

UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT

**No. 10-72104**

NORTHWEST RESOURCE INFORMATION CENTER,

Petitioner,

v.

NORTHWEST POWER AND CONSERVATION COUNCIL,

Respondent,

and

NORTHWEST RIVERPARTNERS, PUBLIC POWER COUNCIL and  
BONNEVILLE POWER ADMINISTRATION,

Respondent-Intervenors.

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DECLARATION OF JAMES EDWARD CHANEY IN  
SUPPORT OF PETITIONER'S OPENING BRIEF

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STEPHEN D. MASHUDA  
KEVIN E. REGAN  
Earthjustice  
705 Second Avenue, Suite 203  
Seattle, WA 98104  
(206) 343-7340 | Phone  
(206) 343-1526 | Fax  
smashuda@earthjustice.org  
kregan@earthjustice.org  
*Attorneys for Petitioner*

I, JAMES EDWARD CHANEY, state and declare as follows:

1. My name is James Edward (“Ed”) Chaney and I am over eighteen years of age. I am a resident of Eagle, Idaho. I make the following declaration, based on my personal knowledge, in support of the Northwest Resource Information Center’s (“NRIC”) opening brief for its challenge to the Northwest Power Planning Council’s (the “Council”) Sixth Power Plan.

2. I have been professionally and personally involved with the conflict between anadromous salmon and steelhead (hereinafter “salmon”) of the Columbia River Basin and the Federal Columbia River Power System (“FCRPS”) for 42 years. I have been professionally involved with the Pacific Northwest Power Planning and Conservation Act of 1980 (“NPPA”) prior to and after it was signed into law, including participating in the activities of the Council to implement the Act. On a personal level, I have been fishing for salmon as well as boating, hiking, and recreating in their habitat for more than four decades.

3. My declaration is organized as follows:

(A) Statement of my recreational, aesthetic, scientific, economic, and civic interests in the salmon of the Columbia River Basin and their marine and freshwater ecosystems, and how those interests provided impetus to found NRIC;

(B) An overview of Northwest Resource Information Center;

(C) A summary of my experience with the conflict between anadromous salmon and the Federal Columbia River Power System from the mid-1970s to date;

(D) A summary of my and NRIC's involvement with the NPPA and the activities of the Council charged with implementing the Act and;

(E) An overview of the disastrous ecological, economic, and social consequences of the Council's three-decade failure to fulfill its legal duty under the Act and how its actions and violations of the NPPA in the Sixth Power Plan harm me, NRIC, and its contributors, collaborators, and supporters unless this court can force the Council to fulfill its salmon restoration mandate under the Power Act.

A. MY INTERESTS IN COLUMBIA RIVER BASIN SALMON AND THEIR MARINE AND FRESHWATER ECOSYSTEMS.

4. Since migrating to the Pacific Northwest in 1966, I have been in awe of Columbia River Basin salmon. They are unique in the world. Their extraordinary life cycle extends nearly 1,000 miles inland and thousands of miles along the Pacific coast. Historically salmon had high ceremonial, subsistence, recreational, and commercial value throughout their range. They are integral components of complex marine and freshwater ecosystems.

5. From 1966 to date—excepting the period 1969-1972—I have enjoyed fishing for and observing salmon in the greater Columbia River Basin, and in

particular in the tributary Snake River Basin. I have fished for salmon in the Columbia and Snake Rivers and many of their tributaries throughout a geographic area extending from the mouth of the Columbia River inland approximately 700 miles to the headwaters of the Salmon River.

6. Salmon not only have intrinsic value to me, they are important to ecosystem functions that sustain other fish and wildlife, which also are important to me and NRIC's contributors, collaborators, and supporters. These creatures include marine fish and mammals, such as orcas and sea lions, and a myriad of terrestrial and freshwater fish and wildlife such as bears, eagles, osprey, and bull trout. The presence of these fish and wildlife is important to my frequent enjoyment of recreational activities including fishing, hunting, camping, sight-seeing, and nature study.

7. I intend to continue to enjoy these activities in the future. For example, as in past years, this fall I plan to fish for salmon and otherwise recreate on the Deschutes, Wallowa, and Grande Ronde Rivers in Oregon, and on the Clearwater and Salmon Rivers and their tributaries in Idaho. In the spring of 2013 I plan to continue my usual practice of fishing the upper Salmon River in Idaho and the mainstem Columbia River below McNary Dam.

8. I also have long-standing scientific interests in salmon. My formal higher education includes a Bachelor of Science in Conservation—what today

would be called “ecology.” This, coupled with my formal higher education in English (B.A. requirements completed) were designed to facilitate a career analyzing, synthesizing, and writing about complex natural resource issues. This is the path I have followed from my 1965 graduation to date.

9. My first experience with Columbia River Basin salmon was in 1966 when I was employed by the Oregon Fish Commission in Portland, Oregon, which managed the state’s marine and freshwater salmon fisheries, including those on the Columbia River. My role at the Commission was to work in close daily collaboration with fisheries scientists to synthesize scientific/technical information and convert it to information easily accessible to decision makers, fishermen, and the general public. I was immediately immersed in management of the fisheries, the marine and freshwater life cycle of salmon, protection of natural salmon spawning and rearing habitat, artificial propagation of salmon in hatcheries, and the impact on salmon and salmon fisheries of federal hydroelectric dams completed and pending on the mainstem Columbia and Snake Rivers. The latter would quickly become the focus of my work.

10. In the late 1960s, the effects of the FCRPS’ hydroelectric dams completed and in progress on the lower Snake River were taking a growing toll on salmon by inundating important spawning and rearing habitat and by causing high mortalities of both migrating adult and juvenile salmon. In 1946, about 15 years

before the first of the dams was completed, the U.S. Fish and Wildlife Service had formally warned this would happen; the U.S. Army Corps of Engineers (“Corps”) ignored these warnings and failed to include in its design of the dams any consideration whatsoever for juvenile salmon to migrate from the vast pristine headwaters of Snake River tributaries to the Pacific Ocean. Disaster happened. Major research projects were underway to define and treat the contributing factors. I became immersed in this issue.

11. In 1967, the Corps closed John Day Dam on the mainstem Columbia River before the fish ladders were fully operable. An estimated 300,000 adult salmon perished below the dam. The Corps at first refused state biologists access to the dam to determine the cause. One of the biologists came to me and reported windrows of dead adult summer chinook salmon on the riverbank below the dam. Up to that point the whole episode had not received scientific or journalistic attention. I investigated and wrote a press release for the Commission that provided what facts were known at that point. The Oregonian newspaper in Portland printed a story; the Corps immediately responded, in effect, that I didn’t know what I was talking about. I pleaded with The Oregonian’s outdoor writer Don Holm to investigate and write an in-depth story; he refused, instead writing a column labeled “Fish Aren’t Lost, Biologists Are,” and blamed the Indian gill net fishery for declining numbers of salmon. I quickly returned to the scene, this time

with a camera, photographed the windrows of dead salmon, and provided the photos to The Oregonian which published a front page story and a full page of the photographs inside. I was immediately put under a gag order “for jeopardizing our [the state’s] good working relationship with the Corps.” I resolved to learn all there was to know about the effects of the FCRPS on salmon, including the underlying science and technical issues, the ecological, economic and social effects and ways those adverse effects might be mitigated; I was especially interested in the causative factors rooted in the failure of governance and of the rule of law. Forty years later this is still a work in progress.

12. My economic interest in Columbia River Basin salmon started with my employment by the Oregon Fish Commission in 1966. In 1969 I accepted the job as Information Director of the National Wildlife Federation in Washington, D.C. While there I continued to monitor and write about the Columbia River FCRPS/salmon conflict. My economic stake in Columbia River Basin salmon was rejuvenated when I returned to the Pacific Northwest in 1973 to work as a private consultant, predominately on salmon-related projects. I was concerned about the perilous and deteriorating status of Snake River salmon due to mortalities at the four Corps dams on the lower Snake River, the last of which was completed in 1975. This critical situation provided the impetus for me to found the Northwest Resource Information Center, which was incorporated in 1976 as a scientific,

educational, non-profit organization under section 501(c)(3) of the Internal Revenue code.

**B. NORTHWEST RESOURCE INFORMATION CENTER**

13. I have been personally responsible for NRIC and its activities since its founding to date. As Executive Director, I control and make all decisions for the organization, including whether or not to pursue litigation, such as this appeal of the Pacific Northwest Power and Conservation Council's Sixth Power Plan. I decide if and how NRIC solicits funding and how received funds are managed. Since its inception, NRIC's activities, to a large extent, have been supported by my income from for-profit consulting work and by contributing the majority of my time spent on NRIC activities. My personal contributions have also been substantially supplemented by foundation grants, by government contracts with NRIC to perform work, by monetary contributions from other nongovernmental organizations and individuals, and by pro bono support from collaborating experts.

14. In addition to representing the interests of the organizations and individuals contributing to NRIC's activities, since its inception NRIC has both informally and formally represented the interests of a large number and wide variety of individuals and organizations sharing common interests in Columbia River Basin salmon. Informal representation occurs as a result of NRIC routinely consulting and collaborating with individual and organizational salmon advocates



to ensure their interests are reflected in NRIC's activities, including research and technical analyses, public information initiatives, comments on pending governmental actions, and congressional testimony. NRIC formally represented the views of numerous salmon advocacy organizations in the region under the aegis of the Mainstem Flow Coalition formed by NRIC to bring public and political attention to the conflict between salmon and federal dams on the mainstem Columbia and Snake Rivers. To expand those activities, in 1991 NRIC founded and raised operating funds for the Save Our Wild Salmon Coalition, a coalition of numerous nongovernmental salmon advocacy organizations still active in the Northwest. I served as paid director for Save Our Wild Salmon Coalition during the organization's start-up year. In 1991 NRIC filled the seat accorded all "Snake River Basin sport fishing interests" in the regional Salmon Summit called by then Oregon Senator Mark Hatfield as a result of the threat of Columbia River Basin salmon, notably Snake River salmon, being listed as threatened or endangered under the Endangered Species Act.

**C. MY EXPERIENCE WITH THE CONFLICT BETWEEN ANADROMOUS SALMON AND THE FEDERAL COLUMBIA RIVER POWER SYSTEM FROM THE MID-1970S TO DATE.**

15. Since I founded NRIC in 1976, the organization has been immersed in the conflict between salmon and the Federal Columbia River Power System. As Executive Director, I have produced numerous letters, action alerts, essays,

articles, reports, speeches, comments and testimony before state, regional, and national decision making bodies and personally participated in countless meetings about Columbia River Basin salmon with relevant state, regional and national decision makers, scientists and economists, and citizen salmon advocates.

Attachment 1 to this declaration is a list of projects representative of my experience with the conflict between salmon and the FCRPS.

16. In addition to the present case, NRIC also has initiated and encouraged other salmon advocacy organizations to join several Columbia River Basin salmon-related lawsuits in the federal courts. They include: Northwest Resource Information Center, Inc. v. Northwest Power Planning Council, 35 F.3d 1371 (9th Cir. 1994) (“NRIC”) and Northwest Environmental Defense Center v. Bonneville Power Administration, 117 F.3d 1520 (1997).

17. NRIC submitted comments on the Council’s Draft Sixth Power Plan and attended a public meeting related to the Council’s decision to adopt that Plan. NRIC focused its comments on the Council’s failure to comply with the Power Act to date and emphasized the opportunity to correct those problems in the Sixth Power Plan.

18. Concurrent with my activities on behalf of NRIC, I have also been involved as a consultant in major governmental efforts to protect and enhance Columbia River Basin salmon. These activities and NRIC’s parallel activities

were mutually reinforcing. Examples of this are also listed in Attachment 1, but they include participation as a member of the planning team of the National Salmon and Steelhead Advisory Commission established to develop a new management structure for salmon and steelhead fisheries in the Washington and Columbia River Conservation Areas, and the development, implementation, and negotiation of a multi-year strategy leading to a more than \$200 million salmon restoration/irrigation water development program in the Umatilla River Basin of eastern Oregon on behalf of the Confederated Tribes of the Umatilla Indian Reservation and U.S. Bureau of Reclamation.

**D. SUMMARY OF NRIC'S INVOLVEMENT WITH THE NPPA AND THE COUNCIL.**

19. By the mid-1970s Snake River salmon were in dire peril due to mortalities inflicted by the four Corps' dams on the lower Snake River. This ecological disaster had been predicted before the dams were built. BPA and the Corps notoriously fought every proposal to reduce salmon mortalities at the dams which would reduce energy production. In the late 1970s, legislation designed to rationalize the production and sale of FCRPS energy was working its way through the Congress.

20. Four other Idaho salmon advocates and I requested and obtained a meeting in Boise, Idaho with then Idaho U.S. Senator Frank Church. We explained to the Senator and his staff that Snake River salmon were already in dire

peril from the FCRPS, notably operations of the four lower Snake River dams completed 1960-1975. The draft energy legislation, as written, would further tighten BPA's grip on the mainstem Columbia and Snake Rivers which in all likelihood would spell the doom of Snake River salmon. We urged the Senator to ensure that such a dire result would not happen by inserting strong salmon protection/restoration language into the final bill. He agreed, and shortly thereafter he notified us that he had inserted language to that effect. This language provided a foothold for Representative John Dingell, then Chairman of the House Merchant Marine and Fisheries Committee, who quickly became the champion of Columbia River Basin salmon in what was ultimately signed into law as the NPPA.

21. Because Congress was cognizant that BPA and the Corps had failed to achieve congressional intent in multiple salmon protection laws, in the NPPA it anticipated and specified extraordinary specific and sweeping salmon restoration language to safeguard these species. As the United States Court of Appeals for the Ninth Circuit explained in its NRIC decision:

The NPA marked an important shift in federal policy. Continually declining fish runs had revealed the failures of previous legislative efforts requiring that "equal consideration" be given to fish and wildlife affected by resource exploitation. The NPA ensured the "equitable treatment" of fish and wildlife; it marked the shift of the burden of uncertainty-of proving specific harm to salmon from particular activities-from the salmon to the hydropower system, or so was its intent. In doing so, it created a new obligation on the region and various Federal agencies to protect, mitigate, and enhance fish and wildlife.

NRIC, 35 F.3d at 1377-78 (citing 126 Cong. Rec. 10682 (Rep. Dingell)). These safeguards are further summarized in NRIC's November 2009 comments on the Council's draft Sixth Power Plan which are included in the administrative record in this case at AR-88, Document 743.

22. The NPPA mandated the Council be formed within in six months after enactment. The Council was to "promptly" call for recommendations for fish protection measures from the agencies and tribes which were given only 90 days to respond. The Council was to produce a program within one year of receiving those recommendations. Within that short time frame, the Council was to base its program on the "best available scientific knowledge" about necessary changes to dam operations rather than continuing the deadly status quo until salmon had been studied to death.

23. Unfortunately, the Council failed to adopt a plan to meet the salmon restoration intent of the Act. BPA and the Corps persisted in actions that eventually drove Snake River salmon and other Columbia River Basin salmon populations onto the Endangered Species List in the early-1990s. Finally, out of exasperation, NRIC filed suit in the Ninth Circuit Court of Appeals asking the court to order the Council to fulfill the salmon protective purposes of the Act. NRIC prevailed in its lawsuit. The Council responded by amending its Fish and Wildlife Program and asking the Corps to analyze what could be done at the four

lower Snake River dams to restore the salmon as required by the Northwest Power Act.

24. Several years and \$20 million later, the Corps concluded the dams could not be fixed. Either the dams would have to be breached—partially removed to recreate a free-flowing river—or the fish would have to be removed from the river. Rather than make an independent decision as the Court had directed, the Council defaulted to a Biological Opinion for the operation of the dams that the Corps and the other federal agencies developed—allegedly to satisfy the Endangered Species Act—that continued to operate the dams more or less unchanged while relying on the failed practice of taking migrating salmon out of the rivers and barging or trucking them to the estuary. A number of federal court decisions have found that the Biological Opinions issued by NOAA have been arbitrary and capricious and in violation of Section 7 of the Endangered Species Act. The Council has continued to defer to an identical set of hydro system operations in the subsequent decisions and has done so again in the Sixth Power Plan and its included Fish and Wildlife Program, and to date, this Court’s 1994 mandate to the Council to carry out the fish protective purposes of the NPPA has not been implemented.

25. The Council’s abdication of its duty to the federal agencies responsible for driving Snake River salmon to the brink of extinction is ironic,

among other things. Soon after the Endangered Species Act became law, an Idaho Department of Fish and Game fish biologist and I met with an Idaho member of the Pacific Fishery Management Council (“PMFC”). We urged him to consider petitioning the then National Marine Fisheries Service (now NOAA Fisheries) to review Snake River salmon for potential listing as threatened or endangered species. NMFS expressed concern about the prospect of potentially draconian consequences for commercial fisheries if the salmon were listed. The agency persuaded the PFMC member to hold off; in return NMFS would do an “informal” ESA review to determine the status of Snake River salmon.

26. Soon after the Northwest Power Act was signed into law, NMFS terminated its half-hearted effort, claiming that the Act required much more in terms of salmon restoration than the ESA and, therefore, the Council was the most appropriate venue. But, as it has once again done in the Sixth Power Plan, the Council eventually abdicated its duties by adopting as its “baseline” for mainstem Columbia and Snake River salmon protection the federal agencies’ Biological Opinion—which has been rejected three times by the federal district court and which on its face would make mainstem passage conditions for Snake River salmon more deadly than they are at present.

E. THE COUNCIL'S FAILURE TO COMPLY WITH THE NPPA IN THE SIXTH POWER PLAN HARMS MY AND NRIC'S INTERESTS.

27. The Council's 30-year failure to properly implement the NPPA has resulted, and is continuing to result, in disastrous ecological, economic, and social consequences throughout the many thousand-mile freshwater and marine range of salmon, notably those produced in the vast pristine headwaters of the Snake River Basin.

28. The decimation of salmon by the FCRPS deprives ESA-listed bull trout and a multitude of other freshwater organisms of critical marine-derived nutrients and deprives marine fish and mammals, including ESA-listed killer whales and ESA-listed sea lions, of an important food resource. NOAA Fisheries sanctions killing ESA-listed sea lions for inconsequential predation on listed salmon while also sanctioning BPA and the Corps to annually kill ESA-listed Snake River salmon by the millions.

29. The necessary reduction and closing of recreational and commercial fisheries and the ecological/economic side effects of diminished salmon populations have caused the loss of hundreds of millions of dollars to local, state, regional, and national economies; untold hundreds of millions more in future economic benefits are at risk. The United States and Canada, states, Indian tribes, local communities, and members of the general public have been pitted against each other in internecine conflict over drastically reduced supplies of fish.



30. Fishing for and retaining wild salmon has long been prohibited in their approximately 14 million-acre Snake River Basin habitat, roughly half of which is in federally-designated Wilderness Areas, National Recreation Areas, Wild and Scenic Rivers, and other undeveloped federal lands. The total prohibition of salmon fishing in the pristine Middle Fork Salmon River since 1978, for example, and the long-standing basin-wide prohibition on catching and retaining wild salmon has significantly diminished the quality of the outdoor experience for me and many thousands of other salmon advocates.

31. Meanwhile, the region has a surplus of energy. BPA is giving away FCRPS power to utilities and paying to shut down private wind generators, which produce far more power than the four lower Snake River dams at precisely the time of year listed Snake River salmon suffer the highest rate of mortality.

32. In addition to the direct harm from the loss of salmon, the region is wracked with legal and political turmoil that wastes enormous amounts of human and economic capital and diverts attention from pragmatic solutions that could produce substantial national and Northwest economic benefits. The Power Act mandated that salmon be treated “on a par” with other uses of the FCRPS:

The conservation and enhancement of the great migratory fish and wildlife populations of the Pacific Northwest, something of great concern to the sportsmen and conservationists of this Nation, are, for the first time, a matter of urgent priority under this legislation. They are place[d] on a par with other purposes for Federal facilities in this area. If the fish populations of the Pacific Northwest are to be

restored to the sportsmen, the Indians and the commercial fishermen, this is the mechanism which will do it.

126 Cong. Rec. H10680 (Rep. Dingell). The intention that salmon be placed on a par with other uses of the FCRPS, and restored to formerly productive levels, has gone unfulfilled.

33. This case challenges the Council's Sixth Power Plan wherein the Council persists in its failure to do its duty 30 years after Congress passed the NPPA's salmon restoration provisions in response to what then was characterized as an "urgent priority." NRIC, 35 F.3d at 1377 n.10 (citing 1126 Cong. Rec. E5105 (Rep. Dingell)). What was an "urgent priority" in 1980 has degenerated into a crisis in 2012 that poses an existential threat to Snake River salmon which provided the impetus for the fish and wildlife provisions of the 1980 Act.

34. In the Sixth Power Plan, the Council has ignored its duty to give "due consideration" to the needs of salmon and steelhead and the actions needed to restore them. Although the Sixth Power Plan shows that Columbia and Snake River salmon could be restored to formerly productive levels without jeopardizing the regional energy supply, the Council gave no consideration to any additional fish protection measures beyond those it adopted in its fish and wildlife program—and which are based on an illegal Biological Opinion. Instead, for all practical purposes, the Council in its Sixth Power Plan again abdicated its salmon restoration duty under the Power Act to the same federal agencies responsible for

driving Columbia River Basin salmon onto the List of Endangered Species. The Council in the Sixth Plan continues to treat salmon and steelhead as only an exaggerated financial “liability” for the power system, both by adopting methodologies that inflate the alleged “costs” of fish protection and also by failing to consider the quantifiable and unquantifiable benefits of restored salmon and steelhead runs for the regional economy.

35. The Council’s failure to comply with the Power Act in the Sixth Power Plan harms the salmon-related recreational, aesthetic, scientific, economic, and civic interests of me, NRIC, and its contributors, collaborators and supporters, and the interests of others who find value in the salmon and their marine and freshwater ecosystems.

36. My enjoyment of fishing, hiking, boating, nature study, and other activities in the Snake and Columbia River basins is directly affected by the health of wild salmon and steelhead populations that form a special part of the landscape in the areas where I pursue these activities. The continuing depressed state of salmon runs renders these areas less enjoyable for me. Rafting the Middle Fork Salmon River—a Wild and Scenic River which flows through the Frank Church Wilderness Area—for example, is not the same experience without the opportunity to see large numbers of wild migrating salmon and steelhead and to fish for them. Continued declines, or even inadequate improvements, in the

Columbia River Basin's fish populations markedly diminish my ability to use and enjoy these areas for recreation, study, fishing, and other uses and interests, undermining my ability to observe and enjoy these species and their native habitats. If salmon and steelhead runs improve, I would spend even more time in and around the rivers that are home to these fish. But because of the Council's failure to comply with its duty to protect, mitigate, and enhance these salmon runs, there will continue to be fewer wild salmon in our rivers.

37. Moreover, the conflict between the FCRPS and salmon, notably those produced in the Snake River Basin, is NRIC's principal *raison d'être*. NRIC's corporate function and purposes and continued existence depend substantially on the salmon's continued survival and eventual restoration to formally productive levels as mandated by the Northwest Power Act. Actions that threaten fulfillment of the Act's salmon restoration mandate cause significant harm to NRIC's primary function and goals.

38. The Council knows what must be done to achieve the primary purposes of the Power Act. The Court's 1994 NRIC decision vacated and remanded the Council's previous fish and wildlife program. This Court did not have to give the Council specific instructions. The Council was well aware that salmon produced in the Snake River Basin were at greatest peril from the FCRPS and their protection portended the most significant change in the FCRPS. Going

on two decades after that order, Snake River salmon are still in peril, surviving on interim life-support provided by the Oregon district court in other litigation while the federal agencies struggle to dodge the requirements of the ESA.

39. If this Court finds that the Council has violated the NPPA and partially remands the Sixth Power Plan, it will provide the Council with the mandate and opportunity to do its duty, i.e., to produce a regional power plan, which includes and is based on a salmon restoration plan, and measures that will restore Columbia River salmon, notably those produced in the Snake River Basin, while ensuring an adequate and reliable supply of power. I believe an order from this Court remanding aspects of the Sixth Power Plan can facilitate belated achievement of the NPPA's primary purposes of restoring to productive levels salmon adversely impacted by the FCRPS while "maintaining an adequate, efficient, economical, and reliable power supply." 16 U.S.C. § 839(2). This result would alleviate the ongoing injury to my, NRIC, and NRIC's contributors,' collaborators,' and supporters' salmon-related interests.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge. Executed this 19th day of September, 2012, at Eagle, Idaho.

  
JAMES EDWARD CHANEY

# **ATTACHMENT 1**

**REPRESENTATIVE NORTHWEST RESOURCE INFORMATION  
CENTER AND ED CHANEY PUBLICATIONS AND PROJECTS**

- Analyst/Author, Columbia River Basin Salmon & Steelhead Analysis (1976) which led to creation of what is now the Columbia Basin Fish and Wildlife Authority. For Pacific Northwest Regional Commission, composed of governors of Oregon, Washington and Idaho, and a federal representative.
- Author, A Question of Balance – Water/Energy–Salmon and Steelhead Production in the Upper Columbia River Basin. (1978). For U.S. Bureau of Reclamation, Columbia River Inter–Tribal Fish Commission, U.S. Fish and Wildlife Service, National Marine Fisheries Service and Pacific Northwest Regional Commission (comprised of Governors of Oregon, Washington, Idaho, and Montana).
- Co-initiator of the salmon restoration provisions of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 by persuading then Idaho Senator Frank Church to insert salmon restoration language into draft regional energy legislation then working its way through congress.
- Member, initial Scientific and Technical Advisory Team established to advise the Northwest Power Planning and Conservation Council on implementation of the Pacific Northwest Electric Power Planning and Conservation Act of 1980.
- Co-analyst/author, Columbia River Basin Salmon and Steelhead Management Framework Plan. (1980). For Columbia River Fisheries Council (composed of Oregon, Washington, and Idaho state fishery agencies; Columbia River Inter-Tribal Fish Commission; National Marine Fisheries Service; U.S. Fish and Wildlife Service).



- Author, Cogeneration of Anadromous Salmon and Steelhead and Hydroelectric Energy in the Upper Columbia River Basin; an Economic Perspective on the Question of Balance. (1982). For U.S. Fish and Wildlife Service.
- Author, Perspective on Management of Ocean Chinook and Coho Salmon Fisheries Within the Fishery Conservation Zone off California, Oregon, and Washington. (1982). For Pacific Fishery Management Council.
- Participant in regional Salmon Summit convened by then U.S. Senator Mark O. Hatfield, Oregon. (1991). Northwest Resource Information Center represented itself, Idaho Salmon and Steelhead Unlimited and other Snake River Basin salmon sport fishing interests.
- Author, Changing Course, A New, More Business-like Approach to Joint Production of Columbia River Basin Anadromous Fish and Hydroelectric Energy—Recommendations for Recovery of Snake River Basin Anadromous Fish Petitioned for Review Under the Endangered Species Act. (1991). Submitted to the Hatfield Salmon Summit by Northwest Resource Information Center in its own behalf and other Snake River Basin salmon sport fishing interests.
- Member, initial Endangered Species Act Technical Review Committee for Columbia River Basin anadromous fish. (Early 1990s). For National Marine Fisheries Service.
- Founder and start up-year director of Save Our Wild Salmon, a region-wide and national coalition of Columbia River Basin salmon advocacy organizations. (1991).
- Author: Strategies for Recovery of Snake River Salmon, Recommendations for Endangered Species Act Pre-decisional Management Plan; Snake River Salmon, National Treasure at Risk of Extinction. (1993). Endangered Snake River Spring & Summer Chinook Salmon – Causes & Effects. (1994). For Idaho Governor Cecil Andrus.

- Author, Idaho Economic Effects of Breaching/Not Breaching the Army Corps of Engineers' Snake River Dams in S.E. Washington. (2002).
- Author, Draft Framework Strategy for Reintroducing Salmon and Steelhead to the Snake River Basin Above Hells Canyon Dam. (2006). For Shoshone-Bannock Tribes of the Fort Hall Reservation; submitted to Federal Energy Regulatory Commission in relicense proceedings for the Hells Canyon complex of dams.
- Author, analysis of legal and economic issues and Comments on the Northwest Power and Conservation Council Draft 6th Power Plan. (2009).
- Member, Council of Elders; produced technical and economic analyses to support recommendations to the Obama Administration for Columbia River Basin salmon recovery program. (2009). For Resource Renewal Institute.