

Resolution of the Western Division of the American Fisheries Society on the Role of Dams and Conservation of Snake River Salmon, Steelhead, Pacific Lamprey, and White Sturgeon

WHEREAS the first objective in the constitution of the American Fisheries Society is to promote the conservation, development, and wise use of fisheries, and the American Fisheries Society further commits to promote enlightened management of aquatic resources for optimum use and enjoyment by the public; and

WHEREAS past management of Snake River salmon, steelhead, Pacific lamprey, and white sturgeon populations and their environment has resulted in a failure to conserve and use wisely the fisheries, or to provide for optimum use and enjoyment by the public; and

WHEREAS Snake River salmon, steelhead, Pacific lamprey, and white sturgeon extinctions and declines occurred as a result of the impacts from a variety of physical, chemical, and biological factors, including climate change and ocean regime shifts plus those that have been summarized as the “four H’s” - Hatcheries, Harvest, Habitat, and Hydropower; and

WHEREAS four dams (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite) have been constructed on the lower Snake River downstream from the Clearwater and Salmon rivers, which combined provide more anadromous fish spawning area than any other portion of the Columbia River Basin; and

WHEREAS many, and perhaps most, populations of wild Snake River salmon and steelhead are now extinct, and the remaining populations are currently listed as threatened or endangered under the Endangered Species Act; and

WHEREAS counts at Lower Granite Dam indicate order-of-magnitude reductions in the number of Pacific lamprey returning to the Snake River since the four lower Snake River dams were constructed; and

WHEREAS the four lower Snake River dams isolate white sturgeon, creating nonviable populations in each between-dam reach, and these populations are characterized as being demographic sinks and having poor recruitment because of insufficient spawning and rearing habitat; and

WHEREAS despite recent years of relatively large runs of some salmon and steelhead populations, and good flow and ocean conditions, it is prudent to expect a repeat of extended periods of smaller runs, and poor flow and ocean conditions, coupled with continued gradual warming of water temperatures; and

WHEREAS wild Snake River salmon and steelhead have continued to decline as a result of delayed mortality from the hydropower system, despite recent improvements in ocean productivity, passage and adult returns; and

WHEREAS recent incremental improvements and adjustments in management of hatcheries, harvest, habitat and hydropower facilities have not yet produced significant, sustained increases in abundance of wild Snake River salmon and steelhead, Pacific lamprey, or white sturgeon; and

WHEREAS the long-term viability of hatchery fish programs depends to some degree upon the conservation and availability of wild fish for their contributions of genetic material; and

WHEREAS the U.S. Fish and Wildlife Service Lower Snake River Compensation Plan Office, charged with compensating for salmon and steelhead losses associated with turbine mortality at the four lower Snake River dams, has concluded it cannot meet its salmon compensation objectives; and

WHEREAS failure to restore Snake River salmon, steelhead, Pacific lamprey, and white sturgeon to sustainable, fishable levels puts the federal government in a position of failing to meet its Treaty Trust responsibilities; and

WHEREAS restrictions associated with failed recovery of Snake River salmon, steelhead, Pacific lamprey, and white sturgeon directly affect the Columbia Basin's fisheries management, conservation, and economic options (both present and future); and

WHEREAS past and recent scientific reviews, including those conducted as part of the Independent Scientific Advisory Review process, the collaborative and peer-reviewed *Plan for Analyzing and Testing Hypotheses* (PATH), the Fish and Wildlife Coordination Act report on the Corps of Engineers Lower Snake River Juvenile Salmon Migration Feasibility Study Environmental Impact Statement, the 2002 American Fisheries Society publication of the symposium titled *Biology, Management, and Protection of North American Sturgeon*, the 2005 American Fisheries Society Western Division Review of the Federal Columbia River Power System Biological Opinion, the 2010 American Fisheries Society Western Division Review of the Adaptive Management Implementation Plan, and the 2010 U.S. Fish and Wildlife Service *Pacific Lamprey Draft Assessment and Template for Conservation*, have all indicated that restoration of natural river conditions where the lower four Snake River dams occur has the highest likelihood of preserving and recovering salmon, steelhead, Pacific lamprey, and white sturgeon, and poses the least risk to their survival; and

WHEREAS the science associated with dam removals to help conserve and recover fish populations is advancing rapidly, with dams recently removed on many sizeable rivers (e.g., the Kennebec, Rogue, Sandy, Calapooia, Sprague, and Clark Fork rivers), and removals in progress on other rivers (e.g., the White Salmon and Elwha rivers), yet dam removals often take decades of planning; and

WHEREAS decisions regarding management of the lower four Snake River dams and recovering Snake River salmon, steelhead, Pacific lamprey and white sturgeon are ongoing and could benefit from a collective professional opinion; and

WHEREAS economic analyses have shown that river shippers pay only 9% of the total costs of maintaining and operating the lower Snake River navigation system (far exceeding subsidies for

rail and highway freight transportation), and the remainder is subsidized by electric ratepayers and federal taxpayers; and

WHEREAS the power generation of the four lower Snake River dams has constituted an average of 4% of the Pacific Northwest power needs (mostly during spring runoff when it is least needed and most replaceable), while only producing about 1% of regional power needs during high demand periods, and in the past 10 years approximately 11 times their average power production has been added to the regional power supply (about half in natural gas and half in wind);

NOW, THEREFORE BE IT RESOLVED that based on the best scientific information available, it is the position of the Western Division of the American Fisheries Society that the four lower Snake River dams and reservoirs are a significant threat to the continued existence of remaining Snake River salmon, steelhead, Pacific lamprey, and white sturgeon; and

BE IT FURTHER RESOLVED that if society-at-large wishes to restore Snake River salmon, steelhead, Pacific lamprey, and white sturgeon to sustainable, fishable levels, then a significant portion of the lower Snake River must be returned to a free-flowing condition by breaching the four lower Snake River dams, and this action must be comprehensively planned and implemented, using appropriate techniques and management practices, in a timely manner; and

BE IT FURTHER RESOLVED that in conjunction with actions to allow the lower Snake River to flow freely, without impoundment, actions to compensate dam and reservoir users, and to address detrimental impacts to habitat, from harvest, and from hatcheries will be required to further increase the likelihood of recovering Snake River salmon, steelhead, Pacific lamprey, and white sturgeon; and

BE IT FURTHER RESOLVED that The Western Division of the American Fisheries Society will contact the concerned federal and state agencies and tribes, and elected or appointed officials, to make them aware of this resolution.