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INDIAN FISHING RIGHTS AND THE KLAMATH RIVER

Introduction

The assertion of tribal fishing rights in the Pacific Northwest has resulted in decades of heated litigation. Court decisions have radically reallocated salmon resource harvests from ocean commercial and sport fisheries to Indian tribes and have been met with only a grudging social acceptance by many of the non-Indian groups involved. The fishing rights controversy has thus far focused primarily on tribal rights arising under 19th century treaties negotiated with tribes living along the Columbia River and in western Washington. A less well known fishing rights controversy, however, concerns the rights of Hoopa and Yurok tribes living along the Klamath River in northern California.

The Klamath River supports the second largest chinook salmon run in California and produces salmon that comprise as much as 25 percent of annual ocean fishery harvests between Coos Bay, Oregon, and Fort Bragg, California. Assertion of full Hoopa and Yurok tribal fishing rights may result in as profound a salmon harvest reallocation from the ocean fisheries as that seen in the Columbia River and western Washington. Yet, there are promising signs that Klamath River tribal fishing rights will be determined, and the salmon harvest reallocated, through peaceful negotiation rather than through protracted litigation, which has elsewhere divided fishing communities. This memo will review the legal, regulatory, and biological issues involved in determining the extent of the Klamath River tribes' fishing rights and why negotiation appears to be capable of successfully resolving one of the Pacific Northwest's major salmon fishery allocation disputes.

Legal Context

Litigation of tribal fishing rights in the Northwest has a long and complicated history. For the most part, the litigation has primarily concerned specific treaty rights of certain Columbia River and western Washington tribes and has thus excluded the Klamath River tribes. Indeed, the Klamath River tribes' noninvolvement has important consequences for determining the methods by which Klamath River salmon harvests are allocated today. Nevertheless, many of the legal principles developed in this somewhat fact-specific litigation are applicable to the Klamath River tribes. To understand the nature of Indian fishing rights on the Klamath River it is therefore necessary to briefly review relevant portions of the Northwest fishing rights litigation.[1]

The act of establishing an Indian reservation, whether by treaty, statute, or executive order, reserves an exclusive tribal right to fish on the reservation.[2] The tribes of the Columbia River basin and western Washington, however, negotiated a series of treaties that expressly reserved additional tribal rights to fish at traditional off-reservation locations.[3] In particular,

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1 For a more detailed review of Northwest fishing rights litigation, see Ocean Law Memo Issues 13, 15, 18; Coastal Law Memo Issue 4.

2 See, e.g., Menominee Tribe v. United States, 391 U.S. 404 (1968).

3 See United States v. Winans, 198 U.S. 371 (1905).

these so-called Stevens treaties[4] each contained nearly identical language that reserved "the right of taking fish, at all usual and accustomed places, in common with the citizens of the territory."[5] While the creation of an Indian reservation generally preempts state regulatory authority over on-reservation Indian activities, state regulatory authority over off-reservation activities is less well defined.[6] Thus, early Northwest fishing rights litigation focused on clarifying the state role in regulating off-reservation treaty fishing.[7]

However, as fishing pressure increased, salmon harvests became limited and the extent of the tribal fishing right became critical. The first judicial effort toward defining the tribal fishing right's extent occurred in 1969 when federal District Judge Belloni held that the treaty right "to fish at all usual and accustomed fishing grounds" entitled Columbia River tribes to a "fair share" of the Columbia River harvest.[8] In 1974, federal District Judge Boldt fully quantified the reserved treaty right and held that the right to fish "in common with" non-Indians reserved 50 percent of the harvestable salmon run to the tribes at their off-reservation sites.[9]

The Hoopa and Yurok tribes of the Klamath River never entered into treaties with the United States. Instead, a federal statute and a series of executive orders established the Hoopa Valley Reservation for the Hoopa and Yurok tribes.[10] As a result, the Hoopa and Yurok tribes had no reason to participate in the Stevens treaty litigation. Furthermore, because the area reserved within the Hoopa Valley Reservation contained the traditional Hoopa and Yurok tribal fishing grounds, the court decisions concerned with off-reservation fishing had little practical effect on their fishing rights.

Widespread protest to Judge Boldt's 50 percent allocation decree, however,[11] led the United States Supreme Court to review the allocation decision.[12] The resulting decision represents the first, and so far only, Supreme Court ruling concerned specifically with the quantified scope of Indian fishing rights and fishery harvest allocation. Consequently, principles enunciated in the

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4 Isaac Stevens, the first Governor and Superintendent of Indian Affairs for the Washington Territory, negotiated on behalf of the United States. In honor of this fact, the treaties today carry his name.

5 See, e.g., Treaty with the Yakimas, June 9, 1855, 12 Stat. 951.

6 See, e.g., McClanahan v. Arizona State Tax Comm'n, 411 U.S. 164 (1973).

7 See, e.g., United States v. Winans, 198 U.S. 371 (1905) (treaty language preserves access to traditional off-reservation fishing locations over private land); Tulee v. Washington, 315 U.S. 681 (1942) (states may not impose license fee requirements on Indians fishing at traditional off-reservation fishing sites); Puyallup Tribe v. Department of Game, 391 U.S. 392 (1968) (Puyallup I) (states may regulate Indian fishing at traditional off-reservation sites for conservation purposes); Washington Department of Game v. Puyallup Tribe, 414 U.S. 44 (1973) (Puyallup II) (states may ban Indian commercial fishing at off-reservation sites for conservation purposes when a total fishing ban is otherwise imposed).

8 Sohappy v. Smith, 302 F. Supp. 899 (D. Or. 1969).

9 United States v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974).

10 Act of Mar. 3, 1853, 10 Stat. 238, construed in Arnett v. 5 Gill Nets, 48 Cal. App.3d 454 (1975).

11 Non-Indian fishery groups attacked the 50 percent allocation scheme in state court, the Washington Supreme Court responded by holding that the 50 percent allocation violated equal protection and ordered the Department of Fisheries to abandon regulations promulgated to implement the 50 percent scheme. Puget Sound Gillnetters Ass'n v. Moos, 88 Wash.2d 677, 565 P.2d 1151 (1977); Fishing Vessel Ass'n v. Tollefson, 89 Wash.2d 276, 571 P.2d 1373 (1977).

12 Washington v. Washington State Comm'l Passenger Fishing Vessel Ass'n, 443 U.S. 658 (1979).

decision potentially apply to Indian fishing everywhere, including that by the Hoopa and Yurok tribes on the Klamath River.

The Supreme Court affirmed Judge Boldt's 50 percent allocation decree with several important modifications. First, the Court ruled that exclusively held tribal rights could not be used to undermine an equitable allocation and therefore the 50 percent harvest share included reservation caught fish.[13] In addition, 50 percent represented the maximum amount of fish to which the tribes were entitled and could be adjusted downward if tribal needs were met by a lesser amount. As stated by the Court, tribal needs were measured by the harvest portion that provided a "moderate living."[14] This allowed for "changing circumstances," especially changes in tribal size or reliance on the resource.[15]

Despite the modifications to Judge Boldt's 50 percent allocation, the Supreme Court affirmed the general principle for dividing harvests into equal Indian and non-Indian shares. In particular, the right to fish "in common with" non-Indians reserved to the tribes a non-exclusive fishing right equal to that granted by treaty to non-Indians.[16] Since both sides secured a treaty right to a portion of the fish, the equitable division of that common right was to initially divide the harvest into equal shares.[17]

Express treaty language thus controlled the specific allocation at issue. However, the Supreme Court enunciated a more general rule that arguably applies to the Hoopa and Yurok tribes.[18] Under this principle, allocation of scarce natural resources must occur in a manner that satisfies the Indians' reasonable expectations of livelihood.[19] That expectation is defined by the Indians' dependence on the resource at the time of treaty negotiation.[20]

An example of court-ordered allocation in a situation where Indians hold unlimited reserved treaty rights exists with respect to Great Lakes fishery resources. Three tribes for whom Great Lakes fishery resources were "vitally important" for commercial and subsistence purposes,[21] negotiated a treaty that ceded waters and fishing grounds of the Great Lakes and reserved certain areas for their exclusive use.[22] The court relied on the Supreme Court's Northwest salmon allocation decision and held that because "there was no negotiation resulting in a fishing right held in common . . . the Indians implicitly reserved their aboriginal right [to fish] in its entirety."[23]

In determining an equitable allocation of fishery harvests, the court viewed the reasonable livelihood standard as a threshold determination only. After determining that proposed allocation schemes met this standard, the court sought an allocation that best protected all interests involved. To this end, the court showed paramount concern over fully satisfying tribal reserved rights in a manner that best

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13 Id. at 687.

14 Id. at 686.

15 Id. at 687.

16 Id. at 684-85.

17 Id.

18 Id. at 684.

19 Id.; and see Arizona v. California, 373 U.S. 546 (1963) (tribal water rights reserved a sufficient quantity of water to irrigate all the practicably irrigable acreage on the reservation).

20 Id.; and see United States v. Michigan, 505 F. Supp. 467, 472-73 (W.D. Mich. 1980).

21 United States v. Michigan, 471 F. Supp. 192, 224 (W.D. Mich. 1979).

22 Treaty with the Ottawas, 7 Stat. 491.

23 United States v. Michigan, 505 F. Supp. 467, 473 (W.D. Mich. 1980).

minimized social conflict and preserved the resource.[24] The final apportionment gave the tribes 65 percent, 73 percent, and 68 percent of whitefish harvests in each of three different fishery zones.[25]

Both the Northwest and the Great Lakes fishery allocations involved fishing rights reserved by treaty. Hoopa and Yurok fishing rights, however, were implicitly reserved by the federal statute that created the Indian reservation and not by treaty.[26] This distinction may have no legal effect, however, because it is a well settled principle that Indian rights implicitly reserved by federal statute are of the same nature as those reserved by treaty.[27]

The above doctrines therefore arguably hold that the Hoopa and Yurok tribal fishing rights should be measured by tribal dependence on Klamath River chinook salmon at the time the Hoopa Valley Reservation was created.[28] Furthermore, since no express language restricted their fishing rights to be in common with non-Indians, tribal rights were reserved in their entirety. The application of the Supreme Court's "changing circumstances" rule to the Hoopa and Yurok fishing rights is, however, uncertain. The rule represents a curious departure from the traditional reasonable livelihood standard in that it uses modern circumstances to define Indian reserved rights. Because the adjustment has not yet been applied, its effect remains ambiguous.

It is important to note that the court in the Great Lakes fishery allocation decision did not actually quantify fishing rights itself but rather determined which of two proposed--and previously negotiated--allocation schemes was most equitable. The court emphasized the value of negotiated rather than litigated allocations, and the continued conflict in the Northwest gives credence to this admonishment. Under jurisdiction retained by the Belloni and Boldt courts,[29] salmon resource management difficulty in implementing the court decrees has given rise to on-going conflict and protracted litigation despite the Supreme Court's affirmation of the 50 percent allocation scheme.[30]

The Supreme Court's justification for quantifying the Stevens treaty fishing right provides one of the key rea-

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24 United States v. Michigan, No. M26 73 CA (W.D. Mich., May 31, 1985); 12 Ind. Law Rptr. 3079.

25 Id.

26 Arnett v. 5 Gill Nets, 48 Cal. App.3d 454 (1975).

27 Antoine v. Washington, 420 U.S. 194 (1975) (hunting rights reserved by federal statute); and see Arizona v. California, 373 U.S. 546 (1963) (water rights implicitly reserved by executive order); Winters v. United States, 207 U.S. 564 (1908) (water rights implicitly reserved by federal statute). For a general discussion of this topic, see C. Wilkinson, American Indians, Time, and the Law, at 63-68 (1987).

28 Historical evidence of the Klamath River tribes' lifestyle has been found to "clearly establish the dependence of the tribes upon the Klamath River's resources . . . . To modern Indians of the Hoopa Valley Reservation, fishing remains a way of life." United States v. Wilson, 611 F. Supp. 813, 818 n.5 (D.C. Cal. 1985); and see Mattz v Arnett, 412 U.S. 481, 487 n.6 (1973).

29 Both courts expressly retained jurisdiction to provide immediate judicial review of fishery regulations. Sohappy v. Smith, 302 F. Supp. 899 (1969); United States v. Washington, 384 F. Supp. 312 (1974).

30 With respect to the Columbia River, the court in 1976 amended its decree in accordance with the 50 percent Boldt allocation scheme and additionally requested the parties to develop a comprehensive management plan. Sohappy v. Smith, 529 F.2d 570 (9th Cir. 1976). A Columbia River Management Plan was subsequently developed and adopted by the court in 1977. However, because of continued dispute over the plan, the court in 1985 ordered the parties to negotiate a new plan. The parties developed a second management plan, but have not all formally approved it, and management of Columbia River salmon fisheries remains in flux. See United States v. Oregon, 769 F.2d 1410 (9th Cir. 1985). With respect to the conflict in western Washington, see, e.g., United States v. Washington, 761 F.2d 1404 (9th Cir. 1985).

sons that conflict continues today in the Northwest. The Court characterized salmon resources in the following manner:

> The regular habits of [salmon] make their "runs" predictable; this predictability in turn makes it possible for both fishermen and regulators to forecast and control the number of fish that will be caught or "haryested." Indeed, . . . management of anadromous fisheries is more akin to the cultivation of "crops"--with its relatively high degree of predictability and productive stability, subject mainly to sudden changes in climatic patterns--than is the management of most other commercial and sport fisheries.[31]

Therefore, the Court reasoned, the right to "take fish" must be interpreted as meaning not merely the right to try to catch fish but the right to catch a predictable number of fish.[32] In reality, as the following will explain, salmon abundance is highly unpredictable and management is an inexact science. Harvest allocation under traditional management methods includes a high degree of uncertainty and potential for last minute adjustment. While judicial doctrines can provide rough guidance for and oversight of equitable allocations, discussion and negotiation is far better suited to producing a satisfactory allocation scheme than is litigation.

Regulatory Context

Harvest allocations that recognize Hoopa and Yurok tribal fishery claims to Klamath River chinook salmon have traditionally occurred through the regulatory process. Current regulation of Klamath River chinook involves the interaction of two state agencies, two federal agencies, and a tribal entity. In particular, the Bureau of Indian Affairs (BIA) regulates Indian fishing on the Klamath River in conjunction with the Hoopa Valley Business Council (a tribal organization) and with assistance from the United States Fish and Wildlife Service. The California Department of Fish and Game (CDFG) regulates sport fishing on the Klamath River as well as in California ocean waters out to three miles, while the Oregon Department of Fish and Wildlife regulates sport fishing occurring in Oregon waters out to three miles. The Pacific Fishery Management Council (PFMC) regulates the commercial and sport ocean harvest occurring beyond three miles in federal waters. Prior to 1977, however, California played a greater role in regulating Indian fishing due to a relatively confusing status of the Hoopa Valley Reservation.

The Hoopa Valley Reservation was physically located by three executive orders. In 1855, President Pierce issued the first executive order to locate the Klamath River Reservation at the mouth of the Klamath River for locally residing Yurok Indians. The Yurok Indians depended on Klamath River salmon for their livelihood and thus the reservation extended 20 miles upstream from the mouth of the Klamath River as a strip one mile wide along each side of the river.[33] In 1876, President Grant issued a second order locating another reservation approximately 30 miles upstream at the confluence of the Trinity River for local Hoopa Indians who also depended on Klamath River salmon.[34] Finally, in 1891, President Harrison issued a third order to join the two reservations into what is today known as the Hoopa Valley Reservation by reserving the intervening 30 mile stretch.[35]

In 1892, a federal statute opened up the land of the lower Klamath River Reservation for non-Indian purchase and settlement.[36] California assumed that the 1892 federal act dissolved the Klamath River Reservation and began to regulate Indian fishing in the lower river area. In 1933, CDFG promulgated regulations to prohibit all commercial fishing in the lower Klamath River

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31 Washington v. Washington State Comm'l Passenger Vessel Ass'n, 443 U.S. 658, 663 (1979).

32 Id. at 678.

33 See L. Kappler, Indian Affairs - Laws and Treaties 817 (1904).

34 Id. at 815.

35 Id.

36 Act of June 17, 1892, 27 Stat. 52.

area.[37]

In 1953, Congress enacted Public Law 280 which transferred federal jurisdiction over some Indian reservation activities to California. Congress expressly retained jurisdiction over Indian fishing where fishing rights arose through federal treaty, statute, or agreement.[38] California assumed that executive orders, not statute or agreement, located the Hoopa Valley Reservation and that, therefore, the federal government had not retained jurisidiction over Indian fishing on the Hoopa Valley Reservation. The state promptly extended its freshwater commercial fishing moratorium to the entire Klamath River including the Hoopa Valley Reservation.

California's regulation of reservation fishing lasted for 30 years during which time the tribes were limited to subsistence and ceremonial fishing. Finally, in 1973, the U.S. Supreme Court ruled that the 1892 allotment act had not dis-established the lower Klamath River Reservation. State regulatory jurisdiction in this region was therefore the same as that throughout the Hoopa Valley Reservation.[39] The Court remanded the case to the state court to define the role of state regulatory authority over Indian fishing on the reservation under Public Law 280. On remand, the state court held that although physically located by executive orders, a federal statute expressly authorized the establishment of the Hoopa Valley Reservation.[40] Therefore, in Public Law 280, Congress retained federal jurisdiction over Indian fishing on the reservation. The court held that California had no authority to regulate Indian fishing anywhere on the Hoopa Valley Reservation as defined by its 1891 boundaries.[41]

In 1977, the Bureau of Indian Affairs moved in to fill the regulatory void thus created and promptly promulgated regulations to allow for limited Indian commercial fishing.[42] The exercise of Indian commerical fishing rights was, however, short-lived. Beginning in the late 1970's, excessive ocean fishing, in combination with deteriorating spawning habitat conditions, resulted in critically depressed levels of Klamath River chinook salmon. In August, 1978, after preliminary observations indicated that the total number of fish expected to successfully spawn that year--the spawning escapement--would be far lower than the projected goal, the BIA issued an in-season emergency order to close down the Indian commercial fishery.[43] In 1979, faced with further declining escapement, the BIA turned its emergency order into a revised regulation to prohibit all further Indian commercial fishing on the river.[44]

The Indian commercial fishing moratorium was again reviewed in 1985 when a federal district court ruled that the moratorium impermissibly abrogated Indian reserved fishing rights.[45] On appeal, however, the court reversed, stating that the federal trust relationship to the tribes permits the BIA to impose a commercial fishing ban for conservation purposes.[46] The commercial fishing moratorium remains in effect today.[47]

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37 Cal. Fish & Game Code, then § 429.8, now § 8434 (West 1984).

38 67 Stat. 588, 18 U.S.C. § 1162; 28 U.S.C. § 1360.

39 Mattz v. Arnett, 412 U.S. 481 (1973).

40 Act of Mar. 3, 1853, 10 Stat. 238.

41 Arnett v. 5 Gill Nets, 48 Cal. App. 3d 454, 121 Cal. Rptr. 906 (1975), cert. denied, 425 U.S. 907 (1976).

42 42 Fed. Reg. 40,905 (1977).

43 43 Fed. Reg. 39,086 (1978).

44 44 Fed. Reg. 17,144 (1979).

45 United States v. Wilson, 611 F. Supp. 813 (N.D. Cal. 1985).

46 United States v. Eberhardt, 789 F.2d 1354 (9th Cir. 1986).

47 25 C.F.R. § 250.8(e) (1986).

Biological Context

The decline in Klamath River chinook salmon abundance that forced the BIA to impose its commercial fishing moratorium in 1977 was dramatic. Natural spawning escapement on the Klamath River was estimated to have exceeded 100,000 adults in the early 1960's but had plummeted to less than 35,000 in 1979 and reached a record low of 22,700 adults in 1984. The impact of this decline was felt strongly throughout northern California and southern Oregon ocean fisheries because of the ocean distribution of Klamath River chinook salmon.

Chinook salmon begin their lives in freshwater and migrate to the ocean during their first or second year. They remain in the ocean until maturity which can occur at any time between the ages of two and seven. Upon maturity, chinook salmon return to native streams where they spawn and die. While in the ocean, Klamath River chinook congregate with chinook originating from southern Oregon coastal streams including the Rogue River. Unlike salmon stocks affected by the Boldt and Belloni allocation decisions, the Klamath River and southern Oregon chinook salmon stocks do not migrate northward into Alaska and British Columbia ocean waters. Instead, they remain localized off the northern California and southern Oregon coasts where they are subject to ocean fishing as a mixed group of chinook stocks. Hence, the PFMC has designated the ocean region between Cape Blanco, Oregon, and Point Delgada, California, as a single but separate chinook salmon management area.[48]

Concerned about the decline in Klamath River chinook stock abundance, the PFMC began in the early 1980's to manage this entire ocean region primarily on the basis of the Klamath River chinook management goals.[49] After spawning escapement had declined to its 1984 record low, the PFMC imposed a one-year complete moratorium on commercial chinook salmon fishing in the entire northern California-southern Oregon region effective in the summer of 1985.[50]

In the spring of 1985, the PFMC created an inter-agency Klamath River Management Group to re-assess management of the Klamath River chinook stock.[51] The Management Group in turn established an advisory Klamath River Technical Team comprised of representatives from six different federal and state management agencies, four associations of commercial, Indian, and sport fishery groups, and an environmental organization.[52]

The Technical Team began evaluating the Klamath River chinook management goals. These goals had been developed from traditional management techniques that regulate spawning escapement. According to theoretical models, an ideal level of adult spawning exists for each chinook stock that will produce the maximum possible harvestable surplus or maximum sustainable yield (MSY).[53] The number of adult spawners needed to produce the MSY is fixed as the spawning escapement goal for that stock. Fishery regulation under this technique requires managers to estimate the total ocean stock abundance that exists before the fishing season begins. Managers then estimate the number from this total that can be harvested as surplus above the fixed MSY spawning escapement goal. The harvestable surplus of salmon is allo-

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48 See, e.g., Pacific Fishery Management Council, Review of the 1986 Ocean Salmon Fisheries at II-8 (March, 1987).

49 Pacific Fishery Management Council, Review of the 1983 Ocean Salmon Fisheries and Management Goals for the 1984 Salmon Season off the Coasts of California, Oregon, and Washington at V-23 (March, 1984).

50 25 C.F.R. § 250.8(3) (1986).

51 See Klamath River Technical Team, Recommended Spawning Escapement Policy for Klamath River Fall-Run Chinook (1986).

52 The agencies and organizations represented on the Technical Team included the Bureau of Indian Affairs, California Department of Fish and Game, Hoopa Valley Business Council, Klamath River Restoration Committee, National Marine Fisheries Service, Oregon Department of Fish and Game, Pacific Coast Federation of Fishermens Associations, United Anglers of California, United States Fish and Wildlife Service, and the United States Forest Service.

53 Ricker, Stock and Recruitment, 11 J. Fish. Res. Board Can. 559 (1954).

cated between fishery groups with each harvest share representing a certain number of fish.[54]

Problems with fixed escapement regulation arise because stock abundance can vary considerably from year to year. Stock size fluctuations can lead to substantial fluctuations in the harvestable number of fish. This in turn generates uncertainty from one year to the next in expectations of fishing seasons and fishing opportunities. For example, in years of low pre-season abundance, the harvestable surplus of fish will be correspondingly low and permit only a very short--or even non-existent--fishing season. On the other hand, in years of exceptional pre-season abundance, the harvestable surplus will be correspondingly large and permit an extended fishing season.

In addition to economic uncertainty, fluctuations in harvestable surplus of salmon lead to an extremely unbalanced conservation burden between ocean and freshwater users, the latter represented primarily by the Indian tribes.[55] Overestimates in pre-season stock abundance will generate overestimates in the harvestable surplus, and excessive harvest will reduce spawning escapement. Yet, actual spawning escapement cannot be determined until in-river spawning migrations begin. Consequently, awareness of spawning escapement reductions caused by overestimated stock abundance cannot occur until the start of in-river migrations. By this time, however, ocean fisheries have finished for the season. Freshwater fisheries must therefore be curtailed to allow spawning escapement to reach MSY levels. This situation prompted the BIA to issue its 1978 in-season emergency order closing down the Indian commercial fishery on the Klamath River. The scenario also represents a common reason for which the Columbia River and western Washington tribal fishery groups have invoked the court's jurisdiction.[56]

The Klamath River Technical Team was originally established to evaluate conflicting estimates of the MSY spawning escapement level for Klamath River chinook salmon. The PFMC had adopted a long-term stock rebuilding goal of 115,000 adult spawners, which ocean users considered excessive, and which was further contradicted by other estimates ranging from 24,000 to over 115,000 adult spawners.[57] Faced with this tremendous uncertainty in estimating optimum spawning escapement, the Technical Team proposed that spawning escapement regulation for the Klamath River be abandoned in favor of direct harvest rate management for the northern California and southern Oregon chinook salmon fisheries.[58]

Management by harvest rate, as proposed by the Technical Team, is based on the theory that the underlying productivity of a stock determines the overall harvest rate that will produce MSY from that particular stock. Productivity of a stock represents the number of fish spawned by an individual that will in turn survive to spawn. For example, an extremely productive salmon stock might allow for the harvest of eight out of ten adult spawners in order to produce at MSY, whereas a less productive stock might allow for the harvest of only six out of ten potential spawners for MSY. These harvest rates do not depend on stock size. That is, two stocks of very different sizes but of equal productivities will have the same optimal, or MSY, harvest rate.[59] As a result, fluctuations in stock size

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54 See, e.g., J. Gulland, The Management of Marine Fisheries (1977).

55 See R. Barsh, The Washington Fishing Rights Controversy: An Economic Critique (1979).

56 See, e.g., United States v. Washington, 761 F.2d 1404 (9th Cir. 1985); United States v. Oregon, 769 F.2d 1410 (9th Cir. 1985).

57 See, e.g., Pacific Fishery Management Council, Review of the 1983 Ocean Salmon Fisheries and Management Goals for the 1984 Salmon Season off the Coasts of California, Oregon, and Washington, at V-23 (March, 1984).

58 See Klamath River Technical Team, Recommended Spawning Escapement Policy for Klamath River Fall-Run Chinook (1986).

59 See Hankin & Healey, Dependence of exploitation rates for maximum sustainable yield and stock collapse on age and sex structure of chinook salmon (Oncorhynchus tshawytcsha) stocks, 43 Can. J. Fish. and Aquat. Sci. 1746 (1986).

do not affect MSY harvest rate determinations.

The total MSY harvest rate for a particular chinook stock can be separated into ocean and freshwater fishery component harvest rates. Many different ocean and freshwater harvest rate combinations that produce close to MSY for a particular stock may exist and thus provide flexibility in allocating the MSY harvest rate. For example, the Technical Team found eight different freshwater and ocean fishery harvest rate combinations that provided for overall fishing at a nearly optimum harvest rate.[60] These different harvest rate combinations resulted in harvest allocations that ranged from approximately 86 percent ocean and 14 percent freshwater to approximately 31 percent ocean and 69 percent freshwater.

The achieved harvest rate depends on the number of fishermen and the length of the fishing season. Because MSY harvest rates do not normally require annual adjustment to stock size abundance fluctuations, fixed harvest rate management provides fishing seasons of the same length across years. This result is in sharp contrast to that arising from fixed spawning escapement where fluctuations in stock abundance cause fluctuations in the harvestable surplus. Stabilized fishing seasons offer fishermen better predictability in their harvest opportunity.

Although different in theory, implementation of harvest rate management is similar to that of spawning escapement management. After designating the overall MSY harvest rate, managers estimate preseason stock abundance and the percentage contribution of the particular stock to the overall ocean fishery catch. From these two estimates, managers set an allowable total ocean fishery salmon harvest determined by the harvest rate allocation. The ocean fishery proceeds until it reaches the total ocean quota. Similarly, managers determine the total in-river salmon catch based on the harvest rate allocation. Freshwater fishery groups fish through the in-river spawning run until reaching the designated freshwater harvest.

The Negotiation Framework

The Technical Team recommended the adoption of harvest rate management as well as an overall optimal harvest rate for the Klamath River chinook stock in January, 1986.[61] After formal approval of the management strategy by the PFMC in April, 1986, the fishery groups were left to negotiate an allocation agreement. The Technical Team's eight ocean and freshwater fishery harvest rate combinations provided an objective framework from which the negotiations proceeded. Initially, the ocean fishery groups sought a harvest rate combination that would have allocated approximately 68 percent of the harvest to the ocean fisheries and 32 percent to the freshwater fisheries. The tribes began negotiations by asking for a harvest rate combination that would have allocated 60 percent of the harvest to the ocean and 40 percent to the freshwater fisheries.

The parties settled on a harvest rate combination exactly half-way between their initial positions. Harvest rates under this agreement result in allocating 61 percent of the harvest to the ocean fisheries and 39 percent to the freshwater fisheries, of which 29 percent is the Indian share and 10 percent the sport fishing share.[62]

Although the logical bargaining position of the tribes might seem to be a request for at least 50 percent of the harvest if not more under their unrestricted rights, several crucial background factors prevented the tribes from asserting such a large claim. First, because salmon harvest allocation has never been directly adjudicated for these tribes, the theoretical claim to unrestricted tribal rights remains a tenuous bargaining chip. In addition, the tribes were bargaining for ceremonial and subsistence harvests only, whereas the ocean trollers, representing a far greater number of individuals than the tribes, were bargaining for their commercial livelihood. Moreover, the commercial ocean fishery from northern California to southern Oregon had been shut down completely the year before and was opened up in 1986 at substantially lower harvest rates than in previous years.[63]

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60 Klamath River Technical Team, Recommended Spawning Escapement Policy for Klamath River Fall-Run Chinook, at 13 (1986).

61 Id.

62 Pacific Fishery Management Council, Review of the 1986 Ocean Salmon Fisheries (March 1987).

63 Id.

The assertion of a larger harvest claim by the tribes might have prevented the allocation agreement from being reached. Even as much as a 50 percent harvest share would have required reallocating a substantial portion of the entire ocean fishery harvest to the Klamath River freshwater fisheries. Because the Klamath River chinook stock is only one of many chinook stocks in the northern California-southern Oregon region, the overall ocean fishery harvest rate would have to be reduced to accommodate a 50 percent share in the Klamath River freshwater fisheries. This would have resulted in underutilizing other chinook stocks in the region.

Given the relative positons of the ocean and Indian fishery groups, the final harvest rate agreement represents a mutually acceptable allocation scheme. The allocation agreement was successfully implemented in 1986, and each fishery group fished to the full extent of its agreed harvest rate. Natural spawning escapement in 1986 exceeded all expectations and reached 115,900 adults.[64]

Prospects For The Future

Direct management of harvest rates provided a more objective and stable allocation framework than spawning escapement regulation and thereby facilitated the successful conclusion of an allocation agreement. Of crucial importance to the future of negotiated allocation on the Klamath River, however, will be the status of the Indian commercial fishing right. If the Klamath River chinook stock is rebuilt to healthy levels and the conservation threat is removed, the BIA will be required to lift the commercial fishing ban.[65] The tribes, or factions within the tribes, may then seek a greater share of the chinook salmon harvest. Whether non-litigated allocation can withstand an assertion by the tribes to a greater share of the harvest will depend on the amount of harvest increase sought by the tribes and the degree to which all parties are willing to compromise in order to reach an agreement.

As stock size increases, each allocated harvest share results in a greater number of fish caught even though the overall harvest rate allocation remains unchanged. In particular, stock projections for 1987 indicate that the tribal harvest share of 29 percent under the allocation agreement will amount to roughly 57,000 fish. This represents substantially more fish than the tribes have caught in any one year from 1978-1985 and is over three times the average number caught during those years.[66] Thus, a slight increase in harvest share to the tribes could result in a substantial increase in numbers caught once the Klamath River stock size is rebuilt to healthy levels. Ocean fishery groups may tolerate a slight reallocation of harvest to the tribal fisheries when their own harvest share is similarly increased in numbers by a healthy stock size.

An outright claim by the tribes to their full harvest share defined by their unrestricted reserved fishing rights, however, could force an adjudication of tribal fishing rights. Through litigation, the Hoopa and Yurok tribes could possibly receive full legal recognition of their unrestricted fishing rights. Yet, that legal gain could be drastically diminished should ocean fishery groups successfully encourage a court to apply the Supreme Court's ill-defined and untested moderate living standard. Where such uncertainty in the outcome of court-ordered allocation exists, the parties are wise to avoid litigation and continue to negotiate mutually favorable agreements. The tradition of non-litigation in regulating Klamath River fisheries will, it is hoped, encourage such a result. Certainly, the precedent of having once reached an amicable allocation agreement presents a compelling atmosphere for resolving future allocation decisions in a similarly cooperative manner.

Nancy Diamond
July 1, 1987

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64 Id.

65 United States v. Eberhardt, 789 F.2d 1354 (9th Cir. 1986).

66 Pacific Fishery Management Council, Review of the 1985 Ocean Salmon Fisheries (March 1986).

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PUBLICATION UPDATE

TITLE: Update 1 for Federal Fisheries Management: A Guidebook to the Magnuson Fishery Conservation and Management Act

DATE: March 1987

-ABSTRACT-

An update to the 1985 edition of FEDERAL FISHERIES MANAGEMENT: A GUIDEBOOK TO THE MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT (Jon L. Jacobson, Daniel Conner, and Robert Tozer, editors) is now available. The UPDATE covers statutory and regulatory changes to the MFCMA and other important fisheries-related developments. The UPDATE is published as loose-leaf replacement pages to the 1985 Guidebook.

To order a copy of Update 1 ($2.00) or the Guidebook ($5.00) contact:

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