because: "As National Standard 4 makes clear, fishing is a privilege, not a vested right."⁸⁷ Against the factual backdrop of eliminating commercial fishermen from the fishery, the court stated that "[m]erely because these provisions have a greater impact on one type of gear user or group of fishermen does not necessarily mean that they violate National Standard 4."⁸⁸

iii. Coastal Migratory Pelagic Resources FMP

Plaintiffs challenged a ban on drift gillnets in the Atlantic king mackerel and coastal pelagic fishery contained in Amendment 3 to the Coastal Migratory Pelagic Resources FMP in *C&W Fish Company v. Fox*.⁸⁹ Similar to prior National Standard 4 challenges, plaintiffs argued that the ban was not fair and equitable, because "[i]t does not provide equitable access to the resource among competing user groups. Instead, it eliminates one user group altogether."⁹⁰ Additionally, plaintiffs argued there were sufficient quantities of fish for all user groups, and that the banned

85. 831 F.2d at 1460.

86. Plaintiffs' Motion for Summary Judgment at 52, *National Fisheries Inst., Inc. v. Mosbacher*, 732 F. Supp. 21 (D.D.C. 1990) (No. 88-3103 CRR).

87. Federal Defendant's Memorandum Supporting Motion for Summary Judgment and Opposing Plaintiffs' Motion for Summary Judgment at 61, *National Fisheries Inst., Inc. v. Mosbacher*, 732 F. Supp. 210 (D.D.C. 1990) (No. 88-3103CRR).

88. 732 F. Supp. at 225.

89. 745 F. Supp. 6 (D.D.C. 1990).

90. Plaintiffs' Memorandum of Points and Authorities in Support of Their Motion for Summary Judgment at 48, *C&W Fish Co. v. Fox*, 745 F. Supp. 6 (D.D.C. 1990) (No. 90-1123).

drift gillnetters could be accommodated in the fishery without adversely affecting the harvest share of other user groups.⁹¹

In considering the fair and equitable issue, the court found the following facts:

A significant portion of [C&W Fish Company's] business is devoted to trade in Atlantic king mackerel and it reports that it is heavily dependent on vessels using drift gillnets for its supply of king mackerel. . . . Plaintiff Inlet Fisheries, Inc. . . . reports that Atlantic king mackerel represents 30%-40% of its product. It states that 70% of its purchases of Atlantic king mackerel come from the drift gillnet fleet. . . . Plaintiffs James Jeffrey Allman and Bruce Stiller are commercial fishermen who use drift gillnet gear in their business. . . . Allman reports that between April and October, there is no other fishery in which his boat can profitably engage. . . . [Stiller] reports that there is no other fishery in which his vessel can readily and economically be utilized Both men state that their economic livelihood will be jeopardized if the Challenged Rule remains in effect.⁹²

Despite this finding of fact, the court approved the FMP concluding, without explanation, that the FMP allocation was supported by the record.⁹³

iv. Surf Clam and Ocean Quahog IFQs

On June 14, 1990, the Secretary issued regulations implementing Amendment 8 to the Atlantic Surf Clam and Ocean Quahog FMP.⁹⁴ This Amendment replaced a limited access permit system for surf clams in the mid-Atlantic region with an IFQ system.⁹⁵ Amendment 8 also extended the IFQ system to the New England surf clam fishery and to the ocean quahog fishery.⁹⁶

91. *Id.* at 48-49.

92. *C&W Fish Co. v. Fox*, 745 F. Supp. at 7.

93. *Id.*

94. 55 Fed. Reg. 24,184 (1990).

95. Under the limited access program, the fishery was initially restricted to 184 vessels although this number declined as vessels left the fishery. *Sea Watch Int'l v. Mosbacher*, 762 F. Supp. 370, 372-73 (D.D.C. 1991).

96. *Id.*

Sea Watch International challenged the IFQ plan on several grounds, including alleged violations of National Standard 4's fair and equitable requirement. The salient component of plaintiffs' fair and equitable argument was that Amendment 8 had no conservation basis and was intended to drive single vessel owners and small fleet owners from the fishery.⁹⁷ Plaintiffs based their argument on an economic analysis of the practical effects of the IFQ allocations on single vessel and small fleet operators. The court did not directly address the conservation basis argument, but rather summarily dismissed plaintiffs' National Standard 4 argument by citing 50 C.F.R. § 602.14(c)(3)(i), which stated that "[i]nherent in an allocation is the advantaging of one group to the detriment of another."⁹⁸

v. Halibut and Sablefish IFQs

Following the Secretary's approval of an FMP establishing IFQs for the halibut and sablefish fisheries off the coast of Alaska,⁹⁹ fishermen who saw a diminished opportunity to harvest halibut and sablefish mounted a judicial challenge.¹⁰⁰ Alliance Against IFQs complained that the halibut and sablefish plan structured initial IFQ allocations in such a manner that vessel captains and crew members, who were not also owners or lessees, were ineligible for an initial IFQ allocation. Even though crew members and skippers could purchase IFQs after the initial allocation, plaintiffs asserted the IFQ was "not fair and equitable to *all* fishermen" in that certain classes of fishermen were excluded from the initial allocation.¹⁰¹ Plaintiffs' argued that any IFQ fails the fair and equitable requirement unless each class of participants shares in the fishery allocation.¹⁰²

The court began its analysis by stating that allocating all IFQ shares to owners and lessees, and none to crew, appeared to violate "the statutory

97. [Pearson] Plaintiffs' Motion for Partial Summary Judgment at 34, 39, *Sea Watch Int'l v. Mosbacher*, 762 F. Supp. 370 (D.D.C. 1991) (No. 90-1616, 90-1626).

98. *Sea Watch Int'l v. Mosbacher*, 762 F. Supp. at 378.

99. 58 Fed. Reg. 59,375 (1993).

100. *Alliance Against IFQs v. Brown*, 84 F.3d 343 (9th Cir. 1996), *cert. denied*, 65 U.S.L.W. 3518 (1997).

101. Brief of Plaintiffs-Appellants at 17, *Alliance Against IFQs v. Brown*, 84 F.3d 343 (9th Cir. 1996) (No. 95-35077).

102. *Id.* at 14-17.

command of fairness and equity to ‘all’ the fishermen.”¹⁰³ However, the court followed this statement by stating that National Standard 4 cannot be considered in isolation, and that the national standards have competing and conflicting objectives.¹⁰⁴ The court found the Secretary has the duty not only to be fair and equitable, but also to prevent overfishing, promote conservation, promote efficiency, minimize costs, and achieve other criteria.¹⁰⁵ The court concluded there was a tension and inconsistency among these objectives which “necessarily requires that each goal be sacrificed to some extent to meeting the others.”¹⁰⁶

After determining that National Standard 4 cannot be considered in isolation, the court relied upon the guidelines interpretation of National Standard 4 to reject the plaintiffs’ argument.¹⁰⁷ The court stated that “[t]he Secretary is allowed . . . to sacrifice the interests of some groups of fishermen, for the benefit as the Secretary sees it of the fishery as a whole.”¹⁰⁸ The court’s opinion demonstrates that an IFQ plan need not provide initial quota shares to every class of fishermen.

vi. NOAA General Counsel Opinion

The preceding judicial decisions are also fully consistent with the NOAA General Counsel’s broad interpretation of the term “fair and

103. Alliance Against IFQs v. Brown, 84 F.3d at 348.

104. *Id.* at 349-50.

105. *Id.* at 349.

106. *Id.*

107. *Id.* at 349-50 (citing 50 C.F.R. § 602.14(c)). The guidelines interpreting National Standard 4 state:

An allocation of fishing privileges may impose a hardship on one group if it is outweighed by the total benefits received by another group or groups. An allocation need not preserve the status quo in the fishery to qualify as *fair and equitable*, if a restructuring of fishing privileges would maximize overall benefits.

50 C.F.R. § 602.14(c) (1995), removed by 61 Fed. Reg. 32,577 (1996), recodified at 50 C.F.R. § 600.325(c), see 61 Fed. Reg. 32,538, 32,552 (1996).

108. Alliance Against IFQs v. Brown, 84 F.3d at 350 (citing Alaska Factory Trawler Ass’n v. Baldrige, 831 F.2d 1456, 1460 (9th Cir. 1987)). The court’s view that the national standards have competing objectives which require balancing is validated by the legislative history of the Sustainable Fisheries Act. The Senate Report explaining an amendment to National Standard 5 states: “The goal of this amendment is not to eliminate efficiency as a consideration in the development of plans and regulations, but rather to ensure that it is balanced with the requirements of other national standards.” S. REP. NO. 104-276, at 13 (1996).

equitable." In considering the Texas closure under the Gulf Shrimp FMP, the NOAA General Counsel rendered an opinion stating:

The phrase "fair and equitable" in section 301(a)(4)(A) is not defined in the [Magnuson-Stevens Act] or elaborated on in the legislative history. While it is susceptible of countless interpretations, we suggest that the measure meet, at a minimum, the following standard: the allocation must have a rational basis and must not impose a hardship on one group disproportionate to the benefits received by another group.¹⁰⁹

Thus, the courts and NOAA concur as to the meaning of National Standard 4's fair and equitable requirement.

vii. Analysis

A thorough review of National Standard 4 reveals that the essence of the fair and equitable inquiry for an IFQ plan is whether the allocation furthers legitimate plan objectives or assists in achieving optimum yield and whether the benefits received by one user group are sufficiently great to justify the hardship placed on another user group.¹¹⁰ IFQs, even management-based IFQs, are likely to pass muster under the fair and equitable prong of National Standard 4 if the FMP record demonstrates that the benefits outweigh its burdens and that the IFQ is consistent with the Act's purposes and policy.

b. IFQs and the Promotion of Conservation

The second requirement of National Standard 4 is that any allocation, including an IFQ, must be "reasonably calculated to promote conservation."¹¹¹ IFQ opponents might seize on this language to demand a biological basis for an IFQ plan. However, conservation has been assigned an expansive meaning, which even a management based IFQ

109. 89 Op. Off. Gen. Counsel, NOAA 8 (May 29, 1980).

110. A related issue is whether an allocation can be fair and equitable if it is not the least restrictive alternative. Although raised with respect to a few FMPs, only one court has addressed this question. That court stated the Secretary "does not need to demonstrate that [the selected alternative] is the least restrictive alternative available." *Alaska Factory Trawler Ass'n v. Baldrige*, 831 F.2d at 1460.

111. 16 U.S.C.A. § 1851(a)(4)(B) (West 1985 & Supp. 1997).

plan can satisfy. Before their deauthorization, the guidelines stated that “[a]n allocation scheme may promote conservation by encouraging a rational, more easily managed use of the resource. Or it may promote conservation (in the sense of wise use) by optimizing the yield, in terms of size, value, market mix, price, or economic or social benefit of the product.”¹¹² The sweeping interpretation given to the term “conservation” is further supported by the NOAA General Counsel’s Opinion regarding the Gulf Shrimp Plan’s Texas closure. NOAA General Counsel determined that the closure satisfied National Standard 4’s conservation requirement because the shutdown of the Texas shrimp fishery optimized yield in terms of size, value and market mix. Thus, purely economic and social benefits were deemed “conservation.”¹¹³

Given the broad interpretation of the term “conservation,” IFQ programs that satisfy the test set forth in the guidelines will satisfy the conservation requirement on National Standard 4.

c. Avoidance of Excessive Shares Under an IFQ System

The final inquiry in determining if an allocation satisfies National Standard 4 is whether it grants any person or entity an excessive share of fishing privileges. Plaintiffs in *Sea Watch Int’l v. Mosbacher* raised this issue in the challenge to the surf clam and ocean quahog IFQ plan.¹¹⁴ Plaintiffs alleged that the plan would concentrate 40% of the annual catch quota for ocean quahogs in two fishermen.¹¹⁵ The court noted the 40% number “does give pause” but found the Act has no definition of the term “excessive shares” and that the Secretary’s judgment of what is excessive “deserves weight.”¹¹⁶ With that, the court dismissed plaintiffs’ argument.

In light of the absence of a regulatory standard defining what is an excessive share, it is difficult to imagine circumstances under which an IFQ plan distributing quota shares among a relatively large number of fishermen would run afoul of this portion of National Standard 4.

112. 50 C.F.R. § 602.14(c)(3)(ii) (1995), removed by 61 Fed. Reg. 32,577(1996), recodified at 50 C.F.R. § 600.325(c)(3)(ii), see 61 Fed. Reg. 32,538, 32,553 (1996).

113. 89 Op. Off. Gen. Counsel, NOAA 9 (May 29, 1980).

114. 762 F. Supp. 370, 380 (D.D.C. 1991).

115. *Id.*

116. *Id.*

2. National Standard 5

National Standard 5 contains two independent elements requiring separate analysis. The first component addresses efficiency in the utilization of resources, while the second portion prohibits measures whose sole purpose is economic allocation. It is this second element that is at issue in IFQ litigation and raises the question of whether IFQs *per se* fail National Standard 5's prohibition on an FMP having "economic allocation as [its] only purpose." By its very terms, National Standard 5 only prohibits allocations based exclusively on economics. If an FMP blends economic objectives with management, social, or biological objectives, it is immediately outside the reach of National Standard 5.¹¹⁷

An FMP, however, may have economic allocation objectives so long as they are not the only objectives. For example, Amendment 14¹¹⁸ had several objectives including: (1) ensuring the equitable distribution of access to the sablefish resource among different gear types, (2) reducing the negative economic impacts on local communities which are relatively more dependent on the fishery, (3) limiting the concentration of incompatible effort in certain areas, thereby reducing gear conflicts and grounds preemption, and (4) preventing or slowing the development of excess capacity in the sablefish fishery.¹¹⁹ Only the first objective contemplated an economic allocation. The other three objectives were directed at reducing social dislocations and slowing the rapid growth of effort in the fishery. The Secretary and the court approved Amendment 14, despite the presence of one economic allocation objective.¹²⁰

117. 50 C.F.R. § 602.15(e) (1995), *removed by* 61 Fed. Reg. 32,577(1996) *recodified at* 50 C.F.R. § 600.330(e), *see* 61 Fed. Reg. 32,538, 32,553 (1996). The guidelines stated that National Standard 5:

[P]rohibits only those measures that distribute fishery resources among fishermen on the basis of economic factors alone, and that have economic allocation as their only purpose. Where conservation and management measures are recommended that would change the economic structure of the industry or the economic conditions under which the industry operates, the need for such measures must be justified in light of the biological, ecological, and social objectives of the FMP as well as the economic objectives.

Id.

118. *See supra* Part III.C.1.a.i.

119. 50 Fed. Reg. 43,193, 43,196 (1985).

120. *See supra* Part III.C.1.a.i.

The legislative history of National Standard 5, however, has created some confusion regarding its interpretation. The economic allocation portion of National Standard 5 was added to the Act on the floor of the Senate by Senator Ted Stevens (R-Alaska). Senator Stevens described the amendment as follows:

The intent of this amendment is to make certain that those management and conservation measures shall not be for the sole purpose of economic allocation of the fishery resources. We have no such intent.

In effect, I am saying that a regional council could not, for example, say that only vessels over a certain size can fish for one species, and only those under another size for another species.

We have no intention to permit the regional council to have economic authority over fishery resources. They are to have conservation and environmental authority, but not economic.¹²¹

Senator Stevens's statement that "[w]e have no intention to permit the regional council to have economic authority over fishery resources" is difficult to reconcile considering the multiple sections of the Act which contemplate the economic effects of management plans.¹²²

Contemplating the dichotomy between the Senator's words and the other provisions of the Act, NOAA General Counsel observed:

Perhaps the best way to fit National Standard 5 into the rest of the [Magnuson-Stevens Act] is to construe it to prohibit only those measures which distribute fishery resources among U.S. fishermen, which base such distribution on economic factors alone, and which have economic allocation as their only purpose.¹²³

121. 122 CONG. REC. 685 (daily ed. Jan. 22, 1976) (statement of Sen. Stevens), reprinted in LEGISLATIVE HISTORY, *supra* note 4, at 345.

122. Such sections discuss economic factors in optimum yield, development of underutilized fisheries, limited access, FMPs which take into account social and economic needs of the states, and a national program to ensure employment, food supply, and revenue. 16 U.S.C.A. §§ 1801, 1853 (West 1985 & Supp. 1997).

123. 89 Op. Off. Gen. Counsel, NOAA 10 (May 29, 1980).

NOAA's interpretation of National Standard 5 was further supported by the court in *Alaska Factory Trawler Association v. Baldrige*.¹²⁴ The court in *Sea Watch International* also recognized that National Standard 5 only prohibits FMPs whose sole purpose is economic allocation. The court found that there was no violation of National Standard 5 because "[w]here the Secretary considered and relied upon . . . noneconomic objectives when reviewing and promulgating regulations, there is no violation of National Standard 5."¹²⁵ *Sea Watch International* is particularly instructive because the plaintiffs challenged the IFQ system for ocean quahogs on the ground that its sole purpose was economic allocation. Plaintiffs asserted that the written justification for the FMP was devoid of any biological or social objectives.¹²⁶ In rejecting plaintiffs' argument, the court determined that the administrative record for the FMP did show the Secretary's concern for the biological impact of fishing pressure shifting from the restricted surf clam fishery to the ocean quahog fishery—a non-economic issue.¹²⁷

Based upon these interpretations of National Standard 5, an IFQ will survive a legal challenge if it is reasonably justified on grounds other than simply making an economic allocation.

3. *National Standard 8*

National Standard 8, added to the Act by the Sustainable Fisheries Act, could be used by IFQ proponents to further demonstrate the compatibility of management based IFQs with the Magnuson-Stevens Act. The new Standard provides:

Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to the fishing community in order

124. 831 F.2d 1456, 1460 (9th Cir. 1987). In the opinion, the court states: "The record shows that the Secretary considered several non-economic objectives in promulgating the regulations and that the measure was not adopted solely for economic reasons. In consequence, the Secretary could reasonably conclude that Amendment 14 does not violate National Standard 5" *Id.*

125. *Sea Watch Int'l v. Mosbacher*, 762 F. Supp. 370, 380 (D.D.C. 1991).

126. *Id.*; Memorandum of Plaintiffs' Motion for Partial Summary Judgment at 24, *Sea Watch Int'l v. Mosbacher*, 762 F. Supp. 370 (D.D.C. 1991).

127. 762 F. Supp. at 380.

to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize the adverse economic impacts on such communities.¹²⁸

Discussed below are the two requirements imposed by National Standard 8 and the arguments that may arise in future IFQ litigation.

a. Sustained Participation of Fishing Communities

The first portion of National Standard 8 allows IFQ proponents to rely on the economic and social interests of entities such as processors and coastal communities to justify an IFQ plan. The term "fishing community" used in National Standard 8 is essential to the arguments of IFQ proponents. The Act defined the term as "a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such community."¹²⁹ Under this definition, processors who are hiring, or even importing into the community, additional labor to handle the glut of fish landings associated with an overcapitalized, short season, open access fishery could argue that an IFQ plan is consistent with National Standard 8 because it allows for continuous sustained local employment versus seasonal surges in employment. Managing the fishery to permit a more continuous use of processing facilities would also reduce operational costs and minimize expenses associated with freezing and storing fish which cannot be absorbed by the market all at once. The economic and social fabric of coastal communities may also be advantaged by an IFQ plan because processing employment and worker income may be more consistent, as it would not be limited to the needs associated with a shortened fishing season. Furthermore, under an IFQ plan, community infrastructure systems and services may no longer be stretched to deal with an influx of workers from other areas who are hired to meet surge processing needs. Despite these arguments, IFQ opponents may argue that the term fishing community includes *all* classes of fishermen, including vessel owners, operators and crew, and that any IFQ which excludes one class from the fishery violates National Standard 8. The burden

128. 16 U.S.C.A. § 1851(a)(8) (West 1985 & Supp. 1997).

129. *Id.* § 1802(16).

imposed by National Standard 8 is to "take into account" the needs of the fishing community and to minimize adverse impacts "to the extent practicable." As discussed below, the existing precedent interpreting the Act does not support the argument likely to be advanced by IFQ opponents.

In *Sea Watch International v. Mosbacher*, plaintiffs complained that the Secretary failed to comply with § 1853(b)(6) of the Act which requires the Secretary to "take into account" certain factors when establishing a limited access system.¹³⁰ The court said that as long as the Secretary had "considered" these factors, § 1853(b)(6) was satisfied and "the Court may not second-guess the accuracy of the balance struck" after these factors were considered.¹³¹ An identical result was reached in *Alliance Against IFQs v. Brown*¹³² where plaintiffs alleged § 1853(b)(6) violations because the Secretary allegedly failed to take into account present participation in the fishery. The court found that the Secretary indeed "considered" this issue and made a decision which was not arbitrary and capricious.¹³³ Thus, if "take into account" means to consider, then National Standard 8 is transformed into a procedural standard, requiring only that the administrative record demonstrate that the interests were given full consideration and that a rational basis exists for the choices made.

b. Minimizing Adverse Economic Impacts on Fishing Communities, "To the Extent Practicable"

National Standard 8's admonition to minimize adverse impacts is preceded by two modifying clauses. The standard applies both a "take into account the importance of fishery resources to the fishing community"¹³⁴ modifier and a "to the extent practicable" limitation.¹³⁵ When considering whether an IFQ plan minimizes adverse economic impacts on fishing communities, IFQ plan proponents will have a ready defense in National Standard 8 if there are competing concerns that do not make it "practicable" to minimize impacts.

130. *Id.* § 1853(b)(6).

131. *Sea Watch Int'l v. Mosbacher*, 762 F. Supp. at 379.

132. 84 F.3d 343, 347 (9th Cir. 1996), *cert. denied*, 65 U.S.L.W. 3518 (1997).

133. *Id.* at 347-48.

134. 16 U.S.C.A. § 1851(a)(8) (West 1985 & Supp. 1997).

135. *Id.*

Opponents of future IFQ plans may argue that the words "to the extent practicable" impose a burden on the Council and the Secretary to take every practicable step to minimize adverse economic impacts on each segment of the fishing community. This argument, however, ignores the framework of National Standard 8 which states that the Secretary is only required to "take into account" the importance of fishery resources to fishing communities so as to minimize adverse economic impacts "to the extent practicable."¹³⁶

Opponents may also argue that National Standard 8 recognizes that an FMP may cause adverse impacts and, therefore, the burden on the Secretary is to consider these impacts and to achieve a rational compromise. However, in *Alaska Factory Trawler Association v. Baldrige*, plaintiffs made the related argument that there were other alternatives which were fairer and more equitable under National Standard 4 and that the national standards required the Secretary to select the least restrictive alternative.¹³⁷ The court rejected this argument stating that the Secretary "does not need to demonstrate that the [selected alternative] is the least restrictive alternative available."¹³⁸ Finally, IFQ proponents may also argue that an IFQ plan that excludes certain classes of individuals from a fishery is, nevertheless, consistent with the Magnuson-Stevens Act, because there must be a balancing of competing interests under the different national standards and if the comparative benefits of the plan outweigh its detriments then the economic impacts are minimized.¹³⁹

While this new standard creates additional consistency requirements for FMPs, existing legal precedent and the language of the standard indicate that the standard supports the legality of IFQ plans.

136. *Id.*

137. *Alaska Factory Trawler Ass'n v. Baldrige*, 831 F.2d 1456, 1460 (9th Cir. 1987).

138. *Id.*

139. Support for this argument can be found in *Alliance Against IFQs v. Brown* wherein the court said that an IFQ plan which might appear to violate one national standard could nevertheless be approved under the Act because the Act requires a balancing of the competing objectives of different National Standards. *Alliance Against IFQs v. Brown*, 84 F.3d 343, 348 (9th Cir. 1996), *cert. denied*, 65 U.S.L.W. 3518 (1997). Therefore, something which might not be approved if considered in isolation could be approved under the balancing test.

4. *National Standard 9*

National Standard 9, another new standard added to the Magnuson-Stevens Act by the Sustainable Fisheries Act, seeks to avoid the traditional problems associated with an overcapitalized open access fishery. In such a fishery, fishermen engage in a race to harvest the fish during a shortened fishing season and often do not take the time to minimize the bycatch of non-target species or the harvest of sublegal size members of the target species. An overcapitalized open access fishery rewards the swift. There is a disincentive to take time away from harvesting the target species so as to minimize the bycatch of non-target species. In a situation such as in the halibut fishery, where openings were limited to twenty-four hours, fishermen were driven to harvest as rapidly as possible, setting out more gear than could reasonably be retrieved when the season was over in an attempt to maximize their harvest potential.¹⁴⁰ When the fishing period was completed, the excess gear was cut loose and continued to "ghost fish." IFQs are one means, but certainly not the only way, of stopping the race to harvest. Where the administrative record establishes that a proposed IFQ plan will reduce bycatch and associated mortality, a reviewing court will be hard pressed to find the plan inconsistent with National Standard 9. Nevertheless, IFQ plan opponents might argue that National Standard 9 imposes a requirement to minimize bycatch and associated mortality "to the extent practicable" and that it is practicable to implement another alternative which would more effectively reduce bycatch.¹⁴¹

Although the legislative history of the Sustainable Fisheries Act does not explain the proper meaning of the term "to the extent practicable" which is used in each new national standard and discussed previously, some inferences can be drawn. The House version of National Standard 9 originally provided that: "Conservation and management measures shall, to the maximum extent practicable, minimize bycatch."¹⁴² Similarly, in amending those provisions of the Magnuson-Stevens Act detailing the required components of FMPs, the House-passed bill required that an

140. See *infra* notes 156-59 and accompanying text.

141. This argument is the reverse of the least restrictive alternative argument discussed with respect to National Standard 8 because here opponents of IFQs would be arguing that the clause "to the extent practicable" imposes a requirement to select the more stringent alternative. See *supra* Part III.C.3.

142. H.R. REP. No. 104-171, at 4 (1995).

FMP "include conservation and management measures necessary to minimize bycatch to the maximum extent practicable."¹⁴³ However, other sections of the House bill omitted the word "maximum."¹⁴⁴

The House of Representatives apparently saw a distinction between the burden imposed by the standard "to the maximum extent practicable" and the burden imposed by "to the extent practicable." Deletion of the word "maximum" from the Sustainable Fisheries Act suggests that Congress did not intend to impose upon the Councils and the Secretary the burden of selecting the alternative that does the *most* to achieve a reduction in bycatch. Thus, a reasonable argument can be made that the phrase "to the extent practicable" allows a balancing of what may be competing fishery conservation and management interests.

Furthermore, "to the extent practicable" can be interpreted to require a balancing of interests because some FMP measures are impracticable. This view is supported by the explanation in the House Report regarding the meaning of the requirement "to the maximum extent practicable, minimize bycatch." The House Report clearly states that this language requires that bycatch be minimized, "not eliminated."¹⁴⁵ Congress viewed the standard "to the maximum extent practicable" as requiring some balancing to determine practicality. Deletion of the word "maximum" in the enacted law provides even more discretion in this balancing, and if the balance struck is supported by the administrative record, a court will not substitute its judgment for that of the Secretary.

5. National Standard 10

In the race to the fish associated with an overcapitalized open access fishery, fishermen are compelled to work during the available fishing season regardless of weather conditions because there is no other time during which the fishery may be prosecuted. The result can be vessel damage and fatalities, a situation which was all too true in the pre-IFQ

.143. *Id.* at 6.

144. The House bill required that FMPs "to the extent practicable, minimize mortality caused by economic discards and regulatory discards in the fishery." *Id.* at 7. Similarly, in the section listing discretionary provisions which could be included in an FMP, the House-passed bill allowed the inclusion of conservation and management measures "necessary to minimize, to the extent practicable, adverse impacts on essential fishery habitat." *Id.*

145. *Id.* at 27.

halibut and sablefish fisheries.¹⁴⁶ National Standard 10 intends to avoid these problems by requiring that FMPs "promote the safety of human life at sea."¹⁴⁷ An IFQ plan may not be the only way to end the race to the fish and reduce the threat to life and property, but to the extent the administrative record demonstrates that the IFQ plan promotes the safety of human life at sea, it will be found consistent with National Standard 10.

D. Necessary Provisions of Fishery Management Plans

Section 1583(a) of the Act enumerates mandatory FMP provisions.¹⁴⁸ The Sustainable Fisheries Act added a new provision to § 1583(a) requiring that FMPs include: "[C]onservation and management measures that, to the extent practicable and in the following priority—(A) minimize bycatch; and (B) minimize the mortality of bycatch which cannot be avoided"¹⁴⁹ As discussed in relation to National Standard 9, it is likely that IFQ plan proponents will be able to establish a record demonstrating that IFQ plans minimize bycatch and associated mortality by eliminating the race to the fish. Plan opponents may raise the issue of the meaning of the undefined term "to the extent practicable." However, a court is unlikely to substitute its judgment for that of a Council and the Secretary if both parties determine, and such determination is supported by evidence in the record, that an IFQ plan is a reasonable response to a bycatch issue, particularly given the balancing necessary to comply with various other requirements of the Act.

The Sustainable Fisheries Act also requires the Secretary and the Councils to "take into account" the affect of limited access systems on "the cultural and social framework relevant to the fishery and any affected

146. DRAFT ENVIRONMENTAL IMPACT STATEMENT, REGULATORY IMPACT REVIEW, INITIAL REGULATORY FLEXIBILITY ANALYSIS OF PROPOSED INDIVIDUAL FISHING QUOTA MANAGEMENT ALTERNATIVES FOR THE HALIBUT FISHERIES IN THE GULF OF ALASKA AND BERING SEA, 1-10 (June 1, 1991) [hereinafter DRAFT ENVIRONMENTAL IMPACT STATEMENT]; FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT STATEMENT FOR THE INDIVIDUAL FISHING QUOTA MANAGEMENT ALTERNATIVE FOR FIXED GEAR SABLEFISH AND HALIBUT FISHERIES, GULF OF ALASKA AND BERING SEA/ALEUTIAN ISLANDS, 2-3 (Sept. 15, 1992) [hereinafter FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT].

147. 16 U.S.C.A. §1851(a)(10) (West 1985 & Supp. 1997).

148. *Id.* § 1853(a).

149. *Id.* § 1853(a)(11).

fishery communities.”¹⁵⁰ While this language requires an evaluation of the social and cultural impact of the proposed system, the burden on the Council and the Secretary is to “take into account” these factors. Again, as discussed in regard to National Standard 9, the burden imposed by this requirement is more procedural than substantive. If it can be shown from the record that these factors were considered and there was a rational basis for the ultimate decision, a reviewing court is likely to uphold the plan.

Another new section to the Act provides that in approving any IFQ plan,¹⁵¹ the Councils and the Secretary are required to “consider” the recommendations contained in a report on IFQs to be completed by the National Academy of Sciences by October 1, 1998, and must “ensure” that any IFQ plan: (1) establishes procedures and requirements for review of the plan; (2) provides for effective enforcement, including adequate observers, (3) allows for fees of up to three percent of the ex-vessel value of fish to recover actual costs directly related to enforcement and management of the plan, (4) provides for a fair and equitable initial allocation, (5) prevents any person from acquiring an excessive share of IFQs, and (6) considers the allocation of a portion of the annual harvest to entry level fishermen, small vessel owners and crew members who do not hold or qualify for IFQs.¹⁵² Not only do these standards demonstrate congressional approval of IFQs, but it can be argued they implicitly approve IFQ plans that do not provide an initial allocation to all segments of the “fishing community.” If exclusions for an entire class of fishermen were not contemplated as a possibility, it would have been unnecessary for Congress to require the Councils and the Secretary to “consider” setting aside a portion of the harvest for certain classes. Furthermore, the congressional mandate only requires that the Council and the Secretary “consider” the recommendations of the report.

E. Conclusion

Statutory language, legislative history, and applicable judicial precedent suggest that plaintiffs challenging IFQ plans will be hard pressed to find

150. *Id.* § 1853(b)(6)(E).

151. The Sustainable Fisheries Act also amended the Act to prohibit the development or approval of any new IFQ plan before October 1, 2000. *Id.* § 1853(d)(1).

152. *Id.* § 1853(d)(5).

purely legal arguments to support their case, even if a plan is justified only on a management basis. In the wake of the Sustainable Fisheries Act, it appears to be even more certain that IFQs are a viable and legal fisheries management plan option. Despite the legality of IFQs, if the administrative record supporting an IFQ plan is deficient, IFQ plan opponents will be able to assert failed compliance with the Act.

IV. IFQS AS A MANAGEMENT TOOL:

DO THEY ACHIEVE MANAGEMENT AND CONSERVATION OBJECTIVES?

The opposite of an IFQ fishery is an open access fishery in which anyone and everyone can participate. Profitable open access fisheries attract continuing investment and such fisheries drift into a situation whereby a fisherman's harvest depends on whether that fisherman can fish faster than the next person—thereby creating an incentive to build newer, bigger, and more expensive fishing vessels or to utilize higher capacity equipment.¹⁵³ An overcapitalized open access fishery favors the swift, not necessarily those who use the allowable harvest most productively. The all-too-frequent outcome of a profitable open-access fishery is that the number of participating vessels increase, average vessel size increases, output per vessel declines, the fishing season shortens, and profits are squeezed.

Although this may be a worst case scenario, it is not without precedent and raises the question of whether IFQs are a necessary and effective tool to address such situations or prevent them from occurring. This section of the Article answers this question by reviewing and analyzing the three fisheries in which IFQs have been established: the North Pacific halibut and sablefish fisheries, the Mid-Atlantic and New England surf clam and ocean quahog fisheries, and the South Atlantic wreckfish fishery.

153. There is also an incentive to hire larger crews to fish faster, purchase and carry redundant gear to avoid delays caused by broken gear, put as much gear in the water as possible to maximize the harvest, not handle the fish as carefully as might otherwise be done for product quality because that takes away time from maximizing the harvest, not carefully release prohibited species because that too takes time, not take time to fish so as to reduce the bycatch of non-target species, fish in whatever weather conditions exist when the fishing season is open, pressure decisionmakers to make more fish available for harvest, and forego opportunities to participate in other fisheries if those fisheries occur during the open access fishing derby.

A. *Survey of IFQ Fisheries:
Before and After the IFQ Fishery Management Plan*

1. *The Halibut And Sablefish IFQ Plan*

The structural changes in the halibut and sablefish fisheries which lead to the IFQ plan illustrate the problems which can plague an open access fishery. In 1984, 49.3% of the vessels fishing for halibut were under thirty-six feet and they landed 13.7% of the catch. By 1990, only 39.5% of the vessels were under thirty-six feet but they landed only 8.4% of the harvest. At the same time, vessels in the thirty-six foot to fifty-five foot class more than doubled in number while their average catch declined twenty-three percent. Vessels in excess of fifty-six feet almost tripled in number but the catch per vessel declined thirty-eight percent. The impact of this enormous growth in fishing power was reflected in ever shorter fishing seasons. In Area 3A, which typically comprises the bulk of the halibut harvest, the season declined from forty seven days in 1977 to three days in 1990.¹⁵⁴

For sablefish, the pattern was the same. Only eighty-nine vessels participated in the fishery in 1981. In 1985, there were 337 vessels harvesting sablefish and NMFS determined that domestic harvesting capacity was large enough to catch the entire allowable harvest. By 1988, there were 723 vessels in the fishery. As with halibut, the effect was ever shorter fishing seasons. In 1984, the season in the four principal fishing areas lasted 180, 244, 254, and 366 days respectively. By 1989, sablefish seasons in those areas lasted only 16, 46, 56, and 103 days.¹⁵⁵

Operating in shorter seasons, fishermen were setting as much gear as possible, inevitably resulting in tangled and lost gear. In one area, fishermen reported gear being overlaid by as many as three other sets of gear. In 1989 alone, the number of skates¹⁵⁶ increased up to 100% from

154. DRAFT ENVIRONMENTAL IMPACT STATEMENT, *supra* note 146, at 1-7, 5-1 to -2.

155. NORTH PACIFIC FISHERY MANAGEMENT COUNCIL, *LONGLINE AND POT GEAR SABLEFISH MANAGEMENT IN THE GULF OF ALASKA AND THE BERING SEA/ALEUTIAN ISLANDS*, DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT AND REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS TO THE FISHERY MANAGEMENT PLANS FOR THE GULF OF ALASKA AND THE BERING SEA/ALEUTIAN ISLANDS 30, 34 (Nov. 16, 1989) [hereinafter *LONGLINE AND POT GEAR SABLEFISH MANAGEMENT*].

156. A skate is an array of longline fishing gear.

1987, and almost every sablefish fishermen reported losing between ten and thirty skates due to overcrowded fishing grounds.¹⁵⁷

The result of setting as much gear as possible was that not all of it could be retrieved when the fishery was open for only twenty-four hours at a time. Unretrieved fishing lines were cut loose and began "ghost" fishing, thereby creating conservation problems.¹⁵⁸ The International Pacific Halibut Commission (IPHC) estimated that the 1,860 skates lost in the 1990 halibut fishery killed approximately two million pounds of halibut valued at \$2.4-\$4.0 million.¹⁵⁹

The race to the fish also provided an economic disincentive for important conservation actions. For example, the IPHC estimated that over one million pounds of sublegal halibut were killed in the 1990 halibut fishery because fishermen did not take the time to safely unhook and discard the fish.¹⁶⁰ The open access fishery caused approximately seven million tons of rockfish with an ex-vessel price of \$1.7-\$2.9 million to be discarded. The lost opportunity cost of taking the time to retain or safely discard this bycatch was too high to make the preservation of the fish profitable. The mortality rate for discarded rockfish was almost 100%.¹⁶¹

The rush to take the available harvest in an overcapitalized open access fishery can also make it difficult for fishery managers to prevent fishermen from exceeding the allowable harvest. Short fishing seasons do not allow adequate time to find out just how much gear is being set and to react to the quantity of gear set. Thus, between 1980 to 1990, the halibut quota in Areas 3A and 3B was exceeded in eight of these ten years.¹⁶² In 1990, the halibut quota was exceeded in five of the eight fishing areas, in one case by 208%.¹⁶³ Sablefish harvesters surpassed the allowable limit in every area in the Gulf of Alaska in every quarter from 1986 through 1990, with the exception of one quarter in a single area.¹⁶⁴

157. LONGLINE AND POT GEAR SABLEFISH MANAGEMENT, *supra* note 155, at 9.

158. *Id.*

159. FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, *supra* note 146, at 2-6 to 2-7.

160. *Id.* at 2-14.

161. *Id.* at 2-13.

162. *Id.* at 5-18 tbl.5.3.3.

163. *Id.* at 2-61 tbl.2.7.

164. NORTH PACIFIC FISHERY MANAGEMENT COUNCIL AND ALASKA FISHERIES SCIENCE CENTER, DRAFT REVISED SUPPLEMENT TO THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT AND REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS FOR THE GROUND FISH FISHERY MANAGEMENT PLANS FOR THE GULF OF ALASKA

Generally, as seasons shorten in an open access fishery, fishermen must fish regardless of the weather conditions and must work longer hours at a faster pace. In the halibut fishery, during the first twenty-four hour opening of the 1991 season, four vessels and three lives were lost.¹⁶⁵ Between 1991 and 1994, a total of eleven fatalities occurred.¹⁶⁶ An independent study by the National Research Council confirmed that the short and inflexible halibut openings were forcing fishermen to work under extremely adverse conditions.¹⁶⁷

The race to capture as much fish as possible in the shortest amount of time also had a measurable impact on product quality. Since more fishing gear was being set than could reasonably be retrieved, hooked fish stayed on the bottom longer and were exposed to sea lice and predators. To increase fishing speed, some fishermen devoted less crew time to heading and gutting fish. Uncut fish suffer more rapid quality degradation. Sablefish and halibut fishermen, processors, and retailers all reported quality problems with the catch.¹⁶⁸ Furthermore, as vessels congregated to unload after the truncated fishing season, the quality and freshness of fish off-loaded at the end of the line was inferior to the fish unloaded at the beginning. All of these factors diminished the overall quality of the product and the price offered the fisherman, the processor and the retailer reflected this fact.¹⁶⁹

Like the fishermen and consumers, processors suffered under the open access fishing derby. The market could not absorb the product glut, negatively impacting prices. Processors were forced to bear the added costs of cold storage, including interest and associated carrying costs.¹⁷⁰ Inflexible delivery schedules also prohibited processors from selecting schedules that could reduce overall operating costs. Moreover, uncertain-

AND THE BERING SEA/ALEUTIAN ISLANDS LONGLINE AND POT GEAR SABLEFISH MANAGEMENT IN THE GULF OF ALASKA AND THE BERING SEA/ALEUTIAN ISLANDS (May 13, 1991).

165. DRAFT ENVIRONMENTAL IMPACT STATEMENT, *supra* note 146, at 1-10.

166. Letter from Jennifer M. Lincoln, National Institute for Occupational Safety and Health, to Donna Parker, Alaska Department of Commerce and Economic Development (Sept. 9, 1996) (on file with Author).

167. FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, *supra* note 146, at 2-3.

168. DRAFT ENVIRONMENTAL IMPACT STATEMENT, *supra* note 146, at 1-11; FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, *supra* note 146, at 1-9.

169. LONGLINE AND POT GEAR SABLEFISH MANAGEMENT, *supra* note 155, at 1-11.

170. See FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, *supra* note 146, at 2-6.

ties regarding the supply of fish, and the resulting inability to plan for orderly and consistent processing made long-term investment and planning very difficult.¹⁷¹ Furthermore, the glut of fish caused by the status quo derby caused processors to produce products giving them the greatest revenue per hour, while they discarded others. A slower and steadier supply of raw product would have permitted the processors to use facilities and workers to process lower value product, thereby increasing efficiency and product variety.¹⁷² In order to rectify the situation, the North Pacific Fishery Management Council turned to IFQs in 1993.

In September 1996, the North Pacific Fishery Management Council reviewed the effects of the plan, which was first implemented in 1995. Although complete data were not available, the preliminary data showed that the IFQ plan was successfully achieving its objectives.

With respect to the overcapacity problem, the number of halibut quota share holders dropped eight to ten percent in Areas 2C, 3A, 3B and 4A in 1995 and declined three percent in Area 4B.¹⁷³ Similarly, the number of sablefish quota share holders declined from one to seven percent depending on the fishing area.¹⁷⁴ As a result, the size of the average quota share increased.¹⁷⁵ The number of vessels making landings declined twenty to forty-five percent from 1994¹⁷⁶ in all halibut management areas except one, where there was a slight increase,¹⁷⁷ and declined or remained the same in sablefish areas.¹⁷⁸

There were also new entrants into the fisheries. Persons who had not been eligible for an initial halibut quota share constituted two to nine

171. *Id.* at 2-12.

172. *See id.* at 2-6.

173. ALASKA COMMERCIAL FISHERIES ENTRY COMMISSION, REPORT NO. 96-10N, EXECUTIVE SUMMARY: CHANGES UNDER ALASKA'S HALIBUT IFQ PROGRAM, 1995, at 4 (1996) [hereinafter REPORT 96-10N]. The halibut and sablefish IFQ plan allocated quota shares by fishery management area. However, under the allocation formula more people could qualify for a quota share than had fished in recent years, a fact which will slow the capacity consolidation process. In Area 2C, for example, an average of 1,635 permit holders landed halibut from 1990-1994 but 2,378 persons received quota shares. *Id.*

174. ALASKA COMMERCIAL FISHERIES ENTRY COMMISSION, REPORT NO. 96-11N, EXECUTIVE SUMMARY: CHANGES UNDER ALASKA'S SABLEFISH IFQ PROGRAM, 1995 [hereinafter REPORT 96-11N].

175. *Id.*

176. REPORT 96-10N, *supra* note 173, at 14.

177. *Id.* The numbers exclude the one fishing area where the entire available harvest was allocated to a community development program. *Id.*

178. REPORT 96-11N, *supra* note 174, at 15.

percent of the quota share holders at the end of 1995, depending on the fishing area, and fifty percent or more of the leased quota shares went to people who did not initially received a quota share.¹⁷⁹ The pattern was the same in the sablefish fishery where the percentage of new entrants ranged from six to ten percent depending on the area.¹⁸⁰

In contrast to the pre-IFQ era, the total allowable catch for halibut in 1995 was not exceeded in any of the eight management areas for which harvest levels were set.¹⁸¹ In fact, the harvests were only 67.5%-88.7% of the permitted level.¹⁸² The pattern was the same in the sablefish fishery, where harvests fell below allowable levels in all management areas by 7.2%-34.6%.¹⁸³

Although incomplete, the collected data suggest additional conservation improvements. For example, the IPHC estimates halibut mortality from lost or abandoned fishing gear dropped significantly in 1995 and tentative estimates of the halibut bycatch also suggest declines.¹⁸⁴ No estimate of the effect of the IFQ plan on groundfish discards is currently available.¹⁸⁵ From the data now available, there is no documented evidence of highgrading,¹⁸⁶ although it has been talked about anecdotally. Similarly, the data do not suggest the under reporting of harvest levels that traditionally accompanies highgrading.¹⁸⁷

In regard to product price and quality, a survey of processors revealed that most were paying higher ex-vessel prices for halibut and sablefish in 1995 and received higher wholesale prices.¹⁸⁸ Although many processors felt the IFQ program increased their production costs, they were divided

179. REPORT 96-10N, *supra* note 173, at 9.

180. REPORT 96-11N, *supra* note 174, at 7.

181. REPORT 96-10N, *supra* note 173, at 15. No harvest level was established in management area 4E which was set aside for the community development program. *Id.*

182. *Id.*

183. REPORT 96-11N, *supra* note 174, at 15.

184. Sandra Lowe et al., Executive Summary: Assessment of Conservation Effects of the Alaska Halibut and Sablefish IFQ Programs 2 (1996) (Presented to the North Pacific Fishery Management Council) (on file with Author).

185. *Id.*

186. *Id.* at 3. Highgrading is the process of keeping only high value fish and discarding low value fish.

187. *Id.*

188. Gunnar Knapp & Dan Hull Executive Summary: The First Year of the Alaska IFQ Program: A Survey of Halibut and Sablefish Registered Buyers 2(1996) (prepared for the Alaska Department of Commerce and Economic Development and the Alaska Department of Fish and Game) (on file with Author).

about the effect of this on gross margins for halibut processing. Most processors, however, did believe that there was a decrease in profit margins for sablefish.¹⁸⁹ Processors also attributed better product quality to the IFQ program. Furthermore, the share of halibut prepared for the higher priced fresh fish market increased from eighteen percent in 1994 to thirty-eight percent in 1995.¹⁹⁰

A survey of quota share holders confirmed that ex-vessel prices increased under the IFQ plan. Fishermen who fished for halibut on the same vessel in 1994 and 1995 reported an average ex-vessel price increase of \$0.18 per pound.¹⁹¹ Additionally, average crew size aboard vessels harvesting halibut declined,¹⁹² as did the costs of gear replacement and insurance, although the costs of ice and fuel generally increased.¹⁹³ While this suggests generally lower vessel operational costs and higher returns, no clear trend emerged regarding crew wages. Of the survey respondents who fished on the same halibut vessel in 1994 and 1995, fifty-two percent reported that crew shares remained the same, while twenty-nine percent said crew shares increased and fourteen percent reported a decline.¹⁹⁴

One of the important facts emerging from the fishermen's survey was that fishermen were adjusting their harvesting plans to account for weather conditions, fish prices, and opportunities to participate in other fisheries.¹⁹⁵ Further evidence of increased safety under the IFQ plan was reflected in the fact that while there were eleven fatalities in the Alaskan halibut fishery between 1991-1994, there were none in 1995 and none in 1996, as of September 9, 1996.¹⁹⁶ The Coast Guard also reported that the number of search and rescue operations, which totaled twenty-three in 1992, twenty-six in 1993, and thirty-three in 1994, declined to fifteen in 1995.¹⁹⁷

189. *Id.* at 5-6.

190. *Id.* at 5.

191. *Id.* at 7.

192. *Id.* at 9.

193. *Id.* at 11.

194. *Id.* at 14.

195. *Id.* at 1.

196. Lincoln, *supra* note 166.

197. Letter from B.I. Merchant, Captain, U.S. Coast Guard Office of Maritime Operations Compliances to Philip J. Smith, Chief, National Marine Fisheries Service, Alaska Region 5 (September 6, 1996) (on file with Author).

Although preliminary, the data indicate the halibut and sablefish IFQ plan is achieving its objectives and addressing the problems of the pre-IFQ open access fishery.

2. *Wreckfish*

In 1987, the two vessels participating in the wreckfish fishery harvested only 29,000 pounds of wreckfish.¹⁹⁸ After the 1987 discovery of wreckfish as a substitute for grouper, interest in the fishery skyrocketed and by 1990, seventy to eighty vessels were targeting wreckfish and landings exceeded four million pounds.¹⁹⁹ The allowable harvest, which was only two million pounds, was exceeded by 100% because of the uncontrolled race for the fish that developed.²⁰⁰

The rapid expansion in the harvesting sector caused other problems similar to the sablefish and halibut fisheries. The pressure to fish as quickly as possible created gear conflicts, including the use of prohibited bottom longlines. Moreover, fishermen were forced to fish in bad weather. Fishing also occurred when fish availability was relatively poor, thereby increasing operating costs. The sudden glut of fish on the market caused by the race to harvest the allowable catch resulted in little or no profits on the sale of wreckfish, a situation compounded by the fact that processors lacked the capacity to absorb the harvest.²⁰¹

Beginning in 1990, the South Atlantic Fishery Management Council took steps to address these problems and sought to prevent overfishing. Harvest levels were restricted to two million pounds, vessels were required to have a permit to participate in the fishery, trip harvest limits were imposed, and bottom longlines were prohibited.²⁰² Despite these

198. *Snapper-Grouper Fishery of the South Atlantic*, 55 Fed. Reg. 39,023, 39,024 (1990).

199. *Snapper-Grouper Fishery of the South Atlantic*, 56 Fed. Reg. 57,302, 57,303 (1991).

200. *Id.*

201. SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL, FINAL AMENDMENT 5 (WRECKFISH), REGULATORY IMPACT REVIEW, INITIAL REGULATORY FLEXIBILITY DETERMINATION AND ENVIRONMENTAL ASSESSMENT FOR THE FISHERY MANAGEMENT PLAN FOR THE SNAPPER-GROUPER FISHERY OF THE SOUTH ATLANTIC REGION, 9-16 (Sept. 1991).

202. *Snapper-Grouper Fishery of the South Atlantic*, 55 Fed. Reg. 32,257-58 (1990); *Snapper-Grouper Fishery of the South Atlantic*, 56 Fed. Reg. 2443-44 (1991); *Snapper-Grouper Fishery of the South Atlantic* 56 Fed. Reg. 18,742 (1991); *Snapper-Grouper Fishery of the South Atlantic*, 56 Fed. Reg. 56,016 (1991).

efforts, additional controls were deemed necessary. Limited entry was not seen as a solution, and an IFQ plan was established in 1992.²⁰³

Adoption of the wreckfish IFQ plan has eliminated the overcapacity in the fishery, reduced gear conflicts, decreased costs per trip, improved regulatory compliance, and increased the price of wreckfish—all predicted benefits. Under the IFQ plan, the number of vessels decreased from ninety-one in 1991 to a near optimum level of twenty-two in 1993.²⁰⁴ The remaining vessels ceased fishing during the April to June post-spawning period when fishing is poor and fishermen reduced their effort in order to avoid higher fishing costs and the safety problems associated with the early season fishing.²⁰⁵ Prior to the wreckfish IFQ, many fishermen wanted to increase fishing pressure on the stock by raising allowable harvest levels from two million pounds to between six to eight million pounds. Now, there is no effort to increase the allowable harvest.²⁰⁶ There is also evidence of increased compliance with the prohibition on bottom longlines.²⁰⁷ In fact, according to government enforcement agents, fishermen are increasingly willing to provide enforcement tips that significantly improve enforcement effectiveness.²⁰⁸ Since adoption of the IFQ plan, the economics of the fishery have also improved. Wreckfish prices have increased to approximately \$1.85 per pound, which contrasts with the average monthly price of \$0.90-\$1.55 per pound in the pre-IFQ open-access fishery.²⁰⁹

203. *Snapper-Grouper Fishery of the South Atlantic*, 57 Fed. Reg. 7886 (1992).

204. John R. Gauvin et al., *Description and Evaluation of the Wreckfish Polyprion Americanus Fishery under Individual Transferable Quotas*, 9 MARINE RESOURCE ECON. 99, 107 (1994). It had previously been estimated that the fishery could optimally support roughly twenty vessels. *Id.*

205. *Id.*

206. *Id.* at 113. In fact, during the first three years of the IFQ plan, the allowable harvest was not taken. Andrew Brod & William Shobe, *The Demand for ITQs: The Puzzle of the Atlantic Wreckfish Industry*, in WORKING PAPERS IN BUSINESS AND ECONOMICS 2 (Univ. of N.C. Greensboro Working Paper Series No. ECO960201, 1996).

207. John R. Gauvin et al., *A Description and Preliminary Evaluation of the Wreckfish Fishery, Polyprion Americanus, under Individual Transferable Quotas*, in MANAGEMENT OF EXPLOITED FISH 761, 781-84 (Alaska Sea Grant, 1993).

208. *Id.* at 783.

209. Gauvin, *supra* note 204, at 112. The most likely explanation for this phenomenon is that shrimp fishermen with wreckfish IFQ shares were not using their shares but instead employed their vessels in the more profitable shrimp fishery. Brod & Shobe, *supra* note 206, at 15-17.

While the wreckfish IFQ plan is relatively young, the preliminary analysis suggests that it too is addressing the problems of an open-access fishery.

3. *Surf Clam and Ocean Quahog*

The adoption of a 1977 FMP for the surf clam and ocean quahog fishery recognized the already serious overcapacity in the fishery. The FMP established a moratorium prohibiting the entry of additional vessels into the fishery and severely regulated harvest levels.²¹⁰ Despite these seemingly draconian measures, fishing pressure continued to increase, because the moratorium, which froze fleet size, did not regulate harvesting capacity. Total surf clam and ocean quahog landings between 1967 and 1974 more than doubled from forty-five million pounds to ninety-seven million pounds and reached a peak in 1985 of 125 million pounds.²¹¹ At the same time, the number of allowable fishing hours in the mid-Atlantic surf clam fishery decreased ninety-two percent, from 1,752 in 1978 to 138 in 1986.²¹²

Faced with ever increasing fishing pressure, the Mid-Atlantic Fishery Management Council instituted a system of quarterly quotas, designated fishing weeks, and reduced hours in order to control the fishery.²¹³ However, the restrictions on fishing time created other problems, specifically an incentive to maximize total harvests by overharvesting fishing beds. This practice, in turn, caused a significant increase in the catch of

210. Surf Clam and Ocean Quahog Industries, 42 Fed. Reg. 60,438 (1977). In fact, the overcapacity problem was so great that the Mid-Atlantic Fishery Management Council asked the Secretary to implement the FMP on an emergency basis because the existing fleet could take the 1978 annual quota in just fifteen days. MID-ATLANTIC FISHERY MANAGEMENT COUNCIL, MID-ATLANTIC FISHERY MANAGEMENT COUNCIL FISHERY MANAGEMENT PLAN ACHIEVEMENTS, 1977-1993-SURF CLAM AND OCEAN QUAHOG FISHERY MANAGEMENT PLAN 1,5 (undated) (on file with Author) [hereinafter MID-ATLANTIC COUNCIL REPORT].

211. MID-ATLANTIC FISHERY MANAGEMENT COUNCIL, AMENDMENT 8, FISHERY MANAGEMENT PLAN FOR THE ATLANTIC SURF CLAM AND OCEAN QUAHOG FISHERY 1, 40 (July 1988) (on file with Author).

212. *Id.* at 43. Although the 1977 limited entry system did not successfully control fishing capacity, it did limit the magnitude of the potential problem. In the Mid-Atlantic surf clam fishery, the moratorium finally limited the number of permitted vessels to 142. In contrast, a moratorium on new entrants was never established in the New England fishery. In this fishery, NMFS issued 1,192 permits to fish for surf clams and 993 permits for ocean quahog vessels. 55 Fed. Reg. 3416, 3417 (1990).

213. *Id.*

undersized clams since restricted fishing times did not permit vessel owners to search for beds with larger clams.²¹⁴ In addition, serious safety concerns developed because of the pressure on vessel owners to fish during their allotted fishing days, even when weather conditions were adverse. Finally, the moratorium created another safety concern in that existing boats could not be replaced unless their predecessors sank, were destroyed by fire, or became inoperable. When the FMP was promulgated, there were a large number of older and less safe vessels operating in the fishery.²¹⁵

Faced with continuing problems in the fishery, the Mid-Atlantic Fishery Management Council, in cooperation with the New England Fishery Management Council, developed the IFQ plan, which was implemented in the last quarter of 1990.²¹⁶

There has been relatively little analysis on the effects of the surf clam and ocean quahog IFQ plan. The limited analysis, however, shows that by 1992 only sixty-eight vessels were participating in the IFQ surf clam fishery, down from 133 vessels in 1990.²¹⁷ The data also show that while the total harvest remained relatively constant, the catch per vessel increased.²¹⁸ For example, the number of vessels in excess of 100 gross registered tons participating in the surf clam fishery declined from seventy-five in 1990 to forty in 1992, while the hours fished increased from 11,000 to 18,000, and the catch per vessel jumped from 28,000 to 52,000 bushels.²¹⁹ These changes suggest general improvement in per vessel profitability and fleet economics. However, ex-vessel prices have not significantly improved under the IFQ plan, but rather remain within the historical range for surf clams and are rising somewhat for quahogs.²²⁰

As is the case with the wreckfish IFQ plan and the halibut and sablefish plan, the surf clam and ocean quahog IFQ plan seems to be addressing at

214. Defendants' Memorandum of Law in Support of Their Motion to Strike, In Opposition to Plaintiffs' Motions for Partial Summary Judgment, and in Support of the Defendants' Cross Motion for Summary Judgment at 10, *Sea Watch Int'l v. Mosbacher*, 962 F. Supp. 370 (D.D.C. 1991) (No. 90-1616; 90-1626).

215. *Id.* at 11.

216. *Atlantic Surf Clam and Ocean Quahog Fishery*, 55 Fed. Reg. 3416 (1990), *codified* at 50 C.F.R. § 652 (1995), *removed by* 61 Fed. Reg. 35,011 (1996).

217. Mid-Atlantic Council Report, *supra* note 210, at 12.

218. *Id.* at 13-14.

219. *Id.* at 13.

220. *Id.* at 14.

least some of the problems occurring in the pre-IFQ open access fishery.

V. IFQS AS A NECESSARY CONSERVATION AND MANAGEMENT MEASURE

IFQ opponents argue that plans which confer ownership shares are unnecessary for the conservation and management of a fishery. IFQ opponents raise three related questions: (1) are individual quotas a useful management tool for the conservation and management of fishery resources; (2) if so, is it necessary that such quotas confer ownership shares; and (3) should ownership shares be transferable? The first question was addressed in Parts III and IV, which demonstrate that IFQ plans can be a useful tool for the conservation and management of a fishery, and is amplified on in this section. This Part of this Article also discusses the other two questions raised by IFQ opponents.

The right granted by an IFQ is revocable because the Magnuson-Stevens Act allows a Council and the Secretary to alter an FMP establishing an IFQ.²²¹ It is also settled law that a license to perform an act upon public lands and waterways does not vest the holder with a permanent property right which, if revoked, is subject to compensation under the takings clause of the Fifth Amendment. For example, in *Marine One, Inc. v. Manatee County*,²²² individuals claimed that the revocation of a permit to build a dock on waters owned by Florida constituted a taking of property without compensation. The court found that permits to perform activities on public waters cannot be treated as property for takings purposes. The court stated: "Both federal and . . . state cases stand for the proposition that permits to perform activities on public land—whether the activity be building, grazing, prospecting, mining or traversing—are mere *licenses* whose revocation cannot rise to the level of a Fifth Amendment taking."²²³ Other courts have also emphasized that licenses and permits are not private property under the Fifth Amendment finding: "It is clear that a license does not constitute property for which the Government is liable upon condemnation Many permits issued by the

221 16 U.S.C.A. §§ 1852-1854 (West 1985 & Supp. 1997).

222. 898 F.2d 1490 (11th Cir. 1990).

223. *Id.* at 1492-93.

United States have value as between private persons, but they may be revoked without payment of compensation."²²⁴

This legal principle has also been applied in cases involving fishing rights. In *Burns Harbor Fish Co., Inc. v. Ralston*,²²⁵ a federal district court considered a claim that a ban on gillnet fishing constituted an unlawful taking under the Fifth Amendment. In that case, commercial perch fishermen using gillnets in Lake Michigan challenged Indiana's decision to revoke their gillnet permits. The fishermen argued that the revocation constituted a taking of property for which they were entitled to just compensation. The court disagreed, stating: "[T]here is a wealth of federal precedent standing for the proposition that by purchasing or otherwise obtaining a license to perform an act upon state owned land or waterways an individual does not thereby acquire property that is subject to takings clause protection against the licensor."²²⁶ The court also noted that fishing permits can constitute property for some purposes without constituting property for takings purposes.²²⁷ As courts have long recognized, something can have value without being private property subject to the Fifth Amendment if the "property right" is revoked by the government.²²⁸ The Magnuson-Stevens Act, as amended by the Sustainable Fisheries Act, confirms this judicial precedent by providing that an IFQ is a revocable permit which does not confer any right to compensation if revoked or limited.²²⁹

Although the "ownership" interest conferred by IFQs is revocable, the fact remains that the right given by the public to the fishermen confers significant economic benefits, at minimal cost to the recipient and with little or no benefit to the public treasury.²³⁰ IFQ opponents contend this

224. *Acton v. United States*, 401 F.2d 896, 899 (9th Cir. 1968), *cert. denied*, 395 U.S. 945 (1969). *See also* *United States v. Locke*, 471 U.S. 84, 104-105 (1985) ("The United States . . . maintains broad powers over the terms and conditions upon which the public lands can be used, leased, and acquired."); *Tlingit and Haida Indians of Alaska v. United States*, 389 F.2d 778 (Ct. Cl. 1968).

225. 800 F. Supp. 722 (S.D. Ind. 1992).

226. *Id.* at 727. *See also* *Ridenour v. Furness*, 504 N.E.2d 336 (Ind. Ct. App. 1987).

227. *Burns Harbor Fish Co., Inc. v. Ralston*, 800 F. Supp. at 729-30.

228. *See, e.g.*, *United States v. Fuller*, 409 U.S. 488, 492 (1973); *Acton v. United States*, 401 F.2d at 899; *Marine One, Inc. v. Manatee County*, 898 F.2d at 1493; *Osborne v. United States*, 145 F.2d 892, 896 n.5 (9th Cir. 1944); *Reed v. Village of Shorewood*, 704 F.2d 943, 948 (7th Cir. 1983).

229. 16 U.S.C.A. § 1853(d)(2), (3) (West 1985 & Supp 1997).

230. The Sustainable Fisheries Act amendments authorize the collection of a fee of up

“ownership” is unnecessary and unrelated to fisheries conservation and management.

While IFQs do confer significant economic benefits, it is important to recognize that the potential solutions which are designed to eliminate IFQ ownership and capture the value of the resource for the public benefit can raise equally troubling issues. For example, if the Magnuson-Stevens Act allowed an annual auctioning of fishery shares, much of the value of the fishery would be captured for the public and all fishermen willing to bid would have an opportunity to participate in the fishery. However, the practical result could be that all but the wealthy would be disenfranchised, unless the Councils and the Secretary devised a system for restricting the share size that could be purchased and reserved some of the allowable harvest for certain classes of fishermen. Such restrictions reduce the likelihood that the market, through the transfer and accumulation of shares, will determine the most efficient scale in which the fishery should operate. Over time, an IFQ system should permit the market to determine optimum efficiency in terms of share size, vessel size, fishing techniques, fishing season, etc. Moreover, an annual auction may have the unintended consequence of making long-term planning for the acquisition of vessels and gear more difficult—not to mention the associated problem of obtaining bank financing. Finally, IFQ systems are premised on the theory that a long-term conservation advantage will result from granting fishery participants a vested interest in a fishery. But this advantage would be somewhat diminished if a fisherman’s vision of the future was limited to one year.

The annual auction concept could be modified by extending the term of the quota share to more than one year. Nevertheless, depending on the duration of the share, such a system could have many, if not all, of the problems associated with an annual auction. For example, no single IFQ term would coincide with everyone’s investment cycle and an IFQ of a limited duration would impose a corresponding degree of dislocation in long-term economic planning and capital financing.

If quota shares are awarded at no cost, or are leased or auctioned in some manner, the question that inevitably arises is whether persons who

to three percent of the ex-vessel price of fish harvested under an IFQ plan to recover the costs directly related to the management and enforcement of the IFQ Plan. *Id.* § 1843(d)(2). The Secretary was also authorized to collect a fee of no more than one-half percent of the value of any limited access permit with the fee to be collected upon the award of the permit and upon any transfer. *Id.* § 1855(h)(5).

have acquired shares should be allowed to transfer them. Transferability introduces market forces into the determination of the optimum scale for prosecuting the fishery assuming the auction or lease price, when compared to vessel operating costs and the ex-vessel price of the fish, leaves an economic margin that allows for the sale or lease of the quota shares.

Transferability, however, raises questions regarding whether the transfers will result in an unreasonable concentration of fishing privileges. This is both a social issue and an economic question. Social policy may argue against allowing market forces to alter the character of the fishery by displacing certain participants, but it can also be argued that market allocation allows more efficient use of resources with the antitrust laws providing a brake on the excessive concentration of shares.

Noting these issues, a Council and the Secretary could manipulate the variables of IFQ price, duration, and transferability in numerous ways. Depending on the mixture, some or all of the aforementioned problems arise. For example, if the FMP eliminates the auction by setting the price at or near zero and limits the term of the quotas, the Council forfeits the full recapture of rent for the public. The Council also incurs the problem of redesigning the allocation system at the end of the term, for if no redesign is planned, the allocation takes on the character of a permanent IFQ.

The preceding issues, though important, are structural and beg the question of whether IFQs can be helpful from a conservation and management perspective. The fundamental issue is whether IFQs can assist in preventing overfishing and reducing bycatch.

Although there are several aspects to the overfishing issue, the existence of an IFQ plan allocating the allowable catch does not change the amount of the total allowable catch. Still, the setting of the total allowable catch is not a precise and formulaic process that occurs with absolute certainty in the data. To the extent the data is subject to reasonable, but subjective, interpretation, an open-access fishery with excess fishing capacity can easily result in enormous pressure from fishermen to allow the largest possible harvest. Erring on the side of increased harvest levels may not be in the long-term interest of the resource. If IFQs are structured to vest fishermen with a long-term interest in conserving the resource, decision makers are likely to be under less pressure to maximize harvests.

Non-IFQ limited entry systems are less likely to offer the same potential conservation advantage as IFQs in regards to reducing the demand for increased harvests. Merely limiting the number of fishermen or vessels

in a fishery does not limit the growth of capacity and fishing power as larger and more efficient replacement vessels and gear are added. The number of units participating in the fishery may be controlled, but the overcapacity problems of open access can be replicated. After the total allowable catch is established, the problem that arises is ensuring that fishermen do not exceed it. This can be a particularly thorny issue in many open-access fisheries due to the difficulty managers have in effectively monitoring the harvest rate. The greater the overcapacity problem and the rapidity with which the fishery is prosecuted, the more difficult it is to monitor harvest levels and the greater the likelihood that the harvest will exceed allowable levels. IFQs can alleviate this problem by eliminating the race to the fish. A non-IFQ limited entry system is less likely to be effective in this regard, unless it also limits effort so as to eliminate overcapacity and the competition for who can harvest the most fish in the shortest time.

Although IFQs will generally be more effective than other management systems in preventing overfishing during the fishing season, a race for the fish can still occur under an IFQ system where the fishery is best prosecuted in a limited area or during a specific time. In such a situation, there could still be a race, but with fewer participants. There is also the problem of whether the establishment of IFQs in one fishery will cause displaced vessels to enter other fisheries and create an overcapacity problem there.

Ending the race to the fish through IFQs can, however, create highgrading²³¹ problems. This process can result in overfishing from undercounting the harvest. IFQ proponents argue that highgrading and undercounting is controllable because at-sea enforcement is easier with IFQs because the restricted fishing effort provides enforcement agents with greater observation opportunities. Another deterrent to the practice of highgrading is the self-interest of fishermen who have a vested ownership interest in the long-term health of the resource. Nevertheless, the fact remains that highgrading, though not peculiar to IFQ systems, is a phenomenon which is more likely to occur in an IFQ fishery.

By ending the race to the fish associated with an overcapitalized open-access fishery, IFQs allow fishermen the time to fish in ways that reduce

231. The process by which fishermen take the time to sort the catch and keep only the best market fish, discarding the remainder and then repeating the process until the IFQ is reached.

the bycatch of non-target and prohibited species. While other management techniques, such as time and area closures may still be necessary to control bycatch, IFQs can be a useful tool. Generally, IFQs are a better tool than non-IFQ limited entry systems unless the system can eliminate the race to the fish.

To the extent that accurate reporting of landings is an important element in monitoring harvest levels to prevent overfishing, limited entry systems can improve enforcement by creating an enforcement "paper trail" that requires proof of a fishing permit to cover the landings and which also requires purchasers to document purchases of a specified amount from a permitted harvester. Within the range of limited entry systems, those that assign individual quotas will be more effective from an enforcement perspective and those that establish enforcement systems will allow managers to monitor landing levels and to act against persons exceeding their quotas.

Many of these conservation benefits are directly related to ending the race to harvest the allowable catch. Although IFQs may be more likely to succeed in this regard than non-IFQ limited entry systems, it is important to recognize that the transferability of IFQs may not be necessary to achieve these conservation benefits. In fact, transferability would not generally relate to conservation issues unless transferability allows the elimination of overcapacity problems that are related to conservation issues. For example, if overcapacity in the fishery causes crowding on the fishing grounds, gear conflicts, and gear loss, the lost gear can raise conservation issues if it continues to "ghost fish."

While much of the IFQ debate focuses on the economic aspects of IFQs, such plans can change the economics of the fishery in other respects. First, by ending the race to the fish, fishermen can carry an optimal number of crew and gear instead of carrying extra gear and crew to increase fishing speed. Second, gear entanglements and conflicts are likely to be reduced and the cost of replacing lost gear will be lessened. Third, fishermen may be able to plan their fishing season to maximize the catch per unit of effort instead of experiencing the higher operating costs associated with fishing when the season opens but when fish availability may be lower. Fourth, ex-vessel prices and, therefore, crew income may increase because the fishermen can take more time to preserve the quality of the harvested fish, adjust trip length, and avoid the pricing problems associated with a glut of fish. Fifth, processors can plan processing strategies to reduce operating and fish storage costs by spreading deliver-

ies and processing activities over time. Sixth, processors can increase the amount of product from the fish since a glut of fish associated with shortened fishing seasons overloads processing plants and encourages the processing of only the highest value product. Seventh, greater economic stability will reduce the cost of investment capital.

Despite these potential advantages, IFQs can have significant adverse impacts on the economic position of fishermen who do not receive quota shares and who can no longer participate in the fishery, unless such fishermen have an alternative fishery in which they can participate. It is also important to recognize that non-IFQ limited access systems which eliminate the race to the fish can achieve the benefits enumerated in the preceding paragraph and that transferability is generally unlikely to be necessary to achieve these benefits.

Finally, IFQs can improve safety on the fishing grounds if fishermen are no longer compelled to fish in adverse weather conditions because that is when the season or opening occurs. Again, IFQs, including transferable IFQs, are not the only way to achieve this benefit but they are more likely to do so unless the alternative management system ends the race to the fish and allows fishermen to determine their harvesting season and strategy.

Whether IFQs are a necessary conservation measure is a question that can only be answered on a fishery-by-fishery basis. What can be said is that IFQs can be a useful conservation tool. It can also be said that some type of effort limitation is likely to be necessary in almost every profitable fishery. If a reasonable economic return can be realized from the fishery, it will continue to attract participation. In fact, success in preventing stock depletion using traditional management tools will encourage more fishermen to enter the fishery to take advantage of the potential profit, thereby creating the drift toward an overcapitalized open access fishing derby. Unfortunately, limited entry alone may not be successful in preventing the problems associated with overcapitalization because limiting the number of units in the fishery does not address the capacity of those units and prevent increased pressure on the resource due to increased and improved fishing capacity. Thus, for some fisheries, IFQs are the next evolutionary step in management.

IV. CONCLUSION

Is there a legal and conservation basis for IFQs? The answer to both questions is yes. Although IFQs may not be the universally correct solution, IFQs can be a useful and appropriate conservation and management measure. How useful and how appropriate is a question to be answered based on the conditions in each individual fishery.