FRIENDS OF THE CLEARWATER

Protecting Wild Clearwater Country Since 1987

A SALMON SANCTUARY

in Idaho's Clearwater River Basin

SALMON SANCTUARY INITIATIVE — PHASE II REPORT

September 14, 2026

Bear Creek, tributary to the upper Selway River, 2001 · Photo by Dick Walker

Friends of the Clearwater

THE BIG WILD

THE LARGEST WILD PLACE IN THE LOWER 48

SALMON SANCTUARY

FRIENDS OF THE CLEARWATER

SANCTUARY

A Place of Refuge and Protection

On the eastern edge of Idaho last fall, seven hundred miles from the sea, I watched a single female chinook, with great, crimson-gilled gasps of effort, turn her ocean-built body into a shovel and dig, in the unforgiving bone of the continent, a home for offspring she would not live to see.

I watched her lay eggs so tender the touch of a child's fingertip would crush them, eggs exactly the color of setting suns. I watched the darker, fierce-kyped male ease in front of those suns, and send milt melting down into her nest of stones. I watched the paired chinook circle their pebbled redd, tending it, guarding it — I want to say "loving it," if the State will allow. Yet only incidentally, as if by accident, did they touch each other, because they weren't making love to each other. They were making love to the very land and water, to broken bits of mountain and melting snows.

I left them to die, as salmon do, their clutch of eggs orphaned in a frigid gravel womb. As I write these words, winter has snapped down hard in the Rockies. Snow is mounting high. But in that ice-covered streambed nest, which the female covered with protective pebbles with her last few strokes of life, tiny eyes are even now appearing in her sun-colored eggs.

There is a fire in water. There is an invisible flame, hidden in water, that creates not heat but life. And in this bewildering age, no matter how dark or glib some monetized, spiritually inert humans work to make it, wild salmon still climb rivers and mountain ranges in absolute earnest, solely to make contact with that flame.

Words can't reach deep or high enough to embody this wonder. Only wild salmon can embody it. Each migration, each annual return from the sea, these incomparable creatures climb our inland mountains and sacrifice their lives, that tiny silver offspring may be born of an impossible watery flame.

These are the Genesis gift, the biblically blessed beings, that we are eradicating from the American West and the Pacific for all time.

— From *A Prayer for the Salmon's Second Coming*, by David James Duncan

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INTRODUCTION

The largest tract of wild country in the contiguous United States spreads across roughly 300 miles, largely north to south, in central Idaho — more than ten million acres in the Big Wild. The Clearwater River basin forms roughly its northern half, with elevations ranging from 740 feet at the river's mouth to over 9,000 feet in the Bitterroot mountains. The basin includes over one million acres of designated Wilderness and nearly 1.5 million acres of Inventoried Roadless Areas — and more public lands than Glacier National Park and Yellowstone National Park combined.

Figure 1. Idaho's Big Wild

For nearly forty years, Friends of the Clearwater (FOC) has worked to protect the basin's public lands, wildlife and waterways. The Moscow, Idaho-based 501(c)(3) non-profit has held federal agencies accountable to environmental laws, advocated for threatened and endangered species, and even successfully challenged the largest oil company in the world to abandon its plan to convert the Clearwater and Lochsa Wild and Scenic River corridor into an industrial heavy-haul truck route. As part of a bold, action-driven project to protect Clearwater Country and the species and processes that keep it wild, FOC is launching a Salmon Sanctuary Initiative to protect and restore native fish habitat within the Clearwater River basin and secure the largest salmon sanctuary in the United States.

In Phase I of this initiative, thirteen Pacific Northwest fish biologists, resource managers and conservationists shared their professional opinions on the concept of a salmon (or native fish) sanctuary, its required habitat for our focal species, and related recommendations. Those Phase I interviewee/consultants are listed in the appendix. Using that guidance, a Phase II team — three fish biologists, a hydrologist, an author/filmmaker, retired business owner, two FOC board members, FOC's executive director and the team leader — prepared the document you are now reading. Phase II team members are also listed in the appendix.

THE PLACE

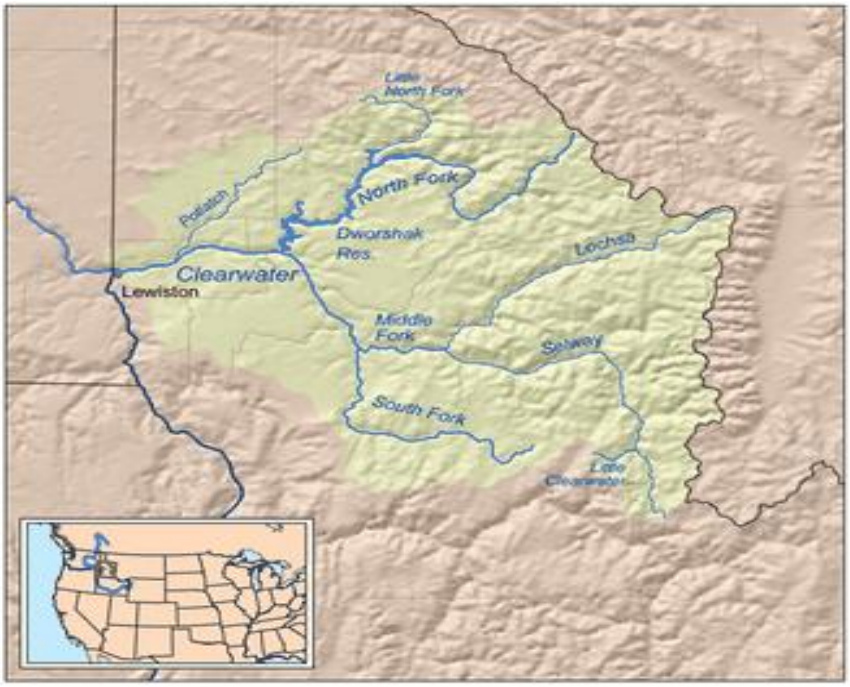

Figure 2. The Clearwater River basin

Idaho's Clearwater River basin is nationally known for its uniqueness as an inland temperate rainforest, its vast public lands, and its notable rivers. The Lochsa, Selway, and Clearwater's Middle Fork are three of the original eight rivers included in the Wild and Scenic Rivers Act of 1968. The basin hosts old growth forests, including ancient cedars and white-barked pine, and flora which more typically appear on the Pacific coast. Forests and peaks are home to wolverine, fisher, wolves, mountain goat, cougar and the occasional grizzly. The basin contains 1,254 miles of suitable spawning-rearing habitat for Chinook salmon and 2,423 miles of such habitat for steelhead.

This rich and diverse region is supported by a marine mineral and nutrient exchange facilitated by several sea-migrating fish species. These include fall Chinook and steelhead, which are presently Endangered Species Act-listed as threatened with extinction, as well as Pacific lamprey, a candidate for such listing. In addition, the Nez Perce Tribe Fisheries Department has reintroduced coho salmon, while both the Tribe and the Idaho Fish and Game Department have been actively engaged in the reintroduction of spring/summer Chinook. The Clearwater River basin is also home to ESA-listed bull trout, arguably the salmonid most sensitive to climate warming, as well as westslope cutthroat trout.

The Clearwater is a major tributary of the Snake, which historically produced an estimated half of all anadromous fish in the Columbia River basin. Today, Snake River salmon and steelhead are in serious jeopardy. Wild Snake River steelhead runs stand at just 2.7% of estimated historic returns. For spring/summer Chinook, today's returns average a dismal 1% of historic numbers. Sockeye salmon manage a rate of just 0.06% and are considered “functionally extinct.” Saving these species from extinction requires protecting and restoring available salmonid habitat, including migratory routes.

Of special note: the Clearwater River basin has been home to the Nez Perce people (Nimiipuu) for over ten thousand years. The Tribe's right to hunt, fish and gather in the usual and customary places is enshrined in the Treaty of 1855. FOC acknowledges the Nez Perce's deep and enduring cultural connection to the Clearwater River basin and its waterways, as well as the Tribe's critically important, ongoing work focused on restoring native fish throughout much of central Idaho.

NATIVE FISH HABITAT REQUIREMENTS

The Salmon Sanctuary Initiative is first and foremost about protecting and restoring the habitat our target species need to survive and thrive. Five ingredients top the list:

1. **Cold, clean, well-oxygenated water**
   Salmon require water temperatures at or below 68°F (20°C). Warmer water can result in disease, stalled migration, reduced growth and death. Bull trout need even colder water, lower than 58°F (14.5°C). Streams and rivers must also be free of excess fine sediments and pollutants.

2. **Stream complexity**
   Quality salmon and trout habitat has the structural complexity that comes from natural processes operating across the landscape: deep pools, large woody debris, undercut banks, flood plains, riffles with unimpacted (clean) gravel, and enough water for every life stage

3. **Biological diversity**
   Because all parts of an ecological system are interconnected, a salmon sanctuary needs many plant and animal species, including the insects that feed native fish.

4. **Connectivity**
   Every waterway in the watershed that supports a life stage of these fish must allow unobstructed migration whenever it's needed.

5. **Large-scale landscapes.**
   The lands within a salmon sanctuary must be of sufficient size to withstand natural occurrences such as flood and fire, and to retain resilience to climate-change driven increases in extreme weather events. A sanctuary must further be of a size thar facilitates the expression of diverse life history strategies across complex and connected habitats.

THREATS AND UNCERTAINTIES

The Clearwater River basin is a wild place of national significance — and it is under attack.

1. In 2025, American Rivers named the Clearwater River and its major tributaries the **7th most threatened river system** in the United States, reporting:

> *The stunning Clearwater River Basin in the Nez Perce-Clearwater National Forest is known as a 'Noah's Ark' for Chinook salmon, steelhead, westslope cutthroat trout, and bull trout because its cold, clean, high-elevation streams will be able to sustain fish populations even as temperatures warm.*

   The national organization cited the planned four-fold expansion of commercial logging prescribed in the Nez Perce-Clearwater National Forests' 2025 Land Management Plan as a major driver of habitat loss — chiefly through increased sediment loads from road building and future mass failures, disrupted ecosystems with decreased biological diversity, and the possible loss of stream connectivity. Dredge mining poses yet another threat.

2. Climate change is significantly affecting native fish habitat in the Snake and Clearwater basins. Water temperatures are increasing, the magnitude of runoff is changing, water levels are decreasing, and warmer ambient temperatures are changing the hydrologic calendar. Harmful effects on anadromous fish are well documented.
3. Political pressure to sell public lands has resurfaced. Such sales would jeopardize the lands and waters largely responsible for native species' continued existence.
4. Attempts by the federal administration to eliminate key elements of bedrock environmental laws pose yet another threat. Prime examples include narrowing the definition of "harm" in the Endangered Species Act and greatly reducing opportunities for citizens to participate in decision-making about public land use as required in the 1970 National Environmental Policy Act.
5. Extinction of one or more focal species is the greatest threat of all. Nez Perce Tribe Fisheries Department research illustrates that extinction risk occurs tributary by tributary — within evolutionarily significant units (ESU). When the number of adult fish returning to a given ESU to spawn is fewer than 50 adults for 4 or more years, extinction is irreversible. Extinction is not a future risk; it is underway now. This fact underlies the urgency of our work.

OUR VISION

We envision a salmon sanctuary shaped by natural processes, large enough to possess resilience to natural events such as floods, fires, and debris flows; a sanctuary rich in aquatic life; intact ridgetop to ridgetop. For anadromous fish, that means habitat supporting all three life stages that occur in the Clearwater basin —

spawning, rearing and migration — on which their survival depends. We also envision expression of the full diversity of life history strategies with wide variation in freshwater rearing periods.

The Clearwater River was once a salmon and steelhead Eden, producing millions of juvenile salmonids each year and witnessing the return of abundant and resilient adult fish laden with nutrients of the sea. That is our ultimate vision, which we believe is possible once again. That vision remains attainable when wild, locally adapted fish continue to have access to high quality connected habitat. This is precisely why our vision is possible once again.

Fish scientists from throughout the Pacific Northwest — along with the National Marine Fisheries Service and the Fish Passage Center — agree that breaching the four lower Snake River dams is the single most critical step toward recovering the Clearwater's anadromous fish. The Clearwater River Salmon Sanctuary Initiative acknowledges this science and supports the on-going work of many organizations to achieve the breaching goal. However, the Salmon Sanctuary Initiative is focused on protecting and restoring the habitat anadromous fish require now, as well as in future years when the dams are breached. The presence of the lower Snake River dams makes even more critical the protection of existing salmon and steelhead habitat, as well as the restoration of critical habitat that has been damaged.

OUR GOALS

Friends of the Clearwater adopts the following goals for the Salmon Sanctuary Initiative:

1. Full protection of existing Wild and Scenic Rivers within the Clearwater River basin against any and all violations of the Wild and Scenic Rivers Act of 1968.
2. The elevation of all streams and segments of streams identified as Wild and Scenic eligible in the Clearwater Forest's 1987 Land Management Plan to the same status in an amended 2025 Land Management Plan.
3. The increase in miles of officially designated Wild and Scenic Rivers in the Clearwater River basin.
4. Full protection of designated Wilderness areas within the Clearwater River basin as defined in the 1964 Wilderness Act.
5. The expansion of designated Wilderness within the Clearwater River basin.
6. The full protection of all waterways within the basin identified as Conservation Watersheds in the Nez Perce-Clearwater National Forests 2025 Land Management Plan.
7. No violation of previous forest plan stream standards such as PACFISH and INFISH.
8. Retention of all United States Forest Service Inventoried Roadless Areas within the Clearwater River basin that are critical to native fish survival.

SALMON SANCTUARY BENEFITS

A Clearwater River Salmon Sanctuary can provide the following benefits:

1. Continued cold-water habitat for remaining wild salmon, steelhead and other locally-adapted native fish species crucial to their continued existence in an ever warming climate;
2. The interruption of a further decline of salmon and steelhead through habitat security, habitat restoration, and by stopping the cumulative effects caused by habitat impairment;
3. A breadth of biodiversity only available in intact ecosystems;
4. Economic benefits to local individuals and communities in the form of recreational dollars spent in the region;
5. Public recognition of the commitments the U.S. government made to indigenous peoples in treaties that guarantee their right to hunt, fish and gather in all usual and accustomed places;
6. Acknowledgement of Idaho's culture of hunting, fishing, hiking and other forms of outdoor recreation, along with Idahoans' support for public lands;
7. A contribution to halting global warming—intact forested ecosystems in inland temperate rainforests sequester over 150 tons of carbon per acre;
8. Additional protection for designated Wilderness and Inventoried Roadless Areas in the upper Clearwater basin, as well as water supplies of downstream Idaho communities;
9. National attention to the plight, value and needs of Columbia River basin salmon and steelhead;
10. Further illumination of the urgent need for effective out-of-basin actions to restore wild Idaho salmon and steelhead.

INITIATIVE ACTIVITIES: YEAR ONE

The Clearwater River Salmon Sanctuary is an initiative of the Friends of the Clearwater, which will govern, lead, and manage this project.

In year 1 (September 2026–September 2027), FOC will:

1. Form a volunteer Phase III team to begin initiative implementation.
2. Build an advisory group of notable experts to guide the project.
3. Prepare and execute a communications plan for FOC members and other interested individuals, conservation organizations, tribes, federal and state agencies, area universities, and the general public.
4. Declare the Clearwater basin a salmon sanctuary and share this declaration widely.
5. Prepare an integrated assessment of available data as a baseline for habitat conditions and develop a monitoring system for assessing habitat quality.
6. Connect the Initiative with the fisheries departments at the University of Idaho, Washington State University, and the Nez Perce Tribe.

7. Build public awareness of the Sanctuary's physical, economic, and social value to the state and region.
8. Engage community members in citizen science, including habitat-assessment training and implementation.
9. Monitor and enforce the Nez Perce-Clearwater Forests' compliance with the Wild and Scenic Rivers Act, the Wilderness Act, the Endangered Species Act, the National Environmental Policy Act, and the Nez Perce-Clearwater National Forest's commitment to protecting threatened and endangered fish species and the Conservation Watersheds identified in the Forests' 2025 Land Management Plan.
10. Identify potential habitat restoration projects with the biggest possible impact.
11. Develop short, medium and long-term budgets for the Salmon Sanctuary Initiative.
12. Secure funding sufficient to support necessary project activities during years 1 and 2 of the initiative.

Initial Timeline 2026

MONTH	ACTIVITIES
August	– The project team leader will conduct a final review of the draft Phase II Report with the Phase II team and other experts. – The FOC Board of Directors will approve the final report and officially launch the Initiative. – A communications plan will be created, including both messaging and visuals.
September	– A Phase III Implementation team will form and begin its work – An advisory team of noted experts will be created to help guide the work. – FOC will share the final SSI Phase II report/plan with various state and federal agencies and conservation organizations prior to public release. – The 2026–2027 Communications Plan will begin implementation. – The Clearwater River Salmon Sanctuary Initiative goes live!

APPENDIX

Phase I Team Members / Consultants

1. Keith Carlson — former commissioner, Idaho Department of Fish and Game
2. Eric Crawford, Director, Snake River Campaign, Trout Unlimited
3. Pat Ford, former Executive Director of Save Our (Wild) Salmon
4. Steve Hawley, author, *Recovering a Lost River* and *Cracked: The Future of Dams in a Hot, Chaotic World*; writer/director of the documentary film *Dammed to Extinction*
5. Kevin Lewis, former Executive Director, Idaho Rivers United

6. Gary Macfarlane, former Eco Defense Director, Friends of the Clearwater
7. Steve Pettit — fisheries biologist, Idaho Department of Fish and Game, retired
8. Stephen Pfeiffer, Wild Fish and Hydropower Policy Manager, Idaho Rivers United
9. Bob Ries, fisheries biologist, National Marine Fisheries Service, retired
10. Richard Scully, fisheries biologist, Idaho Department of Fish and Game, retired
11. Katherine Thompson, fisheries biologist, Nez Perce-Clearwater National Forests, retired
12. Russ Thurow, Emeritus fisheries scientist, United States Forest Service, Rocky Mountain Research Station
13. Rick Williams, fisheries ecologist and biology professor, College of Idaho, emeritus; author, *Managed Extinction: The Decline and Loss of Wild Salmon and Steelhead in the Pacific Northwest*

Phase II Team Members

1. Nick Gerhardt, hydrologist, Nez Perce National Forest, retired
2. Steven Hawley, author, film director and producer
3. Beth Hoots, FOC board member, fish physiologist and postdoctoral fellow at the U. of Alberta, Canada
4. Kyran Kunkel, Executive Director, Friends of the Clearwater
5. Linwood Laughy, former board chair of Advocates for the West, Salmon Sanctuary team leader
6. Gary Macfarlane, Eco Defense Director, Friends of the Clearwater, retired
7. Bob Ries, fish biologist, National Marine Fisheries Service, retired
8. Rick Rupp, retired business owner
9. Katherine Thompson, fish biologist, Nez Perce-Clearwater National Forests, retired

Maps and Graphs

The following maps are contained in a separate SSI-Maps file that accompanies this report:

1. The Big Wild: The Heart of Idaho's Wild Country
2. The Clearwater River Basin in north central Idaho
3. The Greater Clearwater River basin, including Nez Perce Tribe reservation
4. Nez Perce Tribe (Nimiipuu) Aboriginal Territory
5. Snake River Threatened and Endangered Salmon Returns 1995–2024
6. Natural Origin spawner abundance for Snake River Basin spring/summer Chinook Salmon
7. Natural Origin spawner Abundance for Snake River summer Steelhead
8. Nez Perce-Clearwater National Forests Conservation Watersheds, northern and southern portions, in the NPCNF's 2025 Land Management Plan
9. Management Areas, Recommended Wilderness, and Suitable Wild and Scenic Rivers, southern portion of watershed
10. Clearwater River Subbasins to 4th Field Hydrologic Unit Codes for the Clearwater River basin
11. Clearwater River basin August a.m. Water Temperatures, Idaho Department of Water Quality, 2001

12. Clearwater River basin August p.m. Water Temperatures, Idaho Department of Water Quality, 2001

13. August Mean Temperature map including the Clearwater River basin, 2015, from *The cold water climate shield: delineating refugia for preserving salmonid fishes through the 21st century*

REFERENCES

The Phase II planning team referenced the following plans, reports, books and other professional material in its discussions. This material will provide recommended resources as the Phase III team begins plan implementation. *Note: This resource list emphasizes accessibility for the interested reader rather than meeting any prescribed system of notation.*

1. *Aquatic Ecosystem Assessment on the Nez Perce-Clearwater National Forests, along with PACFISH/INFISH amendments and Riparian Habitat Conservation Areas,* as compiled by Katherine Thompson. May 2026.

2. Beneficial Use Reconnaissance Program (BURP) Data Summary for the Clearwater Basin, Nick Gerhardt. June 2026.

3. Beneficial Use Reconnaissance Program (BURP): Idaho's 2024 Integrated Report. https://www2.deq.idaho.gov/admin/LEIA/api/document/download/22615

4. *The cold-water climate shield: Delineating refugia for preserving salmonid fishes through the 21st century.* https://research.fs.usda.gov/treesearch/47740

5. *The case for basin-wide passage and habitat restoration for Pacific Lamprey in the Willamette River basin,* in Native Lampreys: Research and Conservation of Ancient Fishes. researchgate.net/publication/369372179

6. *Cracked: The Future of Dams in a Hot, Chaotic World*, Steven Hawley, 2023, Patagonia

7. *An Ecological, Cultural and Legal Review of Pacific Lamprey in the Columbia River Basin*. Idaho Law Review. digitalcommons.law.uidaho.edu

8. *Explanation of Hydrologic Unit Codes as Applied in the Clearwater Basin*, Nick Gerhardt. May 19, 2026.

9. *Snake River Anadromous Fish Status: Quasi-extinction Threshold Analysis* , Jay A. Hesse and Ryan N. Kinzer, https://ryankinzer.github.io/SRAFS/

10. *Managed Extinction: The Decline and Loss of Wild Salmon and Steelhead in the Pacific Northwest*, by Rick Williams and Jim Lichatowich, 2024.

11. *Native Fish Conservation Areas: A Vision for Large-Scale Conservation of Native Fish Communities*. Fisheries 36:6, 267–277. research.fs.usda.gov/treesearch/38415

12. *Native Fish Conservation Areas: Sustaining Native Fish and Aquatic Ecosystems*, May 2008, Rick Williams. researchgate.net/publication/299484957

13. Nez Perce-Clearwater National Forests 2025 Land Management Plan. fs.usda.gov — 2025 Land Management Plan

14. *New Approaches for Monitoring Stream Temperature: Airborne Thermal Infrared Remote Sensing*. https://studylib.net/doc/10997757

15. Nez Perce Tribe Department of Fisheries Resource Management — Management Plan 2013–2028. nezperce.org — DFRM Management Plan

16. Northwest Power and Conservation Council Columbia Basin Fish and Wildlife Program, June 2026. nwcouncil.org/fs/19912/2026-1.pdf

17. Northwest Power and Conservation Council Columbia Basin Fish and Wildlife Program, June 2026 — Subbasin Plans: Clearwater River. nwcouncil.org/subbasin-plans/clearwater

18. *On Our Watch: Salmon Extinction on the Middle Fork Salmon River in the Heart of Idaho*, Pat Ford, Idaho Capital Sun, June 16, 2026. idahocapitalsun.com — On Our Watch

19. *Paired Color Infrared and Thermal Infrared Imaging and Analysis for Selected Idaho Streams.* Idaho Department of Environmental Quality, April 25, 2001.

20. *Recovering a Lost River: Removing Dams, Rewilding Salmon, Revitalizing Communities*, Steven Hawley, Beacon Press, 2011

21. *River of Life, Channel of Death: Fish and Dams on the Lower Snake*, Keith Petersen, Confluence Press, 1995

22. Roadless Areas: see Friends of the Clearwater website. friendsoftheclearwater.org/roadless

23. The Salmon-less River, Jack Hurty, https://jackhurty.substack.com/p/the-salmon-less-river?r=4vo4ie&utm_medium=ios&triedRedirect=true

24. *Salmon and Public Lands in Idaho*, Pat Ford, Boise, Idaho, 2025.

25. Storch, A.J., et. al. 2022. *A review of potential conservation and fisheries benefits of breaching four dams in the Lower Snake River* (Washington, USA). Water Biology and Security[online]1(2):100030 (https://www.sciencedirect.com/science/article/pii/S2772735122000440).

26. *A Stream Evolution Model Integrating Habitat and Ecosystem Benefits*. Cluer, B. and Thorne, C., 2014. River Research and Applications, 30(2), pp. 135–154.

27. Western Pearlshell Mussel, as described in Appendix 3 of the Nez Perce-Clearwater National Forests 2025 Land Management Plan, beginning on page 61.