



1 Reclamation had to operate Glen Canyon Dam under a nine-month steady flow regime  
2 called "seasonally-adjusted steady flows." Reclamation has failed to do so since 2001,  
3 in violation of ESA Sections 7(a)(2) and 9(a)(1)(B).

4 3. Further, Reclamation has violated ESA section 7(a)(2) by never  
5 "consulting" on its Glen Canyon Dam's "Annual Operating Plans." Reclamation has  
6 also violated the National Environmental Policy Act (NEPA) by not subjecting its  
7 Annual Operating Plans for Glen Canyon Dam to public environmental review through  
8 an environmental assessment or environmental impact statement. Plaintiffs Grand  
9 Canyon Trust challenges these violations of the ESA and NEPA.

#### 10 JURISDICTION AND VENUE

11 4. This Court has jurisdiction over this action pursuant to 5 U.S.C. § 701 et  
12 seq. and 28 U.S.C. § 1331, and 16 U.S.C. §§ 1540(c) and (g). A present and actual  
13 controversy exists between the parties. 28 U.S.C. § 2201.

14 5. As required by the ESA, 16 U.S.C. § 1540(g)(2)(A), on September 10,  
15 2007, the Grand Canyon Trust provided the Defendants with written notice of intent to  
16 sue regarding the ESA violations alleged in this Complaint. More than sixty days have  
17 passed since Defendants were put on notice of these alleged violations.

18 6. Venue is properly vested in this Court pursuant to 16 U.S.C. §  
19 1540(g)(3)(A) and 28 U.S.C. § 1391(e).

#### 20 PARTIES

21 7. Plaintiff GRAND CANYON TRUST sues on behalf of itself and its  
22 adversely affected members and staff. The Trust is a non-profit corporation  
23 headquartered in Flagstaff, Arizona. The mission of the Grand Canyon Trust is to  
24 protect and restore the canyon country of the Colorado Plateau -- its spectacular  
25 landscapes, flowing rivers, clean air, diversity of plants and animals, and areas of beauty  
26 and solitude. One of the Trust's goals is to ensure that the Colorado Plateau is a region  
27 characterized by vast open spaces with restored, healthy ecosystems and habitat for all  
28 native fish, animals, and plants. The Grand Canyon Trust has over 3,500 members,

1 many of whom reside in western states, including Wyoming, Colorado, Utah, New  
2 Mexico, California, New Mexico, and Arizona. Members of the Grand Canyon Trust  
3 regularly use and intend to continue to use lands throughout the Colorado River region  
4 as well as the Colorado River and its tributaries -- including the critical habitat and  
5 potential habitat of the humpback chub -- for observation, research, aesthetic enjoyment,  
6 and other recreational, scientific, and educational activities. The Trust's members and  
7 staff have participated in efforts to protect and preserve the endangered humpback chub,  
8 its critical habitat and other fish native to the Colorado River, which includes  
9 advocating for and presenting information regarding flow regimes from Glen Canyon  
10 Dam that protect Grand Canyon resources and comply with the ESA, NEPA, and the  
11 Administrative Procedure Act (APA). Defendants have failed to operate Glen Canyon  
12 Dam in a manner that complies with the ESA, NEPA, and APA. The Trust's interests  
13 have been, are being, and unless the relief requested is granted, will continue to be  
14 adversely affected and injured by Defendants' operations of Glen Canyon Dam. The  
15 Trust's injuries will be redressed by the relief sought.

16 8. Defendant U.S. BUREAU OF RECLAMATION operates Glen Canyon  
17 Dam and determines flow releases from the Dam

18 9. Defendant ROBERT JOHNSON is sued in his official capacity as the  
19 Commissioner of the U.S. Bureau of Reclamation. Defendant Johnson has final  
20 responsibility for operating Glen Canyon Dam and complying with the ESA and NEPA.

## 21 LEGAL BACKGROUND

### 22 I. ENDANGERED SPECIES ACT

23 10. Before the ESA operates for the benefit of an imperiled species, FWS  
24 must first list a species as "threatened" or "endangered" within the meaning of the ESA  
25 and concurrently designate critical habitat. 16 U.S.C. § 1533. Once listed, the ESA  
26 provides several procedural and substantive protections for the listed species and its  
27 habitat. These include: (1) the section 7 duty on federal agencies to "consult" with FWS  
28 before undertaking any action that may affect a listed species, 16 U.S.C. § 1536(a)(2);

1 (2) the section 7 prohibition against federal activities that jeopardize the continued  
2 existence of listed species, id; (3) the section 7 prohibition against federal activities that  
3 adversely modify or destroy critical habitat, id; and (4) the section 9 prohibition against  
4 "taking" individual members of a listed species which applies comprehensively to all  
5 "persons." Id. § 1538(a)(1)(B).

6 A. The Section 7(a)(2) Consultation Process

7 11. Under section 7(a)(2) of the ESA, a federal agency cannot undertake any  
8 action that is "likely to jeopardize the continued existence" of any listed species or  
9 "result in the destruction or adverse modification of" critical habitat. 16 U.S.C. §  
10 1536(a)(2). Upon proposing to authorize, fund, or carry out an action that may affect a  
11 species or its critical habitat, the action agency is required to consult with the FWS. 16  
12 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.2. Throughout the consultation process, the action  
13 agency and the "applicant," as defined by ESA regulations at 50 C.F.R. § 402.2, shall  
14 not make an irreversible or irretrievable commitment of resources. 16 U.S.C. § 1536(d).

15 12. The action agency must prepare a "biological assessment" to facilitate this  
16 consultation process. 16 U.S.C. § 1536(c). The agency preparing the biological  
17 assessment must use the best scientific and commercial data available. 16 U.S.C. §  
18 1536(a)(2). In the biological assessment, the action agency must identify the proposed  
19 or listed species or designated or proposed critical habitat in the area, and evaluate the  
20 potential effects of the proposed action. 16 U.S.C. § 1536(a)(2); 50 CFR §§ 402.02,  
21 402.12, 402.14(d).

22 13. At the conclusion of the consultation process, FWS provides the action  
23 agency with a biological opinion as to whether "jeopardy" or "adverse modification" is  
24 likely to occur due to the action and, if so, sets forth the reasonable and prudent  
25 alternatives that could avoid such ESA violations. 16 U.S.C. § 1536(b)(3)(A). FWS  
26 must use the best scientific and commercial data available in drafting a biological  
27 opinion. 16 U.S.C. § 1536(a)(2). According to FWS regulations, jeopardy results when  
28 it is reasonable to expect that the action would "reduce appreciably the likelihood of

1 both the survival and recovery of a listed species in the wild by reducing the  
2 reproduction, numbers, or distribution of that species." 50 C.F.R. § 402.02. Adverse  
3 modification occurs when it is reasonable to expect that the action results in "a direct or  
4 indirect alteration that appreciably diminishes the value of critical habitat for both the  
5 survival and recovery of a listed species. Such alterations include, but are not limited  
6 to, alterations adversely modifying any of those physical or biological features that were  
7 the basis for determining the habitat to be critical." 50 C.F.R. § 402.02. Agencies must  
8 reinitiate consultation when (1) the action changes in a manner that was not considered  
9 by the FWS during the initial consultation, (2) the amount or extent of "take" is higher  
10 than expected, (3) the manner or extent of the action's effects were not previously  
11 considered, or (4) if a new species is listed or critical habitat designated that may be  
12 affected by the identified action. 50 C.F.R. § 402.16.

13 B. The Section 9(a)(1)(B) Take Prohibition And Exceptions

14 14. Under section 9 of the ESA, it is unlawful for anyone to "take" a  
15 threatened or endangered species of fish or wildlife. 16 U.S.C. § 1538(a)(1)(B) & (G).  
16 Congress broadly defined "take" in the ESA to mean "harass, harm, pursue, hunt, shoot,  
17 wound, kill, trap, capture, or collect." 16 U.S.C. § 1532(19). The term "harm" is further  
18 defined to include "significant habitat modification or degradation where it actually kills  
19 or injures wildlife by significantly impairing essential behavioral patterns, including  
20 breeding, feeding or sheltering." 50 C.F.R. § 17.3.

21 15. Congress created two "incidental take" exceptions to section 9's take  
22 prohibition. In addition to ESA section 10 incidental "take permits," which do not cover  
23 federal agencies, Congress also created incidental "take statements" for federal  
24 agencies. 16 U.S.C. § 1536(o)(2). As part of the section 7 consultation process, FWS  
25 provides a "take statement" to an action agency only after making a no jeopardy and no  
26 adverse modification finding or identifying a reasonable and prudent alternative that  
27 avoids jeopardy and adverse modification. Id. § 1536(b)(4)(A). An incidental take  
28 statement must (1) specify the impacts on the species, (2) specify the reasonable and

1 prudent measures that FWS considers necessary to minimize such impact, and (3) set  
2 forth terms and conditions that must be complied with by the federal agency to  
3 implement these reasonable and prudent measures. 16 U.S.C. § 1536(b)(4). Failure to  
4 comply with the mandatory terms and conditions of a take statement renders the  
5 agency's action in violation of the ESA section 9 take prohibition.

## 6 II. NATIONAL ENVIRONMENTAL POLICY ACT

7 16. Congress enacted NEPA to "promote efforts which will prevent or  
8 eliminate damage to the environment." 42 U.S.C. § 4321. NEPA requires federal  
9 agencies to analyze environmental impacts of a particular action. In addition, NEPA  
10 ensures that the public is notified of and allowed to comment on the environmental  
11 impacts of a proposed action before the agency finalizes its decision to proceed with the  
12 action.

13 17. The cornerstone of NEPA is the environmental impact statement ("EIS")  
14 that must be prepared for all "major federal actions significantly affecting the quality of  
15 the human environment." 42 U.S.C. § 4332(C). An EIS must be prepared prior to  
16 initiating any major federal action so that the environmental impacts can be considered  
17 and disclosed to the public during the decision-making process. 40 C.F.R. §§ 1501.2,  
18 1502.5. Federal agencies may first prepare an environmental assessment ("EA") to  
19 determine whether a project's environmental impacts are significant and an EIS is  
20 required. 40 C.F.R. § 1508.9. If the EA concludes that a project "may" have a  
21 significant impact on the environment, then an EIS must be prepared. If not, the federal  
22 agency must provide a detailed statement of reasons why the project's impacts are  
23 insignificant and issue a finding of no significant impacts ("FONSI"). Id. 1508.13.

24 18. In either an EIS or EA, federal agencies must broadly consider the  
25 environmental impacts of their actions. Federal agencies must not only review the  
26 direct impacts of their actions, but also analyze indirect and cumulative impacts.  
27 Indirect effects are those "caused by the action and are later in time or farther removed  
28 in distance but are still reasonably foreseeable." 40 C.F.R. § 1508.8(b). Cumulative

1 impacts include impacts of "other past, present, and reasonably foreseeable future  
2 actions regardless of what agency (Federal or non-Federal) or person undertakes such  
3 other actions." 40 C.F.R. § 1508.7. NEPA regulations also provide that significant  
4 impacts are likely present when wetlands, ecologically critical areas, or endangered and  
5 threatened species or their critical habitat will be impacted. 40 C.F.R. § 1508.27(b).

## 6 FACTUAL BACKGROUND

### 7 THE HUMPBAC CHUB AND ITS CRITICAL HABITAT

8 19. The humpback chub is a three-to-five million-year-old fish that is native  
9 to the Colorado River Basin. It is medium-sized and part of the minnow family, with  
10 silvery sides and a brownish back. The chub gets its name from the dorsal hump that  
11 develops behind its head as it matures. Humpback chub live in river canyons, where  
12 there are pools, rapids, riffles, and eddies. The chub prefers quiet habitats, such as  
13 shorelines, eddies and deep pools, and warm water.

14 20. The humpback chub was once found throughout the Colorado River  
15 system, from the Flaming Gorge on the Green River in Wyoming to below the Grand  
16 Canyon on the Colorado River in Arizona. The chub is now limited to approximately  
17 six isolated populations throughout the entire Colorado River basin. One of the six is  
18 located in the Grand Canyon. The chub's current range represents a fraction of what  
19 once existed.

20 21. The humpback chub is currently threatened with extinction due to  
21 numerous factors. One of the most significant is the presence and operation of dams on  
22 the Colorado River and its tributaries. Dams have flooded important chub habitat  
23 throughout the Colorado River Basin by creating reservoirs. Dams have created a  
24 physical barrier to the movement of sediment, nutrients, organic matter, and other  
25 organisms necessary to sustain the chub. Dams have changed the downstream aquatic  
26 habitats by altering natural sediment loads, turbidity, water temperatures, and timing  
27 and volume of base and flood flows. These habitat changes negatively affect the  
28 humpback chub by reducing the quality and quantity of spawning and rearing areas,

1 altering the natural food base, increasing hybridization with other similar species, and  
2 subjecting the chub to higher levels of mortality from introduced predators, competitors,  
3 parasites, and diseases. Dams have also fragmented chub habitat areas, blocking fish  
4 passage and preventing gene flow between the remaining populations. Further, federal  
5 and state agencies have introduced nonnative fish to the Colorado River Basin. The  
6 introduced fish, such as brown trout, rainbow trout, and channel catfish, compete with  
7 and prey on humpback chub.

8         22. Due to these threats, the humpback chub is an "endangered species,"  
9 meaning it is in danger of extinction throughout all or a significant portion of its range.  
10 See 16 U.S.C. § 1532(6) (defining endangered species). The humpback chub was first  
11 recognized as an endangered species in 1967. 32 Fed. Reg. 4001 (March 11, 1967). The  
12 chub was placed on the endangered species list when the ESA was passed in 1973.

13         23. On March 21, 1994, Defendants designated critical habitat for the  
14 humpback chub. 59 Fed. Reg. 13374. Under the ESA, the designation of critical habitat  
15 is an inventory of habitat areas essential for the survival and recovery of listed species.  
16 Critical habitat serves to identify those areas where recovery efforts are to be  
17 concentrated. Critical habitat includes both occupied and unoccupied habitat. 16 U.S.C.  
18 § 1532(5).

19         24. For the humpback chub, Defendants designated seven habitat stretches of  
20 the Colorado River system as critical habitat, which constituted approximately 28  
21 percent of the chub's historic range. 59 Fed. Reg. at 13384. Within Grand Canyon  
22 National Park, FWS designated critical habitat from Nautiloid Canyon west to Granite  
23 Park on the Colorado River's mainstem, and the lower eight miles of the Little Colorado  
24 River, a tributary to the Colorado River. FWS defined chub critical habitat as (1) water  
25 in the quantity and quality needed for all its life stages, (2) the physical river habitat  
26 features that are suitable for spawning, nursing, feeding and rearing, and (3) the  
27 biological environment which provides sufficient food supply and includes a natural  
28 balance of predation and competition from nonnative species.



1           25.     FWS approved a Recovery Plan for the humpback chub on August 22,  
2 1979. FWS twice revised the chub Recovery Plan, in 1984 and 1990. According to the  
3 Recovery Plan, the humpback chub utilizes the river's shoreline habitats -- usually  
4 shallow areas and sandy reaches -- to rear their young, away from the river's coldwater  
5 and nonnative fish that prey upon the chub and these habitat conditions are necessary  
6 for the chub's survival and recovery. The 1990 Recovery Plan provides that operating  
7 dams to maximize hydropower revenues causes significant adverse impacts to the chub  
8 and chub habitat due to high fluctuations in water releases. These flow fluctuations  
9 produce cycles of inundation and dewatering of chub habitat areas in the Colorado  
10 River.

#### 11 THE COLORADO RIVER SYSTEM AND GLEN CANYON DAM OPERATIONS

##### 12 A.     1956 Colorado River Storage Act

13           26.     Congress authorized the construction of Glen Canyon Dam through the  
14 1956 Colorado River Storage Act ("1956 Act"). Construction of the 710-foot high dam  
15 was completed in 1963. Both Glen Canyon National Recreation Area and the Grand  
16 Canyon National Park are found downstream of Glen Canyon Dam. Above the Dam is  
17 Lake Powell, which is the second largest man-made reservoir in the country.  
18 Reclamation operates Glen Canyon Dam, making decisions on how and when to release  
19 stored Colorado River water.

20           27.     According to the 1956 Act, the primary purpose of the Glen Canyon Dam  
21 is to store and conserve water for use by the Upper Colorado River Basin states. Lake  
22 Powell can hold approximately 26.2 million acre-feet of Colorado River water. In  
23 accordance with the 1922 Colorado River Compact, Reclamation must release at least  
24 8.23 million acre feet per year to ensure Colorado River water is delivered to the Lower  
25 Colorado River Basin States and Mexico.

26           28.     According to the 1956 Act, a secondary function of the Dam is to generate  
27 hydropower. Reclamation's operations of Glen Canyon Dam for the purpose of  
28 generating hydropower focus on the demand for "peaking" power. Rather than

1 generating a consistent flow of electricity, Reclamation will adjust water releases from  
2 the Dam based on hourly, daily, weekly, or monthly demand. Such operations are  
3 known as "peaking" operations. Peaking operations create fluctuating flows in the river  
4 downstream of the Dam.

5 29. Prior to Dam construction, the Colorado River was a sediment-laden river.  
6 Below the Dam, river flows varied according to the seasons, rainfall and inflows from  
7 side canyons and tributaries. Springtime floods originating in the Upper Colorado River  
8 transported sediment downstream, which built beaches and maintained habitat for native  
9 fish. With the Dam in place, the Colorado River system has changed significantly.  
10 Sediment flowing from the Upper Colorado River is trapped in Lake Powell. Almost all  
11 of the sediment that moved downstream of Glen Canyon Dam no longer does. The river  
12 downstream of the Dam now runs cold because the water that is released is taken from  
13 below Lake Powell's surface.

14 30. Since 2000, severe drought conditions have existed in the Colorado River  
15 Basin. During this time, inflow into Lake Powell above Glen Canyon Dam has been  
16 extremely low. In July 1999, Lake Powell was at 99 percent of capacity. In November  
17 2007, Lake Powell was at 49 percent of capacity due to the continuing effects of the  
18 drought in the Colorado River Basin. The seven-year period from 2000 through 2006  
19 proved to be the lowest amount of water inflow in 100 years of recordkeeping.

20 31. These drought conditions have resulted in low water release years. In low  
21 water years, 8.23 million-acre-feet must still be released from Glen Canyon Dam.  
22 Reclamation released 8.23 million-acre-feet each year between 2001 and 2007. 2008 is  
23 forecasted to be a low water year as well.

24 B. 1968 Colorado River Basin Project Act

25 32. The Colorado River Basin Project Act of 1968 ("1968 Act") applies to  
26 Glen Canyon Dam as well as other dams on the Colorado River administered by  
27 Reclamation under the authority of the 1956 Act. The 1968 Act, Section 602(a),  
28 established the amount of water required to be stored in the Colorado River reservoirs,

1 including Lake Powell.

2 33. The 1968 Act, Section 602(b), requires Reclamation to adopt long-range  
3 operating criteria (the "1968 Act LROC") for all of its dams in the Colorado River  
4 Basin, and then review and update the operating criteria as needed every five years  
5 thereafter. Operating criteria refer to the planning of dam and reservoir operations for  
6 several decades. Reclamation completed the first 1968 Act LROC on June 10, 1970.  
7 The most recent updated version of the 1968 Act LROC was completed in 2005 and  
8 published in the Federal Register on March 29, 2005. 70 Fed. Reg. 15873.

9 34. The 1968 Act also requires Reclamation to prepare annual operating plans  
10 (the "1968 Act AOP(s)") for the Colorado River basin dams each year. These annual  
11 operating plans govern monthly operations during the upcoming year for each Colorado  
12 River dam operating under the 1968 Act. The 1968 Act AOPs are based on forecasted  
13 water availability and runoff conditions. They may be revised by June 1st of the water  
14 year to reflect actual hydrological conditions.

15 C. Grand Canyon Protection Act of 1992 And NEPA Process

16 35. Since the Dam was constructed, of the eight native fish species in the  
17 Grand Canyon, three have gone extinct and another, the razorback sucker, is no longer  
18 reproducing. The endangered humpback chub no longer has a reproducing population  
19 in the mainstem of the Colorado River below Glen Canyon Dam. The only chub  
20 breeding area below the Dam is in the Lower Colorado River.

21 36. Congress took notice that Glen Canyon Dam operations adversely impact  
22 downstream resources, such as the native fish, and enacted the Grand Canyon Protection  
23 Act of 1992 as a result. The Grand Canyon Protection Act imposes requirements on  
24 how Reclamation operates the Dam. Specifically, Reclamation must "exercise other  
25 authorities under existing laws in such a manner as to protect, mitigate adverse impacts  
26 to, and improve the values for which Grand Canyon National Park and Glen Canyon  
27 National Recreation Area were established, including, but not limited to natural and  
28 cultural values and visitor use." Grand Canyon Protection Act of 1992, Public Law No.

1 102-575, § 1802(a). Notably, the Grand Canyon Protection Act directed Reclamation to  
2 prepare an environmental impact statement under the NEPA within two years,  
3 addressing the impacts of Glen Canyon Dam operations. Id. § 1804(a). The Grand  
4 Canyon Protection Act anticipates that protecting the natural, cultural and recreational  
5 resources will negatively impact hydropower capacity and revenues. Id. § 1809.

6 37. On March 21, 1995, Reclamation concluded its administrative process for  
7 complying with the Grand Canyon Protection Act's mandate to prepare an EIS. On  
8 October 9, 1996, Reclamation determined how it would on operate Glen Canyon Dam  
9 in its Record of Decision ("1996 ROD"). The administrative process surrounding that  
10 decision "was prepared with an unprecedented amount of scientific research, public  
11 involvement, and stakeholder cooperation." As NEPA requires, Reclamation  
12 considered various operation alternatives that had varying degrees of impacts to the  
13 resources and selected its "preferred alternative," which is called "Modified Low  
14 Fluctuating Flow" regime. As part of Dam operations, this chosen alternative included  
15 "beach habitat building flows," which are scheduled high water releases of short  
16 duration designed to rebuild beaches and restore shoreline habitat areas. According to  
17 Reclamation, the Modified Low Fluctuating Flow regime has less adverse impacts than  
18 prior Dam operations.

19 38. Because the 1968 Act LROC and AOPs were not intended by Congress to  
20 protect downstream resources in the Grand Canyon, the Grand Canyon Protection Act  
21 requires Reclamation to develop operating criteria and annual operating plans specially-  
22 designed for Glen Canyon Dam. 16 U.S.C. § 1804(c)(1)(A). These criteria and plans  
23 are in addition to the 1968 Act LROC and 1968 Act AOPs for the Colorado River  
24 System Reservoirs as a whole. Id. On March 3, 1997, Reclamation adopted specific  
25 operating criteria for Glen Canyon Dam. 62 Fed. Reg. 9447. The Operating Criteria for  
26 Glen Canyon Dam are to be reviewed every five years to ensure the purposes of the  
27 Grand Canyon Protection Act are being accomplished. 62 Fed. Reg. at 9448/1.

28 39. Whereas the 1996 ROD established daily and hourly release limits, the

1 AOPs under the Grand Canyon Protection Act establish monthly water releases for Glen  
2 Canyon Dam. The monthly releases are the maximum amount of water that can be  
3 released during any one month. These releases vary each month. In December 2007,  
4 Reclamation completed the 2008 AOP for the Colorado River System Reservoirs. It  
5 includes the Annual Operating Plan for Glen Canyon Dam under both the Grand  
6 Canyon Protection Act and the 1968 Act.

7 D. 1994 Biological Opinion On Glen Canyon Dam Operations

8 40. Reclamation recognized that the ESA section 7 consultation provision  
9 applies to Glen Canyon Dam operations due to adverse impacts to the humpback chub  
10 and its critical habitat. Reclamation and FWS first consulted on Glen Canyon Dam  
11 operations in 1977. In response, FWS produced a biological opinion on May 25, 1978.  
12 FWS stated in its biological opinion "that the major reason for the decline of [the  
13 humpback chub] in this reach of the Colorado River has been the abnormal water  
14 conditions that result from the operation of Glen Canyon Dam." In particular, FWS  
15 identified coldwater temperatures and fluctuating flows as causing significant adverse  
16 impacts to the chub. FWS concluded that Glen Canyon Dam operations jeopardize the  
17 chub and adversely modify chub essential habitat. The 1978 Biological Opinion called  
18 for studies regarding water temperatures, the chub's ecological needs below Glen  
19 Canyon Dam, and evaluating alternative methods for operating the Dam. On April 2,  
20 1982, FWS confirmed its 1978 "jeopardy" and "adverse modification" opinion.

21 41. In 1994, in concert with the NEPA review required by the Grand Canyon  
22 Protection Act, Reclamation underwent a second formal ESA consultation with FWS on  
23 Glen Canyon Dam operations. In December 1994, FWS completed its Glen Canyon  
24 Dam biological opinion. In the 1994 Biological Opinion, FWS determined that Dam  
25 operations under a Modified Low Fluctuating Flow regime used to facilitate  
26 hydropower revenues "jeopardize" the humpback chub and "adversely modify" chub  
27 critical habitat.

28 42. FWS's conclusion and analysis in the 1994 Biological Opinion focus on

1 impacts to chub habitat. Glen Canyon Dam operations prevent the mainstem of the  
2 Colorado River from providing habitat for the survival of the chub. It also reduces the  
3 chub's ability to recover in the river downstream of Glen Canyon Dam and within the  
4 species' critical habitat. Modified Low Fluctuating Flows prevent the deposit of the  
5 limited supply of sediment that originates from tributaries to the Colorado River  
6 downstream of Glen Canyon Dam. Further, fluctuating flows keep water temperatures  
7 too cold for spawning and foster conditions that are conducive to nonnative fish that  
8 predate on the humpback chub.

9 43. As the ESA requires when a jeopardy opinion is issued, FWS identified a  
10 "reasonable and prudent alternative" in the 1994 Biological Opinion. To the extent the  
11 alternative is implemented, Reclamation's operation of Glen Canyon Dam would not  
12 jeopardize the chub or destroy chub critical habitat. As FWS states in the Biological  
13 Opinion,

14 [S]uccessful completion of the reasonable and prudent alternative is necessary to  
15 remove jeopardy to the humpback chub [] from the proposed action. The  
16 reasonable and prudent alternative will be accomplished when all elements of the  
17 selected alternative have been effected and studies confirm compatibility  
18 between th[is] species requirements and the operation of Glen Canyon Dam.

19 44. In the Biological Opinion's Reasonable and Prudent Alternative 1(A),  
20 commonly referred to as "RPA 1(A)," FWS calls for "seasonally adjusted steady flows"  
21 during low water release years. In moderate and high water release years, Reclamation  
22 can operate the Dam according to its preferred Modified Low Fluctuating Flows. A low  
23 water year is defined as a year when only the required 8.23 million acre-feet of water is  
24 released from Glen Canyon Dam.

25 45. Seasonally adjusted steady flows, also known as SASF, are described as  
26 high steady flows in the Spring and low steady flows in the Summer and Fall.  
27 Seasonally adjusted steady flows are intended to mimic natural conditions on the  
28 Colorado River, often referred to as the "natural hydrograph." According to the  
Biological Opinion, operating Glen Canyon Dam under a seasonally adjusted steady  
flow regime would not jeopardize the endangered humpback chub nor adverse modify

1 critical habitat. Rather, this program of steady flows would support all life stages of the  
2 chub, including breeding and rearing young in the mainstem of the Colorado River.

3 46. FWS imposed the seasonally adjusted steady flow requirement based on  
4 the best available scientific and commercial data available. RPA 1(A) ensures the  
5 delivery of water in accordance with the Colorado River Compact. RPA 1(A) also  
6 ensures compliance with the Grand Canyon Protection Act's mandate to "protect,  
7 mitigate adverse impacts to and improves values for which Grand Canyon National Park  
8 and Glen Canyon National Recreation Area were established." In requiring seasonally  
9 adjusted steady flows, FWS considered the notion that steady flows could impact  
10 nonnative fish populations.

11 47. RPA 1(A) required Reclamation to design a specific flow pattern that  
12 achieved seasonally adjusted steady flows by October 1996. Reclamation completed its  
13 design and included it as an alternative in the 1995 Final Environmental Impact  
14 Statement and 1996 ROD. RPA 1(A) also required Reclamation to test the design's  
15 efficacy by April 1998. The time period for testing had to be sufficient to allow for  
16 "biological processes to function and for variability inherent in riverine ecosystems to  
17 be expressed." In all subsequent low water years, Reclamation is required by RPA1(A)  
18 to implement either Reclamation's tested experimental design, or the seasonally adjusted  
19 steady flow program detailed in the Biological Opinion. The Biological Opinion's  
20 seasonally adjusted steady flow program was the default program in the event  
21 Reclamation's experimental program had not made sufficient progress.

22 48. Reclamation has not tested a seasonally adjusted steady flow program in  
23 accordance with the 1994 Biological Opinion. On June 13, 2002, FWS provided  
24 Reclamation with an "insufficiency letter," explaining that since the completion of the  
25 Biological Opinion, Reclamation had not complied with RPA 1(A). FWS sent similar  
26 insufficiency letters in 1997 and 1999. Through 2007, Reclamation has never  
27 implemented seasonally adjusted steady flows during low water years. Since the  
28 completion of the 1994 Biological Opinion, additional population declines of the

1 humpback chub in the Grand Canyon have been documented.

2 FIRST CLAIM FOR RELIEF  
3 (Violation of ESA Section 7(a)(2) -- Duty to Ensure Against Jeopardy Against the  
4 Bureau of Reclamation)

4 49. Each and every allegation set forth in this complaint is incorporated herein  
5 by reference.

6 50. The 1994 Biological Opinion concluded that operating Glen Canyon Dam  
7 under a Modified Low Fluctuating Flow regime jeopardizes the continued survival of  
8 the humpback chub. Operating Glen Canyon Dam under a Modified Low Fluctuating  
9 Flow regime violates ESA section 7(a)(2) prohibition against jeopardizing a listed  
10 species.

11 51. FWS offered a Reasonable and Prudent Alternative that, if performed,  
12 would eliminate jeopardy to the chub from Glen Canyon Dam operations. RPA 1(A)  
13 includes a requirement to operate Glen Canyon Dam under a Seasonally Adjusted  
14 Steady Flow regime in low water years.

15 52. Accordingly, by failing to comply with the 1994 Biological Opinion and  
16 operating Glen Canyon Dam under a Modified Low Fluctuating Flow regime,  
17 Reclamation is violating its mandatory ESA section 7 duty to avoid jeopardy. 16 U.S.C.  
18 § 1540(g)(1)(A). Reclamation's failure to ensure against jeopardy renders its  
19 operations of Glen Canyon Dam arbitrary and capricious, an abuse of discretion, not in  
20 accordance with law, and without observance of procedure required by law, within the  
21 meaning of the APA. 5 U.S.C. § 706(2).

22 SECOND CLAIM FOR RELIEF  
23 (Violation of ESA Section 7(a)(2) -- Duty to Ensure Against Adverse Modification  
24 Against the Bureau of Reclamation)

24 53. Each and every allegation set forth in this complaint is incorporated herein  
25 by reference.

26 54. The 1994 Biological Opinion concluded that operating Glen Canyon Dam  
27 under a Modified Low Fluctuating Flow regime destroys and adversely modifies chub  
28 critical habitat. Operating Glen Canyon Dam under a Modified Low Fluctuating Flow



1 regime violates the ESA section 7(a)(2) prohibition against adverse modification of  
2 chub critical habitat.

3 55. FWS offered a Reasonable and Prudent Alternative that, if performed,  
4 would eliminate adverse modification to chub critical habitat from Glen Canyon Dam  
5 operations. Compliance with the Reasonable and Prudent Alternative 1(A) would  
6 eliminate adverse modification from Glen Canyon Dam operations. RPA 1(A) requires  
7 Reclamation to operate Glen Canyon Dam under a Seasonally Adjusted Steady Flow  
8 regime in low water years.

9 56. Accordingly, by failing to comply with the 1994 Biological Opinion and  
10 operate Glen Canyon Dam under a Modified Low Fluctuating Flow regime,  
11 Reclamation is violating its mandatory ESA section 7 duty to avoid actions that destroy  
12 or adversely modify critical habitat. 16 U.S.C. § 1540(g)(1)(A). Reclamation's failure  
13 to ensure against adverse modification renders its operations of Glen Canyon Dam  
14 arbitrary and capricious, an abuse of discretion, not in accordance with law, and without  
15 observance of procedure required by law, within the meaning of the APA. 5 U.S.C. §  
16 706(2).

17 THIRD CLAIM FOR RELIEF

18 (Violation of ESA Section 9(a)(1)(B) -- Duty to Avoid Taking Against the Bureau of  
Reclamation)

19 57. Each and every allegation set forth in this complaint is incorporated herein  
20 by reference.

21 58. Reclamation operates Glen Canyon Dam. Reclamation's operation of  
22 Glen Canyon Dam determines how water is released from the Dam. Releasing water  
23 from Glen Canyon Dam under a Modified Low Fluctuating Flow regime causes the  
24 "taking" of humpback chub.

25 59. FWS included an incidental take statement in the 1994 Biological  
26 Opinion. The take statement is predicated upon compliance with the 1994 Biological  
27 Opinion, including the reasonable and prudent alternative. The take statement exempts  
28 compliance with the ESA section 9(a)(1)(B) prohibition against take if Reclamation

1 complies with RPA 1(A). Reclamation has not complied with RPA 1(A). The  
2 incidental take statement included in the 1994 Biological Opinion is not valid.

3 60. Accordingly, Reclamation is violating ESA section 9(a)(1)(B) by not  
4 complying with the 1994 Biological Opinion, within the meaning of the ESA's citizens  
5 suit provision. 16 U.S.C. § 1540(g)(1)(A). By operating Glen Canyon Dam without  
6 complying with the 1994 Biological Opinion, Reclamation has unlawfully withheld  
7 compliance with section 9(a)(1)(B)'s "take" prohibition, within the meaning of the  
8 Administrative Procedure Act, 5 U.S.C. § 706(1), and has operated Glen Canyon Dam  
9 in a manner that is arbitrary and capricious, an abuse of discretion, and not in  
10 accordance with law, within the meaning of the Administrative Procedure Act. 5 U.S.C.  
11 § 706(2).

12 FOURTH CLAIM FOR RELIEF  
13 (Violation of ESA Section 7(a)(2) -- Duty to Consult On Annual Operating Plans  
14 Against the Bureau of Reclamation)

14 61. Each and every allegation set forth in this complaint is incorporated herein  
15 by reference.

16 62. The ESA section 7(a)(2) duty to consult applies to all agency actions.  
17 Reclamation's Annual Operating Plans for Glen Canyon Dam are agency actions as  
18 defined under the ESA. The Annual Operating Plans establish monthly releases from  
19 Glen Canyon Dam on a yearly basis. Reclamation's Annual Operating Plans for Glen  
20 Canyon Dam, including the 2007 and 2008 AOPs, may affect the humpback chub.  
21 Reclamation has failed to consult on any of its Annual Operating Plans for Glen Canyon  
22 Dam operations for at least the last 10 years. Reclamation has not initiated or  
23 completed consultation on the 2008 AOP.

24 63. Reclamation's failure to initiate and complete consultation on the Annual  
25 Operating Plans, including the 2008 AOP, is a violation of its mandatory duty to consult  
26 under ESA section 7(a)(2), within the meaning of the ESA's citizen suit provision. 16  
27 U.S.C. § 1540(g)(1)(A).

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FIFTH CLAIM FOR RELIEF

(Violation of NEPA -- Duty to Prepare Environmental Impact Statement or Environmental Assessment Prior to Completing Annual Operating Plans Against the Bureau of Reclamation)

64. Each and every allegation set forth in this complaint is incorporated herein by reference.

65. NEPA's duty to prepare an environmental assessment or environmental impact statement applies to all major federal actions. Reclamation's Annual Operating Plans for Glen Canyon Dam are major federal actions under NEPA. The Annual Operating Plans establish monthly releases from Glen Canyon Dam on a yearly basis. Reclamation's Annual Operating Plans for Glen Canyon Dam, including the 2007 and 2008 AOPs, may significantly impact the environment downstream of the Dam. Reclamation has failed to prepare and circulate to the public an EA or EIS on any of its Annual Operating Plans for Glen Canyon Dam operations for at least the last 10 years. Reclamation has not complied with NEPA for its 2008 AOP.

66. Reclamation's failure to comply with NEPA for its Annual Operating Plans, including the 2008 AOP, is agency action unlawfully withheld. 5 U.S.C. § 706(1).

PRAYER FOR RELIEF

Plaintiff respectfully requests that this Court enter judgment providing the following relief:

1. Declare Defendants have violated the 1994 Biological Opinion, sections 7(a)(2), 7(d), and 9(a)(1)(B) of the Endangered Species Act, and the National Environmental Policy Act;
2. Order Defendants to comply with all provisions of the Endangered Species Act, the 1994 Biological Opinion, and the National Environmental Policy Act;

