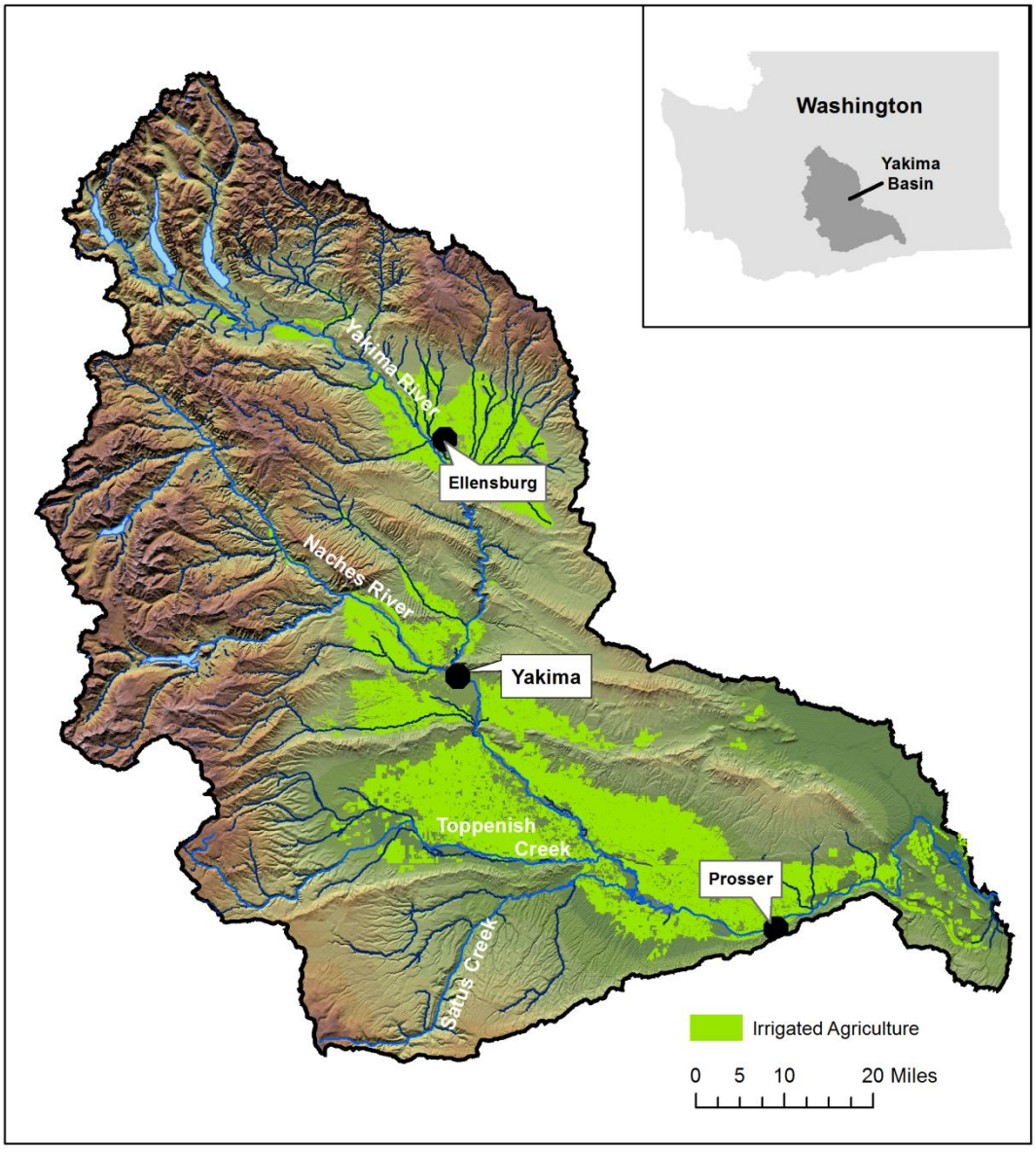
YAKIMA BASIN FISH AND WILDLIFE RECOVERY BOARD

LEAD ENTITY MANUAL



Updated January 2026

Dedication

To all of the landowners and managers in the Yakima Basin who have taken on the challenge of demonstrating that we can protect and restore fish habitat while meeting landowner goals and sustaining local economies.

Executive Summary

Washington's Salmon Recovery Funding Board (SRFB, commonly pronounced "surfboard") funds fish habitat improvement projects throughout the State of Washington. To ensure that funded projects address high priority needs and are supported by local communities, SRFB project proposals are vetted through an intensive local and state review process led by Lead Entities.

"Lead Entities" are local community groups whose work is essential for salmon recovery in Washington. They coordinate volunteer community leaders and technical experts to accomplish scientifically sound and publicly supported salmon habitat restoration projects across the state. Lead Entities are organizations supported by city, county, and tribal governments and work with project sponsors to solicit and develop project proposals, complete vigorous local technical and community review, and rank them according to how well they address real priorities for at-risk fish populations in a technically sound and broadly supported manner.

The Yakima Basin Fish and Wildlife Recovery Board (Recovery Board/YBFWRB) serves as the Lead Entity for the Yakima Basin. This document describes the review process used by the Board. Those interested in an overview of existing projects funded by the SRFB in the Yakima Basin should see the Yakima Basin Habitat Restoration Projects booklet.[1]

The first chapter of this document provides background information on the Board and its role as a Lead Entity. The second chapter provides an overview of a) fish populations of the Yakima Basin and the major issues facing them and b) past and current efforts to improve fish habitat. These chapters aim to give a sense of the larger context within which SRFB funds are used in the Yakima Basin.

The third chapter provides a detailed description of the process used by the Board to solicit, review, and prioritize projects proposed for SRFB funding. It is meant as a guide to the process for project sponsors, committee and board members, and others. The associated appendices provide the specific review criteria used by the technical committee and citizen committee.

This document does not provide a detailed overview of priority habitat needs in specific parts of the basin. That role is filled by three separate plans developed by the Board: the Yakima Subbasin Plan[2] prepared for the Northwest Power and Conservation Council in 2004; the Yakima Steelhead Recovery Plan[3], which was completed in 2009 and is incorporated into NOAA's Middle Columbia Steelhead Recovery Plan[4]; and the Yakima Bull Trout Action Plan.[5]

---

[1] URL: https://ybfwrb.org/wp-content/uploads/2024/01/2023-YBFWRB-Project-Booklet.pdf
[2] URL: http://www.nwcouncil.org/fw/subbasinplanning/yakima/plan/
[3] URL: https://ybfwrb.org/wp-content/uploads/2017/09/YakimaSteelheadPlan.pdf
[4] URL: https://www.fisheries.noaa.gov/resource/document/recovery-plan-middle-columbia-river-steelhead-distinct-population-segment
[5] URL: https://ybfwrb.org/recovery-planning/bull-trout-recovery/bull-trout-action-plan/

Table of Contents

Chapter 1: Introduction to the Board's Lead Entity Program

**New committee and board members are encouraged to reference the Onboarding Glossary.*

The Yakima Basin Fish & Wildlife Recovery Board (Board/YBFWRB) is made up of representatives of the Yakama Nation and 22 local governments including Benton, Kittitas, & Yakima Counties and 19 Yakima Basin cities. The Board's mission is to restore sustainable and harvestable populations of salmon, steelhead, bull trout, and other at-risk fish and wildlife species through collaborative and economically sensitive resource management in the Yakima River Basin. The Board:

- develops strategic plans to guide fish and wildlife recovery efforts in the Yakima Basin;
- coordinates funding for fish and wildlife restoration projects in the Yakima Basin; and
- fosters public awareness and engagement in fish and wildlife recovery issues.

An important part of the Board's work is to act as the Lead Entity (LE) for the Yakima Basin. The Salmon Recovery Act (RCW 77.85) created the Lead Entity program to support salmon recovery work in Washington. Each year the Washington Salmon Recovery Funding Board (SRFB) distributes money to on-the-ground fish habitat improvement projects throughout the state. This funding is a mix of funds appropriated by the state legislature and federal contributions from NOAA Fisheries via the Pacific Coastal Salmon Recovery Fund (PCSRF). Lead Entities are local organizations that solicit projects from their geographic areas, organize local technical and community reviews of the proposals, and present the highest ranked proposals to the SRFB for funding.

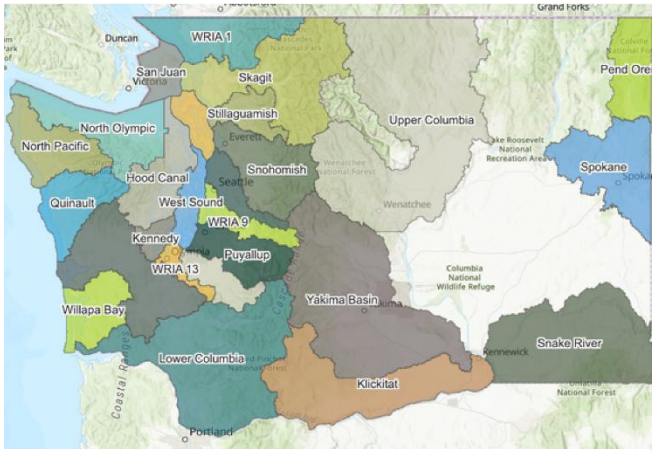


Figure 1: Map of Lead Entities

The Yakima Basin Fish & Wildlife Recovery Board is under contract with the State of Washington to act as the Lead Entity for the Yakima Basin (WRIA's 37, 38, & 39).[6] Between 1999 and 2025, the Yakima Basin Lead Entity program has funded 181 local projects for a total of over $47 million dollars of SRFB funding. These projects are described in detail in the YBFWRB habitat restoration project booklet.[7]

We also work with the SRFB and project sponsors to track the progress of funded projects in the Yakima Basin, help project sponsors access other sources of project funding, and conduct outreach that supports the Lead Entity program. Other funding entities have also used the local review structure set up by the Board's Lead Entity program to provide local input for funding decisions on habitat work in the Yakima Basin.

[6] From 1999 through early 2006, the Lead Entity Program was managed by the City of Selah and overseen by a separate Board, the Yakima River Basin Salmon Recovery Board.
[7] URL: https://ybfwrb.org/wp-content/uploads/2024/01/2023-YBFWRB-Project-Booklet.pdf

This Lead Entity Manual is a supporting document for the Board's Lead Entity Program. It is meant to serve as a guide for potential project sponsors, members of the Board and the Lead Entity Technical Advisory Group and Citizen Committee, participants in the statewide SRFB review process, and other interested parties. This manual is updated as needed to incorporate new information, changing ecological conditions, and changing community interest and public policy. It is consistent with the rationale developed by the Governor's Salmon Recovery Office (GSRO).

Guiding Principles for the Board's Lead Entity Program

The Board's Lead Entity Program supports habitat protection and restoration efforts that help recover salmon, steelhead, and bull trout populations in the Yakima Basin. Our efforts are guided by the following beliefs:

- Local leadership and community involvement are required if efforts to recover at-risk fish populations in the basin are to succeed;
- Recovering and maintaining self-sustaining, harvestable populations of native salmonids throughout their historic range in the Yakima basin creates direct benefits for:
    - the native ecology of our river systems;
    - recreational fisherman and the local businesses that they support; and
    - the culture and economy of the Yakama Nation.
- Recovering populations of steelhead and bull trout to levels that allow them to be removed from the federal Endangered Species Act will reduce current and potential regulatory burdens on land managers and local economies;
- When wisely conducted, efforts to protect and restore fish habitats can also provide numerous other public benefits, such as:
    - reduction of flood hazards;
    - improved public infrastructure (roads, bridges, utilities, irrigation systems, etc.);
    - protection of open spaces and working landscapes; and
    - improved outdoor recreation opportunities.
- Protecting existing high-quality and functional habitat from future degradation is an essential part of recovering and sustaining at-risk fish species in the Yakima Basin;
- Recovering at-risk fish species also requires improving habitat conditions in parts of the basin that have been degraded but still have the potential to provide quality habitat; and
- Efforts to protect and restore habitat should be driven by voluntary incentives.

These guiding principles are consistent with the Yakima Subbasin Fish and Wildlife Planning Board's Vision 2020, Appendix A, which was developed in 2004 as part of the Subbasin Planning process.[8]

[8] While the target date of 2020 has passed, the overall vision of this document has not changed.

Objectives of the Board's Lead Entity Program

Specific objectives of the Board's Lead Entity Program are to:

- Develop and implement a credible process for identifying and prioritizing fish habitat projects in the Yakima watershed that is built upon the best available science and has broad community support;
- Identify and encourage diverse project sponsors to apply for SRFB funds;
- Provide clear guidance to potential project sponsors as they identify and develop projects that address priority habitat needs in an effective manner;
- Submit a list of prioritized project proposals to the SRFB for each funding cycle that meets statewide, regional, and local goals for salmon recovery;
- Assist project sponsors in their efforts to secure other funding sources for priority projects;
- Help coordinate the efforts of watershed groups, stakeholders, and state, federal, local, and tribal governments to ensure that habitat projects are implemented in an efficient and cost-effective manner;
- Support education and outreach efforts that help build broad public support for habitat protection and restoration activities; and,
- Support monitoring, research, and assessment activities that help us better understand how to effectively protect and enhance priority habitats in the Yakima Basin.

Chapter 2: Overview of Fish Restoration in the Yakima Basin

This section provides background information on the Yakima Basin, the fish species that inhabit it, and the work that is being done to promote recovery of salmon, steelhead, bull trout, and other species in the basin. This information provides the broader context needed to understand the role of the Lead Entity process in the Yakima Basin.

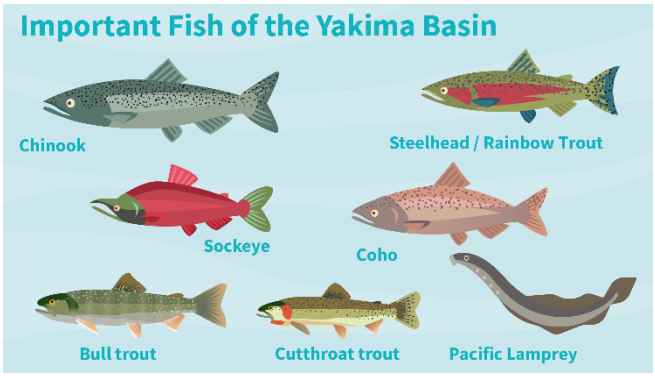
The Yakima River is the largest of the Columbia River's tributaries in Washington and drains approximately 6,100 square miles from its headwaters in the Cascade Mountains.

The mainstem Yakima flows from the glacial lakes, now used as reservoirs, just east of Snoqualmie Pass to its confluence with the Columbia River 221 miles downstream at the Tri-Cities (Richland, Kennewick, and Pasco). Along its route, it passes the old mining communities of Roslyn and Cle Elum, the hay farms and cattle ranches of the Ellensburg area, the stark scenery and trophy fly fishing of the Yakima Canyon, and the orchards, vineyards, hop yards, dairies, and other farms that fill much of the valley from Selah to the Tri-Cities. The Yakima's tributaries rise in the mountain highlands and flow through the managed forestlands of the Wenatchee National Forest, the Washington State Department of Natural Resources, the Yakama Nation, and private landowners before passing through private ranchlands, recreational areas, and some of the state's biggest State Wildlife Areas.

These waters supply a vibrant agricultural economy and a diverse population of over 500,000 people, most of whom are centered in and surrounding the growing urban areas of Ellensburg, Yakima, and the Tri-Cities. The watershed includes a striking range of ecosystems, including the mixed conifer forests of the Cascades, the drier pine forests and grasslands of the foothills, and the riparian forests and sagebrush steppe of the lower elevations. The broad range of elevation, climatic, and geologic conditions available creates some of the most extensive and diverse aquatic habitats in central and eastern Washington. These habitats supported – and to a lesser degree continue to support – some of the most diverse fish populations in the inland Columbia Basin.

Fish Species of the Yakima Basin

Table I shows estimated historic and current abundances of major fish species in the Yakima Basin. Total historic numbers are estimated to have ranged from 300,000 to one million returning adults. Recent returns have improved significantly from the lows of the 1980's and '90s, but still range from only 6,000 to 50,000 a year. The rest of this section gives a species-by-species overview. Run numbers reported are from Yakama Nation Fisheries and DART (University of Washington's Data Access & Retrieval Tool); totals include adult and jack returns. For steelhead, a July 1 to June 30 run year is used.



Source: Yakima Basin Handbook for Healthier Waters

Table I: Historic and current fish abundances in the Yakima Basin[9]

Species/Run	Low Estimate	High Estimate	Current Status	Low	Year		High	Year
Spring Chinook	100,000	500,000	Supplemented	666	1995		21,472	2001
Fall Chinook	38,000	100,000	Supplemented	523	1988		13,000	2002
Summer Chinook	??	??	Extirpated and reintroduced	254	2020		2,167	2023
Coho	40,000	150,000	Extirpated & reintroduced	-	until '93		21,428	2014
Sockeye	100,000	200,000	Extirpated & reintroduced	-			3,742	2016
Steelhead	20,000	100,000	Wild Population	474	2023		6,796	2009
Total	**298,000**	**1,050,000**		**1,917**			**68,605**	
Bull Trout	??	??	Wild Population				Up to 3,000	
Lamprey	??	??	Wild Population	0	many		710 adults	2017

Steelhead

Steelhead (the anadromous form of *Oncorhynchus mykiss*) spawn in tributaries and mainstem reaches throughout the Yakima Basin, making them the most widespread of the basin's anadromous species. They are part of the Middle Columbia River Steelhead Distinct Population Segment (DPS) which is classified as threatened under the federal Endangered Species Act. "Threatened" means a species is likely to become endangered within the foreseeable future. Biologists have identified four distinct populations – Satus, Toppenish, Naches, and Upper Yakima – in the basin. Estimates of historic abundances range from 20,000 to 100,000; returns in the last 20 years have ranged from 474 to 6,796. There is no hatchery production in the Yakima Basin, and in-basin fisheries for steelhead have not been held since 1994. Unlike salmon, steelhead do not always die immediately after spawning, and Yakima-Klickitat Fisheries Project (YKFP) runs an innovative program to recondition post-spawning adults (kelts) so that more of them can spawn again. Recovering steelhead to levels that allow for removing the Endangered Species Act (ESA) listing and reopening fisheries is a primary focus of fisheries recovery efforts in the basin. For more information on steelhead in the Yakima Basin, see the Yakima Steelhead Recovery Plan.[10]

Chinook

Historically there were three runs of Chinook (*Oncorhynchus tshawytscha*) in the Yakima Basin: spring, summer, and fall. The spring run returns to the Yakima in the spring, and holds in the Yakima system until late summer and early fall when they spawn in the Upper Yakima and Naches basins. The eggs hatch the following spring, and the young rear in the basin through the summer and following winter before leaving for the ocean as smolts in their second spring.

[9] Current status data from Dart online database; historic estimates are from preliminary review of literature.

[10] URL: https://ybfwrb.org/wp-content/uploads/2017/09/YakimaSteelheadPlan.pdf

Juveniles migrate extensively throughout the basin as they rear. Biologists have identified three distinct populations of spring Chinook—the Upper Yakima, Naches, and American River. Biologists estimate historic populations to have been between 100,000 and 500,000, and numbers dropped below 500 in the 1980's. The last decade has seen runs range from fewer than 2,000 to over 21,465. The YKFP's Cle Elum hatchery supplements the Upper Yakima spring Chinook population. The YKFP research program is evaluating the effects of this hatchery program on Chinook and other species of concern. Spring Chinook are a primary focus for efforts to protect and restore the complex floodplain habitats along the mainstem Yakima and Naches Rivers. They are harvested in tribal fisheries in the Columbia and the Yakima, and, in years with sufficient returns, in mark-selective recreational fisheries in the Yakima Basin. For more information about spring Chinook in the Yakima, see the Yakima Subbasin Plan.[11]

Adult fall Chinook have a life history that allows them to make use of habitats that would be inhospitable to salmonids in the summer. They return to the Yakima Basin and spawn in the fall; and are the only salmon species that spawn primarily in the lower Yakima River, from its mouth up to the city of Yakima. The following spring their young hatch and almost immediately start to migrate to the Columbia and the ocean. Estimates of historic abundance range from 38,000 to 100,000. In the 1980's numbers dropped as low as 221; in the last decade, runs have ranged from under 700 to over 7,000 returning adults. The YKFP runs a hatchery program to supplement the fall Chinook run, which supports both tribal and recreational fisheries in the basin. For more information about fall Chinook in the Yakima, see the Yakima Subbasin Plan.[12]

Summer Chinook were once numerous in the mainstem Yakima and lower Naches Rivers, but the combination of high harvest rates in the Columbia and ocean and poor summer habitat conditions in the lower Yakima resulted in their extirpation by the 1970's. Their life history is similar to fall Chinook, except that the adults migrate into the basin during the summer months, and some young may over-summer like spring Chinook. The Yakama Nation is currently reintroducing summer Chinook. Reintroduced summer Chinook are expected to make use of the extensive floodplains of the lower Naches and mid-Yakima.

Coho

Coho (*Oncorhynchus kisutch)* make use of low-gradient tributary and side channel habitat and were historically widespread in the Yakima River. The Yakima's native coho run was extirpated in the 1980's, but the estimated historical abundance ranged from 40,000 to 150,000 returning adults. This was largely due to heavy harvest in ocean and Columbia River fisheries that targeted abundant hatchery stocks. YKFP began reintroducing coho in the mid-1980's and are developing Yakima-adapted brood stock from the original Little White Salmon Hatchery brood stock. Since 2006, between 1,881 and 21,428 adults have returned to the basin each year. Coho migrate into the Yakima and spawn in the fall and early winter, and rear in freshwater for one to two years. Coho are a target species for many tributary and side channel restoration efforts. For more information about coho, see the Yakima Coho Master Plan.[13]

---

[11] URL: http://www.nwcouncil.org/fw/subbasinplanning/yakima/plan/
[12] See 11.
[13] URL: http://www.ykfp.org/CohoMP/Final%20Yakima%20Coho%20Master%20Plan%2010_04.pdf

Sockeye

Sockeye salmon *(Oncorhynchus nerka)* historically occupied the headwater lakes of the Yakima Basin. Estimated returns range from 100,000 to 200,000 adults. They were extirpated by the early 20th century when impassable dams were built on top of the outlets of lakes Kachess, Keechelus, Cle Elum, and Bumping. Kokanee, the resident form of sockeye, are present in these five major reservoirs in the basin.

Sockeye reintroduction is underway in Cle Elum Lake and planned for other large lakes. The Bureau of Reclamation, WDFW, and the Yakama Nation are currently building a fish passage facility at Cle Elum Dam and transporting adult sockeye from the Columbia River to Lake Cle Elum. Offspring of these fish are successfully returning to the Yakima. More information about sockeye in the Yakima Basin can be found in the Yakima Subbasin Plan[14] and the Bureau of Reclamation's Yakima Dams Fish Passage Study.[15]

Bull Trout

Twelve local populations of bull trout (*Salvelinus confluentus*) are found in the cold headwaters of the Yakima Basin. Once abundant stocks migrated between high-elevation spawning areas, the mainstem Yakima, and possibly the Columbia River; today migratory populations remain in the Naches and its undammed tributaries. Upstream of the five storage dams in the basin isolated populations now migrate between the reservoirs and upstream headwaters, while in other areas resident populations go through their entire life cycles in specific tributaries. Once treated as a "trash" fish, bull trout are now listed as threatened under the ESA. Bull trout prey on other salmonids, and the reduction in overall numbers of anadromous fish is considered to be one of the causes for the decline of bull trout. Habitat degradation, genetic isolation, and harvest have also negatively affected bull trout. Surveys from 1998 to 2020 show an average of 529 redds, with counts declining significantly for a number of populations. For more information on bull trout in the Yakima Basin, see the 2005 Yakima Subbasin Plan[16], the 2015 USFWS Bull Trout Recovery Plan[17], the Yakima Bull Trout Action Plan[18], and other recovery documents.[19]

Rainbow Trout

The catch-and-release fishery for rainbow trout (the resident form of *Oncorhynchus mykiss*) in the Upper Yakima River and the Yakima Canyon is one of the most popular recreational fisheries in the state. It attracts anglers from throughout the region and supports a number of professional guides. WDFW discontinued planting hatchery rainbows in the early 1990's. Specific tributaries in the basin show distinct genetics, while mainstem fish often show a mixing of native and hatchery-origin genetics. Rainbow trout are known to interbreed with steelhead, and improving our understanding of the relationship between the two is a key research need in the basin. It is generally assumed that trout will benefit from the work to improve habitat condition for anadromous salmonids. The YKFP research program has found no evidence to support early concerns in the angling community that increases in Chinook runs would be detrimental to the trout population.

---

[14] URL: http://www.nwcouncil.org/fw/subbasinplanning/yakima/plan/
[15] URL: https://www.usbr.gov/pn/studies/fishpassage/index.html
[16] URL: See 13.
[17] URL: https://ybfwrb.org/wp-content/uploads/2022/11/Final_Bull_Trout_Recovery_Plan_092915-corrected.pdf
[18] URL: https://ybfwrb.org/recovery-planning/bull-trout-recovery/bull-trout-action-plan/
[19] URL: https://www.fws.gov/species-publication-action/5-year-review-bull-trout

Cutthroat Trout

Native west-slope cutthroat trout (*Oncorhynchus clarki lewisi*) exist in the Yakima River and its tributaries, and the USFWS has designated it as a species of concern. "Species of concern" is an informal term that refers to those species which might need concentrated conservation actions. Native cutthroat populations are strongest in upper reaches of many tributaries. Native cutthroat inbreed with both hatchery-origin cutthroat and rainbow trout. To date, there has been little focus on the conservation needs of cutthroat trout in the Yakima Basin.

Other Trout

Introduced brook trout *(Salvelinus fontinalis)* (widespread) and lake trout (*Salvelinus namaycush)* (in Lake Cle Elum) are present in the basin and have a negative effect on bull trout and sockeye reintroduction. Brown trout are also present in some areas (Cooper Lake and Cooper River in the upper Cle Elum Basin, Corral Canyon Creek, Wide Hollow Creek, and Wenas Reservoir). These exotic trout species are not conservation priorities.

Lamprey

Pacific lamprey (*Lampetra tridentata*), while not salmonids, also have an anadromous life cycle in which they travel from spawning locations in the headwaters of rivers like the Yakima to the Pacific Ocean and back again. Restoring lamprey runs is a goal of the Yakama Nation, whose people once relied heavily on lamprey as a food source. At this time, conservation needs of lamprey in the Yakima Basin are not well understood, and SRFB funds have not been used to fund lamprey restoration projects. Significant effort is being focused on improving passage conditions for lamprey in the Columbia River, and the Yakama Nation has begun to investigate what can be done to restore lamprey in the Yakima Basin. See the Tribal Pacific Lamprey Restoration Plan for the Columbia River Basin.[20]

Other Species

The Basin is also home to at least 46 other native species such as dace, sculpins, pikeminnow, burbot, and suckers. To date these have not been the subject of focused conservation efforts, though many are believed to benefit from projects aimed at improving ecosystem functions for other species. There are also many introduced species, such as carp, catfish, bass, and sunfish, which thrive in highly altered habitat conditions and may in places prey on or outcompete native fish.

Prioritization of Species

The Board's Lead Entity strategy supports habitat protection, restoration, and enhancement work that benefits both ESA-listed steelhead and bull trout populations and non-listed salmon and native trout populations throughout the basin. It accords the highest priority to actions that clearly benefit the ESA-listed species and spring Chinook (which have the highest cultural significance for tribal subsistence and sport harvest). Secondary priority is given to actions that benefit only fall Chinook or coho. To date the Lead Entity process has not placed independent priority on efforts that benefit other native species such as resident rainbow and cutthroat trout, though these species are presumed to benefit from many of the actions prioritized based on other species.

[20] URL: http://www.critfc.org/fish-and-watersheds/columbia-river-fish-species/lamprey/lamprey-plan/

One of the challenges of fish management in the Yakima Basin is how to balance efforts to sustain:

- native populations;
- naturally reproducing populations of hatchery origin; and
- hatchery-origin fish.

Managing hatchery programs and their impacts on other fish populations is the responsibility of the fisheries co-managers in the Yakima Basin (the Yakama Nation and the Washington Department of Fish & Wildlife, which work together on salmon hatchery programs under the Yakima-Klickitat Fisheries Project). The Board's Lead Entity strategy emphasizes efforts to protect and improve natural habitats that sustain all life stages of native and naturally reproducing fish throughout the basin. This habitat may also play an important role in sustaining hatchery-origin fish. Protecting and improving a diverse range of natural habitats in the basin is an essential part of efforts to conserve the spatial distribution and diversity of the basin's remaining native stocks, and will also support efforts to establish diverse naturalized stocks of species like coho, summer Chinook, and sockeye that were extirpated from the basin.

Major Issues Affecting At-Risk Fish Species

As noted earlier, populations of salmon, steelhead, and bull trout in the Yakima Basin have declined significantly in abundance over the last 150 years. This was due to a complex interplay of factors including extensive harvest in the Yakima River, Columbia River, and the ocean, the construction of the Columbia River dams, and widespread degradation of freshwater habitats. Over the last 30 years, state, tribal, and federal managers have made significant changes in harvest regulations and the operation of the Columbia River hydropower system that are aimed at improving conditions for salmon and steelhead. The Board's Lead Entity program is part of a broader effort to reverse the degradation of freshwater habitats in the Yakima Basin. While these efforts have contributed to the rebound of anadromous fish numbers since the low points of the 1980's and early 1990's, significant improvements remain to be made in order to restore sustainable and harvestable salmon and steelhead runs. Detailed descriptions of factors affecting freshwater habitats in the Yakima Basin can be found in the Yakima Steelhead Recovery Plan[21], Yakima Subbasin Plan[22], 2015 USFWS Bull Trout Recovery Plan[23], and Yakima Basin Limiting Factors Analysis.[24]

For the purpose of this document, we simply note that in many areas of the Yakima Basin, historic and current land use practices have:

- Changed the natural flow regime of the Yakima River and its tributaries (via efforts to store, convey, and withdraw irrigation water from the river system, and via changes to upland and floodplain hydrology associated with human land uses);

[21] URL: https://ybfwrb.org/recovery-planning/steelhead-recovery-plan/
[22] URL: http://www.nwcouncil.org/fw/subbasinplanning/yakima/plan/
[23] URL: https://ybfwrb.org/wp-content/uploads/2022/11/Final_Bull_Trout_Recovery_Plan_092915-corrected.pdf
[24] URL: https://ybfwrb.org/wp-content/uploads/2017/10/Limiting-Factors-LFA37_38.pdf

- Created physical barriers (dams, irrigation diversions, road culverts, etc.) that block or impair the movements of adult and juvenile fish, sediment, and woody debris;
- Confined floodplains with dikes, roads, and other developments, reducing the extent, diversity, and quality of the productive aquatic habitats associated with active alluvial floodplains;
- Altered the extent and composition of riparian vegetation, affecting water temperatures, habitat complexity, and food web dynamics in the basin's streams and rivers;
- Increased the delivery of fine sediments to streams and rivers due to increased erosion in upland areas, filling in spawning gravels and changing stream food web dynamics;
- Disrupted sediment supply and routing within river systems through the construction of dams, the constriction of floodplains, and changes in flow patterns, etc.;
- Introduced diverse contaminants to the river system; and
- Trapped fish in unscreened water diversions.

Private and public land managers have made significant efforts to adjust management practices to avoid negative impacts on fish habitats while continuing economically and socially beneficial land uses. Significant public and private investments have also been made with the specific goal of protecting and restoring fish habitats in the basin. The following section gives a brief overview of these efforts.

History of Salmon Recovery in the Yakima Basin

The Early Days:

Efforts to address the impacts of agricultural development and other land uses on salmon and steelhead in the Yakima Basin started in the early 1900's. By the 1920's and '30s, state programs were installing fish ladders and screening irrigation ditches; discussions of the need for improved instream flows for fish were underway by the 1940's.

The 1970's:

By the late 1970's, salmon runs in the basin were disappearing. Both summer Chinook and coho disappeared from the basin, and spring and fall Chinook dropped to their lowest levels to date. Issues came to a head by 1980. Several years of intense drought conditions in the 1970's drove home that the river was over-allocated, the screens and ladders installed 30+ years earlier were obsolete, and fish biologists documented that rapid dewatering below reservoirs at the end of the irrigation season was drying up spring Chinook redds.

The 1980's:

In the early 1980's, several key events jump-started the modern period of fisheries recovery efforts. In response to findings by the Yakama Nation, Federal District Court Judge Justin Quackenbush ruled that the Bureau of Reclamation (Reclamation) did have an onus to protect fish runs; this decision led to the implementation of the 'flip-flop' flow regime, which greatly

reduced the dewatering of spring Chinook redds.[25] The Northwest Power and Conservation Act created a mechanism for the Bonneville Power Administration (BPA) to fund projects in the Yakima Basin to offset the impact of Columbia River dams on fish and wildlife, which initiated a major BPA-funded push to install up-to-date fish ladders and diversion screens throughout the basin. The Yakama Nation and the Washington Department of Fish and Wildlife also began using BPA-funds for habitat protection and restoration. In 1981, Reclamation first convened SOAC (Systems Operation Advisory Committee), an advisory board to the USBR consisting of fishery biologists representing the U.S. Fish and Wildlife Service (FWS), the Yakama Nation (YN), the Washington Department of Fish and Wildlife (WDFW), and irrigation entities represented by the Yakima Basin Joint Board (YBJB).

The 1990's:

On October 31, 1994, passage of the Yakima River Basin Water Enhancement Project's (YRBWEP) phase II legislation secured minimum flows for the mainstem Yakima and set up Reclamation's YRBWEP office to promote water and habitat conservation efforts. The YKFP began to bring together the Yakama Nation and the WDFW to develop BPA-funded hatchery and habitat programs to restore salmon and steelhead runs in the basin. The Cle Elum Hatchery began production in 1997. During this period, federal land managers significantly adjusted their policies to protect fisheries resources, and noteworthy advances were made in our understanding of fish runs and habitat in the Basin.

The 2000's:

The ESA listings of steelhead and bull trout in 1999 and 1998, respectively, forced additional attention on fisheries issues in the Yakima Basin. An increasing number of project sponsors began to do habitat projects with funding from BPA, YRBWEP, and the newly established SRFB (in 1999). The attention on steelhead focused more effort on the basin's tributaries, leading to the creation of the Yakima Tributary Access and Habitat Program (YTAHP), which brings together the Washington Department of Fish and Wildlife, the North Yakima County, Kittitas County, and Benton County Conservation Districts, the Kittitas Conservation Trust, Mid-Columbia Regional Fisheries Enhancement Group, the Yakama Nation, the South-Central Washington Resource Conservation & Development Council, and others to implement fish passage and habitat restoration projects in Yakima Basin tributaries. Adult Chinook from the YKFP's Cle Elum hatchery started returning to the Basin in 2000 (age 3 jacks) and 2001 (age 4 males and females). Basin managers also started to focus on protecting and restoring mainstem floodplain reaches. During this period, the basin-level strategic plans described in the following section were developed.

The 2010's:

This decade saw significant acceleration of restoration activities in the Yakima Basin, with much of it supported by the combination of new funding and collaboration developed by the Yakima Basin Integrated Plan (YBIP).[26] The Integrated Plan brings together the Department of Ecology's Office of Columbia River, the Bureau of Reclamation, the Yakama Nation, major irrigation districts, environmental groups, and others to support environmental and water supply

[25] Flip-flop is the process by which flows in the Upper Yakima are reduced in late summer to avoid luring spawning Chinook to spawn in areas that will not be covered in water through the winter. In order to continue delivering water to irrigators, flows from Rimrock Lake are increased as flows from the Upper Yakima are decreased- thus the term "flip-flop".

[26] URL: https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-supply-projects-EW/Yakima-River-Basin-projects/Yakima-integrated-plan

goals for the Yakima Basin. The SRFB process and the work of the YBIP Habitat Subcommittee have been coordinated to move forward more and larger projects than previously possible, and the design and assessment work funded by SRFB has often been implemented using YBIP funds. This decade also saw increased technical capacity applied to understanding the impacts of water management and predation on fish production. This resulting data is driving a closer look at how we can best improve fish survival.

The 2020's/Current Issues:

Today, fish biologists and Reclamation's river operators continue to discuss how to adjust river operations to protect anadromous fish. Reclamation is constructing fish passage facilities at Cle Elum Dam and is planning future fish passage projects at the rest of the headwater storage dams. The Yakama Nation, YRBWEP, and local counties are completing significant floodplain restoration projects. A wide range of project sponsors are using diverse funding sources to implement habitat projects throughout the basin, and tributaries that were blocked for over 100 years are being reopened to anadromous fish. In addition, significant investments are being made to improve smolt survival to the Columbia.

The SRFB is one of many sources of funding available for protecting and restoring fish habitat in the Yakima Basin.

Certain SRFB projects must also show matching funds including acquisition projects with more than fifty percent uplands, as defined in RCO Appendix K, and projects with riparian planting as a primary component that do not meet minimum riparian buffer widths as described in RCO Appendix I. See Manual 18 for details. Projects funded by SRFB are often implemented by staff funded through YTAHP, YKFP, county governments, and other programs. The Board is committed to working together with its many partners in the basin to ensure that SRFB funds support and complement the many other fish recovery programs in the Yakima Basin.

Strategic Planning for Habitat Protection and Restoration

In the Yakima Basin, four major efforts have been made to develop comprehensive plans to protect, restore, and enhance fish populations and their habitats:

The Yakima Basin Limiting Factors Analysis[27] was completed by the Washington Conservation Commission and a local technical advisory group in response to House Bill 2496. This report was issued in 2005 and is the most detailed reach-by-reach description of habitat conditions in the basin.

The Yakima Basin Watershed Management Plan[28] was completed in 2003 as part of the Department of Ecology's watershed planning process. This plan covers a broad range of water supply, water quality, and fish habitat issues, and was prepared with input from numerous technical and citizen committees. Both the Yakama Nation and Kittitas County withdrew from this planning process. The completed plan was ratified by Yakima and Benton Counties.

[27] URL: https://ybfwrb.org/wp-content/uploads/2017/10/Limiting-Factors-LFA37_38.pdf
[28] URL: https://www.usbr.gov/pn/programs/yrbwep/reports/watershed.pdf

The Yakima Subbasin Plan[29] was prepared by the Yakima Subbasin Fish & Wildlife Planning Board (one of the precursor organizations to the Yakima Basin Fish & Wildlife Recovery Board) for the Northwest Power & Conservation Council (NPCC). This plan covers the needs of a broad suite of fish and wildlife species and identifies priority strategies for protecting and improving priority habitats throughout the basin. The planning process included extensive public participation. The resulting plan was adopted by the NPCC as the primary guide for the BPA's investments in fish and wildlife mitigation in the Yakima Basin.

The Regional Salmon Recovery Plan was prepared by the YBFWRB. The 2005 draft was titled the Yakima Subbasin Salmon Recovery Plan and covered the needs of the two ESA-listed fish species in the basin, steelhead and bull trout. An updated version of the steelhead portion of that plan was released in September 2009. This Yakima Steelhead Recovery Plan[30] is the document of record for steelhead recovery efforts in the basin, and has been incorporated into NOAA Fisheries' Middle Columbia River Steelhead Recovery Plan[31]. The Yakima Bull Trout Action Plan[32] is, along with the 2015 Recovery Plan from the USFWS,[33] the primary reference for bull trout conservation efforts in the basin.

The Board believes that the Yakima Subbasin Plan, the Yakima Steelhead Recovery Plan, and the Yakima Bull Trout Action Plan incorporate the best available science while representing the interests of the Yakima Basin's citizenry. These plans incorporate the results of previous research and modeling efforts and were subjected to extensive scientific and public review. These plans are the primary technical documents used to prioritize recovery actions. The Board recommends that actions identified within these plans be given priority status for SRFB funding.

Community Attitudes towards Fisheries Recovery Efforts

There is broad support and recognition for the ultimate goals of this recovery strategy: returning at-risk fish runs to harvestable and self-sustaining levels by improving habitat conditions that are essential to their needs. Local communities have generally supported projects that:

- Improve water quality;
- Increase the diversity and functionality of existing habitat in the prioritized reaches;
- Incorporate cost-effective approaches with tangible outcomes;
- Increase community involvement and education in fish habitat projects;
- Provide necessary flows for fish in a manner that does not compromise agricultural users and other potentially competing water needs;
- Provide incentives when salmon projects ask water users for voluntary reductions in water use;

[29] URL: http://www.nwcouncil.org/fw/subbasinplanning/yakima/plan/
[30] URL: https://ybfwrb.org/wp-content/uploads/2017/09/YakimaSteelheadPlan.pdf
[31] URL: https://repository.library.noaa.gov/view/noaa/16003
[32] URL: https://ybfwrb.org/recovery-planning/bull-trout-recovery/bull-trout-action-plan/
[33] URL: https://ybfwrb.org/wp-content/uploads/2022/11/Final_Bull_Trout_Recovery_Plan_092915-corrected.pdf

- Provide incentives to developers to preserve functional habitats that are at risk of degradation; and/or
- Maintain and/or increase recreational opportunities for the public.

However, local communities have also raised significant concerns about efforts to protect and restore fish habitat. These include:

- The perception that habitat acquisition projects can erode local tax bases, impact natural-resource-based economies, reduce development opportunities and associated economic benefits, and negatively impact nearby water and land users;
- Concerns over negative effects on economic endeavors that reintroduction of listed fish might have on areas they could occupy if passage barriers are removed;
- Perceived negative effects of anadromous fish on the important resident trout population/fishery in the Upper Yakima, and
- Concerns that habitat restoration might actually benefit non-native smallmouth bass that prey on salmon and steelhead smolts in the lower Yakima River and Yakima delta;
- A concern that many salmon recovery projects are not being done in a cost-effective manner and may be wasting taxpayer dollars; and
- Resistance from some recreational users to habitat projects that may restrict recreational access and/or create perceived hazards (especially large woody debris).

The Board's Lead Entity outreach program strives to engage community members in discussions about how to address these concerns and build community support for the full range of recovery actions. The Lead Entity's efforts to support research, monitoring, and assessment should also emphasize work that helps reduce uncertainties associated with these questions.

Chapter 3: The Yakima Lead Entity SRFB Review Process

Each year, the Yakima Basin Fish & Wildlife Recovery Board (Board) solicits, evaluates, and ranks proposals for salmon recovery projects in the Yakima Basin. Organizations looking for SRFB funding for projects in the basin must submit applications through the Yakima Lead Entity.

This manual applies to the regular SRFB grant program. In recent years, the SRFB has been implementing supplemental grant programs for riparian projects, large "targeted investments" projects, and monitoring projects. The Yakima Lead Entity follows RCO guidance and adapts our regular process as needed for these emerging programs, and details of how we will implement them will be specified in our annual RFP[34] (Request for Proposals).

This section of the Yakima Lead Entity Manual provides:

- Guidance for individuals and organizations who are considering applying for a regular SRFB grant for a project in the Yakima Basin;
- Guidance and resources for Technical Advisory Group and Citizen Committee members who are part of the project review process; and
- An overview of the grant review process for other interested parties.

Sources of Guidance for the SRFB Process

Each Lead Entity in the state has a slightly different process with different timelines, so the applicant should become familiar with the specific procedures in the Yakima Basin, as described in this document. Applicants should also acquire a copy of Salmon Recovery Grants Manual 18[35] (Policies and Application Instructions), which is the official guide to the statewide SRFB grant process. A copy can be downloaded on the Recreation and Conservation Office (RCO) website. *Be certain to download the most current version of Manual 18,* as it is updated for each grant cycle. If you have downloaded Manual 18 before, you may need to refresh the webpage or clear your browser history/cookies to download the current version, since it is always available at the same link.

Applicants need to request both a SAW (Secure Access Washington) account and an account for PRISM,[36] RCO's grant management program. The SAW account is an added layer of security for the PRISM system, which applicants use to submit and modify their grant application. When users log-in to PRISM, they will be redirected to the SAW page to enter their SAW credentials. First-time users will then be redirected to the PRISM login page to enter their PRISM credentials; subsequently, they will only need to use their SAW login to access PRISM.

---

[34] URL: https://ybfwrb.org/wp-content/uploads/2026/01/2026-RFP-for-SRFB-grant-programs.pdf
[35] URL: https://rco.wa.gov/wp-content/uploads/2019/05/SAL-Manual18.pdf
[36] Applicants can request both a Secure Access Washington account and a PRISM account at https://rco.wa.gov/recreation-and-conservation-office-grants/apply-for-a-grant/prism/

Please allow 2-3 business days to receive your usernames and passwords. If you have difficulty accessing PRISM, please contact the YBFWRB office at (509) 453-4104.

Key Players in the SRFB Grant Process

There are several individuals and groups who participate in evaluating SRFB applications:

Salmon Recovery Funding Board (SRFB)

The Washington State Legislature created the SRFB (commonly pronounced "surfboard") in 1999. The Board provides grant funds to protect or restore salmon habitat and assist related activities and sets the policies governing how those grant funds are allocated and used. The Board is composed of five citizens appointed by the Governor and five state agency directors. It brings together the experiences and viewpoints of citizens and the major state natural resource agencies. All meetings are open to the public. The SRFB is supported by staff from the state's Recreation and Conservation Office (RCO).

Lead Entities (LE's)

Lead Entities are local, watershed-based organizations that develop local salmon habitat recovery strategies and then recruit organizations to do habitat protection and restoration projects that will implement the strategies. The Lead Entity coordinates the SRFB grant process to fund many of these projects. Lead Entities consist of:

- A coordinator or administrative body (usually county, conservation district, or tribal staff);
- A committee of local technical experts; and
- A committee of local citizens.

Yakima Basin Fish & Wildlife Recovery Board (Board)

The Board is made up of representatives of the Yakama Nation and 22 local governments including Benton, Kittitas, & Yakima Counties, and 19 Yakima Basin cities. The Board is under contract with the state's RCO to act as the Yakima Lead Entity, and it runs the Lead Entity process in accordance with the SRFB's statewide guidance and the specific terms of the Board's contract with RCO. For additional information on the Board and its members, see the Board website.[37]

Lead Entity Coordinator

The Lead Entity Coordinator is an employee of the Board whose position is funded via the Board's contract with RCO. The Lead Entity Coordinator organizes the local Lead Entity process and provides ongoing support to prospective and funded SRFB project sponsors in the Yakima Basin. They are the primary contact for SRFB programs in the Yakima Basin.

[37] URL: https://ybfwrb.org/about-us/board-membership/

Pre-Application Review Team
This is a small group of individuals consisting of YBFWRB staff and project permitting officials to review SRFB project pre-applications and provide feedback to the sponsor on how to further develop their project ideas. These individuals are not members of the Technical Advisory Group and are chosen by the Board based on their specific expertise.

Technical Advisory Group (TAG)
The Technical Advisory Group is a group of local biologists, scientists, and natural resource professionals who represent a variety of agencies and expertise in the basin. These local technical experts are knowledgeable about the local watershed, habitat, and fish conditions. Their expertise is invaluable to ensure projects are based on priorities for fish recovery and effectively address adverse ecological conditions and processes.

The TAG is convened by Recovery Board staff to evaluate the technical soundness and biological priority of SRFB project proposals. Their evaluation is forwarded to our Citizen Committee to use as a reference when they are ranking projects for funding recommendation.

Citizen Committee (CC)
The Citizen Committee is a group of representatives from each county in the Lead Entity (Kittitas, Yakima, and Benton) and the Yakama Nation. Each jurisdiction has 4 seats, for a total of 16 members. In addition to local citizens, participants on the Citizen Committee may represent a broad range of interests such as local, state, federal, and tribal government, conservation districts, environmental groups, business interests, recreation groups, landowners, community groups, volunteer groups, and other habitat interests.

The CC is convened by Recovery Board staff to evaluate SRFB project proposals based on value to the community and rank them based on those evaluations and technical input from the TAG. The CC is critical to ensure that biological priorities and projects have the necessary community support for success—Citizen Committee members are often the best judges of the community's social, cultural, and economic values as they apply to salmon recovery, and of how to increase community support over time through the implementation of habitat projects.

Salmon Recovery Grants Manager
The RCO is the state agency that administers SRFB grants. The Salmon Recovery Grants Manager, Elizabeth Butler, is assigned to assist the Yakima Basin Lead Entity and applicants through the SRFB process. The Salmon Recovery Grants Manager reviews SRFB applications to confirm that the project meets eligibility requirements and that the application is complete. They are the liaison between the Lead Entity Coordinator and the SRFB and state review panel, and work with grant sponsors when a grant is officially awarded to a project.

State Review Panel
This is a group of engineers, fisheries experts, and habitat experts hired by the SRFB to review projects for technical soundness simultaneously with the local review process. The panel provides an independent, third-party review of the technical merits of SRFB proposals from throughout the state.

Steps in the Yakima Lead Entity Process

Month	Steps
January	RFPs Grant Round Kickoff (optional)
February	Pre-applications due
March	Pre-application conferences Full applications due
April	Sponsor Presentations
May	Site Tours Local feedback due State review panel feedback due
June	Conference call with State Review Panel Final applications due
July	TAG review meeting CC review meeting State Review Panel review meeting
August	Recovery Board Approval Submission of Final Applications to RCO
September	Final SRFB Funding Approval
-	Scope Changes and Cost Amendments

Request for Proposals

At the beginning of each year's Lead Entity Process, the Board issues a Request for Proposals (RFP) for the upcoming SRFB grant round. The RFP is provided to previous project sponsors and other Board partners via email, released to local media, and posted on the Board's website. This document provides instructions on how to apply for a SRFB grant, timelines and deadlines for the grant process, links to application materials, and guidance for eligible and ineligible project elements. Those eligible for SRFB funding include cities, counties, conservation districts, Native American tribes, nonprofit organizations, private landowners, regional fisheries enhancement groups, special purpose districts, and state agencies. Federal agencies may not apply directly, but may partner with eligible applicants.

In 2025, in addition to the annual grant round, the RFP also solicits projects for the SRFB's Riparian Grant Program. In 2023, the state legislature allocated a portion of the revenues from the Climate Commitment Act (CCA) for projects that enhance salmon recovery through the protection and restoration of fully functioning riparian ecosystems. Riparian projects will be scored using the same process and criteria as regular SRFB projects, but will be submitted to the state as part of a separate ranked list.

See the RFP[38] for more information on both SRFB funding opportunities.

Pre-applications

Applicants for SRFB funds must complete a pre-application before entering the project into PRISM. The form is included in Appendix B. The more thorough the pre-application, the more feedback the review team can provide for strengthening the proposal. The date pre-applications are due is specified in the annual RFP. Submitting a pre-application does not obligate the sponsor to submit a full application for the project.

Pre-application Conferences

The pre-application process is meant to provide early feedback to applicants as they determine which proposals to pursue and how to develop them. Shortly after applicants submit the pre-application, they will be asked to schedule a conference with the pre-application review team. The applicant will be required to talk through the steps of completing the project to prove that the project is well thought-out, meets priority needs, and will be able to be implemented as proposed within the grant timeframe. Applicants will need to provide a legal parcel map depicting the ownership of the project site, as well as ownership information for adjacent properties. The applicant will be asked to discuss project-specific communication with stakeholders to date, and the level of support the project concepts are receiving.

This is NOT a formal presentation. At this point it is likely the applicant will not have written a full application. This is an informal discussion about the strengths and weaknesses of a project concept that is meant to help the applicant develop the full proposal. The hope is that this process will allow the applicant to consider initial review team concerns and suggestions, and incorporate them into the full application. This reduces the need for extensive revisions to applications later in the review process. Additionally, if it appears that the project is unlikely to fare well in the review process, the applicant has the option to either avoid the labor associated with developing a full application or continue to develop an application that specifically addresses the weaknesses identified.

Applicants will receive a copy of the Manual 18 Appendix A: Application Checklist[39] at their conference.

Pre-applications are shared with the TAG and CC for early review if the applicant requests this feedback, but it is not required and pre-applications will only be posted if specifically requested. Voluntary comments received from committee members will be shared with the sponsor; neither TAG nor CC members are required to provide feedback at this point. However, sponsors are free to ask individual TAG and CC members questions or request input on their proposals at any point during the grant round.

Submission of Full Applications in PRISM

When an applicant decides to carry a proposal beyond the pre-application review, they are responsible for completing a formal application using the RCO's PRISM database. Applicants must work with the Lead Entity Coordinator to establish a PRISM project number.

[38] URL: https://ybfwrb.org/wp-content/uploads/2026/01/2026-RFP-for-SRFB-grant-programs.pdf
[39] URL: https://rco.wa.gov/wp-content/uploads/2019/05/SAL-Manual18.pdf

When writing a PRISM Project Description, applicants are encouraged to review the Recovery Board's One-Pager on writing Project Descriptions. Applicants are also invited to reach out to the Lead Entity Coordinator at leadentity@ybfwrb.org for assistance drafting their project description.

An application is considered complete when all of the components required by RCO are entered or attached into PRISM. A SRFB application is more than filling in the blanks in PRISM; there are several attachments required, including maps, landowner willingness forms, partner contribution forms, photos, etc. See Manual 18 Appendix A: Application Checklist[40]. The Yakima Lead Entity requires that sponsors fill out the RCO template spreadsheet[41] for cost estimates.

Note that letters of support are not a required attachment and are not part of the evaluation process. Applicants are encouraged to place their efforts on developing the technical merits of their proposals rather than gathering letters of support. Letters of support should only be included if they are highly pertinent to issues raised in proposals and necessary for committee members to understand them.

Also note that, when submitting a project that has been submitted before during a previous grant round, applicants are encouraged to attach a file to their final proposal indicating what has changed from the proposal submitted during the previous grant round. This benefits their project by making it easier for the committees to understand what improvements have been made.

Check the annual RFP and the Board website[42] for the deadline for submission of full applications. *It is very important that complete applications are submitted into PRISM by the deadline.* These applications will be electronically distributed in their entirety to the TAG and CC members. Late or incomplete applications will be at a disadvantage in the evaluation process and can delay our process with the state review panel.

Sponsor Presentations

A few weeks before site visits, project applicants will present their proposal to the Technical Advisory Group (TAG), Citizen Committee (CC), and YBFWRB staff members. The goal of this presentation is to generate dialogue between applicants and reviewers that can be used to modify and strengthen the proposal prior to the technical and citizen review process. Following the presentations, reviewers will clarify their overall feedback to sponsors, which the Lead Entity Coordinator will forward to sponsors.

Applicants will have about 25 minutes to present their project. Presenters should review the Best Practices document provided by the Lead Entity Coordinator for specific details on what to include but should generally view this as the committees' first introduction to the project. Presenters should arrive at least 20 minutes early for the presentation.

The applicant should provide:

- Updates on the status of previous grant awards
- A brief overview of the project
- An assessment of the value of the project to focal fish species

[40] URL: https://rco.wa.gov/wp-content/uploads/2019/05/SAL-Manual18.pdf
[41] URL: https://rco.wa.gov/wp-content/uploads/2022/02/SAL-CostEstimate.xlsx
[42] URL: https://ybfwrb.org/grant-program/information-for-applicants/

- Relative priority of project for salmon recovery in the Yakima Basin
- A summary of landowner involvement in the project
- A description of the role of any additional partners in the project
- Assurances of project implementation as proposed within the grant timeframe
- For acquisition projects, reasons why it is critical for preventing future habitat degradation
- An overview of the project budget
- A summary of plans for long-term stewardship of the project
- An overview of other funding sources to be used with SRFB funds for the project
- Any other community information that may be relevant to the Citizen Committee evaluation of the project

Site Tours

Part of the SRFB grant evaluation process involves a tour of the project site, either in-person, virtually, or in a hybrid format. At a minimum, those who will be present for the site tour are the Lead Entity Coordinator, Salmon Recovery Grants Manager, and two members of the state review panel, along with the project sponsor or their designated representative. Other individuals who may also be present are Board members, other staff, and/or members of the TAG and CC. The applicant, or a designated representative, needs to be present during the tour. If an applicant cannot attend the site tour, their alternate should be well-briefed on the project.

The purpose of a site tour is to allow individuals who will be evaluating the project to get a better sense of the problem and proposed solution. Applicants should be prepared to explain the project, address potential challenges, and show why the project is important. This is an excellent opportunity for applicants to get advice from others on ways to improve the proposal before the final review, and applicants are encouraged to revise their applications in response to feedback.

It is the responsibility of the applicant to get permission from the landowner for access to the site. The Lead Entity Coordinator will work with sponsors to plan site tours to make best use of the state review panel's time. Applicants should reserve all of the days listed in the RFP for site tours until the final schedule is complete. Given the wide geographic range of the Yakima Basin, it can be very difficult to stay true to a schedule for site tours; applicants should be flexible on the day of the site tour in case the review team is behind or ahead of estimated times.

Any site tour handouts and/or virtual site tour slideshows must be uploaded to PRISM. *This is a change from previous years.*

Local Feedback

Following site tours, the TAG and CC will work via consensus to provide feedback to sponsors to strengthen applications and identify questions to clarify details of the project. Sponsors must reply to the feedback and they have the opportunity to adjust proposals in response to it prior to the final application due date.

Sponsors are encouraged to review the Recovery Board's One-Pager on writing Project Descriptions before submitting final applications. Sponsors are also invited to reach out to the Lead Entity Coordinator at leadentity@ybfwrb.org for assistance editing their PRISM project description.

Sponsors are strongly encouraged to provide a **summary of changes from initial to final applications**. This can take the form of a document that points reviewers to where in the application the changes were made—the intent is not to require sponsors to reiterate what they have already stated elsewhere, but rather to aid our committees in identifying how sponsors have incorporated feedback into their applications. *This is a change since 2025.*

Sponsors are strongly encouraged to provide a **summary of how their project addresses Citizen Committee criteria**. This can take the form of a document that points reviewers to other places in the application where the sponsor has explained how the project addresses CC criteria—the intent is not to require sponsors to reiterate what they have already stated elsewhere, but rather as an opportunity to help the CC identify how sponsors have addressed CC criteria in their project design. This summary was first requested in 2025 and the CC reviewed it closely during scoring. An example form is available in Appendix H.1. *This is a change since 2025.*

State Review Panel Feedback

The review panel will send feedback on project proposals two weeks after the site tours via PRISM. They will mark each project with one of four conditions:

- *Cleared:* The project does not raise any concerns.
    - Cleared projects have no other requirements from the state review panel and are considered cleared for funding. If the local Lead Entity process ranks a Cleared project above the funding line, no other action is required.
- *Need More Information (NMI):* There are issues that need to be addressed prior to being cleared for funding; if these issues are not addressed, the project becomes a POC.
- *Project of Concern (POC):* Panel members have more serious concerns regarding the proposal's alignment with review panel criteria and will bring it before the entire state review committee for further discussion.
- *Conditioned:* The project will be cleared if the sponsor accepts specific conditions for funding (e.g., a project may be conditioned to say construction funding cannot be released until designs are reviewed by the panel).
    - Sponsors should review the review panel's comments and conditions and indicate whether they accept the conditions. If the sponsor accepts them, the condition will be added as a requirement to the project agreement if funded. If the sponsor does not, the project status changes to POC.

Sponsors should review and respond to the review panel's initial comments in the Review Comments page in PRISM as well as notes from the RCO Grant Manager in the Grant Manager Comments Report. Responses to comments and changes to the application must be completed by the final application due date.

Conference Call with State Review Panel

For those projects that have been marked as NMI, POC, or Conditioned, sponsors will have the opportunity to clarify feedback with the state review panel. This call will generally occur in early June and attendees will include RCO staff, YBFWRB staff, one state review panel member, and one TAG member. Participation is not required, but if participating, the sponsor must be on the call and is welcome to bring other project partners who will be assisting in answering the state review panel comments and questions.

This is not an opportunity for sponsors to answer questions from the state review panel but rather to ensure that those questions and any concerns are completely understood by the sponsor. This will enable the sponsor to appropriately respond to state review panel comments and questions.

Each Lead Entity is given one hour for these calls, regardless of the number of projects that have been labeled as NMI/POC/Conditioned, so sponsors must work with the Lead Entity Coordinator prior to the call to identify what questions or concerns need clarity to make the best use of that time.

State Review Panel Final Feedback

Once final applications have been submitted, the state review panel will review the applicants' responses to their submitted questions and continue to review individual projects for technical soundness. They will compile comments on each project, which will be available to sponsors on PRISM.

For an NMI project, if the sponsor is found to have adequately addressed the review panel's concerns, the project becomes Cleared; if not, it becomes a POC.

For a Conditioned project, if the sponsor accepted the conditions, the project becomes Cleared; if not, it becomes a POC.

Technical Advisory Group (TAG) Review

Once final applications have been submitted, the Technical Advisory Group (TAG) will evaluate the proposals submitted by project sponsors on their technical merits, benefits to salmon, certainty that the benefits will occur, and certainty that the project can be completed within the grant timeframe and the proposed budget.

TAG members are bound to our Conflict of Interest (Appendix C) policy to ensure a fair and equitable grant review process. Current TAG members are available on our website.[43] *Vacant positions to be filled by March 2026.*

The TAG operates under the following rules, as defined by the YBFWRB bylaws:

There shall be a Technical Advisory Group ("TAG") to evaluate and grade salmon recovery and other fish and wildlife projects based primarily on technical merit. The TAG will also review updated plans, including prioritizing areas of interest and need; and, take such other actions as may be directed by the Board of Directors. Composition and operating procedures for the TAG will include:

[43] URL: https://ybfwrb.org/grant-program/technical-advisory-group/

9.3.1 12- to 15-person membership that is broadly representative of technical experts that are highly knowledgeable about fish and wildlife needs in the Yakima Basin.

9.3.2 Adherence to standards set in RCW 77.85 when reviewing salmon recovery projects that may be submitted to the Salmon Recovery Funding Board.

9.3.3 All projects evaluated for funding under RCW 77.85.050 will be submitted to the Citizen Committee for review and ranking. All other recommendations will be made directly to the Board of Directors.

9.3.4 The TAG may choose to elect a chair and a vice-chair.

9.3.5 The TAG may choose, with Board of Directors approval, to create subcommittees, advisory groups or ad-hoc groups to meet specific needs and tasks.

9.3.6 The TAG shall use a consensus-based decision-making process.

9.3.7 Individual members may provide minority perspectives and guidance to the Board of Directors or, in the case of Lead Entity projects, the Citizen Committee.

9.3.8 TAG members may present information but shall remove themselves from participating in decisions and deliberations on projects where they have a direct interest in requested funding.

Technical Review Process

The TAG will evaluate proposals using the following tools:

TAG Focus Project List

In 2013, the TAG developed the TAG Focus Project List (Appendix E) to help focus SRFB resources on projects that represent the most immediate needs of priority species that can be reasonably achieved as SRFB projects. Project proposals receive a 10-point bonus on the SARM (below) if they are on the current TAG Focused Project List. If they are not on the list, no bonus points are awarded.

The TAG Focus Project List will be updated annually. Occasionally the TAG will identify actions as priorities that are not included in identified priority reaches or defined recovery actions. The TAG may use professional judgment to justify including an additional action for evaluation. The TAG must document all additions to identified priorities and the justifications articulated to support them.

Salmon Recovery Model (SARM)

The SARM is a scoring matrix for evaluating each project on biological benefits to target species and key habitat factors, as well as quantity and quality of habitat affected, certainty of success, benefit to cost, and sustainability. Full details on scoring and guidelines are available in Appendix F.

The SARM is intended to structure consistent discussions. The SARM score provides a starting point for the ranking of projects, and is one of multiple inputs used by the TAG to determine a project's rank.

Typically, proposals are only scored once using the SARM. If they are resubmitted in a subsequent grant round, the previous scores will be used to rank them. Scores will only be reviewed if committee members identify the need to review and update them based on changed information.

The SARM was initially developed in 2004 by ENTRIX, INC under contract with the Lead Entity. It has been evaluated and adjusted as needed by the TAG.

TAG Qualitative Evaluation Form

This form (Appendix G) supplements the SARM. It is used to generate discussion, to foster consistency in evaluating projects, and to provide guidance to TAG members on how to rank projects.

The completed TAG Qualitative Evaluation Forms are provided to the Citizen Committee to inform them about how the TAG evaluated the proposals.

The TAG will use these quantitative and qualitative technical evaluation tools and criteria to rank each proposal. Once ranking is complete, the TAG will also place each project in one of five funding priority categories:

High Priority Fund: These projects are the most impactful and/or urgent for salmon recovery. These are the projects the TAG would most like to see funded in the current year.

Priority Fund: These projects are good to fund to further recovery, but not as strong as High Priority Fund projects.

Fund: These projects are eligible for funding but less competitive than priority projects.

Defer: Projects are deferred for one of two reasons: a) the project has issues that the committee wants the project sponsor to address before the project is submitted for SRFB funding or b) the committee wants to delay the project because its sequencing reduces maximum biological benefit.

Do Not Fund: These projects have significant flaws and should not be funded through SRFB unless significant revisions are made to directly address the committee's concerns as documented through the review process.

The TAG may also recommend a condition for funding on a project. For example, they may condition funding on the sponsor adjusting the project scope to add or remove certain project elements.

The TAG will document its review and report the results to the CC for final ranking. The documentation will include the SARM forms, qualitative evaluation forms, and summary tables showing project ranking recommended by TAG.

A variety of technical tools and information outlined in this document have been used to assist the TAG in evaluating projects, including the Yakima Basin Limiting Factors

Analysis[44], Yakima Basin Watershed Management Plan[45], Yakima Subbasin Plan[46], Yakima Steelhead Recovery Plan[47], and 2015 Recovery Plan from the USFWS.[48]

Citizen Committee (CC) Evaluation

Following completion of the TAG's review, the Citizen Committee (CC) will review and score the projects on cultural, social, and economic impacts; efficient & effective resource use; and support from partners & the community.

CC members are bound to our Conflict of Interest (Appendix C) policy to ensure a fair and equitable grant review process. Current CC membership is available on our website.[49] *Vacant positions to be appointed by March 2026.*

The CC operates under rules established in the YBFWRB Bylaws:

The Citizen Committee will rank and prioritize projects proposed by the TAG to promote fish and wildlife recovery. Composition and operating procedures for the committee will include:

9.4.1 The Citizen Committee shall be composed of four representatives working and/or residing in Benton, Kittitas and Yakima counties and the Yakama Nation (initially, 16 total). Representatives from each county should represent the diversity of interests particular to their region, e.g. – business, landowner, agricultural, habitat, and fishery enhancement. Elected officials may be representatives when not also serving on the Board of Directors.

9.4.2 The Citizen Committee shall submit to the Board of Directors a prioritized list of SRFB projects for funding. The Board of Directors may review and approve the process and/or the selection of the prioritized project list. The Board of Directors may ask the Citizen Committee to re-assess the list, but does not have the authority to change it themselves.

9.4.3 The Citizen Committee shall use a super-majority vote of 65% for decision-making purposes.

9.4.4 Prioritization of projects being submitted for SRFB funding will follow procedures set by chapter 77.85 RCW.

9.4.5 The Citizen Committee may elect a chair and a vice chair.

9.4.6 Committee members shall remove themselves from participating in decisions and deliberations on projects where they have a direct interest in requested funding.

---

[44] URL: https://ybfwrb.org/wp-content/uploads/2017/10/Haring-2001.pdf
[45] URL: https://www.usbr.gov/pn/programs/yrbwep/reports/watershed.pdf
[46] URL: http://www.nwcouncil.org/fw/subbasinplanning/yakima/plan/
[47] URL: https://ybfwrb.org/recovery-planning/steelhead-recovery-plan/
[48] URL: https://ybfwrb.org/wp-content/uploads/2022/11/Final_Bull_Trout_Recovery_Plan_092915-corrected.pdf
[49] URL: https://ybfwrb.org/grant-program/citizens-committee/

Citizen Committee Review Process

The CC will evaluate proposals using the CC Ranking Matrix (Appendix H) and assign a CC score to each project based on their discussions (which may include consideration of input provided by the TAG to the CC).

The CC will then review the TAG's proposed ranked project list and discuss whether any projects have high or low enough CC scores to warrant moving them up or down the ranked list. The CC is not obligated to maintain the same ranking given to projects by the TAG if they think a project's ranking should be adjusted based on CC matrix criteria. When adjustments are made, the CC will clearly document their justification for moving project(s) up or down the ranked list.

The CC also will designate alternate projects and may condition funding for a project (see below).

The resulting updated ranked project list will serve as the final recommendation to the Board of Directors.

Designation of Alternate Projects

The CC will determine a project's final funding priority category (*High Priority Fund, Priority Fund, Fund, Defer, or Do Not Fund*). When adjustments are made from the TAG ranking, the CC will clearly document their justification for changing the funding priority category.

Any projects that fall below the funding line on the final ranked list but are either *High Priority Fund, Priority Fund,* or *Fund* become Alternates. If one or more of the projects above the funding line happen to no longer need that funding for any reason, the Lead Entity, in coordination with the project sponsor and the salmon recovery grants manager, can transfer the funds to the highest ranked alternate project that is ready to receive funding, so long as this happens within a year of the original funding award date (typically in September).

Conditions

If the TAG has recommended placing a condition on a project, the CC will decide whether to maintain that recommended condition in the final ranked list.

The CC may also place a condition of its own for funding on a project. For example, if a project has a significant issue under one of the CC criteria, the CC may require that the sponsor adjust the project to address that.

After the CC evaluation is complete, the Lead Entity Coordinator will reach out to any sponsors with Conditioned projects and confirm whether they accept the conditions before the Board of Directors votes on the final ranked list. If the sponsor accepts the conditions, those conditions will be added as a requirement to the project agreement if the project is funded.

Recovery Board Approval

Upon completion of the CC's review and ranking, the final ranked list is submitted to the Board of Directors for approval. The Board can either approve the list as submitted or remand the list to the CC to adjust the ranking to address specific concerns; it does not have the power to reorder the CC's ranked list by itself.

This step concludes the local review process. This process is set up to meet the requirements of the state statute creating the SRFB and the Lead Entity Program, and is designed to ensure that projects proposed for SRFB funding are technically solid, address priority issues, and are broadly supported by diverse community interests.

The final ranked lists are then submitted to the SRFB.

Submission of Final Applications to RCO

If changes have been requested by the state review panel or local reviewers, sponsors must update project applications to incorporate changes before final submission to RCO.

Final SRFB Funding Decision

The Lead Entity will present the final ranked lists to the SRFB at the September SRFB meeting. Sponsors do not have to be present at this meeting.

The SRFB cannot reorder a Lead Entity's ranked list, and almost always approves the lists as submitted.[50] Once the SRFB approves the final ranked lists, all projects ranked by the Lead Entity to be funded are officially awarded funding.

Following this meeting, sponsors of funded projects will work with SRFB staff on contracting details; this process may take 1-3 months.

For additional details on the SRFB process, please see Manual 18.

Scope Amendments to Funded Projects

As contracts progress, it sometimes becomes apparent that significant changes need to be made to the original scope of work, or an opportunity arises that could enhance an existing contract. A sponsor has the option of submitting a scope amendment request for the following situations:

All projects

- To request additional funding to pay for project overruns
- To increase or decrease a project scope without a funding change
- If a project closes short (has unspent funds remaining in the contract)
- To change a project type
- To transfer sponsorship to another entity
- To reduce the proposed match

Protection projects

- To change the site to a contiguous site
- To change the site to a non-contiguous site
- To pay more than fair market value (with no increase in funding)

[50] The SRFB does have the power to remove any POC's from the ranked list, but it is rare for POC's to still be on the list.

Restoration projects

- To make a significant change in the project location

Assessment projects

- To make a significant change in the location of the study
- To change the type of study

In order to request a scope amendment, a sponsor must fill out a SRFB Amendment Request Form (Appendix I) and submit it to the Lead Entity Coordinator. The request must be approved locally by the TAG and CC before it can be considered for approval by RCO.

If you are requesting a scope amendment, please understand that the process could be lengthy, especially if the changes proposed differ significantly from the original contract. Expect the same level of scrutiny as during a regular grant round. There is no guarantee that a scope amendment will be approved.

Guidelines regarding the level of evaluation a scope amendment will receive at RCO can be found in the SRFB's Manual 18[51].

[51] URL: https://rco.wa.gov/wp-content/uploads/2019/05/SAL-Manual18.pdf

APPENDIX A: Vision 2020

As prepared by the YAKIMA SUBBASIN FISH & WILDLIFE PLANNING BOARD in 2004 as part of development of the Yakima Subbasin plan

Vision for the Year 2020

Yakima River Basin communities have restored the Yakima River basin sufficiently to support self-sustaining and harvestable populations of indigenous fish and wildlife while enhancing the existing customs, cultures, and economies within the basin. Decisions that continuously improve the river basin ecosystem are made in an open and cooperative process that respects different points of view and varied statutory responsibilities, and benefits current and future generations.

Guiding Principles for the Yakima Subbasin Plan

1) That the natural environment including its fish and wildlife resources is the cultural heritage that is common to the diversity of human existence. The underlying premise of the YSBP's *Mission* and *Vision* is to prepare and implement a balanced plan of action that plays a key role in the long-term sustainability of our common cultural heritage within the Yakima Basin.
2) That the quality of water and a near natural timing and quantity of water flow (normative hydrograph) are principal indicators of a healthy river ecosystem.
3) That the Yakima Subbasin Plan enhances the Yakama Nation's continued exercise of Treaty Reserved and aboriginal rights for religious, subsistence, commercial and recreational use of natural resources;
4) That the Yakima Subbasin Plan and the 2009 Yakima Basin Steelhead Recovery Plan are based on voluntary participation;
5) That the processes of plan preparation, implementation, and amendment, be open and equitable;
6) That the costs of plan actions be estimated in relation to benefits. Alternatives that achieve the benefits relative to costs are preferred. Costs of habitat/species restoration should be mitigated and distributed equitably;
7) That the science, strategies and art of restoring ecosystems is yet evolving, hence programs and actions must be monitored and evaluated for effect and may be altered as necessary;
8) That balanced sustainable resources management recognizes these basic precepts: a) that the physical and biological environments are functionally interdependent relative to productivity; b) that at any level of function, productivity is finite; c) without actions to restore degraded functions, and to protect, avoid and mitigate impacts to the physical and biological environment, the increasing demands of human population growth would reduce productivity to zero, with unacceptable costs to the cultures and economies of the subbasin.

APPENDIX B: SRFB Preapplication Form

Project Name:	
Project Sponsor:	
Funding Request:	
Sponsor Contact Info: *Include email and cell number*	
Key Partners:	
Project Location: *Include county and watershed*	
Project Description:	*Please see the YBFWRB guidance for writing project descriptions.*
List the Steelhead Recovery Plan and/or Bull Trout Action Plan Action(s) and TAG Focus Project(s) that this project will address:	*Steelhead Recovery Plan Actions are found in Chapter 5 of the Yakima Steelhead Recovery Plan. Bull Trout Action Plan Actions are found in the Actions Detail section of the Bull Trout Action Plan (p. 164) or in the 2017 BTAP Action Update. Sponsors are also encouraged to review the TAG Focus Project List (available here).*
Fish species benefited:	
Specific benefits to fish and certainty of success:	
How the project relates to/builds upon past/current projects:	
Constraints/uncertainties affecting the project:	
In addition to answering the questions above, please provide:	
1) A general location map 2) A detailed property/parcel map identifying the ownership of the project site and all legal property boundaries and adjacent lot ownership, aerial photos and designs as appropriate 3) A list of all potential stakeholders (landowners, adjacent landowners, and other interest groups), with a summary of project-specific communication that has occurred and the level of support that the project has from each stakeholder 4) A cost estimate and draft budget, and a description of how the cost-estimate was developed or will be developed 5) Photographs of the site (this is in addition to aerials)	

Email this Preapplication Form and attachments to the Lead Entity Coordinator at leadentity@ybfwrb.org. A version in Word is available here.

APPENDIX C: Lead Entity Conflict of Interest Policy

Yakima Basin Fish and Wildlife Recovery Board (YBFWRB) Citizen Committee (CC) and Technical Advisory Group (TAG) members are expected to leave the room for committee discussions about any applications for which they are the identified sponsor/co-sponsor or with which they have a direct personal conflict of interest. Secondary conflicts of interest of committee members and YBFWRB staff (e.g., employment by the sponsoring entity without direct involvement in the proposed project, or association with a project, but not as primary sponsor) shall be declared, and the affected individuals shall discuss with the committee whether they should participate fully in evaluations, remain in the room to provide information but not participate in scoring and ranking of proposals they are associated with, or leave the room during review of proposals they are associated with.

A direct personal conflict of interest is defined as the possibility or appearance of possibility, and not just the actuality of a private benefit, direct or indirect, or the creation of a material personal gain or advantage to the member, family, friends, or associates who hold some share of a member's loyalty.

To be an identified project sponsor is to be a lead individual developing a proposal who is specifically identified as a sponsor in the application. When a committee member discloses either a direct personal conflict of interest or is an identified project sponsor, they shall be asked to leave the meeting, but may return once the project discussion and scoring is finished.

A secondary conflict of interest may exist when a reviewer is a project partner, defined as the underlying landowner (even if public), and anyone who provides cash or services match to the proposed project—an individual, company, private or public organization that has a financial or capital commitment to the proposed project under review. This category extends to include anyone who has financial ties to the applicant (spouse, etc.); sits on the applicant's governing body; or has played a significant role in the development of the proposal. Secondary conflicts of interest must be disclosed by review committee members. Once disclosed, the majority of the review committee will decide if the person should leave the meeting, observe the meeting without contributing to the discussion or scoring, participate but not score, or participate fully in the discussion and scoring of the proposal.

Prior knowledge of the proposal or prior contact with the applicant does not constitute a conflict of interest, as long as none of the above criteria apply to the reviewer. If you have any concerns or questions about whether your relationship with an applicant or proposal warrants taking one of the actions identified above, please explain your situation to the other members of the committee at the meeting. Majority vote will decide whether it constitutes a conflict of interest. If a member has not disclosed any conflict of interest but is challenged from the floor and the challenge has no basis in fact, the member should so state their opinion on the issue and defer to majority vote to decide the issue.

A member who has questions about his or her participation in any matter to come before the committee, or who is concerned about a potential conflict of interest of another participant, should contact the YBFWRB Lead Entity Coordinator, Executive Director, or Board members.

APPENDIX D: Reach Priority by Species

The TAG has prepared maps showing priority reaches for protection and restoration for spring and fall Chinook, steelhead, coho, and bull trout. These maps were generated for the following purposes:

- to provide guidance to help prioritize projects;
- to inform project proponents of priority areas for our Lead Entity; and
- to present our priorities to the Salmon Recovery Funding Board.

The maps were developed for the Lead Entity to help rank projects and should not be used for other purposes. These maps have been largely superseded by the newer list of TAG focus projects. However, they are still available should the TAG choose to use them as part of its evaluation.

The priorities are based on the goal of maximizing the natural production of salmonids by a) preserving habitat that is functioning properly and b) restoring that which has the highest production potential but is currently at risk or not functioning because of compromised habitat factors. Reaches are prioritized for project selection on the basis of the *critical habitat* contributions they provide for one or more of the priority species in the strategy. *Critical habitat in this context is considered habitat needed for the completion of one or more life history stages.* Reaches were initially prioritized based on Ecosystem Diagnostic and Treatment (EDT) model analysis with subsequent adjustment made by the TAG based on scientific data and working experience.

On occasion, there may be a project located in a high priority area that was not identified due to the scale of evaluation, a lack of information, or incomplete data at the time reach priorities were set. For projects that lay outside the geographic scope of the EDT modeling conducted for the Yakima Basin and for projects focused on bull trout and other salmonids not incorporated into the EDT model, the TAG's expert knowledge was used to determine high priority areas. Reach priority may be updated periodically to account for changes in habitat conditions and to incorporate new information.

Maps are available from YBFWRB staff upon request.

APPENDIX E: TAG Focus Projects

January 2026

The Yakima Basin Fish & Wildlife Recovery Board's Focus Project List is a tool developed by the Technical Advisory Group (TAG) to help identify the most timely/urgent needs of priority species and to focus SRFB resources towards project proposals that address those needs.

The list is used to:

- Give the TAG a way to proactively guide Yakima Basin SRFB funding towards high priority and/or urgent projects
- Provide guidance to sponsors deciding what types of projects to pursue and propose
- Strengthen the link between the SRFB project review criteria and Recovery Plan priorities
- Award 10 extra points in the scoring matrix to projects consistent with the list

Using the list as a guide, a project proposal will receive 10 bonus points if it is clearly a Focus Project. If a proposal is not a Focus Project, zero bonus points are awarded.

It is important to emphasize that the TAG uses this approach as a way to recognize and reward proposals that implement identified Focus Projects, but not as a way to exclude other SRFB proposals. Projects that are Focus Projects, but have other significant weaknesses, will have their score brought down by other elements in the TAG review process. Projects that do a strong job of addressing real needs, even if not identified as a Focus Project, will still have an opportunity to compete for funding based on all of the other TAG scoring criteria.

If a project narrowly misses being counted as a focus project during SARM scoring, the TAG shall record a clear explanation for their decision.

The Focus Project List is to be updated annually in the fall, following the SRFB grant review. Any modifications to the list will be communicated to project partners once the annual review is complete.

The following 24 projects and the associated next steps comprise the 2026 Focus Project List:

#	Focus Project	Alignment with Yakima Basin Steelhead Recovery Plan (Pgs 145-203) /Bull Trout Action Plan	Location/ Geographic Scope
1	**Yakima Delta Temperature and Flow** Projects to restore natural flow patterns and fish passage in the Yakima Delta.	**Lower Mainstem Action #7** Protect and restore mainstem and floodplain habitats below Sunnyside Dam. (Pg. 157)	SR 240 Bridge at Richland to the confluence with the Columbia River.
2	**Lower Yakima River Projects** Improve thermal refugia for adults.	**Lower Mainstem Action #7** Protect and restore mainstem and floodplain habitats below Sunnyside Dam. (Pg. 157)	Prosser Dam to the confluence with the Columbia River.
3	**Reducing Smolt Entrainment** Projects that result in the reduction of diversion related mortality of smolts.	**Lower Mainstem Action #3** Reconfigure infrastructure to improve smolt survival rates. (Pg. 155) **Basinwide Action #2** Adequately screen all water diversions. (Pg. 146)	Roza, Wapato, Chandler, and Sunnyside Dams; as well as entrainment on Toppenish Creek below Simcoe Creek.
4	**Toppenish Floodplain and Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Toppenish Action #1** Rehabilitate alluvial fan and downstream floodplain of Toppenish Creek. (Pg. 184)	Toppenish Creek up to and including areas with known anadromous fish distribution.

5	**Wapato Reach Floodplain & Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels.	**Lower Mainstem Action #7** Protect and restore mainstem and floodplain habitats below Sunnyside Dam. (Pg. 157)	Locations that align with those described in the Wapato Reach Assessment.
6	**Wapato Reach Floodplain & Side Channel Protection** Acquisition projects that protect high quality floodplain habitat and/or allow for significant future floodplain reconnection.	**Lower Mainstem Action #7** Protect and restore mainstem and floodplain habitats below Sunnyside Dam. (Pg. 157)	Locations that align with those described in the Wapato Reach Assessment.
7	**Yakima River "Gap-to-Gap" Floodplain & Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Lower Mainstem Action #6** Restore mainstem and side channel habitats in the Union Gap-to-Selah Gap reach. (Pg. 156)	Mainstem Yakima River; Union Gap-to-Selah Gap reach.
8	**Naches Floodplain & Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Naches Action #5** Restore lower Naches River floodplain. (Pg. 163) **Bull Trout Action Plan** Naches FMO Action #3 (Pg. 29)	Tieton River to Mouth.

9	**Naches Floodplain & Side Channel Protection** Acquisition projects that protect high quality floodplain habitat and/or allow for significant future floodplain reconnection.	**Naches Action #5** Restore lower Naches River floodplain. (Pg. 163) **Bull Trout Action Plan** Naches FMO Action #3 (Pg. 29)	Tieton River to Mouth.
10	**Little Naches Floodplain & Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Naches Action #11** Restore side channels and floodplain of Little Naches River. (Pg. 167) **Bull Trout Action Plan** Crow Action #2 (Pg. 118)	Little Naches River up to and including areas with known anadromous fish distribution.
11	**Upper Naches Floodplain & Side Channel Protection** Acquisition projects that protect high quality floodplain habitat and/or allow for significant future floodplain reconnection.	**Naches Action #7** Protect habitats in Naches River mainstem above Tieton confluence. (Pg. 178) **Bull Trout Action Plan** Naches FMO Action #3 (Pg. 29)	Naches upstream of the Tieton Confluence to the Little Naches Confluence.
12	**Upper Naches Floodplain & Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Naches Action #31** Restore Naches side channels and floodplains above the Tieton River confluence. (Pg. 178) **Bull Trout Action Plan** Naches FMO Action #3 (Pg. 29)	Naches upstream of the Tieton Confluence to the Little Naches Confluence.

13	**Improve Cowiche Creek Instream Flow** Projects that create quantifiable improvements to instream flows in Cowiche Creek.	**Naches Action #21** Reduce irrigation diversions from Cowiche Creek. (Pg. 173)	South Fork of Cowiche Creek.
14	**Ahtanum Creek Channel and Floodplain Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Naches Action #27** Ahtanum Creek floodplain and side channel restoration. (Pg. 176) **Bull Trout Action Plan** Ahtanum Action #7 (Pg. 60)	From the mouth of Ahtanum Creek up to and including areas with known bull trout distribution.
15	**Ahtanum Floodplain Protection** Acquisition projects that protect high quality floodplain habitat and/or allow for significant future floodplain reconnection. Work in Bachelor and Hatton Creek is not a current focused action due to unresolved flow and fish screening issues.	**Naches Action #28** Protect Ahtanum Creek riparian areas to lessen development impacts. (Pg. 176) **Bull Trout Action Plan** Ahtanum Action #7 (Pg. 60)	From the mouth of Ahtanum Creek up to and including areas with known bull trout distribution.
16	**Ahtanum Instream Flow** Projects that result in permanent and quantifiable increases of instream flow in Ahtanum Creek and its forks. Proposals will only receive points if the cfs added can be protected.	**Naches Action #24** Protect instream flow improvements in Ahtanum Creek. (Pg. 176) **Bull Trout Action Plan** Ahtanum Action #6 (Pg. 59)	From the mouth of Ahtanum Creek up to and including areas with known bull trout distribution.
17	**Teanaway, Swauk & Tributaries Instream Flow** Projects that result in permanent and quantifiable increases in stream flows in the Teanaway, its forks and Swauk Creek by reducing water diversions or acquisitions of water rights.	**Upper Yakima Action #4** Improve instream flows in Swauk Creek and Teanaway watersheds. (Pg. 191)	Teanaway River and Swauk Creek watersheds.

18	**Teanaway, Swauk, & Taneum Floodplain and Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Upper Yakima Action #14** Restore instream and floodplain habitat complexity in Swauk and Taneum creeks and Teanaway and lower Cle Elum rivers. (Pg. 197)	Teanaway River (all forks), Swauk Creek, and Taneum Creek upstream to and including areas of known anadromous fish distribution.
19	**Teanaway, Swauk, & Taneum Floodplain & Side Channel Protection** Acquisition projects that protect high quality floodplain and side channel habitat and/or allow for significant future floodplain reconnection.	**Upper Yakima Action #14** Restore instream and floodplain habitat complexity in Swauk and Taneum creeks and Teanaway and lower Cle Elum rivers. (Pg. 197)	Teanaway River, Swauk Creek, and Taneum Creek upstream to and including areas of known anadromous fish distribution.
20	**Manastash Instream Flow** Projects that create quantifiable improvements to instream flows in Manastash Creek.	**Upper Yakima Action #5** Provide passage and instream flows in lower Manastash Creek. (Pg. 192)	Manastash Creek upstream to and including areas of known anadromous fish distribution.
21	**Upper Yakima Floodplain & Side Channel Restoration** Dike setbacks and other projects that increase connectivity between the channel and its floodplain or between the channel and existing off-channel habitat. Does not include digging artificial channels or the installation of large woody debris that does not significantly reconnect specific side channels as demonstrated in the proposal.	**Upper Yakima Action #13** Protect & restore floodplain, riparian and in-channel habitats in Upper Yakima, Kittitas and Easton/Cle Elum Reaches. (Pg. 197)	Yakima River from Keechelus Dam to one mile downstream of Wilson Creek confluence.

22	**Upper Yakima Floodplain & Side Channel Protection** Acquisition projects that protect high quality floodplain and side channel habitat and/or allow for significant future floodplain reconnection.	**Upper Yakima Action #13** Protect & restore floodplain, riparian and in-channel habitats in Upper Yakima, Kittitas and Easton/Cle Elum Reaches. (Pg. 197)	Yakima River from Keechelus Dam to one mile downstream of Wilson Creek confluence.
23	**Bull Trout Stranding and Passage** Assessment, design, and restoration projects that reduce stream dewatering and associated bull trout mortality or passage impairment for critical populations.	**Bull Trout Action Plan** Low Abundance, Passage and/or Dewatering are identified as significant and high priority threats for the Box Canyon, Kachess River, Deep Creek and Gold Creek Bull Trout Populations. Gold Actions #2, #3, and #5 (Pgs. 140, 144, 149) Box Canyon Action #1 (Pg. 89) Kachess Action #1 (Pg. 172) Deep Actions #1 and #2 (Pgs. 132 and 135) SF Tieton, NF Tieton, and Indian Creeks added based on discussions of reservoir bed passage during as-yet-unreleased BTAP update	Reaches from reservoirs up to and including known spawning distribution in the following tributaries: • Gold Creek • Box Canyon Creek • Kachess River/Mineral Creek • Deep Creek • SF Tieton Creek • NF Tieton Creek • Indian Creek

24	**Riparian Reforestation to Protect Stream Temperature (does not apply to stewardship projects)** Re-establishment of at least 1 acre of native forest within 75 feet of selected streams.	**Naches Action #10** Improve habitat in Lower Bumping. (Pg. 166) **Naches Action #22** Improve riparian, floodplain, and temperature conditions in Cowiche Creek. (Pg. 174) **Naches Action #23** Restore Oak Creek habitat. (Pg. 174) **Upper Yakima Action #15** Restore tributary riparian areas. (Pg. 199)	Teanaway Forks, Swauk, Taneum, Manastash, Cowiche, Ahtanum, Oak, Simcoe, Toppenish (upstream of Simcoe confluence), Satus (upstream of RM 36) creeks, and tributaries to the Naches River above the Tieton (including Little Naches) from the mouth upstream to the extent of anadromy. Also, tributaries of these streams upstream to the extent of anadromy. Only applies to public and tribal lands to be permanently managed for native riparian forest.

APPENDIX F: Salmon Recovery Model (SARM)

Scoring Criteria	Possible Score	TAG Score
PRIORITY SPECIES		
Steelhead	4	
Bull trout	4	
Spring Chinook	2	
Sockeye	1	
Summer Chinook	1	
Fall Chinook	1	
Coho	1	
	Total	**0.0**
INSTREAM FLOW AND HYDROGRAPH		
1a Improves degraded instream flow and/or hydrograph (e.g., water rights placed in trust, quantified cfs added)	4	
1b Assesses instream flow needs (IFIM) or designs project to improve instream flow and/or hydrograph	3	
WATER QUALITY		
2a Improves degraded water quality (e.g., temperature, sediment, nutrients, etc.)	4	
2b Assesses/designs project to improve degraded water quality (e.g., temperature, sediment, nutrients, etc.)	3	
IN-CHANNEL HABITAT		
3a Protects spawning and/or rearing habitat	5	
3b Improves or creates spawning and/or rearing habitat (cover, etc.)	4	
3c Assesses/designs project to improve spawning and/or rearing habitat conditions and needs	3	
HABITAT ACCESS		
4a Restores access for juvenile and/or adult to high quality habitat (structural/flow/temp)	5	
4b Restores access for juvenile and/or adult to functional habitat (structural/flow/temp)	4	
4c Assesses/designs project to improve habitat access	3	
DIVERSION SCREENING		
5a Protects fish from entrainment, impingement, and other diversion- or screen-induced mortality or injury	5	
5b Assesses/designs project for diversion screening	3	
FLOODPLAIN CONNECTIVITY/RIPARIAN CONDITION		
6a Protects functioning floodplain and riparian (e.g., acquisition)	5	
6b Improves degraded floodplain and/or riparian functions (e.g., dike breaching)	4	
6c Assesses/designs project to improve floodplain connectivity and/or riparian corridor & functions	3	
HIGH PRIORITY PROJECT		
7 Project is a TAG Focus Project	10	
	Total Habitat Score	**0.0**
	Total Species & Habitat Score	**0.0**

		Quantity				
WF1 - Quality and Quantity (1.0 - 2.0)		< 1 mile	1-3 miles	> 3 miles	**Score**	
	High	1.4	1.8	2		
Quality	Medium	1.2	1.6	1.8		
	Low	1	1.2	1.4		
WF2 - Certainty of Success (0.0 - 1.0)	1.0 if reasonably certain of success about 100% 0.5 if moderately certain of success about 50% 0.0 if low certainty of success about 0%				**Score**	
WF3 - Benefit-to-Cost (0.5 - 1.5)	1.5 if High Benefit/Cost 1.0 if Medium Benefit/Cost 0.5 if Low Benefit/Cost				**Score**	
WF4 - Longevity of Benefit (0.5 - 1.5)	1.5 if High Sustainability 1.0 if Medium Sustainability 0.5 if Low Sustainability				**Score**	
					Total Score	**0**

SARM Matrix Guidance

Introduction

Projects proposed for SRFB funding in the Yakima basin are evaluated by the TAG using several tools including the Salmon Recovery Model (the matrix). The matrix was developed in 2004 for use by the TAG and has been revised several times. The TAG considers a standard list of questions about each project and provides the answers using a standardized numeric score. The matrix then calculates a total score for each project.

Generally, higher scoring projects should provide greater benefits to target fish populations than lower scoring projects. However, the matrix tool is not precise enough for small differences in final scores to be strong indicators of meaningful differences in project quality. Further, the matrix does not consider all factors which may be relevant to ranking proposed projects. *Therefore, matrix scores are only a starting point for the TAG to rank projects.* Adjustments to the preliminary rankings based on matrix scores should be expected and the rationale for final rankings will be documented by the TAG.

Typically, proposals are only scored once using the SARM matrix. If they are resubmitted in a subsequent grant round, the previous scores will be used to rank them. Scores will only be reviewed if committee members identify the need to review and update them based on changed information.

General Instructions

Reviewers start by identifying the priority species in the area affected by the project. They then consider a series of questions about how the proposed project would change *current* habitat conditions and distributions of priority species, rather than potential future conditions. The TAG also determines if the proposed project is on the TAG's previously adopted list of Focus Projects. Finally, the TAG assigns each project weighting factors based on their assessment of the amount and quality of habitat affected, certainty of success, benefit to cost, and sustainability.

The TAG assigns the project scores for each line in the matrix and scores can range from zero up to the full points indicated. Scores should be assigned in increments of 0.5 points for the Priority Species section and the habitat elements (questions 1a through 6c). For question 7, projects are assigned full points if they are on the TAG Focus Project List, and zero points otherwise. The weighting factors are scored in different increments depending on the project type and factor being scored.

Guidance by Project Type

To answer the habitat questions, a project is usually assigned to one of three project types: 1) protection projects, 2) restoration implementation projects, and 3) assessment and design-only projects. However, in some cases, protection projects may be combined with other project

types—for example, an applicant may propose to acquire and restore a property as one SRFB project.

For each habitat component in the SARM matrix, a project should be scored on the questions specific to its project type unless it is a combination project. For example, if a project is scored under 4a (protection benefit for rearing habitat), it should not typically be scored under 4b and 4c (restoration and assessment/design benefits). However, a combination project including property acquisition and restoration of the property could be scored under both 4a and 4b. (In most of these cases, the project would not score full points for habitat protection because parcels requiring restoration are presumably not fully functioning.)

Restoration projects propose to undertake activities that will significantly improve habitat conditions in the affected reach. Some key restoration actions for our basin include passage and screening, instream flow, floodplain connectivity, and physical habitat restoration.

Protection Projects
Protection projects (which include acquisition projects) ensure that currently functioning habitat is not converted to incompatible uses or otherwise degraded. Protection tools include the purchase of land, water, access, or development rights; and the utilization of rights in fee title or by perpetual/conservation easement. All acquisition projects shall be voluntary in nature, and require documentation that the seller is willing to participate in the proposed project.

The TAG evaluates the current habitat value of proposed protection projects, the risk that those values will be lost if the project is not completed, and the potential for future habitat enhancement on the protected parcels. Protection of high-quality habitat that is at high risk of degradation is the highest priority for protection projects. A project that protects an area of high-quality priority habitat from imminent development should receive the maximum score, while a project that protects lower value habitat and/or protects habitat from less likely degradation (e.g., where existing zoning, access, and regulation make development less likely) should receive a lower score.

Assessment projects (which include monitoring projects) collect and analyze information in order to identify and recommend future actions. These projects should focus on priority reaches and assess how best to address significant limiting factors. Assessment projects need to show that information gathered by the project will fill a key data gap and will likely lead to a future protection or restoration project with significant fisheries benefit. Assessment projects should be scored based on the expected benefits of implementing the assessed actions.

Design projects fund design work but do not include funding for actual construction. They are typically a first step in a phased approach to project funding. Design projects should be scored based on the expected benefits of implementing the designed actions.

Stewardship projects are important for the overall success of salmon recovery in the Yakima Basin. However, these projects do not fit well into the SARM and therefore will *only be evaluated using the TAG Qualitative Evaluation Form* (Appendix G).

Guidance for Specific Questions

PRIORITY SPECIES – Priority species are identified in the matrix and include anadromous salmonids and bull trout. The TAG assigns points for species that are within the area affected by the proposed project.

Species scores will range from 0.0 to 4.0 based on established species priorities and the expected benefit of the project for key life stages. Most species have a maximum score of 1 point. Spring Chinook have a maximum score of 2 points. Federally listed species have a maximum score of 4 points.

The TAG will assign a score considering the project benefit for spawning, rearing, and migration for each species, or reduced human-caused mortality. To receive a maximum species score, there should be significant benefits for two of the three life stages, or a significant increase in survival or productivity. (For example, a passage project that has a goal of allowing access to significant spawning and rearing habitat for steelhead should receive a score of four; a screening project that reduces or eliminates known mortality could receive a score of three; and an LWD project that only provides rearing habitat for steelhead should receive a score of two.)

INSTREAM FLOW AND HYDROGRAPH – Does the project directly and quantifiably benefit the hydrograph by increasing low flows or reducing unnaturally high flows?

1a – Application receives points if it directly improves the hydrograph via trust water program or other means, such as water conservation measures to reduce diversions. Reviewers should be able to quantify beneficial effects to the hydrograph (e.g., how many cfs will be trusted). This question is not intended to award points for projects that simply redirect instream water into side channels or improve floodplain connectivity, although such projects may have incidental effects on the hydrograph.

For such a project to receive points, the applicant should quantify hydrograph benefits.

In most cases, projects awarded points in 1a will also receive points for improving rearing habitat.

1b – Application receives points if the proposed assessment directly addresses instream flows. Assessments for side channel or floodplain projects with incidental hydrograph effects are not considered here unless such effects will be explicitly addressed and quantified.

WATER QUALITY – Water quality is a major limiting factor in the middle and lower mainstem Yakima River and portions of some tributaries. Temperature, suspended sediment, and agricultural chemicals in some flowing waters in the Yakima Basin have exceeded either water quality criteria or known tolerance thresholds for salmonid species.

Most SRFB projects improve water quality to some degree. Points are only awarded to projects where water quality is a known limiting factor for target species and the project aims to make a significant, documentable improvement in water quality. Example projects include: flow and habitat projects (e.g., creation of refugia) that have a strong likelihood of significantly improving

stream temperature where that is a limiting factor; projects that reduce a significant and documented unnatural input of sediment; projects that remove a wastewater discharge from a stream or reduce stormwater discharge; etc. If nutrient enhancement is proposed as a project, it can be scored under Water Quality.

Projects that make smaller or incidental improvements to water quality are not awarded points for this category; for example, riparian restoration that will provide minor and/or unquantified shade benefits.

IN-CHANNEL HABITAT – For the purposes of the SARM, in-channel habitat is defined as the habitat below bank full width or OHWM. Quality in-channel habitat is a combination of cover, substrate, and hydraulics. Common in-channel restoration projects include construction on the bank or bed to improve cover, width/depth ratios, pool quantity and quality, and/or streambank condition.

Improvements to in-channel habitat can be awarded in question 3. Typical projects will score in only one of the sub-questions (a, b, or c) unless the project is a combination. For example, a proposal to acquire and restore a property could be awarded points in parts a and b of question 3.

3a – Protection of spawning and rearing habitat should be scored by considering both habitat value and the threat to the habitat that the proposed project will alleviate.

> Habitat value is the current value of the area to the priority species and is a function of size, quality, use by priority species, importance of habitat type or location, etc. Habitat value is not historic value or potential value based on anticipated restoration.
>
> Threat Reduction is the threat to the existing habitat that will be alleviated by the proposed project. The TAG should consider the nature and type of the threat, and likelihood that it will occur. For example, the likelihood of habitat impacts may increase from properties merely in a UGA, to properties for sale, to properties with ongoing degradation. The TAG should also consider the effectiveness of the project in reducing the potential threat. For example, purchase may alleviate more of a threat than does acquiring an easement.
>
> The following is an example of how Habitat Value and Threat Reduction can be considered together:

		Threat Reduction		
		Low	Med	High
Habitat Value	High	2	4	5
	Med	1	3	4
	Low	0	1	2

HABITAT ACCESS – Application receives points for removing or reducing physical and flow- or temperature- induced passage barriers. Examples include improving passage at culverts,

dams, ladders, etc., or improving flows or temperature where they inhibit passage. Physical barriers preventing entrance to existing side channels are also included. Projects that correct partial barriers should generally receive a lower score than full barrier removals, unless the TAG identifies the barriers as addressing significant limiting factors in that watershed.

This question is not intended to award points for side channel creation, levee setbacks, etc.

For this question, a project can be eligible for points under 4a or 4b, but not both (a project restoring access to high quality habitat doesn't also get points for restoring access to functional habitat).

DIVERSION SCREENING – Application receives points for protecting priority species from entrainment, impingement, and other diversion or screen-induced mortality or injury.

The most protection can generally be achieved by projects that add screens to currently unscreened diversions, so those projects are most likely to receive maximum points. Other implementation projects include improving poorly functioning or outdated screens and reducing the amount of surface water diverted (e.g., converting an unscreened surface water diversion to a well, or reducing surface diversion rate via water right acquisition or water conservation). Depending on their level of impact, these projects can also receive maximum points as well.

FLOODPLAIN CONNECTIVITY/RIPARIAN CONDITION – These questions score projects that maintain and improve floodplain connectivity and riparian conditions. Functional floodplains and riparian zones allow water and sediment to move through the ecosystem naturally (often improving in-stream habitat) and allow fish to access an array of productive habitats at various flows. Typical projects include removing or modifying levees or bank armor, reconnecting or constructing side channels or off-channel areas, adding cover, planting native vegetation, managing invasive species, and/or controlling livestock, vehicles, and foot traffic.

HIGH PRIORITY PROJECT – The TAG has developed the TAG Focus Project List to help focus SRFB resources on projects that represent the most immediate needs of priority species that can be reasonably achieved as SRFB projects. Project application receives 10 points if it is on the most recent TAG Focus Project List. If not on the list, zero points are awarded.

If a project narrowly misses being counted as a focus project during SARM scoring, the TAG shall record a clear explanation for their decision.

WEIGHTING FACTORS (WF) – These elements are a very important part of the TAG evaluation and involve many factors. In addition to the scores assigned, there should be a clear explanation supporting the scores of WF 2, 3, and 4 in the TAG evaluation meeting notes so that the Citizen Committee, applicants, and others have a clear understanding of what factors affected the TAG weighting.

WF 1: QUALITY AND QUANTITY – This WF uses a simple matrix based on how much habitat a project benefits (<1 mile, 1 to 3 miles and >3 miles) and what the current quality of that habitat is (High, Medium, or Low) to assign a multiplier ranging from 1.0 to 2.0. See the scoring chart below:

		Quantity		
		<1 mile	1 to 3 miles	>3 miles
Quality	High	1.4	1.8	2.0
	Med	1.2	1.6	1.8
	Low	1.0	1.2	1.4

Projects that implement fixes to point source fish mortality should default to being given a "medium" score of 1.6. However, if the TAG thinks this wouldn't capture the full biological benefits of a project, the TAG can rank it qualitatively.

WF 2: CERTAINTY OF SUCCESS – Projects are weighted based on the likelihood that they can ultimately deliver habitat benefits (identified in earlier matrix questions) given the known and unknown barriers to success. This WF is a combination of the likelihood that the project will be successfully implemented and the likelihood that it will deliver biological benefits. The following table is an example of how the two elements of certainty of success can be considered together to derive WF 2, which is a multiplier ranging from 0.0 to 1.0. The specific questions to consider are listed below.

		Certainty of Biological Benefits		
		Low	Med	High
Certainty of Successful Implementation	High	0.6	0.8	1.0
	Med	0.3	0.6	0.8
	Low	0.0	0.3	0.6

Considerations are different for each project type:

Restoration projects:

- *Certainty of successful implementation:* Does the proponent have the wherewithal to successfully implement the project as proposed, given challenges (e.g., site complexity, administrative, political, property ownership)?
- *Certainty of biological benefits:* If implemented as proposed, what is the likelihood that the biological benefits identified in habitat questions (#1-7) would be realized?

Design Projects:

- *Certainty of successful implementation:* Does the proponent have clear goals, and a solid understanding of and ability to overcome all of the challenges involved in designing a feasible project? More complex environments, complex designs, and unproven

designs generally have a lower certainty of success. Design projects that will require coordination of multiple disciplines, or have sponsors that do not understand the required disciplines, generally have a lower certainty of success.

- *Certainty of biological benefits:* Are there clear and specific biological goals for the design that would yield the biological benefits identified in habitat questions 1-7? What is the likelihood that a design can achieve the biological goals?

Assessment projects:

- *Certainty of successful implementation:* How likely is the assessment to identify potential future projects that would be feasible given physical, administrative, and political constraints? Would potential future projects identified by the assessment be achievable at a reasonable cost?

- *Certainty of biological benefits:* What is the importance of the assessment to planning future restoration (i.e., will the information provided in the assessment have a significant impact on future restoration decisions)? How likely is the assessment to identify potential future projects that would achieve the biological benefits identified above?

Protection projects:

- *Certainty of successful implementation:* Degree of real estate interests secured, future property management, and likelihood of a sale actually closing.

    - What degree of real estate interests are being secured? From highest to lowest certainty: fee simple; deed restriction; easement held by government agency; easement held by private entity.

    - How will the property be managed into the future? Will there be regular inspections and a commitment to maintain (garbage, weeds, trespass)?

    - Stage of agreement – From highest to lowest certainty: option agreement; purchase and sale agreement; appraisal completed and reviewed by seller; written correspondence discussing price; SRFB acknowledgement letter only.

    - Type of seller – From highest to lowest certainty: government agency; individual with high motivation to sell; small business; corporation (higher for bank-owned properties); individual with low motivation to sell; estate; unresolved estate or high potential for unresolved estate.

    - Grant applicant – From highest to lowest certainty: government agency with real estate professionals and real estate policies; established real estate/land trust with a history of purchases of this type; government agency w/o in-house real estate professionals; new or young land trust with little experience; other private organizations.

- Complexity of sale – From highest to lowest certainty: fee simple entire parcel with no other uses on parcel; deed restriction/easement over a portion of parcel; fee simple with boundary line adjustment or subdivision required; fee simple with conformance to will or other testamentary document to divide property or proceeds from sale.

- *Certainty of biological benefits:* Will the habitat elements be protected into the future?

    - From highest to lowest certainty: will be used solely for habitat with no other developed access; passive recreational uses allowed/encouraged; passive recreational uses allowed/encouraged with high intensity uses/urban areas adjacent.

    - From highest to lowest certainty: property is surrounded by other properties already legally devoted to SRFB purposes and long-term management plan in place; property is surrounded by other properties currently zoned for and managed for compatible purposes; property surrounded by/adjacent to properties incompatible and zoned with SRFB purposes.

    - Other things to consider – risks posed by channel migration; risks posed by adjacent invasive species; risks posed by adjacent grazing practices; and other risks that would expose the habitat to potential degradation.

WF 3: BENEFIT-TO-COST – Is the proposed cost of the project reasonable with respect to the expected biological outcomes? This WF is a qualitative evaluation of the biological benefit of the project compared to the cost to SRFB and is not intended to require quantification of biological benefits. This WF is a multiplier ranging from 0.5 to 1.5, with average projects scoring a 1, projects with a poor benefit-to-cost ratio scoring lower, and projects with a great benefit-to-cost ratio scoring higher.

If a score other than 1.0 is assigned by the TAG, there should be an explanation in the TAG meeting notes.

Note: WF 3 is not intended to evaluate if the proposed budget is a fair estimate of the cost of the work to be done. Although this is important, this topic should be addressed in the TAG Qualitative Evaluation Form and not in the matrix.

WF 4: LONGEVITY OF BENEFIT – This WF considers the ability of the project to provide benefits in the long-term and if the project will need additional resources for its benefits to persist. This WF is a multiplier ranging from 0.5 to 1.5, with average projects scoring a 1, projects with below-average longevity scoring lower, and projects with above-average longevity scoring higher.

- Will the projected benefits persist in the long term? For example:

- Higher score if ecosystem processes (e.g., hydrology, sediment) will reinforce and sustain the benefits of the project, and lower score if the project merely changes conditions that may revert to a degraded status over time. (Another way to think about this would be: is the project addressing the cause or only a symptom?)
- Protection of investment – when relevant (e.g., riparian planting), higher score if the project is on land managed by a public entity or land trust and dedicated to natural resource preservation, and lower score for other public land or private land protected by conservation easement, and fewest points for private land with no conservation easement.

- Will the project need additional input of resources in the long-term, and what happens if those resources are not forthcoming? For example:
  - For riparian planting, will the project fail without a long-term commitment to weed management that has not been identified, committed to, and budgeted?
  - For a diversion, screen, or similar project, how much do the anticipated benefits depend on proper operation, and is the operation on 'autopilot', or is there a high susceptibility to human error (e.g., not opening a headgate at the right time, etc.)? Also consider likelihood of proper maintenance and biological risk if maintenance does not occur.

APPENDIX G: TAG Qualitative Evaluation Form

Proposal Title: _____

Proposal PRISM #: _____

Please consider the factors relevant to the TAG's evaluation of the project.

	Strengths	Weaknesses
Biological Benefits		
Landowner Commitment		
Sequencing		
Budget		
Design		
Future Stewardship		
Climate Resiliency		
Lamprey/ Mussels		
Other: Strengths, Uncertainties, & Constraints		
Acquisition Only: Appraisal and Urgency		

Is there anything the TAG would recommend to improve the project or help it be successful?

The below information does not need to be incorporated into TAG evaluation. Where appropriate, TAG should utilize their expertise to provide feedback for the Citizen Committee for use in their evaluation (next page).

ESA Liability

This project will a) significantly increase, b) significantly decrease, or c) have no significant effect on ESA Liability.

Notes:

Other Wildlife and Habitat Benefits

Most restoration projects benefit other wildlife and habitat in addition to target species. This project will a) have significantly more benefit, b) have significantly less benefit, or c) have similar benefits to other wildlife and their habitat compared to a typical restoration project.

Notes:

Guidance for TAG Qualitative Evaluation Form

1. **Biological Benefits**: The main criteria for evaluation used by the TAG for every project. Would the project implement actions identified in regional recovery plan(s)? Would it contribute to meeting specific biological goals within the plan(s)? How well?

2. **Landowner Commitment:** Does the landowner fully support the project? The landowner should be involved in discussions regarding this project early in the planning process, and should be aware of, and willing to wait through, the grant administration process. (The SRFB requires that the landowner sign a Landowner Acknowledgement form before an applicant can submit a grant for evaluation, and a signed commitment by the landowner before SRFB approves funding.)

3. **Project Sequencing:** Consider whether the sponsor is implementing projects in the correct order. A project should build upon and complement existing or future actions, and/or pave the way for additional habitat projects. Correctly sequencing and coordinating projects is important for efficient use of limited resources and maximizing potential benefits. Also consider: Do current land use and regulatory programs adequately protect the long-term benefits of the project? Is the project consistent with existing land use and legal guidance? (E.g., land use and development regulations, critical area ordinances, stormwater management regulations, shoreline master plans, forest management regulations, etc.)

4. **Reasonable Budget:** Analyze the proposed budget – is it complete? Are the prices quoted reasonable compared to similar projects? Is the proposed budget a fair estimate of the work to be done? Remember a budget can be too high or too low. This is the TAG's place to evaluate whether the budget seems accurate given current market costs for similar projects to avoid unnecessary requests for cost increases and to ensure that SRFB is getting good value for its money.

5. **Design:** Is the project design clearly described? Is it based on proven methods? The design should be adequate for the goals outlined in the proposal, and meet standards established by WDFW. If the project uses innovative and experimental approaches, consider whether those approaches are warranted: consider whether proven methods would not be feasible, whether the conditions the approaches were designed for could not be corrected through conventional methods, whether the potential benefits would exceed that of traditional designs, whether the benefit-to-cost ratio would be high, etc.

6. **Stewardship:** The proposal should include information on how the project will be maintained and monitored for at least 10 years. (The SRFB requires a stewardship plan with the final documentation at the close of the project for acquisition and restoration projects on lands owned or controlled by the applicant.)

7. **Climate Resiliency**: Is the project in a location where benefits are unlikely to persist in the face of climate change? Conversely, does the project do a particularly good job of increasing resiliency to climate change (e.g., improving stream flow in a warming reach)?

8. **Other Strengths, Uncertainties, and/or Constraints:** Review the project to determine if there are any technical, legal, permitting, financial, or environmental constraints that could affect the outcome of the project.

9. **Acquisition Specific—Appraisal and Urgency:** In addition to the relevant questions above, review acquisition projects on appraisal and urgency. Has the sponsor sufficiently documented landowner interest and agreement on property value (e.g., recent appraisal, options, sale agreements, etc)? Has the sponsor sufficiently documented clear and significant risk to the property if it is not protected?

Is there anything the TAG would recommend to improve the project or help it be successful?

This question is not meant to encourage the TAG to go looking for something to recommend; rather, to check whether there's any weakness of the final application that rises to the level that the TAG would like to formally recommend a change or addition. The committee has already given feedback earlier in the process, after all.

In rare cases, the TAG may place a condition on a project for funding; that may arise from a strong recommendation.

The below elements of the TAG Qualitative Evaluation Form are generally not utilized for evaluation purposes by the TAG. Rather, they are for the TAG to reach consensus and provide expert information to the Citizen Committee for use in their evaluations.

1. **ESA Liability:** The Endangered Species Act prohibits unauthorized ‘take’ of a listed species, which includes both killing or harming individuals of a species and altering habitat. Community members whose actions may create a ‘take’ face potential legal liability. Specific projects may either alleviate liability (e.g., when a new fish screen prevents fish from dying in an irrigation system) or increase liability (e.g., when a project allows a species to access new areas where take is likely). Any ways in which a project may decrease or increase legal liabilities for specific community members should be assessed (note that simply supporting general recovery of a species does not count as reducing liability).

2. **Other Wildlife:** Proposals for funding by the SRFB must target ESA-listed salmonid species and/or other anadromous fish species. However, there are times when a project has benefit to other fish and wildlife. The TAG should identify any significant positive or negative impacts to other wildlife and their habitat.

APPENDIX H: Citizen Committee Matrix and Guidance

Background

The Citizen Committee evaluates projects proposed for SRFB funding based on their value to local communities. The Citizen Committee is made up of four representatives from each county in the Lead Entity (Kittitas, Yakima, and Benton) and the Yakama Nation, for a total of 16 members. Members are appointed by the YBFWRB Board of Directors following the procedures in its bylaws. Participants may represent counties, cities, conservation districts, tribes, environmental groups, business interests, landowners, citizens, volunteer groups, regional fish enhancement groups, and other stakeholder groups.

The Citizen Committee ensures that projects identified as biological priorities also have the community support they need to succeed. The committee works together to evaluate how the community's social, cultural, and economic values are incorporated into salmon recovery projects. This is a vital part of ensuring that community support for salmon recovery increases over time.

The CC will base its scoring of project benefits on the contents of the application and not on other knowledge that the committee members may have that is not included in the application. CC members are encouraged to share benefits of a project that they don't see reflected in the application with the sponsor at sponsor presentations and site tours; this gives the sponsor an opportunity to add that information to the final application.

The Citizen Committee develops the final ranked project list that is then approved by the Board and submitted to the SRFB for funding. The Citizen Committee takes the ranked list provided by the TAG, and utilizes it as the starting point for the development of the final ranked list. The TAG ranking serves as the local evaluation of the biological benefits of the projects, which is the primary driver of SRFB investments. Projects may be moved up or down in rank on the final ranked project list when the committee provides sufficient justification that the social, cultural, and economic values of a project warrant changing its position from that recommended by the TAG. Committee decisions shall be made by consensus; on those rare occasions when consensus cannot be reached, the Citizen Committee bylaws allow a decision to be made using a super-majority vote of those present of 65%.

Note that the Board can remand the list to the Citizen Committee for reconsideration, but the Board cannot re-rank projects. This process is set up to meet the requirements of the state statute creating the SRFB and the Lead Entity program, and is designed to ensure that projects proposed for SRFB funding are technically solid, address priority issues, and are broadly supported by diverse community groups.

Scoring

Citizen Committee members use the Citizen Committee Matrix to determine how projects rate for multiple criteria in each of four categories; cultural and social, economic, context and organization, and partnerships and community support.

In this matrix, each criterion will be scored with a +1, 0, and -1 assigned as follows:

- +1 = Project has a significant positive effect
- 0 = Project has no significant net effect
- -1 = Project has a significant negative effect

Scores are added together to determine an overall positive or negative total for each project. The Citizen Committee uses these scores as they review the TAG ranked list and develop the final ranked project list. A positive score means that a project has high community value, beyond what the TAG evaluated for benefits to salmon and habitat, and may be a candidate to move higher up the final ranked project list. A negative score means that a project may have less community value, and may be a candidate for moving lower in the final ranked project list. Note that a project with a total of zero (0) points, or slightly above or below zero points, may well be a solid project, the Citizen Committee score of 0 simply means that there is not a clear indication that the project's rank should be either raised or lowered as compared to the TAG recommendation.

Citizen Committee Matrix

1. How does the project affect the Yakama Nation and its members (beyond contributing to salmon recovery)?
2. How does the project affect agricultural interests?
3. How does the project affect recreational opportunities within the basin?
4. Will the project significantly increase or decrease ESA liabilities, or have no significant effect?
5. Will the project have significantly more benefit, similar benefits, or significantly less benefit for other wildlife (besides target species) and their habitat, as compared to a typical restoration project?
6. Does the project include substantive and compelling education and outreach components?
7. Are there economic effects associated with this project?

8. Are there specific elements of the project budget that either raise concerns or are particularly cost-effective?
9. How is the project coordinated with other past, present, and future actions?
10. Are the right people/groups/authorities involved to make the project succeed?
11. Does the project have community support?
12. Are the landowners who are directly affected by the proposed project in strong support of this proposal?
13. Is the project sponsor bringing in other non-SRFB funding to support the project?

Guidance for Specific Questions

General

Project Strengths and Shortcomings

Consider *noteworthy* strengths and/or shortcomings of the project to inform committee scoring discussions.

Is there anything the CC would recommend to improve the project or help it be successful?

This question is not meant to encourage the CC to go looking for something to recommend; rather, to check whether there's any weakness of the final application that rises to the level that the CC would like to formally recommend a change or addition. The committee has already given feedback earlier in the process, after all.

In rare cases, the CC may place a condition on a project for funding; that may arise from a strong recommendation.

Cultural & Social Considerations

1. How does the project affect the Yakama Nation and its members (beyond contributing to salmon recovery)?

   Consider project impacts to the protection of cultural resources, access for traditional activities, traditional food/plant gathering, and other benefits or issues of concern. The committee should rely heavily on input from representatives from the Yakama Nation for scoring.

   Elements of a project that benefit fish and their habitat should be considered neutral. A positive point should be given for projects that create additional benefits and a negative point for elements that create challenges for the Yakama Nation.

2. How does the project affect agricultural interests?

   Consider project impacts to agricultural infrastructure, impacts on adjacent landowners, removal of land from agricultural production, impacts on agricultural water use and management, and other benefits or issues of concern.

   (This is the space to evaluate whether there will be flood impacts to agricultural interests that increase or decrease because of this project. Changes in ESA liability for community members should be evaluated separately under question 4 below and not as part of this question.)

3. How does the project affect recreational opportunities within the basin?

   This question should foster discussion on how the project affects recreational opportunities within the basin. Consider whether the project impacts access to recreational areas, recreational non-tribal hunting and gathering, impacts anglers, increases or reduces risk for recreationalists, and other benefits or issues of concern.

4. Will the project significantly increase or decrease ESA liabilities, or have no significant effect?

   NOTE: Scoring this project is unintuitive: increasing liability means a negative score, while decreasing means a positive score.

   Consider whether the project increases or decreases potential liability for ‘take’ under the federal Endangered Species Act (defined as harming of a listed species). Also consider if the project lowers the cost and/or complexity of ESA regulatory compliance. Does the project change ESA liabilities in a way that makes it safer, easier, or cheaper for community members to pursue desired activities?

   (This is not the place to evaluate the broader biological benefits of the project to target species.)

   Review any TAG comments from the TAG qualitative evaluation form regarding project impacts on ESA liability for help with scoring this question. (While the TAG may generate an opinion on any changes to ESA liability, they don’t incorporate that information into their ranking; it is just to help the CC with their scoring.)

5. Will the project have significantly more benefit (+1), similar benefits (0), or significantly less benefit (-1) for other wildlife (besides target species) and their habitat, as compared to a typical restoration project?

Consider benefits to other wildlife (besides target species) and their habitat.

Review any TAG comments from the TAG qualitative evaluation form regarding project impacts on wildlife and their habitat for help with scoring this question. (While the TAG may generate an opinion on any impacts on wildlife and their habitat, they don't incorporate that information into their ranking; it is just to help the CC with their scoring.)

6. Does the project include substantive and compelling education and outreach components?

   Consider whether the project proposes to involve students and the public in the project implementation, provide educational signage, serve as sites for outreach events and tours, or otherwise serve as a venue where the public can learn about and become engaged in salmon recovery. An example would be a project that hosts a classroom tour to learn about salmon recovery and/or habitat restoration projects.

Economic Considerations

7. Are there economic effects associated with this project?

   Consider whether the project has significant economic impacts such as changing local infrastructure, creating or limiting recreational opportunities, creating or limiting (new or existing) economic opportunities, and/or either increasing or reducing the need for future investment in project maintenance or repair. For example, a floodplain restoration project that also reduces flood risk to existing developed areas would be given a positive point. A project that severely limits access to an existing recreational area may be given a negative point.

8. Are there specific elements of the project budget that either raise concerns or are particularly cost-effective?

   The TAG also incorporates cost-to-biological-benefit of projects into its ranking. This is the place for the CC to reward projects that model particularly cost-effective approaches or have high benefits relative to cost for other public interests (e.g., reduced flood risk, increased fishing access), and/or to factor in concerns about specific budget items that the CC considers to be clearly unreasonable (either unrealistically low or too high).

   (Match should be evaluated separately under question #12.)

Project Context & Organization Considerations

9. How is the project coordinated with other past, present, and future actions?

   Consider whether the project's benefits are dependent upon the sequencing of other actions (including non-habitat recovery related actions/projects; e.g., municipal, residential, road infrastructure, etc) and how the overall sequence affects the community: Is this the right time to do the project? Is there another action that needs to be completed beforehand? Would the benefits immediately be achieved if the project is implemented, or would another action need to be completed first (e.g., a passage project downstream)? Is there a specific reason that doing the project now will be more effective?

   The Citizen Committee should review TAG notes on project sequencing and if all known actions that might influence a project positively or negatively have been identified, a zero may be given.

   A project should receive a positive point (+1) if it clearly complements ongoing or planned activities, and a negative point (-1) if the project is out of sequence with other actions in a way that would impact project efficacy and/or unnecessarily complicate other activities of importance to the community. A zero should be used for a project where sequencing is irrelevant. For example, a salmon recovery land acquisition that also enables a planned or in-progress dike setback that reduces community flood risk would be given a positive point. A salmon recovery land acquisition that complicates a planned municipal infrastructure project would be given a negative point.

Partnerships & Community Support Considerations

10. Are the right people/groups/authorities involved to make the project succeed?

    Consider positive/neutral/negative aspects of the partnerships demonstrated in the proposal. Does the project team (sponsor and partners) have the authority, expertise, and capacity needed for success for the project? Appropriate partners might be a water trust, conservation trust, riparian restoration experts, utilities, municipalities, etc.

    If the committee gives a -1 for this criteria, they will provide written explanation.

11. Does the project have strong community support?

    Consider community support for the project. Has the project sponsor shown strong support from portions of the community? Are there community needs or concerns that need to be addressed? Are there reasons to expect lack of community support would negatively impact the project? Has the sponsor done community outreach, or does their project proposal include plans to do community outreach?

12. Are the landowners who are directly affected by the proposed project in strong support of this proposal?

    Refer to the Landowner Acknowledgement summary table in the meeting packet. Consider the TAG comments related to landowner commitment on the TAG Qualitative Evaluation Form.

    If not, see the following:

    A proposal should receive a positive score (+1) when there is clear above-average landowner support for the project. This can be shown through involvement in project development, in-kind or cash support, etc. Projects that complete the minimum related to landowner commitment (i.e., signed landowner acknowledgement form) should receive a neutral score (0). A proposal that is missing the signed landowner acknowledgement form(s) at the time of the TAG meeting and/or has landowner opposition (including from adjacent landowners who are directly affected by the project) should receive a negative score (-1).

13. Is the project sponsor bringing in other non-SRFB funding to support the project?

    Refer to the SRFB cost estimate spreadsheet, which should be an attachment in PRISM for each project.

    The project should receive a positive score (+1) if the sponsor demonstrates that they are using SRFB funds to leverage significant amounts from other funding sources and/or the sponsor shows that they have received in-kind and/or financial support from the landowner or other sources not generally dedicated to salmon recovery. This question is meant for the CC to reward projects that are drawing in other funding sources to use SRFB funding efficiently. This is the only question in which only a neutral or positive score are the options.

Citizen Committee Matrix Scoring Sheet

General

Noteworthy Project Strengths	
Noteworthy Project Shortcomings	
Is there anything the CC would recommend to improve the project or help it be successful?	

Cultural & Social Considerations

#1 How does the project affect the Yakama Nation and its members (beyond contributing to salmon recovery)?

#2. How does the project affect agricultural interests?

#3. How does the project affect recreational opportunities within the basin?

#4. Will the project significantly increase or decrease ESA liabilities, or have no significant effect?

#5. Will the project have significantly more benefit, similar benefits, or significantly less benefit for other wildlife (besides target species) and their habitat, as compared to a typical restoration project?

#6. Does the project include substantive and compelling education and outreach components?

Economic Considerations

#7. Are there economic effects associated with this project?

#8. Are there specific elements of the project budget that either raise concerns or are particularly cost-effective?

Project Context & Organization Considerations

#9. How is the project coordinated with other past, present, and future actions?	

Partnerships & Community Support Considerations

#10. Are the right people/groups/authorities involved to make the project succeed?	
#11. Does the project have strong community support?	
#12. Are the landowners who are directly affected by the proposed project in strong support of this proposal?	
#13. Is the project sponsor bringing in other non-SRFB funding to support the project?	
TOTAL	

APPENDIX H.1: Citizen Committee Criteria – Example Form for Sponsors

The Yakima Lead Entity encourages you to provide a document spelling out which Citizen Committee scoring criteria your project addresses (and/or is neutral on and thus should not be dinged for). This helps the CC to be fully aware of how you have addressed their criteria in your application. The CC closely reviews this document and it often improves project scores, which may be what gets your project over the funding line.

Criteria	**Does your project address this criteria? Y/ N / N/a**	**How? / Where is this answer found elsewhere in your application?**
How does the project affect the Yakama Nation and its members (beyond contributing to salmon recovery)?		
How does the project affect agricultural interests?		
How does the project affect recreational opportunities within the basin?		
Will the project significantly increase or decrease ESA liabilities, or have no significant effect?		
Will the project have significantly more benefit, similar benefits, or significantly less benefit for other wildlife (besides target species) and their habitat, as compared to a typical restoration project?		
Does the project include substantive and compelling education and outreach components?		

Are there economic effects associated with this project?		
Are there specific elements of the project budget that either raise concerns or are particularly cost-effective?		
How is the project coordinated with other past, present, and future actions?		
Are the right people/groups/authorities involved to make the project succeed?		
Does the project have community support?		
Are the landowners who are directly affected by the proposed project in strong support of this proposal?		
Are you, the project sponsor, bringing in other non-SRFB funding to support the project?		

APPENDIX I: Amendment Request Form

SRFB AMENDMENT REQUEST
SRFB Subcommittee (or RCO Director) Decision

Project Name:
Project Number:
Project Sponsor:
Lead Entity:
Ranking by Lead Entity:
Source of Funding:
SRFB Funds:
Sponsor Match:
Project Total:

Request:

Background:

Attach maps, any letters of support, LE support document, etc.

Staff Recommendation:

SRFB Subcommittee (or RCO Director) Decision:

APPENDIX J: One-Pager – PRISM Project Description

Dear project sponsors,

For a SRFB project, the PRISM project description is more than just the basis for your project contract—it's your chance to make a great first impression. It's the first thing that the TAG, the CC, and the state review panel read when evaluating the project. It's included in RCO's legislative transmittals, and used as the basis for the YBFWRB project booklet summary and RCO press releases. For members of the public, it is often the *only* impression they will get of your project. As such, it deserves special attention!

Write with the public (and Citizen Committee) in mind:

- Limit the amount of jargon; use Layman's Terms where possible
- Be specific about activities and outcomes. Which fish species, life stage, and/or habitat type will the project benefit, and how? If you have room, connect the dots for an uninitiated reader—explain why, for example, slowing runoff or retaining spawning gravels will help fish. (This might have to be a simplified explanation to fit the character limit, but it's valuable all the same.)

Make it easy to read:

- Be concise
- Avoid run-on sentences
- Vary sentence length
- Use active language (E.g., "We will improve rearing habitat", *not* "Rearing habitat will be improved")

RCO requires six specific elements (applicant name, project type, location, overall goal, what will be acquired/restored/designed/developed, and which priority species will benefit) be included in your project description for contracting purposes. However, they also invite adding an optional second paragraph to describe why the project is a priority and what aspects make it special and/or unique—*include this second paragraph!* It will make your project more memorable.

You are allotted 1,500 characters for your project description—use as many of them as you can on this second paragraph. Some ideas of what to include:

- Explain why your project is a priority—what's wrong? What's at stake? Why is action necessary? Will your project address a key limiting factor?
- Paint the broader picture—is the project a phase of a larger project, or a part of a greater recovery strategy? If so, name it
- Tell the elevator pitch version of the story of your project—what would you like the public to know?

These aims will often come into conflict with each other (e.g., being concise while minimizing jargon). For optional assistance drafting your project description, please reach out to the Yakima Basin Lead Entity Coordinator, Cheyne Mayer, at leadentity@ybfwrb.org.

RCO Grant Manager's Optional Outline for Project Descriptions

Element	Framework	Details May Include
Who?	The _____ in partnership with _____ will *who* *who*	Sponsor, property owners, co-sponsors, state or federal agencies
What?	☐ restore_____ *What?* ☐ complete _____ design to_____ *what level?* *Do what?* *(see list top left)* ☐complete an assessment of_____ *what?*	riparian habitat, floodplain reconnection, instream habitat, tidal inundation to former tidelands Conceptual, Preliminary (Permit application Ready), Final (Permitted) fish passage barriers, shoreline armoring, riparian habitat
Where?	on the _____near _____ *creek or river* *where?*	Tributary of? (Direction of) city? County? Within National Forest? On state-owned land? Puget Sound shoreline?
What?	The _____will include _____ *design, restoration, or assessment* *what?*	*List all the project metrics, selected in the application (but no #s).* Engineered Log Jams, adding wood to the floodplain, Riparian Planting Weed Treatment, Floodplain regrading, removing berms, excavating off channel habitat, reconnecting relic side channels, installing ground water wells, generating GPS maps, prioritizing restoration opportunities
Why?	The goal of the project is to benefit _____ _____ by *life stage* *Salmonid species* improving _____. *what?*	juvenile, adult, spawning Spring Chinook, Summer Chinook, Steelhead, Coho, Bull Trout, Rainbow Trout, Chum, etc. Rearing, holding, out migrating, spawning habitat
Importance?		

APPENDIX K: Introductory Glossary

This glossary is intended to help new committee members and board members get up to speed—it's tailored to focus on the acronyms and terminology you are most likely to encounter during your service with the Recovery Board. For a comprehensive glossary, visit Yakipedia.

Table of Contents

Terminology to Get You Started

Unless otherwise noted, each letter in acronyms is pronounced.

Acre-foot: The volume of water needed to cover an acre of land to a depth of one foot (≈325,000 gallons), a common unit for quantifying how much water is needed for irrigation or stored in our reservoirs

Adfluvial: Resident fish that spawn and rear in streams, but live in lakes or reservoirs as subadults and adults. All of the Yakima Basin's kokanee and many of our bull trout populations are adfluvial. See *Resident*, *Fluvial*.

Alevin: Freshly hatched salmonids that still have the yolk sac from their eggs attached to their bellies. Once they have consumed the yolk sac and grown in size, they emerge from their nest gravel (*Redd*) and are considered *Fry*.

Anadromous: Fish that are born and rear in freshwater, migrate to and mature in salt water, and return to freshwater to spawn. Most salmon are anadromous. Some fish species, like *Oncorhynchus mykiss*, have both anadromous (steelhead) and resident (rainbow trout) individuals. Contrast with *Resident*.

Bankfull: the point at which a stream or river is filled to the brim, carrying the maximum flow it can hold within its regular channel before spilling over into the *floodplain*. Typically, streams reach bankfull levels at least once a year.

BDA: Beaver dam analog. Human-constructed habitat features that function like a beaver dam—holding back water to inundate the *floodplain* and raise the water table. BDA's may be installed to get the benefits of beaver dams in places without beavers, or to encourage beavers to settle in a particular area.

BT: Common abbreviation for bull trout.

BTAP: Yakima Bull Trout Action Plan. The primary guiding document for bull trout recovery in the Yakima Basin. The Bull Trout Working Group (BTWG) works to update and implement the plan. Pronounced, “bee-tap.”

CC: Citizen Committee. One of two committees, along with the *TAG*, that evaluate *SRFB* project proposals. The CC is composed of 16 local citizens, with four from each county in the Lead Entity (Benton, Kittitas, and Yakima) and the Yakama Nation. The CC evaluates SRFB proposals on social, economic, and cultural value/impact.

cfs: Cubic feet per second, a common unit for quantifying streamflow

Diversion: a structure that redirects water from a natural stream for another purpose, such as irrigation. Diversion projects may include the construction of dams, weirs, levees, pumping stations, irrigation canals, or any other manmade structure that modifies the natural flow of a waterway. These structures can be harmful to fish if the fish are redirected along with the water into the irrigation system (*see entrainment*), if the fish get caught on the water intake structure, or if the structure blocks fish from moving further up the stream.

ELJ: Engineered Log Jam. ELJ's mimic natural log jams, which provide numerous benefits to fish. See *LWD*.

Entrainment: When a fish passes through or over a dam/barrier/screen such that it can't return to where it came from, it is considered “entrained”. We see two main forms; when fish enter and are then trapped in an irrigation canal, and when fish pass downstream through a major dam and are unable to return to habitat upstream of the dam. We also talk about entrainment into fish sampling facilities, in which case fish typically are returned to the river after sampling.

ESA: Endangered Species Act.

> **ESA-listed**: a species or *population* of a species that is classified by the federal government under the ESA as either “endangered” with extinction or “threatened” with becoming endangered. In the Yakima Basin, we have no “endangered” fish species, but we have two ESA-listed “threatened” fish species, steelhead (the

anadromous form of *Oncorhynchus mykiss*) and bull trout. These are the highest priority species the Recovery Board works to recover.

Fishery: the act or business of catching fish, or an area where fish are caught.

Floodplain: The relatively flat areas adjacent to river channels that are partially or totally covered with water in flood events. A floodplain is "well-connected" when water is able to spread out from the main channel in flood events (as opposed to a "channelized" stream that has been artificially straightened or restricted by manmade structures). Well-connected floodplains have numerous ecological benefits—they lead to less intense flood events by allowing the water to disperse and slow down, give young fish a refuge from being swept downstream, and more. Read more about floodplains here.

> **X-year floodplain**: The area which has a 1/X annual chance of flooding. For example, the 100-year floodplain has a 1/100 or 1% annual chance of flooding, while the 2-year floodplain has a ½ or 50% annual chance of flooding.

Fluvial: Resident fish that spawn and rear in tributaries, but occupy habitats in larger streams and mainstem rivers as subadults and adults. Examples include bull trout in the Naches River and its tributaries, and many rainbow and cutthroat trout. See *Adfluvial, Resident*.

Fry: A juvenile salmonid that has consumed its yolk sac, about 1-2 inches in length. Following life stages include *Parr* and *Smolt*.

Hab: short for habitat.

Hold: when fish pause their migration and hang out in an area in the interim. Reasons fish might hold include waiting for better migration conditions, or waiting for the right season to smolt or spawn.

HUC: Hydrologic Unit Code, pronounced, "huck." Hydrologic units are a set of standardized hydrologic geographic units in the US, typically referred to as HUC's. There are several different layers of HUC's (see here); the largest units are called HUC-2's (e.g., the Pacific Northwest), and the smallest sub-units are HUC-12's (a small local watershed). HUC codes can be pretty inscrutable to the uninitiated (just a string of numbers) and don't always match the way we talk about watersheds locally, so the Recovery Board has developed our own regional geographic units with names that match local usage but can be tied back to HUCs.

High Flow Event: Describes when the amount of water in a stream increases above the *OHWM*. Floods count as high flow events, but not all high flow events cause flooding. High flow events generally mean increased stream velocity, which means greater

movement of sediment and a less hospitable environment for fish, which will try to move to lower velocity areas like *side channels*.

Incubation: the period after salmon eggs are laid in *redds* during which they remain in the gravel for months while the embryos develop. When the eggs hatch, *alevin* emerge.

Introgression, aka Introgressive Hybridization: the transfer of genetic material from one species into the gene pool of another. Introgression is a major issue for bull trout; when they breed with brook trout, the result is hybrid offspring that are generally not able to reproduce.

Juvenile Rearing: period during which young salmon grow in freshwater; includes *Fry* and *Parr* life stages. Ends when they turn into *smolts* and begin their migration to the ocean.

Kelt: A steelhead that has survived spawning and may return to the ocean before returning to freshwater to spawn a second (or even third) time. Unlike Pacific salmon, steelhead (as well as Atlantic salmon and European sea trout) don't all die after spawning.

Lead Entity (LE): A local salmon recovery organization created in accordance with RCW 77.85.050 to solicit, evaluate, and rank proposals for salmon recovery projects, so as to develop an annual ranked project list(s) for consideration for funding by the Salmon Recovery Funding Board (SRFB). There are 25 LE's across WA, each with their own specific geographic area. LE's typically include a technical and a citizen advisory committees and are managed by a designated LE Coordinator; LE operating costs are funded through a contract with RCO. The Yakima Basin Fish and Wildlife Recovery Board serves as the lead entity for the Yakima Basin.

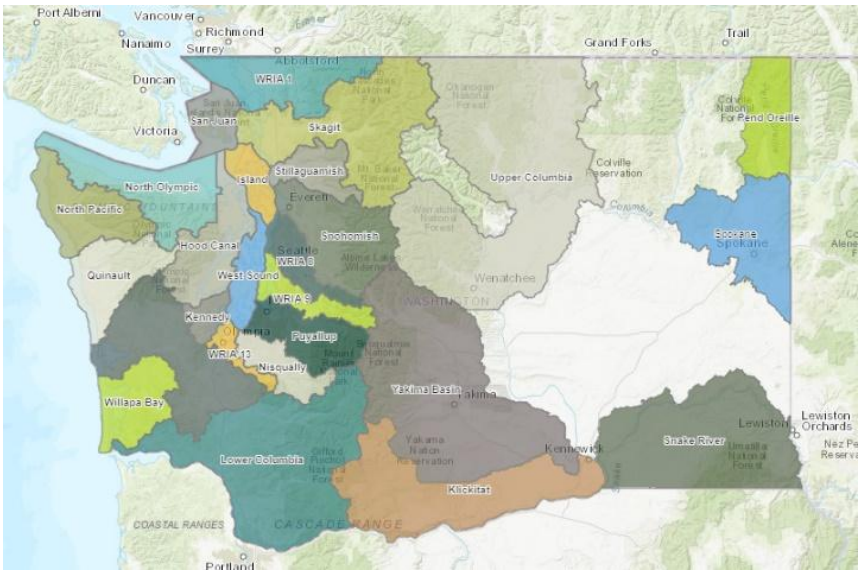


Figure 2. The 25 Lead Entities

Life History Stage: a specific period during the life cycle of a fish such as spawning, incubation, juvenile rearing, smolt migration, etc.

Life History Strategy: the distinct patterns of how fish use different habitats at different points in their life. For example, a fish with a *resident* life history may live its whole life within the same mile of stream, while a fish with a *fluvial* winter migrant life history may migrate to floodplains far downstream during the winter and return to its home stream in summer. Life history categories include *Adfluvial, Anadromous, Fluvial,* and *Resident*, but the term is also used to talk about specific patterns in habitat usage over time within each of these larger categories.

LWD: Large Woody Debris. Trees and tree limbs that have fallen into a stream or river and are often pushed together into log jams. Important for stream health; may be added to streams where it is lacking as part of restoration projects. See *ELJ*.

Mainstem: Term applied to the principal channel of a major stream or river. Mainstems are fed by numerous tributaries and may have side channels.

Middle Columbia Steelhead Recovery Plan: The Recovery Plan for the Middle Columbia Steelhead DPS (the whole steelhead population of the Mid-Columbia Region) developed by NOAA Fisheries as required by the *ESA*. The 2009 Yakima Steelhead Recovery Plan developed by the Recovery Board is incorporated into the federal plan as a chapter.

Migration: the regular, often seasonal, movement of all or part of an animal population to and from a given area. Salmon migrate from freshwater streams to the ocean as *smolts* and migrate back from the ocean as adults to their natal streams to *spawn*.

Mobilization: in habitat restoration projects (and construction projects more generally), this is the phase of preparing, organizing, and transporting materials, equipment, and personnel before construction begins. This step ensures all elements are in place for construction to proceed efficiently once started. Often shortened to “mob.”

(River) Mouth: where a river or stream enters into another body of water, such as an ocean, lake, or another river.

NMI (Needs More Information): A rating the SRFB review panel can give projects after site tours when the review panel needs more information before they can clear the project. A sponsor may get their project cleared by supplying the requested additional information, but if concerns remain, the review panel may switch the designation to POC (Project of Concern). *Contrast with POC*.

OHWM: Ordinary High-Water Mark. The highest elevation of the regularly inundated stream channel, as marked by erosion patterns, changes in vegetation, and debris deposits. Typically at or just below the *bankfull* level.

Parr: Once fry have grown to several inches long and developed vertical fingerprint marks on their sides called "parr marks", they are considered *Parr.* If they are *anadromous*, when they journey to the sea to mature, they become *Smolts*.

PCSRF: Pacific Coastal Salmon Recovery Fund, a primary source of funding for the SRFB grant program. Established by Congress to reverse the decline of West Coast salmon. Managed by NOAA fisheries and made available to Pacific Salmon States (AK, CA, ID, OR, and WA) and federally recognized tribes in the region. Commonly pronounced "Pack-Surf."

PIT tag: Passive Integrated Transponder tag (a tracking device implanted in fish to study their movements). Pronounced like the word, "pit".

POC (Project of Concern): A rating the SRFB review panel can give projects when the review panel has such significant concerns about a project that it recommends that it not be funded. Lead Entities typically remove POC's from the annual funding list they submit to the SRFB. *Contrast with NMI*.

PPFL: Planned Project Forecast List. A list of projects that are anticipated to be pursued in the coming two years. Projects are solicited from project sponsors by the Lead Entity Coordinator. The list is then used by RCO as it develops funding requests to the legislature. See *RCO*.

PRISM: RCO's online database for grant management. Pronounced like the word, "prism." (It stands for "Performance and Registration Information Systems Management", but nobody refers to it that way.) Contrast with *SRP*.

RCO: the Recreation & Conservation Office. This is a state agency that manages numerous grant programs, including SRFB. Lead Entities are contracted through RCO. See *Lead Entity, SRFB*.

Rear: to mature and grow. Salmon and steelhead undergo a period of juvenile rearing in freshwater and adult rearing in the ocean.

Redd: A salmonid spawning bed, or "nest". Redds are dug by female salmonids in streambed gravels, and females deposit and bury fertilized eggs in them.

Resident: Fish that spend their entire life cycle in freshwater, without making significant migrations. The Ahtanum Bull Trout Population is our only resident bull trout population in

the Yakima Basin; many other species of trout also have a resident life history. Contrast with *Anadromous*.

Review Panel (RP): Shorthand for the SRFB State Review Panel, a group of engineers, fisheries experts, and habitat experts hired by the SRFB to review projects for technical soundness simultaneously with the local review process. The panel provides an independent, third-party review of the technical merits of SRFB proposals from throughout the state.

Regional Fisheries Enhancement Groups (RFEG): 14 nonprofits created around WA in 1990 through the RFEG program to involve local communities, volunteers, and landowners in WA's salmon recovery efforts. RFEG's are partially funded by WDFW, but they also seek grants and donations, and their boards are composed of local citizens. Our RFEG is the Mid-Columbia Fisheries Enhancement Group, often referred to as Mid-Columbia Fisheries or MCF.

RFP: Request for Proposal (to solicit grant applications)

Riparian: relating to, living on, or located on the bank of a stream, creek, river, pond, lake, marsh, estuary, or tidewater. We often talk about riparian areas in reference to the area that grows vegetation supported by stream and flood waters, and contrast those to "uplands".

RM: River Mile. River miles count upward from a stream's mouth, that is, its lowest point (where it either joins a larger stream or a lake, or meets the ocean). So, "Yakima River RM 0" would be the confluence with the Columbia River, "Naches River RM 0" would be where the Naches River joins the Yakima River, etc.

Salmonid: a family of genetically similar fish species that includes salmon, trout, char, and white fish. Visit this website to learn all about the various species!

SARM: Salmon Recovery Model (a project scoring matrix developed by the *TAG*). Pronounced like a word, "sarm".

SRFB: the Salmon Recovery Funding Board, which runs the annual grant round for all Lead Entities across the state. Pronounced "surf-board". See *Lead Entity, RCO*.

SH: Common abbreviation for steelhead.

Side Channel: a small channel that branches from the mainstem of a river and returns to the river further downstream. Side channels are formed by the erosive power of the river and may move, fill in, or become the new mainstem over time.

Smolt: A juvenile fish that is migrating out to the ocean. "Smoltification" is a series of bodily changes that salmonids undergo to transition from a freshwater to saltwater environment.

Spawning Adult: a sexually mature adult fish that is ready or in the process of spawning (laying/fertilizing eggs). Spawning adult salmonids look distinct from their adult ocean counterparts; depending on the species, their body color changes from silver to shades of brown, green, or red. The males of some species develop a hooded snout, humped back, and elongated teeth. Salmonids do not feed once they leave the ocean and begin the migration to their freshwater spawning grounds; they spend all their energy navigating back to their natal streams to spawn. After spawning, Pacific salmon die. Some trout (and Atlantic salmon) become *Kelts*.

Sponsor: Shorthand used to refer to SRFB grant applicants, aka project sponsors.

SRP: Salmon Recovery Portal. A database like *PRISM* where you can find and learn about all SRFB projects online, but also planned or conceptual projects as well. See the SRP Map. Does not contain documents associated with the projects, though; for that PRISM is the place to go.

Staging: in habitat restoration projects, the action of temporarily storing machinery and materials leading up to and/or during the project. The staging area is the site where machinery/materials are stored.

- Also, when fish hold in anticipation of future movements (e.g., fish staging in deep pools near a spawning area that they'll spawn in soon).

Subadult: a life stage, typically referred to for bull trout, where larger juvenile fish (typically 2-4 years old) migrate widely in search of food before returning to their natal streams to spawn at 4-5 years old.

TAG: Technical Advisory Group. One of two committees, along with the *CC*, that evaluate SRFB project proposals in the Yakima Basin. The TAG is composed of local biologists, scientists, and natural resource professionals who represent a variety of agencies and expertise, and evaluate the technical soundness and biological priority of proposals. Pronounced like the word, "tag".

Targeted Investments (TI): A newer SRFB grant program for large projects (over $1M) that takes place in even numbered years.

Tributary: A river or stream flowing into a larger river, stream, or lake. Commonly referred to as "trib" for short.

Uplands: See *Riparian*.

Watershed: The entire geographic area upstream of a point that drains precipitation past that point. Watersheds vary in scale; the Yakima Basin is a watershed, but it also contains many smaller watersheds within it (for example, the Naches watershed, the Teanaway watershed, the Toppenish watershed, etc). Used interchangeably with "catchment" and "basin".

WRIA: Water Resource Inventory Area, commonly pronounced, “Rye-uh.” A standardized definition of large watersheds used by the State of Washington. The Yakima Basin is made up of WA WRIA’s 37, 38, and 39, which are consistent with *HUC*-8’s.

YBFWRB: Yakima Basin Fish & Wildlife Recovery Board. “The Recovery Board” for short.

YBTAP: see *BTAP*.

YSRP: Yakima Steelhead Recovery Plan. The primary guiding document for steelhead recovery in the Yakima Basin. Completed by the Steelhead Working Group (SWG) in 2009 and formally adopted by NOAA Fisheries as a chapter in the ESA-required Middle Columbia Steelhead Recovery Plan.

Young of Year (YOY): Young fish in their first year of life. Term overlaps with *Fry* and *Parr*.

Organizations & Groups to Know

Unless otherwise noted, each letter in acronyms is pronounced.

BLM: Bureau of Land Management. A federal agency that manages federal lands in the Yakima Basin, mainly in the Yakima Canyon, Cowiche Creek, and Swauk Creek watersheds and upland areas in the Lower Yakima Basin.

BPA: Bonneville Power Administration, the federal hydropower marketing administration within the federal Department of Energy. The Northwest Power Act directs BPA to fund fish and wildlife projects to mitigate the impacts of federal dams; this funding is widely used in the Yakima Basin.

BTWG: Bull Trout Working Group. A local group convened by the Recovery Board that updates and monitors progress on the Yakima Bull Trout Action Plan (BTAP) and coordinates bull trout recovery activities in the Yakima Basin.

CD: Conservation District, county-level natural resource conservation organizations. The North Yakima CD (NYCD), South Yakima CD (SYCD), Kittitas County CD (KCCD), and Benton CD (BCD) are the conservation districts in the Yakima Basin. They frequently sponsor SRFB projects.

DOE: WA Department of Ecology, which implements state water quality and quantity programs along with many other pollution reduction programs.

DOT: WA Department of Transportation, which is frequently involved in salmon recovery projects where state highways cross or are adjacent to stream and rivers.

DNR: WA Department of Natural Resources. Manages most state-owned lands, including the riverbeds of most rivers, and regulates forestry activity.

FWS: see *USFWS*.

GSRO: Governor's Salmon Recovery Office. Coordinates salmon and orca recovery for the state and develops the state's strategy to guide those efforts and track progress. Produces the annual State of Salmon in Watersheds report. Administered by the RCO, but works under the authority of the governor.

KCT: Kittitas Conservation Trust. A non-profit organization working in upper Kittitas County that is a frequent SRFB project sponsor.

Kittitas County Public Works: An occasional SRFB project sponsor and agency in charge of roads and floodplain management in the County.

MCF(EG): Mid-Columbia Fisheries (Enhancement Group). A frequent SRFB project sponsor. See *RFEG*.

NOAA: National Oceanic & Atmospheric Administration. Their fisheries department helps fund our SRFB grants via PCSRF. Also involved in reviewing projects to ensure their compliance with the ESA.

NPCC: Northwest Power & Conservation Council, created following the 1980 Northwest Power Act to "inform and advance a regional vision for power and fish & wildlife in the Columbia Basin". Provides funding recommendations for BPA's fish and wildlife programs.

RCO: the WA Recreation & Conservation Office. LE's are contracted and SRFB grant programs (plus other grant programs) are run through this office. Administers the GSRO.

RC&D: Washington Resource Conservation & Development council, a nonprofit that supports communities' adaptation to changing environmental and economic conditions, including salmon habitat restoration and wildfire planning.

Reclamation (also **BOR**, **USBR**): the Bureau of Reclamation, a water management agency in the Western US. A source of grant funds.

SRFB: the Salmon Recovery Funding Board, which runs the annual grant round for all LE's across the state. Run by RCO. Pronounced "surf-board".

TU: Trout Unlimited. A nonprofit focused on trout conservation that is a frequent SRFB project sponsor.

USFS (also, **FS**): United States Forest Service. The Recovery Board works primarily with the Naches and Cle Elum Ranger Districts of the Okanogan-Wenatchee National Forest.

USFWS (also, **FWS**): United States Fish & Wildlife Service. The USFWS is a federal agency that manages fish and wildlife resources in the public trust, including more than 560 national wildlife refuges and dozens of national fish hatcheries. It also provides funding and project review for fish restoration projects.

WDFW (also, **DFW**): Washington Department of Fish & Wildlife. WDFW is a state agency that preserves and protects WA's fish, wildlife, and ecosystems while providing sustainable recreational and commercial opportunities. Also an occasional SRFB project sponsor.

WWT: Washington Water Trust, a nonprofit focused on protecting instream flows across WA. A frequent SRFB project sponsor.

Yakama Nation Fisheries: A program of the Yakama Nation that conserves culturally important fish populations and their habitats, and protects the rights of YN members to use those natural resources. Partner in the Yakima-Klickitat Fisheries Project. A frequent SRFB project sponsor.

YBFWRB: Yakima Basin Fish & Wildlife Recovery Board. "The Recovery Board" for short.

YBIP: Yakima Basin Integrated Plan, a 30-year collaborative water resource plan (2013-2045). The Lead Entity coordinates with the YBIP habitat subcommittee to fund fish habitat restoration projects in the Yakima Basin. Pronounced, "why-bip." See *YRBWEP*.

YKFP: Yakima-Klickitat Fisheries Project. A joint fisheries management project of the Yakama Nation and WDFW in the Yakima and Klickitat River Basins. A frequent SRFB project sponsor.

YRBWEP: Yakima River Basin Water Enhancement Project, a program of the Bureau of Reclamation that was created by Congress in 1979 and has federal direction and funding to support habitat restoration, water conservation, and other activities that meet water supply and fisheries goals in the Yakima Basin. In 2009, the YRBWEP program joined with the state Department of Ecology to create the Yakima Basin Integrated Plan (also referred to as YRBWEP Phase III). The YBIP program is overseen by a partnership called the YBIP workgroup that is co-chaired by the Department of Ecology and the Bureau of Reclamation. Pronounced, "yurb-wep."

YTAHP: Yakima Tributary Access & Habitat Program, organized in 2002 by RC&D with regional partners including the North Yakima and Kittitas County Conservation Districts, the Yakama Nation and MCF to help restore fish passage and habitat on Yakima River tributaries by providing technical and financial assistance. Primarily funded by BPA and a frequent source of cost-share funds for SRFB proposals. Pronounced, "why-tap."

YN: Yakama Nation. A frequent SRFB project sponsor. Key programs include Yakama Nation Fisheries, Lower Yakima, Yakama Watersheds, and Yakama Wildlife.

Places to Know

See maps with watershed names on Yakipedia here.

Bonneville Dam: the most downstream dam on the Columbia River.

The Dalles Dam: the second most downstream dam on the Columbia River.

Gap-to-Gap: The 8-mile stretch between Selah Gap and Union Gap.

John Day Dam: the third most downstream dam on the Columbia River, and second dam downstream of the Yakima River.

Lower Yakima: The stretch of the Yakima River that is downstream of Union Gap.

McNary Dam: the fourth most downstream dam on the Columbia River, and first dam downstream of the Yakima River.

Naches Basin: the watershed upstream of the mouth of the Naches River.

Naches River: A tributary of the Yakima River running from the Cascade Crest near White and Chinook Passes by the town of Naches to its confluence with the Yakima in the City of Yakima; a significant watershed for steelhead and bull trout. The watershed supports its own distinct population of steelhead (one of four in the basin).

Prosser Dam: a dam on the Yakima River mainstem in Prosser, WA. Commonly called just "Prosser". Serves as an irrigation diversion for farms downriver in the Lower Yakima Valley.

Roza Dam: a dam on the Yakima River mainstem in the Yakima River Canyon. Commonly called just "Roza." Serves as an irrigation diversion for much of the Lower Yakima Valley.

Satus Creek: A tributary of the Yakima River on the Yakama Reservation; supports its own distinct population of steelhead (one of four in the basin).

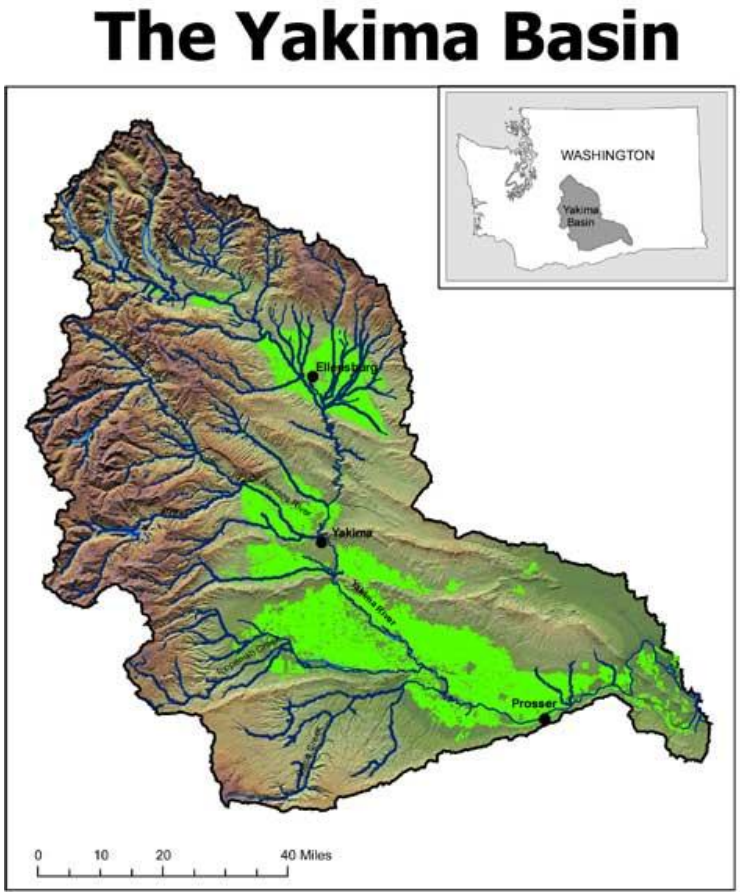
Toppenish Creek: A tributary of the Yakima River on the Yakama Reservation; supports its own distinct population of steelhead (one of four in the basin).

Upper Yakima: Refers to the stretch of the Yakima River that is upstream of the confluence with the Naches River; a significant watershed for salmon, steelhead and bull trout. The watershed supports its own distinct population of steelhead (one of four in the basin).

Upper Yakima Basin: the watershed upstream of the confluence of the Naches River.

Wapatox Dam: A diversion dam on the Naches River just downstream of the confluence of the Naches and Tieton Rivers. Commonly called just “Wapatox”. Serves as an irrigation diversion for farms in the Naches Heights and Upper Yakima Valley.

Yakima Basin: Our watershed, within which all surface and groundwater drains to the Yakima River, and eventually to the Columbia River. The basin extends from Snoqualmie Pass, Chinook Pass, and White Pass all the way to the mouth of the Yakima River where it meets the Columbia River.



Timing of life stages for Yakima Basin salmon and focal species

Charts pulled from the 2004 Yakima Sub-Basin Plan. For in-depth explanations, see pages 211-269.

Steelhead *(Oncorhynchus mykiss)*

Adult steelhead typically return from the ocean in late July through early September, but then hold somewhere between Bonneville Dam and their tributary spawning areas until they finish their migrations and spawn in February through June. Juveniles emerge in the late spring/summer and rear in freshwater for 1-4 years (sometimes more) before migrating out to the ocean as smolts in the spring.

Steelhead do not die after spawning, and may migrate back to the ocean as kelts and return to spawn again in future years.

Steelhead are classified as summer or winter steelhead depending on when the adults renter freshwater; all steelhead in the Yakima Basin are summer steelhead.

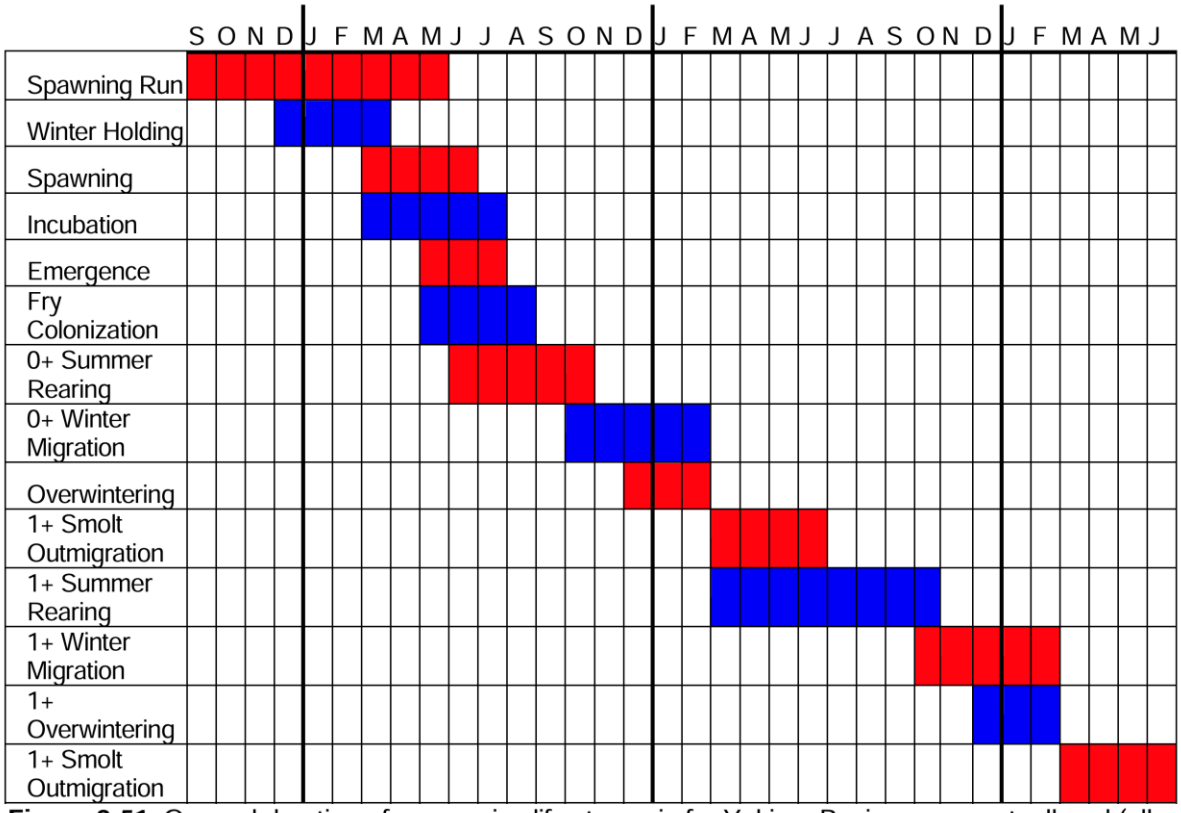


Figure 2-51. General duration of successive life stages in for Yakima Basin summer steelhead (all stocks)

Bull Trout *(Salvelinus confluentus)*

Bull trout in the Yakima Basin are resident, fluvial, or adfluvial. They rear for 2-4 years before becoming fully mature at ages 5-6 for males and 6-8 for females. They may then spawn multiple times in their lifetime, as they do not die after spawning like salmon. Different bull trout populations spawn at different times from late August to as late as mid-December, depending on life history (resident/fluvial/adfluvial), elevation, and size of adult.

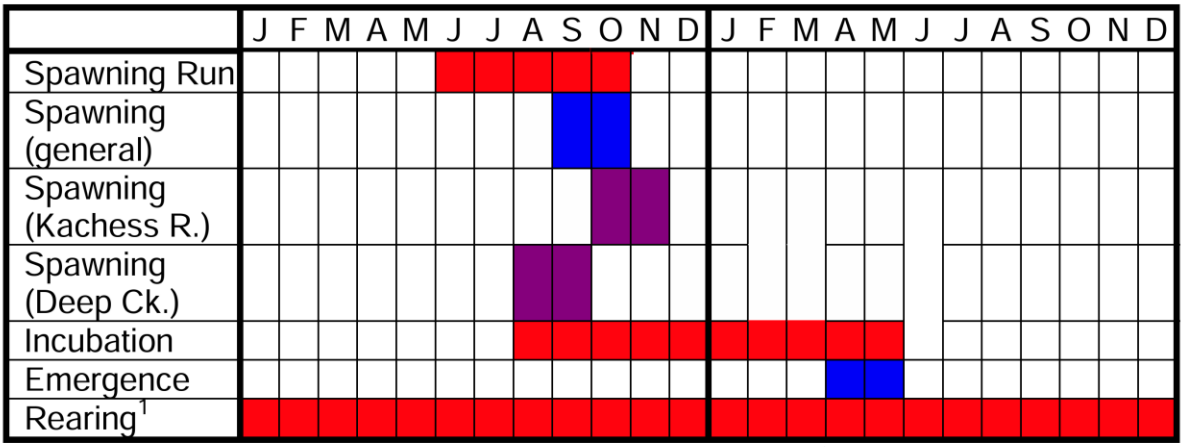


Figure 2-54. Mean timing of successive life stages of bull trout. (Sources: Wydoski and Whitney 2003, Meehan and Bjornn 1991, USFWS 2002, Reiss 2003)

Spring Chinook (*Oncorhynchus tshawytscha*)

Spring Chinook salmon start migrating back from the ocean in spring, giving them their name, and then hold through the summer near their headwater spawning areas, where they spawn in August and September. The juveniles hatch in the late winter/spring, spend approximately one year rearing in freshwater, and then smolt the next spring. They spawn in the Upper Yakima and Naches basins.

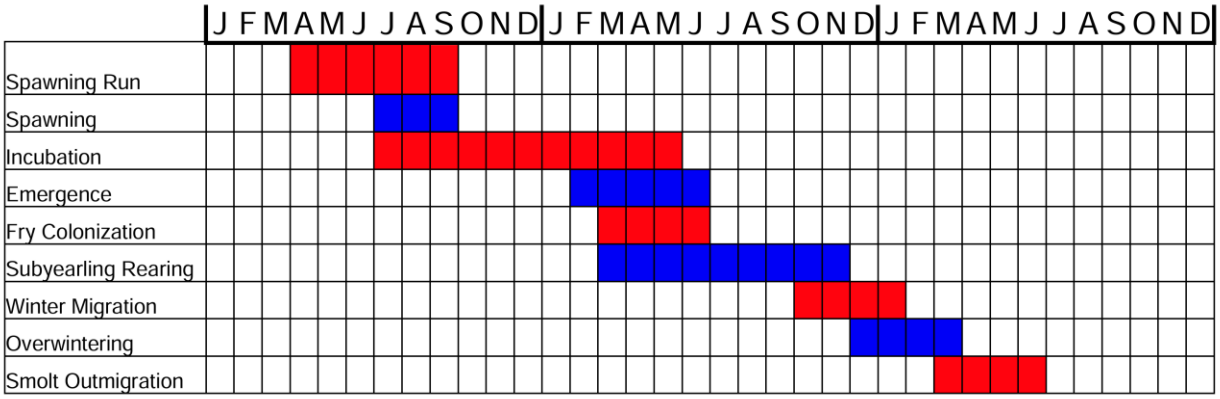


Figure 2-40. Mean timing of successive freshwater life stages of Yakima Basin spring chinook

Fall Chinook (*Oncorhynchus tshawytscha*)

Fall Chinook salmon migrate back from the ocean and spawn in the fall, giving them their name. They are the only salmon species that spawns primarily in the Lower Yakima River. Their juveniles emerge in late winter/spring and migrate out to the ocean in their first year prior to inhospitable late summer habitat conditions.

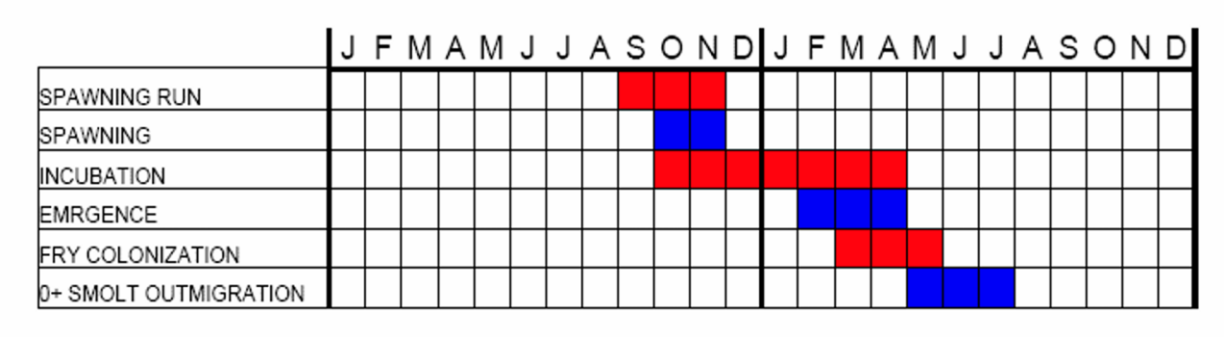


Figure 2-44. Mean timing of successive life stages of Yakima basin fall chinook

Sockeye *(Oncorhyncus nerka)*

The species *Oncorhyncus nerka* has an anadromous form commonly called sockeye salmon and a resident form called kokanee salmon.

Yakima Basin sockeye smolt in April-June, return from the ocean in June-September, and spawn in the fall. Kokanee also spawn in the fall.

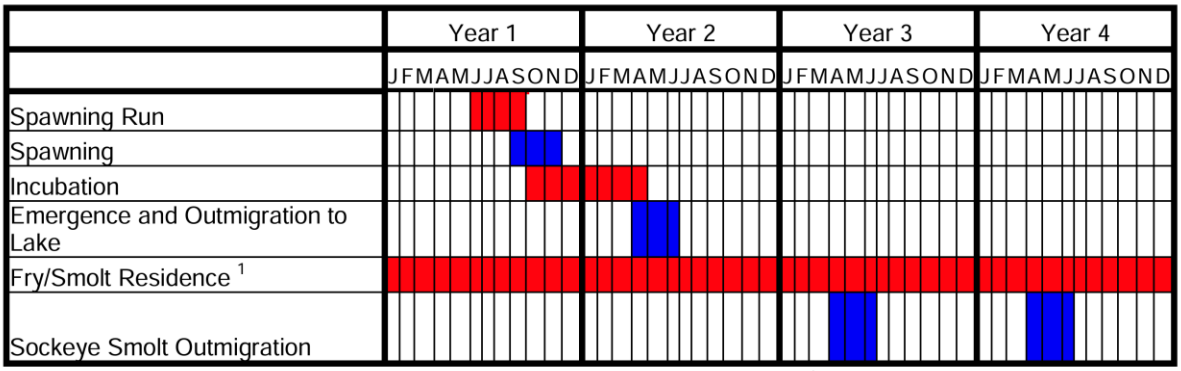


Figure 2-56. Mean timing of successive life stages of sockeye. (Sources: Gustafson et al. 1997, Meehan and Bjornn 1991, Wydoski and Whitney 2003)

[1] Whether remaining in freshwater for their entire life (kokanee) or migrating to sea (sockeye), juveniles progress from fry to outmigrating capability over a period of years. Kokanee reach mature spawning capability between 3 and 5 years, post emergence. Sockeye remain in fresh water for 1-2 years and then outmigrate to saltwater for an additional 2 to 4 years, before returning to spawn.

Lamprey *(Entosphenus tridentatus)*

The Pacific lamprey is a prehistoric jawless fish with a cartilaginous skeleton that is also anadromous. These fish are a culturally significant food source for the Yakama Nation.

Lamprey spawn from April to August. Eggs hatch after only 2-3 weeks. Juvenile lamprey ("ammocoetes") rear for 4-7 years buried in the fine sediments, and then migrate to the ocean in April-June. They migrate back from the ocean in May-October, then overwinter before spawning. Like salmon, they die after spawning.

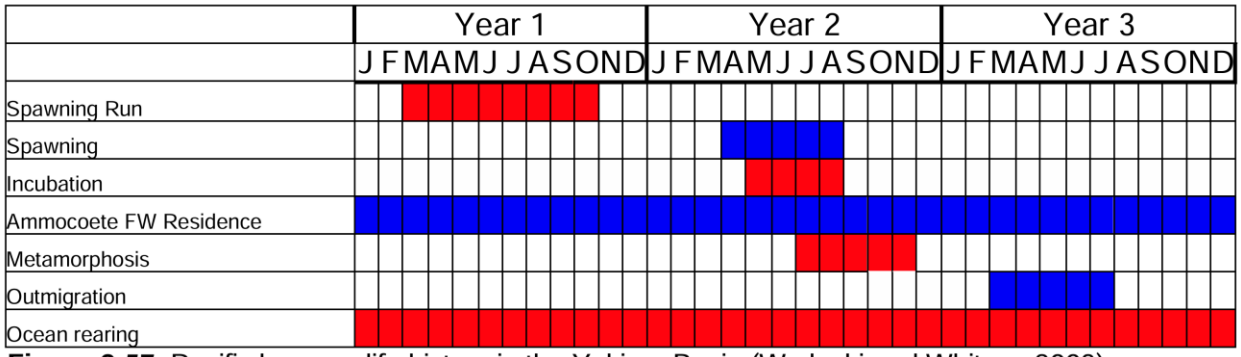


Figure 2-57. Pacific lamprey life history in the Yakima Basin (Wydoski and Whitney 2003)