



Meeting Handouts

August 21, 2018

1. 2019-21 Project List
2. Orca Task Force article
3. Status of Work Plan tasks
4. FBRB Work Plan



2019 - 2021 PROJECT LIST

Rank	Stream Name	County	Project Sponsor	Scope*	Total Requested Amount
1	Johnson Cr	Clallam	Clallam County	Planning	\$199,060
2	MF Newaukum R	Lewis	Lewis County	Planning	\$97,730
3	NF Ostrander Cr	Cowlitz	Cowlitz Indian Tribe	Restoration	\$530,893
4	Johnson Cr (2 barriers)	Okanogan	Trout Unlimited	Restoration	\$1,294,908
5	Coleman Cr	Kittitas	Kittitas Co CD	Restoration	\$1,306,080
6	Cottonwood Cr	Asotin	Asotin Co CD	Restoration	\$445,300
7	Dayton Cr	Mason	Mason County	Restoration	\$420,304
8	Catherine Cr	Snohomish	Wild Fish Conservancy	Planning	\$89,611
9	Chumstick Cr (2 barriers)	Chelan	Chelan County	Restoration	\$488,286
10	Little Pilchuck Cr	Snohomish	Tulalip Tribe	Planning	\$197,633
11	Uncle Johns Cr	Mason	Mason County	Planning	\$339,788
12	Mill Cr	Walla Walla	Tri-State Steelheaders	Restoration	\$1,667,912
13	Cooke Cr (2 barriers)	Kittitas	Kittitas Co CD	Restoration	\$688,543
14	Johnson Cr	Okanogan	Trout Unlimited	Restoration	\$489,673
15	NF Ostrander Cr	Cowlitz	Cowlitz County	Planning	\$322,150
16	Trib to MF Newaukum R	Lewis	Lewis County	Planning	\$68,200
17	Railroad Cr	Clallam	North Olympic Salmon Coalition	Restoration	\$103,779
18	Thorndyke Cr	Jefferson	Jefferson County	Planning	\$198,313
19	Lower Hoko Wetland Complex	Clallam	Clallam County	Planning	\$199,960
20	Delameter Cr	Cowlitz	Cowlitz County	Planning	\$242,250
21	Johnson Cr	Okanogan	Trout Unlimited	Restoration	\$480,670
22	Caribou Cr (2 barriers)	Kittitas	Kittitas Co CD	Restoration	\$355,334
23	Mill Cr (2 barriers)	Walla Walla	Snake R Salmon Rec Board	Planning	\$117,729
24	Uncle Johns Cr	Mason	Mason County	Restoration	\$420,304
25	Trib to Little Pilchuck Cr	Snohomish	Snohomish Co CD	Restoration	\$224,459
26	Mill Cr	Chelan	Chelan County Nat Res	Restoration	\$494,599
27	Parke Cr (2 barriers)	Kittitas	Kittitas Co CD	Restoration	\$302,953
28	Talbot Cr	Clallam	Clallam County	Planning	\$197,060
29	Mason Cr	Clark	Clark County	Planning	\$155,200
30	Seabeck Cr	Kitsap	Kitsap County	Restoration	\$2,066,837
31	Kenney Cr	Whatcom	Whatcom County	Planning	\$442,500
32	Squalicum Cr	Whatcom	City of Bellingham	Restoration	\$447,268
33	Fisher Cr (2 barriers)	Skagit	Skagit County	Planning	\$332,000
34	Spurgeon Cr (2 barriers)	Thurston	Thurston County	Restoration	\$1,700,000
35	Naylor Cr (2 barriers)	Jefferson	Jefferson County	Planning	\$198,850
36	Geissler Cr (3 barriers)	Grays Harbor	Chehalis Basin Task Force	Restoration	\$590,408
37	Scammon Cr	Lewis	Lewis Co CD	Restoration	\$147,227
38	Scammon Cr	Lewis	Lewis County	Restoration	\$561,560
39	Dickerson Cr	Kitsap	Kitsap Co CD	Restoration	\$494,500
40	Minter Cr	Pierce	Pierce County	Planning	\$90,000
41	George Davis Cr (3 barriers)	King	City of Sammamish	Planning	\$722,350
42	Langlois Cr	King	Snoqualmie Vall Water Impr Dist	Planning	\$65,200
43	Ebright Cr	King	City of Sammamish	Planning	\$352,100
44	Kristoferson Cr	Island	Island Co DNR	Restoration	\$544,718
45	Starbird Cr	Skagit	Skagit County	Planning	\$46,500
46	Scammon Cr (2 barriers)	Lewis	Lewis County	Planning	\$160,100
47	Sexton Cr	Snohomish	Snohomish County	Planning	\$141,780
48	King Cr	Lewis	Lewis Co CD	Restoration	\$200,076
49	King Cr	Lewis	Lewis County	Restoration	\$371,678
50	Willows Cr	King	City of Redmond	Restoration	\$400,000
51	Ravensdale Cr (2 barriers)	King	King County Parks and Rec	Restoration	\$2,513,614
52	Trib to MF Quilceda Cr	Snohomish	City of Marysville	Restoration	\$162,740
53	Secret Cr	Snohomish	Snohomish County	Planning	\$122,230
54	Trib to Grader Cr	Clallam	Pacific Coast Salmon Coalition	Restoration	\$68,931
55	Trib to Starbird Cr	Skagit	Skagit County	Planning	\$64,000
56	Williams Cr	Snohomish	Snohomish County	Planning	\$63,750
57	Lyon Cr	King	City of Lake Forest Park	Planning	\$200,000
58	Secret Cr	Snohomish	Snohomish County	Planning	\$144,755
59	Secret Cr	Snohomish	Snohomish County	Restoration	\$694,025
60	Trib to Silver Lk	Snohomish	City of Everett	Planning	\$188,000
61	Ennis Cr (2 barriers)	Clallam	City of Port Angeles	Planning	\$200,000
62	Panther Cr	King	City of Renton	Planning	\$424,150
63	Erick Cr	Cowlitz	Cowlitz County	Restoration	\$1,099,050
64	Trib to Little Pilchuck Cr	Snohomish	Snohomish County	Planning	\$200,000
65	Trib to Little Pilchuck Cr	Snohomish	Snohomish County	Planning	\$200,000
66	Trib to Little Pilchuck Cr	Snohomish	Sound Salmon Solutions	Restoration	\$190,000
					\$28,749,578

*SCOPE: Planning projects are funded for design-only; Restoration projects are funded for construction.

University of Washington Puget Sound Institute.

Task force narrows list of ideas to save killer whales from extinction

August 10, 2018

By Christopher Dunagan

The term “no silver bullet” has been heard again and again as dozens of experts from throughout the state examine ideas that might help avoid extinction for Puget Sound’s beloved orcas.

The Southern Resident Killer Whale Task Force, created by the governor, is considering short-term actions — such as increasing hatchery production of Chinook salmon to help feed the whales. But it is becoming uncomfortably clear that there are no easy answers, no “silver bullet,” as the task force heads toward the finish line for drafting an emergency recovery plan.

The 45-member task force, which represents diverse groups from throughout the state, was created in March out of the realization that there might not be much time left to act before the orcas enter a death spiral toward extinction. Gov. Jay Inslee called on the task force to develop a draft plan by the end of October to help the orcas, whose population has declined from 98 animals in 1995 to 75 today. Most worrisome is the fact that no new babies have been born and survived since the fall of 2015 — and reproductive females have been dying off one by one.

Dramatizing the plight of the Southern Residents, a 20-year-old female orca named Talequah (J35) gave birth to a calf on July 24. The infant lived only about 30 minutes. Talequah, apparently filled with grief after a 17-month pregnancy, placed the dead infant on her head and began carrying it with her. For the past 17 days, each time the carcass slipped beneath the waves, Talequah dived to retrieve it. Her burden has slowed her movements, but she has stayed with her pod, traveling hundreds of miles from Washington into Canada.

“This is the whales telling the story that I could never tell,” said Ken Balcomb, director of the Center for Whale Research, speaking as a task force member during the group’s meeting on Tuesday. Balcomb has been studying these whales for 42 years, and he knows the individual tendencies of each animal, young and old.

Balcomb said anyone could look at the family charts maintained by his research team. They show ongoing losses of young animals, premature deaths of older animals and miscarriages never recorded, all preventing the population from recovering.

Mindy Roberts, director of the Washington Environmental Council and another task force member, followed Balcomb by echoing his sentiments. “The whales have spoken louder than anyone,” she said. “This is something that resonates, not just with people in this room but nationally and internationally as well. Frankly, the solutions need all of us to pull together for a suite of actions. There is no silver bullet that we can count on anymore.”

Some task force members seemed on the verge of tears as they wrestled with the reality of the problem. Another expression heard in the room seems to capture the task force's determination: "Go big or go home."

How much time?

The risk of extinction has been modeled in several "viability analyses" over the past few years. Based on recent trends, the population is likely to decline further until it reaches a level of "quasi-extinction," in which there are not enough breeding animals to sustain the population.

"Because the population is so small, slight changes in births and the sex of calves can have a big influence on modeled future population growth," according to a five-year status review issued at the end of 2016 by the National Oceanic and Atmospheric Administration.

Of the nine Southern Residents born in 2014 and 2015, only two are known to be female. One of the nine died soon after birth before observers could determine its sex. Three of the young males have also died.

Scarlett (J50), one of the two females, has been shown to be emaciated and on the verge of death. Federal biologists have begun an intervention by injecting her with antibiotics, and they could soon be feeding live Chinook salmon to the nearly 4-year-old calf.

It is unknown whether the high ratio of male births in recent years is the result of environmental conditions affecting the mothers — such as low food supply or toxic chemicals — or if it is just a coincidence. But a ratio far outside of 50-50 increases the extinction risk, according to the 2016 report.

"If one assumes that recent trends continue, then things look very poor," said Mike Ford of NOAA Fisheries during an interview. "If one assumes a turnaround in conditions, then things can change totally. With declining trends, there is a strong sense of urgency regarding the status of the population."

Shifting the outlook

The greatest threats to Southern Residents are a lack of food, toxic chemicals in their bodies and noise and disruption from vessels in areas where the orcas feed and reproduce, according to a variety of experts. The potential for an oil spill is another threat with potentially sudden and lethal consequences.

The need for food rises to the top of the list, according to Balcomb and others, because malnutrition puts the whales at risk of starvation and also disease. Research suggests that when the food supply is good, more babies are born, whereas less food means fewer babies.

Southern Residents prefer fat-rich Chinook salmon to all other fish, a trait that probably served them well 200 years ago when Chinook were thriving. But many wild Chinook populations have

gone extinct and others are barely holding on. Toxic chemicals in Puget Sound get picked up by the salmon and passed on to the orcas.

Researchers say an insufficient diet causes the whales to burn their fat reserves and release toxic chemicals into their bloodstreams. The outcome may be disruptions in their neurological, immune and reproductive systems.

According to Balcomb, the best evidence that insufficient food is the biggest problem for the Southern Residents comes from an examination of transient killer whales, a separate subspecies of orca that eats seals, sea lions and other marine mammals. Transients, which are more contaminated than Southern Residents, appear to be getting plenty of food, and their population is thriving, he said.

How to get more Chinook

Southern Resident killer whales are listed as endangered under the Endangered Species Act. In search of Chinook, they travel in groups north from Puget Sound into British Columbia, Canada, and along the West Coast as far south as Monterey Bay, Calif. In the U.S. alone, nine species of Chinook — including those in Puget Sound — are listed as threatened or endangered.

How to get more Chinook to the whales is a primary goal of the governor's task force and a key subcommittee, the Prey Availability Work Group, which has been looking at both short-term and long-term efforts.

Discussions in the work group are organized around the conventional "four H's" of salmon recovery: Hatcheries, harvest, habitat and hydro. The group has since added two new letters: "P" for predators, such as seals and sea lions that eat the salmon, and "F" for forage fish, such as herring that feed the salmon.

Elbowing its way into the discussion is the controversial issue of removing four dams on the lower Snake River in Southeast Washington. Many environmental groups have banded together to increase the political pressure for dam removal, which they say is the most practical way to increase wild salmon populations in the upper Snake River watershed, including pristine wilderness in Idaho.

During Tuesday's task force meeting in Wenatchee, members of the public were given a chance to make brief comments. More than two-thirds of 32 speakers called for removal of the dams.

Ken Balcomb said he has considered every suggestion to get more Chinook for the killer whales, and he believes removing the dams would produce more fish quicker than any other idea, because it has already been studied as a viable solution by the Army Corps of Engineers.

Opponents of dam removal, including some members of the task force, say the dams are needed for irrigation, to get crops to market, to provide electricity and to reduce flooding.

Members of the task force generally agreed to put the dam removal issues on the table by convening experts in an online forum to explain the competing interests. The forum has not yet been scheduled.

Hatchery production

Both short-term and long-term ideas are being considered to increase hatchery production of Chinook with the least impact on wild runs, beginning with an \$837,000 appropriation from the Legislature for this year alone.

The goal is to increase Chinook stocks whose migration overlaps with that of the killer whales, both in Puget Sound, along the coast and at the mouth of the Columbia River. A “priority tool” developed by NOAA and the Washington Department of Fish and Wildlife calls out salmon runs in North and South Puget Sound and the Lower Columbia River as especially important, mainly because the salmon runs cross through areas frequented by the whales.

Hatcheries under consideration for the short term must have available capacity, according to Eric Kinne, manager of WDFW’s hatchery division. The extra production must be approved by state, tribal and federal authorities — including those charged with protecting wild Chinook under the Endangered Species Act.

After the short-term plan is complete in the coming days, the parties will go to work on a longer-term plan, including a proposal for the upcoming two-year state budget. Concerns include long-term genetic effects of breeding that may occur between wild and hatchery fish as well as the potential of increasing competition for food and habitat.

The task force has discussed ways to improve hatchery management to help the orcas, such as supporting runs of hatchery Chinook timed to the needs of orcas, provided that risks to wild stocks are acceptable.

As recommended, hatchery fish would be marked, with an ongoing goal to catch as many hatchery fish as possible after the orcas have a chance to eat them but before the fish can spawn. Methods include targeting fishing on hatchery stocks near their destination or using fish traps in the rivers, or both.

Harvest management

The task force is looking for ways to further reduce the harvest of Chinook in ways that can help the orcas, given complex procedures used to allocate salmon harvest to various groups in compliance with the Endangered Species Act. Some studies have shown that cutbacks in fishing will not provide an equivalent number of fish to the orcas, because the whales’ movements are not predictable and other predators are likely to take some of the foregone harvest.

Some members of the task force have discussed targeted temporary closures in areas where orcas are foraging. Another idea is to require release of all Chinook over a certain size to give the

whales a chance to catch larger fish, although concerns have been raised that many fish caught and released will die anyway.

Task force members generally agree that more effort should be made to reduce the incidental harvest, or “bycatch,” of Chinook in fisheries targeted on other species.

Phil Anderson, Washington state commissioner on the Pacific Salmon Commission, reported this week that the commission recently completed negotiations to update the Pacific Salmon Treaty between the U.S. and Canada. Subject to consultations and approvals by governments on both sides of the border, the new treaty provisions will reduce fishing in northern areas to better protect Chinook returning to Puget Sound and the Columbia River. The new treaty provisions also increase funding for Chinook hatcheries to increase prey for the whales, he said.

Salmon habitat

Additional funding could accelerate the restoration of Chinook salmon habitat and ultimately boost salmon populations, as spelled out through statewide planning efforts. Funding priorities currently are guided by seven regional councils, ranging from the Upper Columbia to the Washington Coast as well as Puget Sound and Hood Canal. Under discussion is how to select salmon-restoration projects that would better serve the orca population.

In the Puget Sound region, 15 “lead entities” provide technical and community forums to reflect local values and come up with the most important projects funded each year. These 15 groups along with lead entities in other regions generally support the existing priorities for restoring Chinook populations through habitat-restoration projects, said Alicia Olivas, lead entity program coordinator.

Other ideas to protect and restore Chinook habitat include increasing enforcement of existing habitat-protection regulations, developing new land-use rules to avoid habitat degradation, and even purchasing important lands and waterways that could be restored to help Chinook.

Hydro dams – the fourth “H”

Besides discussions about taking out the lower Snake River dams, some experts believe that many dams could be better managed to increase salmon survival by adjusting spill rates if the focus were on improving salmon runs and not power production. The task force generally agreed that more information is needed.

Dams that inhibit Chinook migration could be proposed for removal or the addition of new facilities to improve fish passage. In some places, it may be possible to open up and restore salmon runs above the dams where habitat has been blocked. At other dams, consideration should be given to installing facilities to reduce Chinook predation by birds, sea lions and fish.

Competition for Chinook

Concerns about predation of Chinook, especially by seals and sea lions, has resulted in mixed reactions from task force members to the idea of killing marine mammals that could be consuming fish important to the whales. Getting approval for such lethal removal would be complicated, given constraints of the Marine Mammal Protection Act.

Studies are underway to improve the estimates of how many Chinook — both juveniles and adults — are consumed by predators, according to Michael Schmidt of Long Live the Kings, who coordinates the Salish Sea Marine Survival Project and is a member of the Prey Availability Work Group. Harbor seals, for example, eat many kinds of fish and may rely more on juvenile Chinook when they can't find herring, hake, cod, rockfish, sardines and other fish of their choosing.

Also needed are better estimates of the number of marine mammals consumed by transient killer whales, which are helping to control the seal and sea lion populations — thus helping the Southern Residents — to an unknown degree.

Short of killing seals and sea lions, Chinook consumption in certain areas might be reduced by eliminating haul-out areas where the animals rest between feedings. Actions could focus on “choke points” where the greatest predation of Chinook is observed.

Forage fish

The task force is also looking at the status of Puget Sound's forage fish — small, nutrient-rich fish such as herring that provide an important food resource for Chinook. Although herring are known to compete at times with young Chinook, increasing their numbers is expected to benefit adult Chinook which also prey on other forage fish such as sardines, anchovies, sand lance and surf smelt.

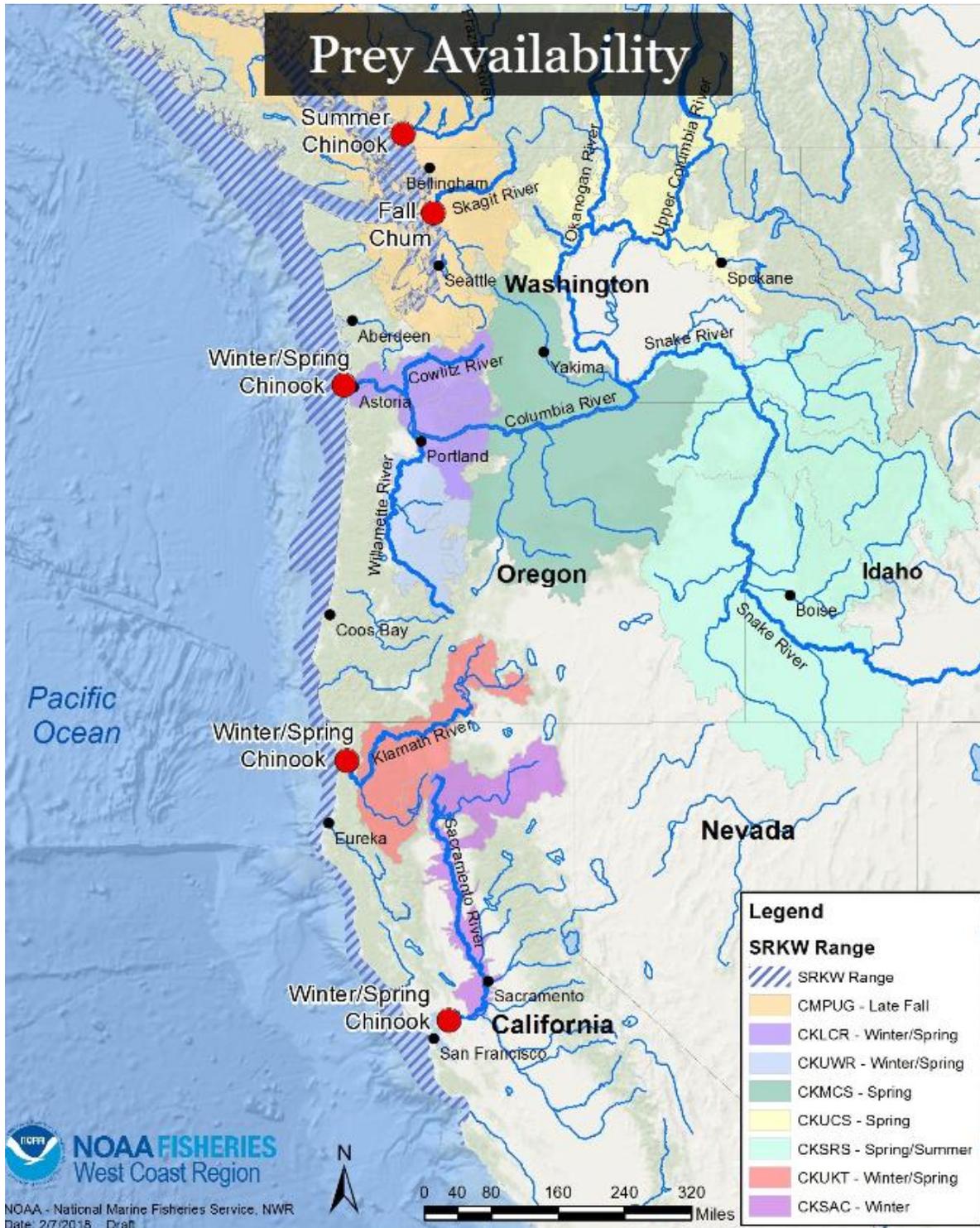
Restoring beach habitat with the removal of bulkheads and increased sandy substrate could increase forage fish populations, experts say. Generally, the task force and working group support an initiative to improve beaches by making changes to railroad tracks that have degraded much of the Puget Sound shoreline.

Also under review is the potential of reducing fishing that targets one or more species of forage fish, with the goal of protecting fish that feed the Chinook that feed the Southern Resident killer whales.

Whether it comes down to small forage fish or any number of other issues — from hatcheries to habitat recovery — task force members say improving the food supply for Puget Sound's endangered orcas continues to remain as complex as it is urgent.

The Southern Resident Killer Whale Task Force is scheduled to meet again on August 28th in Anacortes, Washington.

Prey Availability



WORKPLAN TASKS

June 2018

ACTION	TIMELINE	RESPONSIBILITY	STATUS/COMMENT
Chair and support FBRB	Ongoing	WDFW	<i>Ongoing</i>
Review bylaws annually	Annually	FBRB	<i>Done February 2018</i>
Periodically consider FBRB membership	Summer 2017	FBRB	<i>Have done on ad hoc basis, not all at once</i>
Review and update workplan	Annually	FBRB	<i>Workplan updated April 2017</i>
Review and update communication plan; continue implementing	Spring 2017 and ongoing	WDFW w/FBRB assistance	<i>Consolidated communication tasks with workplan tasks in May 2018</i>
Participate in annual Salmon Recovery workshops	Ongoing	Chair/other members	<i>Next conference in spring 2019</i>
Foster ongoing partnership with WFPA	Ongoing	WDFW	<i>Neil recently contacted Karen T re: interest in FBRB membership; she was going to discuss internally (no response yet)</i>
Review and refine approved prioritization methodology; review Puget Sound/Coast approach to prioritization	Spring 2017	FBRB	?
Develop plan to coordinate information sharing and coordinate activities	?	FBRB	<i>Overdue</i>
Describe ongoing technical assistance and identify gaps	?	WDFW w/FBRB assistance	<i>Overdue</i>
Annual report to BRB on WSDOT and WDFW coordination efforts	October 2017	WDFW, WSDOT	<i>Overdue</i>
Database presentation to FBRB	April 2017	WDFW	<i>Overdue</i>
Training program presentation to FBRB	Fall 2017	WDFW	<i>Overdue</i>
Seek efficiencies/streamlining for federal permits	Ongoing	WDFW	<i>WDFW has discussed this; long term item</i>
Seek authorization for using local/state mitigation funding for barrier removal projects	Ongoing	FBRB	?
PROPOSED NEW TASKS			
Develop FBRB website	June 2017		
Develop guidance for future grant rounds: which portions of project are fundable	?	FBRB	
Impacts of stormwater on fish continue to track this issue	Ongoing	FBRB	
Issue of partial and full barriers downstream – revisit the policy	Summer 2017	FBRB	

Fish Barrier Removal Board

*Work Plan*¹

In 2014, the Washington State Legislature created the Fish Passage Barrier Removal Board to develop a coordinated barrier removal strategy and provide the framework for a fish barrier grant program. The board is established by Chapter 77.95 RCW. This workplan is intended to serve as a guide for the Board's work over the next several years. It will be reviewed annually. The due dates for each action are intended to be general, since the Board's workload will be variable, and actual dates may be later.

Mission

The duty of the board is to identify and expedite the removal of human-made or caused impediments to anadromous fish passage in the most efficient manner practical through the development of a coordinated approach and schedule that identifies and prioritizes the projects necessary to eliminate fish passage barriers caused by state and local roads and highways and barriers owned by private parties.²

Values

The board values all aspects of salmon recovery and the existing structure developed under the 1999 Salmon Recovery Act, and provides a statewide fish barrier removal strategy and program funding recommendations to the legislature. The board will ensure that the processes to identify, prioritize and fund projects are based on maximizing the opening of high quality habitat through a coordinated investment strategy that prioritizes projects necessary to eliminate fish barriers owned by state and local government, tribes, private parties, and others. This investment strategy values (1) opening high quality salmon habitat that can contribute to salmonid recovery, (2) coordinating with others doing barrier removals to achieve the greatest cost savings, and (3) correcting barriers located furthest downstream.

To achieve the mission, goals, and values the Board will:

- Improve coordination of existing fish passage programs to increase the benefits of barrier removal among multiple jurisdictions.
- Expedite the removal of barriers in the most efficient manner practical through economy of scale and streamline permitting processes.
- Facilitate collaboration, coordination, and communication among state, federal and local agencies, tribes, regional salmon recovery organizations, salmon recovery lead entities, regional fisheries enhancement groups, conservation districts, restoration contractors, landowners and other interested stakeholders on fish passage improvement programs and projects.
- Expedite implementation of on-the-ground projects by identifying and addressing institutional hurdles.
- Educate and increase the public and agency awareness of fish passage issues to develop support for solving problems and preventing new ones.
- Seek funding sources for fish passage projects within Washington and administer a strategic funding program to further the Board's mission once funding is secured.

¹Workplan update approved April 2017; list of communications tasks approved and added May 2018

² RCW 77.95.160 (2) (a)

Goals & Actions

The board provides support to local fish passage programs based on its priorities, available resources, and emergent opportunities.

Goal 1: The Washington Department of Fish & Wildlife shall chair and administer a Fish Passage Barrier Removal Board (FBRB).

- A. *Action:* The WDFW will chair and provide staff support for the Fish Barrier Removal Board.³ The membership of the Board includes, as specified in the statute, other state agencies, the governor's salmon recovery office, tribes, and representatives of local governments.

Responsible Party/Timeline: WDFW/Ongoing

- B. *Action:* Internal communication: Create clear communication to describe board role and duties. Develop or update a communication strategy, work plan, fact sheet, and webpage.

Responsible Party/Timeline: FBRB/Ongoing

- C. *Action:* Internal communication: The Board will review its bylaws on an annual basis.

Responsible Party/Timeline: FBRB/annually; next review summer 2017

- D. *Action:* The Board should periodically review the current membership of the FBRB and consider adding members as appropriate. The Board will consider how to determine when new members are needed.

Responsible Party/Timeline: Chair and FBRB/next review summer 2017

- E. *Action:* The Board will develop and implement an annual work plan.

Responsible Party/Timeline: FBRB/Initially adopted July 2015; currently under review

Goal 2: The Board will strive to operate transparently and reach out to interested parties in developing and implementing its programs.

- A. *Action:* In order to gain support for the Board's activities and build momentum, the Board will identify communication strategy elements and timeframes for implementing them. Elements may include developing key messages; identifying target audiences for each type of messaging; coordinating with other fish barrier removal programs; deciding how to share information developed by this Board; connecting with other entities including the federal government, tribes, the inter-tribal fisheries commissions, and railroads; and deciding on an education and information strategy. Several key implementers should be specifically addressed, including state agencies, tribes, and local governments. Low cost early activities should also be considered and included in the strategy. The strategy should be reviewed annually by the Board.

Responsible Party/Timeline: WDFW, with assistance from an outside communications expert and other FBRB members/An initial communication strategy was adopted in December, 2015. Revisions are currently under review (spring, 2017).

³ RCW 77.95.160 (1): "The board must be composed of a representative from the department, the department of transportation, cities, counties, the governor's salmon recovery office, tribal governments, and the department of natural resources. The representative of the department must serve as chair of the board and may expand the membership of the board to representatives of other governments, stakeholders, and interested entities."

- B. *Action:* A biennial conference on salmon recovery is held during odd-numbered years. A number of key players involved in fish passage barrier removal projects attend this conference. The work of the Board can be shared with others interested in the same issues, and opportunities to coordinate and share information can be pursued. The FBRB participated in the May 2015 conference and is scheduled to participate in the April 2017 conference. It will continue to participate in future conferences.

Responsible Party/Timeline: Chair, other members of the FBRB/Odd-numbered years beginning in 2015

- C. *Action:* WDFW will prepare reports to the legislature as needed. *Responsible Party/Timeline:* WDFW and other FBRB members as requested/As needed.

- D. *Action:* Foster ongoing partnership with the Washington Forest Protection Association for outreach and to clarify efforts to coordinate with the barrier removal projects of their members.

Responsible Party/Timeline: WDFW/Ongoing

- E. *Action:* Develop a website specifically for the FBRB (stand-alone and not connected to an agency)

Responsible Party/Timeline: WDFW/June 2017

Goal 3: The FBRB will continue to refine its coordinated approach to identifying and expediting the removal of fish passage barriers.

As noted in the enabling legislation, “The duty of the board is to identify and expedite the removal of human-made or caused impediments to anadromous fish passage in the most efficient manner practical through the development of a coordinated approach and schedule that identifies and prioritizes the projects necessary to eliminate fish passage barriers caused by state and local roads and highways and barriers owned by private parties.”⁴ The initial approach has been developed, and it should continue to be refined to reflect opportunities that exist within existing funding and programs as well as opportunities that will be provided by the future grant program.

- A. *Action:* Refine the statewide coordinated approach. Sub-actions needed to accomplish this action are listed in the table below:

⁴ RCW 77.95.160 (2) (a) “The duty of the board is to identify and expedite the removal of human-made or caused impediments to anadromous fish passage in the most efficient manner practical through the development of a coordinated approach and schedule that identifies and prioritizes the projects necessary to eliminate fish passage barriers caused by state and local roads and highways and barriers owned by private parties.”

SUB-ACTION	BY WHOM	TIMELINE
1. Continue to refine a prioritization methodology aimed at prioritizing which focus areas should be addressed first.	FBRB	Ongoing
2. As directed by RCW 77.95.160 (2)(C), develop a plan to coordinate information sharing and coordination between the FBRB and other entities involved in fish passage barrier removal projects. The plan should address how the FBRB will coordinate with other state and federal programs on project funding lists; how communication and outreach will work; and how the information already known can be shared.		
3. The FBRB will discuss technical assistance through the program and how it has been provided. This is referenced in RCW 77.95.170 (5) (b). Determine the scope of technical assistance that WDFW needs to provide, including barrier inventory training and other training/technical assistance needed. Develop the “technical assistance toolbox” that WDFW will offer.	WDFW with FBRB assistance	By Summer 2017
4. The authorizing legislation explains that there is a partnership between WSDOT and WDFW to identify and complete fish passage barrier removals. WSDOT will annually review their work and look for opportunities to coordinate with the FBRB. It is not intended that the FBRB has any oversight, but rather this information will inform the work of the FBRB.	WSDOT	October 2017
5. Develop and approve a grant manual for use by grant administrators.	FBRB and RCO	Spring 2017
6. Track relevant issues including the impacts of stormwater on fish, climate change, and the issue of partial and full barriers downstream from barriers proposed for correction.	FBRB	As appropriate

Goal 4: The FBRB will strive to seek out available data and information and develop ways to make data and information readily available.

A. *Action:* The FBRB will receive a database management update from WDFW. This will include a general briefing from WDFW and a demonstration of the database, as well as a discussion of information from other entities that is included in the database.

Responsible Party/Timeline WDFW/Spring/Summer 2017

B. *Action:* After the update discussed in Action A above, the FBRB will consider establishing a subcommittee to further discuss and explore this topic. Considerations will include data and information from WDFW and from other entities including other state agencies, tribes, and the private sector if available. This will also address appropriate timing for obtaining RMAP information from WDNR.

Responsible Party/Timeline: FBRB/establish subcommittee and begin work following the briefing.

C. *Action:* Document the training that WDFW has provided as directed by RCW 77.95.170 (5)(b). The purpose of the training is to increase the awareness and consistency of fish passage barrier data collection, use of WDFW’s database, and modern techniques of fish passage barrier correction methods.

Responsible Party/Timeline: WDFW/Ongoing

Goal 5: The FBRB will develop a Grant Program for distributing available funding in an efficient and effective manner.

- A. *Action:* Continue to refine the grant program that will allocate available funding, and address elements including match requirements, whether and how funding might be allocated between regions, provisions for opportunities that emerge (“just-in-time” or “shovel-ready” projects) and other factors. *Responsible Party/Timeline:* FBRB/Ongoing

Goal 6: The FBRB will participate in efforts to streamline Project Permitting and seek ways to efficiently use mitigation funding for barrier removal projects.

- A. *Action:* Seek permitting efficiencies and streamlining regarding federal permits. Coordinating with the Governor’s office, initiates contact with USACE, NOAA, and USFWS to explore and develop the feasibility of bundling of projects under any available nationwide permits for the purpose of achieving streamlined federal permitting.

Responsible Party/Timeline: WDFW/ Ongoing

- B. *Action:* Seek authority to use local and state mitigation monies for barrier removal projects. There should be the ability to determine that local and state mitigation funding would be better used for barrier removal projects in some instances.

Responsible Party/Timeline: FBRB/Ongoing

TIMELINE FOR ACTIONS

This table presents, in chronological order, the actions included above under Goals 1 – 6. They are summarized below; see discussion under each Goal for details of each action.

ACTION	TIMELINE	RESPONSIBILITY
Chair and Support Fish Passage Barrier Removal Board	Ongoing	WDFW
Review internal bylaws and communication	Ongoing	FBRB
Review bylaws annually	Summer 2017	FBRB
Periodically consider FBRB membership	Summer 2017	Chair and FBRB
Develop workplan and update annually	Adopted July 2015; currently under review	FBRB
Periodically review and update communication plan	Adopted December 2015; currently under review	WDFW w/FBRB assistance
Participate in Salmon Recovery workshops	Biennial in odd-numbered years	Chair/other members
Foster ongoing partnership with WFPA	Ongoing	WDFW
Review and refine the approved prioritization methodology	As needed	FBRB
Describe ongoing technical assistance and identify gaps	Summer 2017	WDFW w/FBRB assistance
Annual report to FBRB on WSDOT and WDFW coordination efforts	October 2017	WDFW, WSDOT
Database presentation to FBRB	Spring/Summer 2017	WDFW
Training program presentation to FBRB	Fall 2017	WDFW
Continue to refine grant program	Ongoing	FBRB
Seek efficiencies/streamlining for federal permits	Ongoing	WDFW
Seek authorization for using local/state mitigation funding for barrier removal projects	Ongoing	FBRB

COMMUNICATION PLAN TASKS

ACTION	TIMELINE	RESPONSIBILITY
Develop compelling story that communicates value and urgency of fish barrier removal	Ongoing	FBRB
Meet with SRFB periodically	As needed	
Reach out to Chehalis Basin program to explore connections		
Work with SRFB regarding connections to Lead Entities on communications		
Consider SRFB collaboration regarding future use of Intrinsic Potential model		
Continue engaging with interested agencies to establish FBRB as a resource for fish barrier removal		
Train key messengers using tools and an outreach strategy to tell story of fish passage		
Develop stand-alone website		
FBRB members update their websites regarding fish barrier removal		
WDFW create archive of news stories		
Build relationships with media		
<ul style="list-style-type: none"> • Work with WDFW public information office to reach out to media contacts 		
<ul style="list-style-type: none"> • Issue press releases when key milestones occur 		
Engage with national organizations and Federal agencies committed to fish passage		
Designate lead Board member to guide implementation of communication plan and outreach strategies		Carl Schroeder, AWC has done this

Communications Tasks

Updated list approved July 2017

The FBRB Communications Plan was previously adopted in December 2015 as a stand-alone document. The FBRB reviewed and updated the Plan in Spring, 2017. A decision was made to leave most of the plan as a stand-alone document, for reference purposes, and only update the action items at this time. The action items below are now incorporated as an element of the FBRB Workplan.

PRIORITY ACTIONS

- 2) DEVELOP A COMPELLING STORY THAT COMMUNICATES THE VALUE AND URGENCY OF FISH PASSAGE BARRIER REMOVAL.
 - FBRB must work to tell a compelling story of the general value of fish passage and the Fish Passage Barrier Removal Board.
 - It will be important to share the story consistently on all channels as outlined in the Priority Actions (6, 7, and 9).
 - FBRB must update the story to include the details of the program. And they must update the story on all channels.
 - It will be important to incorporate visuals, maps, and pictures to make the story more engaging.
 - Ideas for additional videos include explaining why some culvert fixes appear to be large; why is there such a narrow construction window; what is a partial barrier; how many barriers still exist; and why construction can take longer than people expect.
- 3) MEET WITH THE SALMON RECOVERY FUNDING BOARD TO INSPIRE THEM TO ENGAGE AND INVEST IN FISH PASSAGE AND FBRB.
 - The Salmon Recovery Funding Board (SRFB) is an essential partner in the effort to promote fish passage barrier removal. A collaborative approach should be developed. FBRB members should continue to meet with them and regularly appear as part of their meeting agendas.
 - Reach out to the Chehalis Basin program and see if there are logical connections.
 - Work with the SRFB regarding engaging with Lead Entities around communication.
 - Consider collaborating with the SRFB regarding future use of the Intrinsic Potential model (used to develop project priorities in Puget Sound)
- 4) ESTABLISH THE FBRB AS A RESOURCE TO HELP FISH PASSAGE BARRIER OWNERS TO COMPLETE BARRIER REMOVAL PROJECTS INDEPENDENTLY.
 - FBRB must establish itself as a trusted resource for information, guidance, and inspiration.

- Even while the details of the FBRB program are being developed, it will be important to reach out to state agencies, cities, counties and others to share that the resources are being developed.
- 5) TRAIN KEY MESSENGERS AND EQUIP THEM WITH TOOLS AND AN OUTREACH STRATEGY TO TELL THE STORY OF FISH PASSAGE.
- For the initial list of external and internal audiences, please see section IV. Audiences.
- 6) UPDATE THE FBRB WEBSITE, ONLINE PRESENCE, AND MATERIALS.
- A stand-alone website should be funded and designed. This will make it easier for the public and media to find information. We need to consider who we are targeting, include both general and specific information, and consider highlighting a “project of the month”.
 - FBRB board member organizations’ websites and materials will need to be updated to tell the new story of fish passage barrier removal. Also, all member websites should link to the FBRB “main website” that will also be updated with new messaging.
 - FBRB is working with Pyramid Communications to develop messages and materials to compel key decision-makers to support fish passage barrier removal. Please see section V. Messages and section VI. Materials for more details.
 - FBRB support staff should create an archive of stories that help illustrate how a coordinated effort to remove barriers statewide maximizes benefits.
- 7) CONTINUE TO SEEK STATE FUNDING FOR FISH PASSAGE BARRIER REMOVAL IN THE LEGISLATURE
- A request has been submitted to the 2017 legislative session. Future requests may be necessary for upcoming supplemental and budget sessions
 - As part of the legislative funding requests, the board will stress the need for new allocations of salmon recovery funds for fish passage rather than a reallocation of existing funds.
- 8) PROACTIVELY BUILD RELATIONSHIPS WITH THE MEDIA
- FBRB and partners must educate the media about the benefits and purpose of coordinated fish passage barrier removal and equip them with compelling stories. The WDFW media office should be involved in these contacts.
 - Please see section IV. Audiences for more details on the media outlets that FBRB should reach out to. It will be of particular importance for FBRB to reach out to outlets like KING 5 and the Tacoma News Tribune that have reported on fish passage previously and work with them to shift how they frame the story.

- Part of the media strategy should include a means to tell the story of fish passage in advance of construction season, when fish passage projects are more visible. When “dirt is being moved” the media will pay more attention.
- A press release should be issued when key milestones occur, including the approval of a funding package by the legislature. Joint press releases should be considered when appropriate.

9) ENGAGE WITH NATIONAL ORGANIZATIONS AND FEDERAL AGENCIES COMMITTED TO FISH PASSAGE

- Set the stage for possible capacity requests at a national level. Make contact with the Bonneville Power Administration and other federal agencies, as well as tribes in each region.
- Engage national groups in the near-term. Identify ways that they can advise or support FBRB.

10) DESIGNATE A LEAD BOARD MEMBER TO GUIDE IMPLEMENTATION OF THE COMMUNICATIONS PLAN AND OUTREACH STRATEGIES

- Association of Washington Cities board representatives have volunteered to lead the development and implementation of legislative strategy, and it may make sense to have an additional lead from the board or support staff to ensure timely completion and implementation of communications priorities. Other agency staff from FBRB members should be brought in as needed.
- Compile a list of related events that we can participate in.