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RICHARD W. WIEKING  
CLERK, U.S. DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
OAKLAND

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

PACIFIC COAST FEDERATION OF  
FISHERMEN'S ASSOCIATIONS, et al.,

No. C 02-2006 SBA

Plaintiffs,

Related Case No.  
C 00-01955 SBA

v.

**ORDER**

UNITED STATES BUREAU OF  
RECLAMATION, et al.,

*Plaintiff's Counsel are directed to serve this  
order upon all other parties in this action.*

Defendants.

United States District Court  
For the Northern District of California

This matter comes before the Court on Plaintiffs' Motion for Summary Judgment [Doc. 147], the Federal Defendants' Cross-Motion for Summary Judgment [Doc. 166], the Water Users' Cross-Motion for Summary Judgment [Doc. 167], Yurok Tribe's Motion for Summary Judgment [Doc. 144], and Hoopa Valley Tribe's Motion for Summary Judgment on the Fourth Claim for Relief [Doc. 157]. Having read and considered the arguments and evidence presented to the Court in the papers submitted by the parties and at the telephonic hearing held on June 5, 2003, the Court hereby GRANTS IN PART and DENIES IN PART Plaintiffs' Motion for Summary Judgment, GRANTS IN PART AND DENIES IN PART the Federal Defendants' Cross-Motion for Summary Judgment, GRANTS IN PART AND DENIES IN PART the Water Users' Cross-Motion for Summary Judgment, DENIES Yurok Tribe's Motion for Summary Judgment and DENIES Hoopa Valley Tribe's Motion for Summary Judgment.

**I. Background**

**A. The Klamath Project**

The present litigation concerns the operation of the Klamath Reclamation Project ("the Project") for the years 2002-2012. The U.S. Bureau of Reclamation (the "BOR") manages the Klamath Reclamation Project, which covers approximately 200,000 miles in Northern California and Southern

1 Oregon. See Kandra v. United States, 145 F.Supp.2d 1192, 1196 (D.Or. 2001). Water collects in the  
2 Upper Klamath Lake ("UKL"), which is relatively shallow and has a limited storage capacity available  
3 for use during dry years. Water is drawn from UKL into the Project via the A-canal, which sits above  
4 Link River Dam. Link River Dam regulates the flow of water into the lower Klamath River. Link River  
5 Dam is the first in a series of dams in the Project, the last being the Iron Gate Dam. From Iron Gate  
6 Dam, the Klamath River flows into the Pacific Ocean.

7 The BOR determines the level, timing, and rate of water flow through the Klamath Project. In  
8 managing the Project, the BOR must balance many interests and obligations, all potentially competing  
9 for the same valuable, but limited, resource. Pursuant to contracts authorized by the Reclamation Act,  
10 the Project provides irrigation water to farmers and communities in the area. Additionally, water from  
11 the Project supports two national wildlife refuges, the Lower Klamath and Tule Lake National Wildlife  
12 Refuges. The BOR must also preserve the tribal resources of three Native American Tribes whose  
13 territory falls within the Project-- the Hoopa, Klamath, and Yurok Tribes. See Pacific Coast Federation  
14 of Fishermen's Associations v. U.S. Bureau of Reclamation, 138 F.Supp.2d 1228, 1231 (N.D.Cal. 2001);  
15 see also Patterson v. Klamath Water Users Protective Ass'n, 204 F.3d 1206, 1213 (9th Cir. 2000) (citing  
16 United States v. Adair, 723 F.3d 1394, 1408-11, 1415 (9th Cir. 1983)). The preservation of tribal  
17 resources includes protection of the coho salmon and maintaining the tribes' water rights. See Kandra  
18 v. U.S., 145 F.Supp.2d 1192, 1197 (D.Or. 2001) Additionally, the Project must comply with the  
19 Endangered Species Act ("ESA"), Title 16 U.S.C. section 1531 *et seq.*, because its territory encompasses  
20 the habitat of the coho salmon, a threatened species under the Endangered Species Act. See 62 Fed.Reg.  
21 24588, 24592 (May 6, 1997).<sup>1</sup> The coho salmon populate the waters below the Iron Gate Dam in the  
22 Klamath River and its tributaries, and the Klamath River from Iron Gate Dam to the Pacific Ocean has  
23 been designated critical habitat for the coho salmon.

24 **B. Requirements Under the ESA**

25 Under the ESA, the Project is prohibited from engaging in any action that is likely to "jeopardize  
26

27 <sup>1</sup>The Ninth Circuit has found that the interests of the Tribes as well as compliance with the ESA  
28 take precedence over contracts with irrigators under the Reclamation Act. See Patterson, 204 F.3d at  
1213-14.

1 the continued existence of" an endangered or threatened species or result in "destruction or adverse  
2 modification of [the designated critical habitat]." 16 U.S.C. § 1536(a)(2). An action "jeopardizes the  
3 continued existence" of a species when the action "reasonably would be expected, directly or indirectly,  
4 to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by  
5 reducing the reproduction, numbers, or distribution of that species." 50 C.F.R. §402.02. An action  
6 results in "destruction or adverse modification" when the action results in a "direct or indirect alteration  
7 that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed  
8 species." Id.

9       Whenever an agency undertakes an action that "may affect" a species listed as threatened under  
10 the ESA, it must pursue consultation with the United States Fish and Wildlife Service ("FWS") or the  
11 National Marine Fish Service (the "NMFS"). The agency proposing the action (the "acting agency") may  
12 prepare a "biological assessment" ("BA") to evaluate the potential effects of a proposed action. 50  
13 C.F.R. § 402.12(a). As part of the formal consultation process, the consulting agency will issue a  
14 "biological opinion" detailing how the proposed action will affect the listed species. 16 U.S.C.  
15 §1536(b)(3)(A). If the NMFS or the FWS determines that the agency action will jeopardize or adversely  
16 modify the species or its critical habitat, the NMFS or the FWS will suggest reasonable and prudent  
17 alternatives ("RPAs") that "avoid the likelihood of jeopardizing the continued existence of listed species  
18 or result in the destruction or modification of critical habitat." 50 C.F.R. § 402.02; see also 16 U.S.C.  
19 § 1536(a)(2); 16 U.S.C. § 1536(b)(a)(3). In evaluating whether a proposed action is likely to avoid  
20 jeopardy or destroy or modify a critical habitat, the NMFS or the FWS must evaluate the "effects of the  
21 action," along with the "cumulative effects" on the species. 50 C.F.R. § 402.14(g)(3). "Effects of the  
22 action' refers to the direct and indirect effects of an action on the species or critical habitat, together with  
23 the effects of other activities that are interrelated or interdependent with that action, that will be added  
24 to the environmental baseline. The environmental baseline includes...the anticipated impact of all  
25 proposed Federal projects in the action area that have already undergone...consultation, and the impact  
26 of State or private actions which are contemporaneous with the consultation in process. Indirect effects  
27 are those that are caused by the proposed action and are later in time, but are still reasonably certain to  
28 occur." 50 C.F.R. § 402.02. "Cumulative effects' are those effects of future State or private activities,

1 not involving Federal activities, that are reasonably certain to occur within the action area of the Federal  
2 action subject to consultation." *Id.*

3 If the NMFS or the FWS determines that the proposed action or the RPA will not jeopardize a  
4 species, but may result in the taking of a threatened species that is incidental to the agency action, the  
5 NMFS or the FWS provides an "incidental take statement" ("ITS") along with the biological opinion.  
6 16 U.S.C. § 1536(b)(4)(i)-(iii). The ITS specifies the impact of such incidental taking on the species and  
7 RPAs that are necessary or appropriate to minimize such impact. 16 U.S.C. § 1536(b)(4).

8 **C. History of the BOR's Operating Plans and Compliance with ESA Requirements**

9 Beginning in 1995, the BOR began issuing annual operating plans detailing, *inter alia*, the  
10 minimum flow levels in the Klamath River below the Iron Gate Dam. The plans specifically provided  
11 for flows in terms of cubic feet per second ("cfs") of water. The flows were planned upon weekly or  
12 monthly periods, based upon hydrological conditions for the year; e.g., Above Average, Below Average,  
13 Dry, and Critically Dry. These classifications were based upon estimates received from the Natural  
14 Resources Conservation Service. Generally, the accuracy of the estimates increased in temporal  
15 proximity to the planned action.

16 Since 1995, the BOR has also been attempting to prepare a multiple-year operating plan,  
17 including a biological assessment as required under the ESA. Before issuing the multi-year plan, the  
18 BOR consulted with Thomas Hardy, Ph.D. of the NMFS, to complete a comprehensive review of the  
19 status of all anadromous fish in the Klamath River. In August of 1999, Dr. Hardy released "Phase I" of  
20 his report, ("Hardy Phase I"), which recommended certain interim minimum flow levels necessary to  
21 protect the anadromous fish in the Klamath River. However, the Phase I report was only an interim  
22 report because further testing and analysis was desired, in particular site-specific studies. In November  
23 of 2001, Dr. Hardy released the draft version of the Phase II Report (the "2001 Hardy Draft Report").  
24 That version included site-specific studies and further analysis. The 2001 Hardy Draft Report has not  
25 been issued in its final form.

26 In 2000, the BOR issued an operating plan which instituted various flow levels. However, the  
27 BOR did not seek formal consultation of the plan as required by the ESA. The Pacific Coast Federation  
28 of Fishermen's Associations ("PCFFA"), brought suit in this Court challenging the BOR's 2000 plan.

1 On April 3, 2001, the Court granted PCFFA's motion for summary judgment. See Pacific Coast  
2 Federation of Fishermen's Association v. U.S. Bureau of Reclamation, 138 F.Supp.2d at 1247. The  
3 Court found that "[d]espite the weight which the Ninth Circuit repeatedly has placed upon the procedural  
4 requirements of the ESA, it is clear that the Bureau of Reclamations failed to comply with these  
5 requirements before implementing its 2000 Operations Plan for the Klamath Project." Id. at 1243.  
6 Based on the substantial violation of the ESA's procedural requirements, the Court determined that an  
7 injunction was appropriate. Thus, the Court enjoined the BOR from sending water irrigation deliveries  
8 from the Project if the flows dropped below certain minimum amounts. See id. at 1250.

9 In order to determine what levels were appropriate, the Court looked to the best science available.  
10 The Court determined that the best science available at the time was the Hardy Phase I report.

11 [The Hardy] Phase I report was based upon extensive input from the  
12 members of a technical team, including Bureau of Reclamation staff, and  
13 was created specifically to address the situation which the Bureau [BOR]  
14 apparently still is confronting, namely, the need to present instream flow  
15 recommendations without completed site-specific studies. Neither the  
16 Bureau nor Intervenor direct the Court to any better science. Nor do they  
17 offer a counter proposal concerning the type of injunction that should be  
18 entered.

19 Id. at 1249-50. By its terms, the order was to expire when the BOR adopted a plan which met the  
20 requirements of the ESA.

21 On April 6, 2001, three days after the Court issued its Order, the NMFS issued a biological  
22 opinion ( the "2001 NMFS Biological Opinion") discussing the on-going impact of the Project on, *inter*  
23 *alia*, coho salmon. The 2001 NMFS Biological Opinion concluded that the low flow levels proposed  
24 by the BOR for 2001 were likely to jeopardize the continued existence of the coho salmon and adversely  
25 modify their habitat. The NMFS proposed a "reasonable and prudent alternative" for the Project's  
26 operations including minimum flow levels they believed were necessary to avoid jeopardizing the coho  
27 salmon.

28 On the same day, the FWS also issued an opinion stating that the Project needed to maintain  
certain levels at Upper Klamath Lake in order to mitigate any deleterious impact upon the shortnose and  
Lost River sucker fish, both of which have been listed as endangered. Based on these two opinions, and  
after further consultation with the NMFS and the FWS, the BOR indicated it would implement the

1 biological opinions in its 2001 operating plan. The 2001 plan called for drastically reduced deliveries  
2 of water to irrigation districts. This operating plan was challenged by irrigators and irrigation districts.  
3 However, the plan was upheld by the District Court for the District of Oregon. See Kandra v. United  
4 States, 145 F.Supp.2d 1192 (D.Or. 2001).

5 **D. The NRC Report and the Interim Operating Plan**

6 In December of 2001, the Department of the Interior ("Interior") and the Department of  
7 Commerce ("Commerce"), sought review of the 2001 NMFS Biological Opinion and the FWS biological  
8 opinion by the National Research Council ("NRC"), an arm of the National Academy of Sciences. The  
9 NRC convened a Committee on Endangered and Threatened Fishes in the Klamath River Basin  
10 consisting of twelve independent scientists and scholars (the "NRC Committee"). The NRC Committee  
11 conducted hearings and received opinions and evidence from other individuals affected by the Project  
12 or those knowledgeable in the field, including a member of the PCFFA and Dr. Hardy.<sup>2</sup> A report was  
13 prepared and circulated to nine independent reviewers for additional comment and critique. Finally, it  
14 was subject to a further independent examination by two external reviewers.

15 On February 6, 2002, the NRC Committee issued its "Prepublication Copy, Interim Report,  
16 Scientific Evaluation of Biological Opinions on Endangered and Threatened Fishes in the Klamath River  
17 Basin (2002)," (the "NRC Report"). The NRC Report recognized that "the reduction in stocks of native  
18 coho salmon in the Klamath River Basin has been caused by multiple interactive factors." Changes in  
19 the physical habitat associated with inadequate flows and water temperature were cited as examples.  
20 However, the NRC Report found that there was not a sufficient basis to support the proposed flows in  
21 the 2001 NMFS Biological Opinion.

22 The proposed low-flow limits on the Klamath River may not be of  
23 significant benefit to the coho population. While the provision of  
24 additional flow seems intuitively to be a prudent measure of expanding  
25 habitat, the total habitat expansion that is possible given the limited  
26 amount of water that is available in dry years is not demonstrably of  
27 much importance to maintenance of the population. In wet years, any  
28 benefits from increased flow will be realized without special limitations.  
Year classes that have high relative strength should have emerged from  
the wet years of the recent past flow regime if flow is limiting. This does

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<sup>2</sup> The NRC Committee did not consider the Hardy Phase II report which was only in draft form.

1 not appear to have been the case in the past decade, however. Thus,  
2 factors other than dry-year low flows appear to be limiting to survival and  
3 maintenance of coho.....[A]vailable information provides little support for  
4 benefits presumed to occur through the increase of flows beyond those of  
5 the last decade.

6 AR at 2942-44. The NRC Report found that higher flows might disadvantage the young coho salmon  
7 between July and September because the additional flows would include water which has been warmed  
8 in retention lakes. Id. High water temperature was found to be one of the reasons for the decline of coho  
9 salmon. "This issue has apparently not yet been studied in any rigorous manner, yet it is critical to the  
10 evaluation of higher flows in the warmest months." Id. at 2943. The NRC Report also questioned  
11 whether the increased flows might have a detrimental effect upon thermal refugia which is critical to the  
12 coho salmon's habitat. Id.

13 The NRC Report found that,

14 Progressive depletion of flows in the Klamath River main stem would at  
15 some point be detrimental to coho salmon through stranding or predation  
16 losses. Thus, incremental depletions beyond those that are reflected in  
17 the recent historical record could be accomplished only with increased  
18 risk to coho salmon. At the same time, the available information  
19 provides little support for the benefits presumed to occur through the  
20 increased flows beyond those of the last decade. While single-year or  
21 multiple-year averages of low-flow extremes beyond those presently  
22 reflected in the record cannot be supported, there is also presently little  
23 evidence of a scientific nature that increased low flows will improve the  
24 welfare of the coho salmon.

25 Id. at 2944. While the NRC Report did not find scientific support for the minimum flows proposed by  
26 NMFS, the NRC Report also found that the BOR's proposal in its 2001 biological assessment could not  
27 be justified. The NRC Report concluded that the BOR's 2001 biological assessment "could lead to more  
28 extreme suppression of flows than has been seen in the past, and cannot be justified either." Id. at 2945.  
Overall, the report concluded that "there is no convincing scientific justification at present for deviating  
from flows derived from operational practices in place between 1990 and 2000."<sup>3</sup> Id.

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<sup>3</sup> Subsequent to the release of this report, the NMFS sent a letter to NRC requesting clarification. Of particular importance, the NMFS inquired whether the NRC "considered the benefits of increased flows in the spring, when temperature is not a limiting factor." The NMFS propounded questions to the NRC on whether its recommendations about minimum flow levels were applicable to spring flows. On April 30, 2002, the NRC issued a letter in response to the NMFS' request for clarification. The NRC stated in its clarification letter that it "did consider whether there would be benefits to fry from increased

1           On February 25, 2002, the BOR issued its multi-year "Final Biological Assessment: The Effects  
2 of Proposed Actions Related to Klamath Project Operation (April 1, 2002-March 31, 2012)" (hereinafter  
3 "the 2002 Biological Assessment"). In accordance with the findings of the NRC Report, the BOR's 2002  
4 Biological Assessment proposes flows that are intended to mimic the operational practices for the ten  
5 year period beginning with 1990.

6           On February 27, 2002, the BOR initiated formal consultation with the NMFS concerning its 2002  
7 Biological Assessment. The NMFS indicated that its biological opinion reviewing the 2002 Biological  
8 Assessment would not likely be completed until June of 2002. In light of the fact that the NMFS was  
9 not likely to release its report prior to the spring operations, on March 27, 2002, the BOR issued an  
10 interim operating plan for April through May, 2002 (the "2002 Interim Operating Plan"). The 2002  
11 Interim Operating Plan proposed minimum flows that were consistent with those in the 2002 Biological  
12 Assessment.

13           Based upon the BOR's 2002 Interim Operating Plan, on April 24, 2002, Plaintiffs PCFFA,  
14 Institute for Fisheries Resources, Northcoast Environmental Center, Klamath Forest Alliance, Oregon  
15 National Resources Council, the Wilderness Society, Waterwatch of Oregon, Defenders of Wildlife,  
16 Headwaters, and Representative Mike Thompson (collectively "Plaintiffs") filed a Complaint in this  
17 matter, along with a motion for a temporary restraining order. Plaintiffs argued that based upon the best  
18 science available, a much higher minimum flow of water from the Iron Gate Dam than set in the 2002  
19 Interim Operating Plan was necessary to avoid a negative impact upon the coho salmon. Based on the  
20 Hardy Phase I report, the 2001 NMFS biological opinion, and the 2001 Hardy Draft Report, they  
21 asserted that coho salmon require higher instream flows of water into the lower Klamath River. Thus,  
22 Plaintiffs sought a temporary restraining order preventing the BOR from restricting the flow to those

23 \_\_\_\_\_  
24 spring flows." It recognizes that the concerns about increased water temperature are not present in  
25 relation to the spring flows. However, the NRC asserted that it found "other weaknesses in the  
26 arguments for increased flows" and that the "projected increases in habitat for the fry seemed, in the  
27 opinion of the committee, quite modest at best." The NRC also found it unlikely that the coho salmon  
28 are "saturating the main stem habitat" or that the main stem was a significant rearing area for the coho  
salmon. Thus, the NRC's letter reaffirms its conclusion that there is no convincing evidence to support  
the minimum flows proposed in the NMFS's 2001 opinion. However, the NRC did acknowledge that  
the conclusions about benefits of increased flow levels might be correct pending more research and  
studies.



1 levels in the BOR's 2002 Interim Operating Plan, and mandating minimum flows in accordance with the  
2 2001 Hardy Draft Report. Plaintiffs argued that the BOR had not completed a formal consultation with  
3 the NMFS as required under the ESA and that the putative informal consultation is invalid.  
4 Alternatively, Plaintiffs asserted that even if the informal consultation is valid, the NMFS' concurrence  
5 with the 2002 Interim Operating Plan violates the Administrative Procedures Act ("APA"), Title 5  
6 U.S.C. sections 551 *et seq.*, because it is arbitrary, capricious, and contrary to law.

7 In an order filed May 22, 2002, the Court denied Plaintiffs' motion for a temporary restraining  
8 order. Although the Court concluded that the BOR failed to satisfy the procedural consultation  
9 requirements of the ESA, the Court found that the BOR could proceed with its 2002 Interim Operating  
10 Plan pursuant to ESA § 7(d), which allows an agency to proceed with its proposed action prior to  
11 completing consultation if it is determined that the activity would not irreversibly or irretrievably commit  
12 resources which would foreclose the development of an RPA. In its Order, this Court approved the  
13 BOR's use of the NRC report as the best science available, and declined to rely on the 2001 Hardy Draft  
14 Report as the best science, since that report existed only in draft form.

15 While the validity of the 2002 Interim Operating Plan was being litigated in court, the NMFS  
16 continued to assess the validity of the BOR's 2002 Biological Assessment and produced drafts of its  
17 biological opinion. On April 23, April 29, and April 30, 2002, the NMFS and the BOR met regarding  
18 the most recent version of the draft biological opinion, which proposed specific flow rates that were  
19 higher than those proposed in BOR's 2002 Biological Assessment. *Id.* at 4594. The BOR proposed that  
20 it should be responsible for the remedy to the extent that coho are harmed as a result of the Klamath  
21 Project. *Id.* Specifically, the BOR proposed that it should be responsible for providing 57% of the flows  
22 proposed in the draft biological opinion, based on the fact that 57% of the irrigable acres in the upper  
23 Klamath Basin are irrigated by Project contractors. *Id.* The NMFS noted that providing 57% of what  
24 it recommended as the appropriate target flows might be insufficient to avoid jeopardizing the coho, and  
25 therefore would not constitute a viable RPA. However, "[t]his problem was resolved when [BOR]  
26 agreed that it would use its authorities to establish a multi-agency task force/working group, comprising  
27 Federal, State, Tribal and, where possible, local agencies and interests, to develop the other 43% of the  
28 flows identified in the RPA. This approach anticipates that the States of California and Oregon will

1 participate in the process, step up enforcement of existing water rights or water rights laws, and develop  
2 programs to improve flows in the tributaries to the Klamath above and below the Project." Id.

3 On May 31, 2002, the NMFS issued its final biological opinion (the "2002 Biological Opinion").  
4 The 2002 Biological Opinion concluded that the BOR's proposed action contained in the 2002 Biological  
5 Assessment "is likely to jeopardize the continued existence of SONC coho salmon" and "is likely to  
6 adversely modify critical habitat for the SONC coho salmon." Id. at 4590. The NMFS then proposed  
7 an RPA that could be implemented by the BOR that would avoid the likelihood of jeopardizing the  
8 existence of the coho salmon or adversely modifying their critical habitat. Id. at 4591. The RPA  
9 consists of the following elements: (1) specific water management measures over a ten-year period; (2)  
10 a water bank and water supply enhancement program to provide flows to the Klamath River below Iron  
11 Gate Dam; (3) an agreed-upon long-term flow target to be achieved by 2010; (4) an inter-governmental  
12 task force--the Conservation Implementation Committee-- to develop, procure, and manage water  
13 resources; and (5) an inter-governmental science panel to develop and implement a research program  
14 to identify and fill gaps in existing knowledge regarding coho and their habitat requirements during  
15 various life history states and water year types. Id. at 4591. These program elements are to take effect  
16 in various degrees during three phases. Phase I covers the years 2002-2005. During this time, the RPA  
17 requires the BOR to: 1) lay the ground work for gaining cooperation of Oregon, California, and Klamath  
18 River Tribes; 2) establish a scientific panel to guide investigations to address issues identified in the  
19 interim and final NRC committee reports on threatened and endangered fishes in the Klamath River  
20 Basin; 3) begin to develop water supplies that are devoted to increasing flows in the Klamath River  
21 below Iron Gate Dam; and 4) provide the minimum flows identified in BOR's 2002 Biological  
22 Assessment, as modified on an annual basis by agreed upon use of the water bank for improved spring  
23 and/or summer flows.<sup>4</sup> In Phase II, covering the years 2006-2010, the BOR is to 1) maintain a waterbank  
24 of 100 thousand acre-feet; 2) contribute 57% of the long-term RPA flow to the river below Iron Gate  
25 Dam or the flow identified in its Biological Assessment, whichever is greater; 3) implement non-flow

26  
27 <sup>4</sup>In 2002, in addition to the flows proposed by the Biological Assessment for a below average  
28 year, BOR is to provide 30,000 acre-feet of water. In 2003-2005, in addition to the flows proposed in  
the 2002 Biological Assessment, BOR is to provide an additional 50,000, 75,000, and 100,000 of acre-  
feet of water, respectively. Id. at 4598.

