

Agenda



Fish Barrier Removal Board

January 4 – 10:30 am to 4:00 pm

Association of Washington Cities
1076 Franklin St SE
Olympia, WA 98501

10:30 **Welcome, Introductions, Agenda Review**

10:45 **Public Comments**

11:00 **Old Business**

- Approval of December meeting notes
- Project Funding – Notes from December 22nd, 2017 Meeting with RCO
- [Governor's 2018 Supplemental Capital Budget](#)
- [Review of the 19 Projects on the Legislative Evaluation & Accountability Program \(LEAP\) list](#)

12:00 **Lunch** (provided for board members)

12:30 **New Business**

- [Match Certification Credit](#)
 - Discuss whether to include this again for 2019-21 projects
 - *Action item: vote on Match Certification Credit inclusion*
- Minimum Requirements for Funding Construction Projects
 - Discuss whether to require designs in the application materials for construction projects
 - *Action item: vote on application requirements*
- [Fish Passage Project Solicitation for 19-21 Biennium](#)
 - Review draft RFP
 - *Action item: approve draft RFP with any comments for finalization and release by WDFW*

3:30 **Summary and next steps**

- Next meeting February 13th, 2018, Assoc. of WA Cities
- Other business

4:00 **Adjourn**

1 (1) The appropriation in this section is provided solely for the
2 list of projects identified in LEAP capital document number 2017-5H,
3 developed June 30, 2017.

4 (2) The board may retain a portion of the funds appropriated for
5 this section for its office for the administration of the grants. The
6 portion of the funds retained for administration may not exceed four
7 and twelve one-hundredths percent of the appropriation.

8 Appropriation:

9	State Building Construction Account—State.	\$19,747,000
10	Prior Biennia (Expenditures).	\$0
11	Future Biennia (Projected Costs).	\$40,000,000
12	TOTAL.	\$59,747,000

13 **Sec. 3097.** 2017 3rd sp.s. c 4 s 3120 (uncodified) is amended to
14 read as follows:

15 **FOR THE RECREATION AND CONSERVATION FUNDING BOARD**

16 Recreation and Conservation Office Recreation Grants (92000131)

17 The reappropriations in this section are subject to the following
18 conditions and limitations: (~~The appropriation in this section is~~
19 ~~provided solely to purchase replacement properties for Blanchard~~
20 ~~mountain trust lands core zone.~~)

21 (1) The reappropriations are subject to the provisions of section
22 3026, chapter 35, Laws of 2016 sp. sess.

23 (2) A maximum of \$1,100,000 of unused funds in this
24 reappropriation may be used for the willows road regional trail
25 connect, without requiring matching resources.

26 (3) A maximum of \$500,000 of unused funds in this reappropriation
27 may be used for the Wilburton trestle section of the eastside rail
28 corridor, without requiring matching resources.

29 Reappropriation:

30	Outdoor Recreation Account—State.	\$4,108,000
31	State Building Construction Account—State.	\$26,148,000
32	Subtotal Reappropriation.	\$30,256,000
33	Prior Biennia (Expenditures).	\$4,525,000
34	Future Biennia (Projected Costs).	\$0
35	TOTAL.	\$34,781,000

36 **NEW SECTION. Sec. 3098. FOR THE STATE CONSERVATION COMMISSION**

2017-19 Capital Budget
LEAP Capital Document Number 2017-5H
Developed June 30, 2017
Brian Abbott Fish Passage Barrier Removal Board
Dollars in Thousands

Sub-Project Title	2017-19 New Approps
Chico Creek, Suquamish Tribe	3,785
Johnson Creek, North Olympic Salmon Coalition	3,008
Buford Creek, Nez Perce Tribe or Asotin C.D.	4,721
Middle Fork Newaukum, Lewis County	572
Unnamed Tributary to Arkansas Creek, Cowlitz County	285
Coleman Creek, Kittitas Conservation District	771
Catherine Creek, Sound Salmon Solutions	566
Coffee Creek, Mason County	327
Johnson Creek, Trout Unlimited/CCT	544
Baxter Creek, Cowlitz County	2,181
Turner Creek, Cowlitz County	1,090
Cottonwood Creek, Asotin Conservation District	62
Unnamed Tributary to Johnson Creek, Clallam County	1,022
Middle Fork Newaukum	Alternate
Dayton Creek	Alternate
Coleman Creek	Alternate
Catherine Creek	Alternate
Johnson Creek	Alternate
Thorndyke Creek	Alternate
Statewide Total	18,934

Table of Contents

Ordered by Project Rank

Rank	Stream Name	Site ID	Pages
1	Chico Creek	15.0229 1.00	4, 5
2	Johnson Creek	R261020014604	6
3	Buford Creek	990048	7
4	Middle Fork Newaukum	021(45011)(07070)	8
5	Unnamed Tributary to Arkansas Creek	106c0042	9
6	Coleman Creek	Col03.41	10
7	Catherine Creek	993471	11
8	Coffee Creek	115 MC182	12
9	Johnson Creek	114JC001	13
10	Baxter Creek	106c0048	14
11	Turner Creek	106c0152	15, 16
12	Cottonwood Creek	602004	17
13	Unnamed Tributary to Johnson Creek	80001263	18
Alt 1	Middle Fork Newaukum	021(94001)(15790)	19
Alt 2	Dayton Creek	115 MC209	20
Alt 3	Coleman Creek	Col05.09	21
Alt 4	Catherine Creek	993472	22
Alt 5	Johnson Creek	992055	23
Alt 6	Thorndyke Creek	160508	24, 25

Cost Estimate Disclaimer

Washington Department of Fish and Wildlife (WDFW) engineers conducted feasibility level estimates for the majority of proposed projects. WDFW did not do any surveying or investigate property ownership, utilities, detour routes, etc. Most dimensions, including bank full width, were estimated.

The cost estimates are a starting point for planning purposes. They can be used to compare project complexity as well as the general cost category. A number of factors could lead to higher or lower costs for each project. WDFW worked with the following assumptions:

- Projects will be designed as either a stream simulation culvert or a bridge
- Designs will be completed by an A&E firm and will be consistent with WDFW guidance
- Projects will be constructed via Public Works contracting (subject to sales tax, prevailing wages, etc.)
- Costs include project management, design, permitting, construction, contract administration, construction engineering/inspection
- Contingencies were applied to all projects based on perceived level of risk
- Projects will be completed in the next few years


#1: Chico Cr

Coordinated Project Pathway

Barrier Summary

WATERSHED	Chico Creek
NOMINATING ENTITY	Kitsap County
WRIA	15
COUNTY	Kitsap
STREAMS IN PACKAGE	Chico Creek
TRIBUTARY OF	Dyes Inlet
NUMBER OF BARRIERS IN NOMINATION	1
NUMBER OF CORRECTED/FUNDED BARRIERS (WITHIN THE LAST 5 YEARS)	5
TOTAL LINEAR GAIN	10.82 Miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID / STREAM	15.0229 1.00 / Chico Creek	
ROAD/LAT-LONG	Golf Club Rd/ 47.59298, -122.7091	
OWNERSHIP	Kitsap County	
PASSABILITY/REASON	67% / Water Surface Drop	
POTENTIAL SPECIES	Coho, Steelhead, Chum, Sea Run Cutthroat	
BANK FULL WIDTH / GRADIENT	31 ft / 1.5%	
EXISTING STRUCTURE	12 ft x 8 ft x 115 ft Box Culverts (3)	
PROPOSED STRUCTURE	140 ft span Concrete Bridge	
COST ESTIMATE	\$3,472,000 – includes floodplain restoration	
COST BENEFIT	\$61 per foot / \$320,888 per mile	
GAIN TO NEXT BARRIER	10.82 Miles	
HABITAT QUALITY GAIN	Habitat consists of a healthy riparian buffer and excellent spawning and rearing opportunities.	
PROJECT READINESS	Project has 60% Designs	
ADJACENT RESTORATION (WITHIN LAST 5 YEARS)	4 County Fish Passage projects, estuary restoration, In-Stream restoration, 1 RMAP project, and a funded FFFPP Project upstream.	
COMMENTS	There is a WSDOT barrier culvert downstream – part of the injunction. Culvert is a high priority for local tribes and restoration practitioners.	

Amount of Habitat Opened

SITE #	SITE ID		DISTANCE BETWEEN BARRIERS				COST ESTIMATE
1	15.0229	1.00	57,149	ft.	10.82	mi.	\$3,472,000
		TOTAL	57,149	ft.	10.82	mi.	\$3,472,000

#2: Johnson Cr


Watershed Pathway Barrier Package

Hoko Watershed Priority 1

Barrier Package Summary

WATERSHED	Upper Hoko River
LEAD ENTITY	North Olympic Peninsula Lead Entity for Salmon
WRIA	19
COUNTY	Clallam
STREAMS IN PACKAGE	Johnson Creek and Unnamed tributary
TRIBUTARY OF	Hoko River
NUMBER OF BARRIERS IN PACKAGE	3
NUMBER OF UPSTREAM BARRIERS	5
TOTAL LINEAR GAIN	10.7 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID / STREAM	R261020014604 / Johnson Creek	
ROAD/LAT-LONG	5900 Road / 48.179174,-124.447242	
OWNERSHIP	Private (Hawthorn Timberlands LLC)	
PASSABILITY/REASON	33% / Drop	
POTENTIAL SPECIES	Coho, Steelhead, SR Cutthroat	
BANK FULL WIDTH	32 ft	
CHANNEL GRADIENT	0.7%	
EXISTING STRUCTURE	12 ft x 12 ft x 200 ft Round Culvert	
PROPOSED STRUCTURE	Full Removal with 52 ft toe width	
COST ESTIMATE	\$2,759,000	
GAIN TO NEXT BARRIER	6.2 miles	
COST BENEFIT	\$84 per Foot / \$445,000 per Mile	
HABITAT	Forested with fish bearing wetland habitat upstream. Coho, steelhead, fall Chinook, and chum salmon potentially use lower Johnson Creek.	
PROJECT READINESS	No scoping or designs completed at this time.	
COMMENTS	Steep access. The top priority in this package because it opens 6.2 miles and 24.9 acres of high quality habitat. Existing structure has a high potential for failure, which could release fill that is approximately 60 feet in height into the Hoko River. The potential failure threatens salmon productivity in all 12 miles of mainstem habitat, and could threaten the lives of downstream homeowners.	

#3: Buford Cr


Watershed Pathway Barrier Package

Grande Ronde Priority 1

Barrier Package Summary

WATERSHED	Grande Ronde
LEAD ENTITY	Snake River Salmon Recovery Board
WRIA	35
COUNTY	Asotin
STREAMS IN PACKAGE	Buford, Cottonwood and Cougar Creek
TRIBUTARY OF	Grande Ronde River
NUMBER OF BARRIERS IN PACKAGE	4
NUMBER OF UPSTREAM BARRIERS	1
TOTAL LINEAR GAIN	8.72 Miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID	990048 / Buford Creek	
ROAD/LAT-LONG	SR 129 / 45.99889, -117.28076	
OWNERSHIP	State (Transportation)	
PASSABILITY/REASON	67%/Excessive Velocities	
POTENTIAL SPECIES	Steelhead, Resident Trout	
BANK FULL WIDTH	20 ft	
CHANNEL GRADIENT	6%	
EXISTING STRUCTURE	11 ft x 11 ft x 180 ft Baffled Round Culvert	
PROPOSED STRUCTURE	Minimum 30 ft span bottomless arch culvert	
COST ESTIMATE	\$3,100,000	
GAIN TO NEXT BARRIER	No additional US barriers. 3.5 mile gain.	
COST BENEFIT	\$168 per foot / \$885,714 per mile	
HABITAT	Habitat upstream consists of a healthy riparian buffer and relatively unaltered landscape. Dominant substrate consists of boulders, large cobbles and pockets of gravel.	
PROJECT READINESS	The Nez Perce Tribe received a SRFB Grant to fund the design of this barrier correction. The design is currently at 30%.	
COMMENTS	Remoteness of crossing and lack of detour routes will make construction and traffic management difficult. Productive spawning and rearing habitats available upstream.	

#4: MF Newaukum Watershed Pathway Barrier Package


Newaukum River Priority 1

Barrier Package Summary

WATERSHED	Middle Fork Newaukum River
LEAD ENTITY	Chehalis Basin Lead Entity – Coast Salmon Partnership
WRIA	23
COUNTY	Lewis
STREAMS IN PACKAGE	Middle Fork Newaukum River and Tributaries
TRIBUTARY OF	North Fork Newaukum River
NUMBER OF BARRIERS IN PACKAGE	7
NUMBER OF UPSTREAM BARRIERS	8
TOTAL LINEAR GAIN	9.7 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID / STREAM 021(45011)(07070) / Middle Fork Newaukum River

ROAD/LAT-LONG	Middle Fork Rd/ 46.6016808, -122.70784	
OWNERSHIP	Lewis County	
PASSABILITY/REASON	33% / Velocity	
POTENTIAL SPECIES	Steelhead, Coho, Sea Run Cutthroat	
BANK FULL WIDTH	17 ft	
CHANNEL GRADIENT	1%	
EXISTING STRUCTURE	7 ft x 5 ft x 45 ft Pipe Arch Culvert	
PROPOSED STRUCTURE	20 ft x 7 ft x 50 ft Box Culvert	
COST ESTIMATE	\$525,000	
GAIN TO NEXT BARRIER	2.5 miles	
COST BENEFIT	\$4 Per Foot / \$210,000 Per Mile	
HABITAT	The habitat consists of gravels and a relatively intact and healthy riparian. The stream also high habitat complexity with a lot of beaver activity.	
PROJECT READINESS	Project needs scoping and design.	
COMMENTS	Replacing this culvert would provide access to over 2.5 miles of excellent forested habitat.	

#5: Trib to Arkansas Cr

Watershed Pathway Barrier Package


Lower Cowlitz River Watershed Priority 1

Barrier Package Summary

WATERSHED	Arkansas/Delemeter Watershed
LEAD ENTITY	Lower Columbia Fish Recovery Board
WRIA	26
COUNTY	Cowlitz
STREAMS IN PACKAGE	Arkansas/Delemeter Creeks and Tributaries
TRIBUTARY OF	Cowlitz River
NUMBER OF BARRIERS IN PACKAGE	7
NUMBER OF UPSTREAM BARRIERS	3
TOTAL LINEAR GAIN	22.75 Miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID/STREAM 106c0042 / Unnamed to Arkansas Creek

ROAD/LAT-LONG	Sandy Bend Rd/ 46.264431534, -122.93018805	
OWNERSHIP	Cowlitz County	
PASSABILITY/REASON	0% / Failed	
POTENTIAL SPECIES	Steelhead, Coho, Sea Run Cutthroat	
BANK FULL WIDTH	10.6 ft	
CHANNEL GRADIENT	1%	
EXISTING STRUCTURE	4 ft x 4 ft x 44.5 Round Culvert	
PROPOSED STRUCTURE	18 ft x 8 ft x 40 ft Box Culvert	
COST ESTIMATE	\$261,000	
GAIN TO NEXT BARRIER	2.2 miles	
COST BENEFIT	\$23 Per Foot / \$118,637 Per Mile	
HABITAT	Upstream habitat consists of wetlands with heavy beaver activity. Limited riparian cover.	
PROJECT READINESS	Project has been scoped and cost estimate developed by the county.	
COMMENTS	Crossing is washed out and a total fish passage barrier.	


#6: Coleman Cr Watershed Pathway Barrier Package

Wilson/Cherry Watershed Priority 1

Barrier Package Summary

WATERSHED	Wilson/Cherry Watershed
LEAD ENTITY	Yakima Basin Fish and Wildlife Recovery Board
WRIA	39
COUNTY	Kittitas
STREAMS IN PACKAGE	Coleman Creek, Caribou Creek
TRIBUTARY OF	Naneum and Wilson Creeks
NUMBER OF BARRIERS IN PACKAGE	4
NUMBER OF UPSTREAM BARRIERS	Unknown at this time
TOTAL LINEAR GAIN	3.17 Miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID	Col03.41 / Coleman Creek	
ROAD/LAT-LONG	46.97811, -120.46945	
OWNERSHIP	State (Parks)	
PASSABILITY/REASON	33% / Hydraulic Drop	
POTENTIAL SPECIES	Steelhead, Coho, Chinook, Resident Trout	
BANK FULL WIDTH	29 ft	
CHANNEL GRADIENT	1-3%	
EXISTING STRUCTURE	25 ft x 4.5 ft Concrete Diversion Dam	
PROPOSED STRUCTURE	Decommission one diversion and install piping/pump and one center pivot irrigation sprinkler.	
COST ESTIMATE	\$606,762	
GAIN TO NEXT BARRIER	1.75 miles	
COST BENEFIT	\$66 per Foot / \$346,721 per Mile	
HABITAT	Fair channel complexity and intact riparian corridor through this reach.	
PROJECT READINESS	No scoping or design work has been completed at this time.	
COMMENTS	<p>This diversion is considered a “historic structure” associated with Olmstead State Park. Install pipeline to upstream canal and abandon this feature. Proposed projects will provide passage into two of the Major Spawning Areas (MSAs) which are part of the Yakima Steelhead Recovery Plan’s steelhead population’s spatial structure goals. Access to these valuable spawning and rearing habitats is a key step towards recovery and delisting for the entire Middle Columbia Steelhead DPS.</p>	

#7: Catherine Cr


Watershed Pathway Barrier Package

Little Pilchuck Watershed Priority 1

Barrier Package Summary

WATERSHED	Little Pilchuck Creek
LEAD ENTITY	Snohomish Basin
WRIA	7
COUNTY	Snohomish
STREAMS IN PACKAGE	Catherine Creek, Little Pilchuck Creek
TRIBUTARY OF	Little Pilchuck Creek, Pilchuck River
NUMBER OF BARRIERS IN PACKAGE	4
NUMBER OF UPSTREAM BARRIERS	47
TOTAL LINEAR GAIN	16.8 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID / STREAM	993471 / Catherine Creek	
ROAD/LAT-LONG	28 th ST NE/ 48.0193748, -122.0573654	
OWNERSHIP	City of Lake Stevens	
PASSABILITY/REASON	33% / Velocity	
POTENTIAL SPECIES	Coho, Steelhead, Sea Run Cutthroat	
BANK FULL WIDTH	20 ft	
CHANNEL GRADIENT	0.4%	
EXISTING STRUCTURE	4.7ft x 3.1 x 39 ft Pipe Arch Culvert s (2)	
PROPOSED STRUCTURE	40 ft x 20 ft Bridge	
COST ESTIMATE	\$519,500	
GAIN TO NEXT BARRIER	1.3 miles	
COST BENEFIT	\$78 per Foot / \$399,615 per Mile	
HABITAT	At confluence with Stevens Creek. Large riparian restoration completed upstream.	
PROJECT READINESS	No scoping or designs completed at this time.	
COMMENTS	Replacing the culvert at the convergence would allow greater access to this habitat under restoration for spawning and rearing of several species of salmon, especially Coho and steelhead.	

#8: Trib to Coffee Cr

Watershed Pathway Barrier Package


Goldsborough Creek Watershed Priority 1

Barrier Package Summary

WATERSHED	Goldsborough Creek
LEAD ENTITY	WRIA 14 Salmon Habitat Recovery Committee
WRIA	14
COUNTY	Mason
STREAMS IN PACKAGE	Coffee Creek, Dayton Creek, West Fork Coffee Creek, Uncle Johns Creek, and Deer Creek.
TRIBUTARY OF	Goldsborough Creek, Independent Tributaries
NUMBER OF BARRIERS IN PACKAGE	6
NUMBER OF UPSTREAM BARRIERS	8
TOTAL LINEAR GAIN	6 miles

Individual Barrier Details (In the order of Lead Entity preferred ranking)

1. SITE ID / STREAM 115 MC182 / Coffee Creek

ROAD/LAT-LONG	W Deegan Rd/47.18213341, -123.15326699	
OWNERSHIP	Mason County	
PASSABILITY/REASON	0% / Slope	
POTENTIAL SPECIES	Chum, Coho, Steelhead, Sea Run Cutthroat	
BANK FULL WIDTH	10 ft	
CHANNEL GRADIENT	1-4%	
EXISTING STRUCTURE	3 ft x 3 ft x 51.2 ft Round Culvert	
PROPOSED STRUCTURE	14 ft x 9 ft x 60 ft Box Culvert	
COST ESTIMATE	\$300,000	
GAIN TO NEXT BARRIER	1.1 mile	
COST BENEFIT	\$52 per Foot / \$272,727 per Mile	
HABITAT	Habitat consists of large ponds, woody material, and forested wetlands.	
PROJECT READINESS	South Puget Sound Salmon Enhancement Group has developed conceptual designs.	
COMMENTS	Holds a high potential for Coho, Steelhead, and Cutthroat Trout.	

#9: Johnson Cr

Watershed Pathway Barrier Package

Okanogan River Watershed Priority 1

Barrier Package Summary

WATERSHED	Okanogan River Watershed
LEAD ENTITY	Upper Columbia Salmon Recovery Board
WRIA	49.0202
COUNTY	Okanogan County
STREAMS IN PACKAGE	Johnson Creek
TRIBUTARY OF	Okanogan River
NUMBER OF BARRIERS IN PACKAGE	5
NUMBER OF UPSTREAM BARRIERS	7 – Two of which will be corrected summer 2016
TOTAL LINEAR GAIN	1.6 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)


1. SITE ID	114JC001 / Johnson Creek
ROAD/LAT-LONG	Copper St / 48.50217, -119.50469
OWNERSHIP	City of Riverside
PASSABILITY/REASON	33% / Slope
POTENTIAL SPECIES	Steelhead, Chinook, Resident Trout
BANK FULL WIDTH	13.5 ft
CHANNEL GRADIENT	1-3%
EXISTING STRUCTURE	5.5 ft x 5.5 ft x 44.6 ft Round Culvert
PROPOSED STRUCTURE	20 ft x 8 ft x 40 ft Bottomless Box Culvert
COST ESTIMATE	\$499,000
GAIN TO NEXT BARRIER	0.17 miles
COST BENEFIT	\$556 per Foot / \$2,935,294 per Mile
HABITAT	Site is located 360 ft upstream of mouth. Moderate gradient with limited channel complexity. Flows through City of Riverside.
PROJECT READINESS	No designs or scoping completed.
COMMENTS	City is supportive of correction efforts. Potential for increased juvenile access and off channel rearing opportunities.



#10: Baxter Cr Watershed Pathway Barrier Package

Okanogan River Watershed Priority 1

2. SITE ID / STREAM 106c0048 / Baxter Creek


ROAD/LAT-LONG	Coyote Ln / 46.3055, -122.9723	
OWNERSHIP	Cowlitz County	
PASSABILITY/REASON	0% / Slope and Velocity	
POTENTIAL SPECIES	Steelhead, Coho, Sea Run Cutthroat	
BANK FULL WIDTH	19 ft	
CHANNEL GRADIENT	5-7%	
EXISTING STRUCTURE	8 ft x 8 ft x 73 ft Round Culvert	
PROPOSED STRUCTURE	106 ft Span Bridge	
COST ESTIMATE	\$2,001,000	
GAIN TO NEXT BARRIER	5.95 Miles	
COST BENEFIT	\$64 Per Foot / \$336,303 Per Mile	
HABITAT	Habitat upstream consists of medium sized cobble, healthy riparian and medium levels of habitat complexity. Habitat would mainly benefit steelhead and coho.	
PROJECT READINESS	Project was scoped in 2004 and cost estimates developed. Problems with the adjacent landowner easements stalled the project.	
COMMENTS	Crossing is a chronic maintenance issue and would open almost 6 miles of pristine forested habitat.	

#11: Turner Cr Coordinated Project Pathway

Barrier Summary

WATERSHED	Coweeman River
NOMINATING ENTITY	Lower Columbia Fish Recovery Board / Cowlitz County
WRIA	26
COUNTY	Cowlitz County
STREAMS IN PACKAGE	Turner Creek
TRIBUTARY OF	Coweeman River
NUMBER OF BARRIERS IN NOMINATION	1
NUMBER OF CORRECTED/FUNDED BARRIERS (WITHIN THE LAST 5 YEARS)	1
TOTAL LINEAR GAIN	2.6 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID / STREAM	106c0152 / Turner Creek	
ROAD/LAT-LONG	Rose Valley Rd / 46.11649, -122.8160	
OWNERSHIP	Cowlitz County	
PASSABILITY/REASON	0% / Slope and Failing	
POTENTIAL SPECIES	Coho, Steelhead, Chum, Sea Run Cutthroat	
BANK FULL WIDTH / GRADIENT	18 ft / 2%	
EXISTING STRUCTURE	3.5 ft x 3.5 ft x 87 ft Round Culvert 3 ft x 3 ft x 83.5 ft Round Culvert	
PROPOSED STRUCTURE	24 ft x 10 ft x 80 ft Box Culvert	
COST ESTIMATE	\$1,000,000	
COST BENEFIT	\$73 Per Foot / \$384,616 Per Mile	
GAIN TO NEXT BARRIER	2.6 miles	
HABITAT QUALITY GAIN	Habitat upstream consists of healthy intact riparian zone, excellent spawning gravels, and high levels of habitat complexity.	
PROJECT READINESS	Conceptual Designs – Will need to be adjusted	
ADJACENT RESTORATION (WITHIN LAST 5 YEARS)	1 Private fish barrier repair, 2 completed FFFPP projects and a LWD project completed over 5 years ago.	
COMMENTS	One culvert is broken and misaligned at the upstream end.	

Amount of Habitat Opened

SITE #	SITE ID	DISTANCE BETWEEN BARRIERS				COST ESTIMATE
1	106c0152	13,727	ft.	2.6	mi.	\$1,000,000
	TOTAL	13,727	ft.	2.6	mi.	\$1,000,000

#12 Cottonwood Cr


Watershed Pathway Barrier Package

Grande Ronde Priority 1

Barrier Package Summary

WATERSHED	Grande Ronde
LEAD ENTITY	Snake River Salmon Recovery Board
WRIA	35
COUNTY	Asotin
STREAMS IN PACKAGE	Buford, Cottonwood and Cougar Creek
TRIBUTARY OF	Grande Ronde River
NUMBER OF BARRIERS IN PACKAGE	4
NUMBER OF UPSTREAM BARRIERS	1
TOTAL LINEAR GAIN	8.72 Miles

2. SITE ID 602004 / Cottonwood Creek

ROAD/LAT-LONG	Grande Ronde Rd / 46.03903, -117.29566	
OWNERSHIP	Asotin County	
PASSABILITY/REASON	0% / Slope	
POTENTIAL SPECIES	Steelhead, Resident Trout	
BANK FULL WIDTH	11 ft	
CHANNEL GRADIENT	4-6%	
EXISTING STRUCTURE	6 ft x 6 ft x 35 ft Round Culvert	
PROPOSED STRUCTURE	16 ft x 8 ft x 45 ft Bottomless Box Culvert	
ESTIMATE	\$57,200	
GAIN TO NEXT BARRIER	No additional upstream barriers. 2.54 mile gain.	
COST BENEFIT	\$43 per Foot / \$225,197 per Mile	
HABITAT	Habitat consists of a small riparian buffer, medium to large cobbles and negative livestock influences.	
PROJECT READINESS	No scoping or design work has been completed for this crossing.	
COMMENTS	Adult Steelhead have been documented upstream of this culvert.	

#13: Trib to Johnson Cr

Watershed Pathway Barrier Package

Hoko Watershed Priority 1

Barrier Package Summary

WATERSHED	Upper Hoko River
LEAD ENTITY	North Olympic Peninsula Lead Entity for Salmon
WRIA	19
COUNTY	Clallam
STREAMS IN PACKAGE	Johnson Creek and Unnamed tributary
TRIBUTARY OF	Hoko River
NUMBER OF BARRIERS IN PACKAGE	3
NUMBER OF UPSTREAM BARRIERS	5
TOTAL LINEAR GAIN	10.7 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

2. SITE ID / STREAM 80001263 / Unnamed Tributary

ROAD/LAT-LONG	Hoko Ozette Rd / 48.180543, -124.450515
OWNERSHIP	Clallam County
PASSABILITY/REASON	0% / Water Surface Drop
POTENTIAL SPECIES	Coho, Steelhead, SR Cutthroat
BANK FULL WIDTH	20 ft
CHANNEL GRADIENT	3.6%
EXISTING STRUCTURE	7 ft x 7 ft x 98 ft Round Culvert
PROPOSED STRUCTURE	34 ft x 12 ft x 160 ft Box Culvert
COST ESTIMATE	\$1,683,000
GAIN TO NEXT BARRIER	2.1 miles
COST BENEFIT	\$154 per Foot / \$801,429 per Mile
HABITAT	1.6 acres of fish bearing wetlands upstream.
PROJECT READINESS	No scoping or designs completed at this time.



COMMENTS Structure includes additional span due to length. A complete barrier that blocks access to 2.1 miles of spawning and rearing habitat and 1.6 acres of potential fish-bearing wetland habitat. The work will complement a fish passage repair by a private landowner immediately downstream.

ALT 1: MF Newaukum

Watershed Pathway Barrier Package


Newaukum River Priority 1

Barrier Package Summary

WATERSHED	Middle Fork Newaukum River
LEAD ENTITY	Chehalis Basin Lead Entity – Coast Salmon Partnership
WRIA	23
COUNTY	Lewis
STREAMS IN PACKAGE	Middle Fork Newaukum River and Tributaries
TRIBUTARY OF	North Fork Newaukum River
NUMBER OF BARRIERS IN PACKAGE	7
NUMBER OF UPSTREAM BARRIERS	8
TOTAL LINEAR GAIN	9.7 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

2. SITE ID / STREAM 021(94001)(15790) / Middle Fork Newaukum River

ROAD/LAT-LONG	Centralia Alpha Rd/ 47.6154633, -122.6755447	
OWNERSHIP	Lewis County	
PASSABILITY/REASON	33% / Velocity	
POTENTIAL SPECIES	Steelhead, Coho, Sea Run Cutthroat	
BANK FULL WIDTH	15 ft	
CHANNEL GRADIENT	1-2%	
EXISTING STRUCTURE	7 ft x 5 ft x 58.4 ft Pipe Arch Culvert	
PROPOSED STRUCTURE	21 ft x 9 ft x 60 ft Box Culvert	
COST ESTIMATE	\$850,500	
GAIN TO NEXT BARRIER	1.3 miles	
COST BENEFIT	\$123 Per Foot / \$654,231 Per Mile	
HABITAT	The habitat consists of gravels and a relatively intact and healthy riparian. The stream also high habitat complexity with a lot of beaver activity.	
PROJECT READINESS	Project needs scoping and design.	
COMMENTS	This culvert barrier is downstream of multiple completed fish passage projects in forest land.	


ALT 2: Dayton Cr Watershed Pathway Barrier Package

Goldsborough Creek Watershed Priority 1

Barrier Package Summary

WATERSHED	Goldsborough Creek
LEAD ENTITY	WRIA 14 Salmon Habitat Recovery Committee
WRIA	14
COUNTY	Mason
STREAMS IN PACKAGE	Coffee Creek, Dayton Creek, West Fork Coffee Creek, Uncle Johns Creek, and Deer Creek.
TRIBUTARY OF	Goldsborough Creek, Independent Tributaries
NUMBER OF BARRIERS IN PACKAGE	6
NUMBER OF UPSTREAM BARRIERS	8
TOTAL LINEAR GAIN	6 miles

Individual Barrier Details (In the order of Lead Entity preferred ranking)

2.	SITE ID / STREAM	115 MC209 / Dayton Creek	
	ROAD/LAT-LONG	Highland Rd/47.222104681, -123.237504036	
	OWNERSHIP	Mason County	
	PASSABILITY/REASON	33% / Water Surface Drop	
	POTENTIAL SPECIES	Chum, Coho, Steelhead, Sea Run Cutthroat	
	BANK FULL WIDTH	13 ft	
	CHANNEL GRADIENT	1-2%	
	EXISTING STRUCTURE	3.3 ft x 5.5 ft x 48.2 ft pipe arch culverts (2)	
	PROPOSED STRUCTURE	18 ft x 9 ft x 50 ft Arch Pipe of Bridge	
	COST ESTIMATE	\$460,000	
	GAIN TO NEXT BARRIER	0.8 miles	
	COST BENEFIT	\$103 per Foot / \$575,000 per Mile	
	HABITAT	Cold water tributary with good spawning and rearing.	
	PROJECT READINESS	South Puget Sound Salmon Enhancement Group has developed conceptual designs.	
	COMMENTS	County replacing upstream barrier in 2019 to complete the reach. High potential for Coho, Steelhead, and Cutthroat trout.	


ALT 3: Coleman Cr Watershed Pathway Barrier Package

Wilson/Cherry Watershed Priority 1

Barrier Package Summary

WATERSHED	Wilson/Cherry Watershed
LEAD ENTITY	Yakima Basin Fish and Wildlife Recovery Board
WRIA	39
COUNTY	Kittitas
STREAMS IN PACKAGE	Coleman Creek, Caribou Creek
TRIBUTARY OF	Naneum and Wilson Creeks
NUMBER OF BARRIERS IN PACKAGE	4
NUMBER OF UPSTREAM BARRIERS	Unknown at this time
TOTAL LINEAR GAIN	3.17 Miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

2. SITE ID	Col05.09 / Coleman Creek	
ROAD/LAT-LONG	Vantage Highway / 47.00015, -120.46099	
OWNERSHIP	Kittitas County	
PASSABILITY/REASON	33% / Slope and Hydraulic Drop	
POTENTIAL SPECIES	Steelhead, Coho, Chinook, Resident Trout	
BANK FULL WIDTH	26 ft	
CHANNEL GRADIENT	1-3%	
EXISTING STRUCTURE	One 13 ft x 4 ft x 80 ft Box Culvert; one 6 ft x 4 ft x 81 ft Pipe Arch Culvert	
PROPOSED STRUCTURE	35 ft x 44 ft Bridge	
COST ESTIMATE	\$1,560,734	
GAIN TO NEXT BARRIER	0.35 miles	
COST BENEFIT	\$845 per Foot / \$4,459,240 per Mile	
HABITAT	Fair habitat complexity and riparian corridor. Spawning habitat upstream.	
PROJECT READINESS	No scoping or design work has been completed to date.	
COMMENTS	Proposed projects will provide passage into two of the Major Spawning Areas (MSAs) which are part of the Yakima Steelhead Recovery Plan's steelhead population's spatial structure goals. Access to these valuable spawning and rearing habitats is a key step towards recovery and delisting for the entire Middle Columbia Steelhead DPS.	


ALT 4: Catherine Cr Watershed Pathway Barrier Package

Little Pilchuck Watershed Priority 1

Barrier Package Summary

WATERSHED	Little Pilchuck Creek
LEAD ENTITY	Snohomish Basin
WRIA	7
COUNTY	Snohomish
STREAMS IN PACKAGE	Catherine Creek, Little Pilchuck Creek
TRIBUTARY OF	Little Pilchuck Creek, Pilchuck River
NUMBER OF BARRIERS IN PACKAGE	4
NUMBER OF UPSTREAM BARRIERS	47
TOTAL LINEAR GAIN	16.8 miles

2. SITE ID / STREAM 993472 / Catherine Creek

ROAD/LAT-LONG	Callow Rd / 48.0314217, -122.073967	
OWNERSHIP	Private	
PASSABILITY/REASON	67% / Depth	
POTENTIAL SPECIES	Coho, Steelhead, Sea Run Cutthroat	
BANK FULL WIDTH	16 ft	
CHANNEL GRADIENT	0.7%	
EXISTING STRUCTURE	3.4 ft x 3.4 ft x 12 ft Round Culverts (5)	
PROPOSED STRUCTURE	40 ft x 18 ft Bridge	
COST ESTIMATE	\$400,000	
GAIN TO NEXT BARRIER	0.4 miles	
COST BENEFIT	\$188 per Foot / \$1,000,000 per Mile	
HABITAT	Coho observed in the area. Habitat consists of relatively intact riparian buffer and high levels of spawning and rearing potential.	
PROJECT READINESS	No scoping or designs completed at this time.	
COMMENTS	8+ acre multiphase riparian floodplain planting and invasive control effort on both banks of Catherine Creek immediately north of the culvert at the convergence with Stevens Creek since 2013.	

ALT 5: Johnson Cr Watershed Pathway Barrier Package


Okanogan River Watershed Priority 1

Barrier Package Summary

WATERSHED	Okanogan River Watershed
LEAD ENTITY	Upper Columbia Salmon Recovery Board
WRIA	49.0202
COUNTY	Okanogan County
STREAMS IN PACKAGE	Johnson Creek
TRIBUTARY OF	Okanogan River
NUMBER OF BARRIERS IN PACKAGE	5
NUMBER OF UPSTREAM BARRIERS	7 – Two of which will be corrected summer 2016
TOTAL LINEAR GAIN	1.6 miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

2. SITE ID 992055 / Johnson Creek

ROAD/LAT-LONG	State St / 48.50088, -119.50585	
OWNERSHIP	City of Riverside	
PASSABILITY/REASON	33%/ Slope	
POTENTIAL SPECIES	Steelhead, Chinook and Resident Trout	
BANK FULL WIDTH	17 ft	
CHANNEL GRADIENT	3-5%	
EXISTING STRUCTURE	5.5 ft x 5.5 ft x 50 ft Round Culvert	
PROPOSED STRUCTURE	24 ft x 8 ft x 47 ft Bottomless Box Culvert	
COST ESTIMATE	\$550,951	
GAIN TO NEXT BARRIER	0.07 miles	
COST BENEFIT	\$1,489 per Foot / \$7,870,729 per Mile	Moderate gradients with limited channel complexity. Flows through City of Riverside.
HABITAT		
PROJECT READINESS	No designs or scoping completed.	
COMMENTS	City is supportive of correction efforts. Potential for increased juvenile access and off channel rearing opportunities.	

ALT 6: Thorndyke Cr Coordinated Project Pathway

Barrier Summary

WATERSHED	Little Quilcene River
NOMINATING ENTITY	Jefferson County
WRIA	17
COUNTY	Jefferson County
STREAMS IN PACKAGE	Thorndyke Creek
TRIBUTARY OF	Hood Canal
NUMBER OF BARRIERS IN NOMINATION	1
NUMBER OF CORRECTED/FUNDED BARRIERS (WITHIN THE LAST 5 YEARS)	2
TOTAL LINEAR GAIN	9.73 Miles

Individual Barrier Details (from lowest to highest barrier in the watershed)

1. SITE ID / STREAM	160508 / Thorndyke Creek	
ROAD/LAT-LONG	Thorndyke Rd / 47.8237, -122.73975	
OWNERSHIP	Jefferson County	
PASSABILITY/REASON	67% / Slope, Velocity and Water Depth	
POTENTIAL SPECIES	Fall Chum, Coho, Steelhead	
BANK FULL WIDTH / GRADIENT	28.5 ft / 2-4%	
EXISTING STRUCTURE	5 ft x 5 ft x 89 ft Round Culverts (2)	
PROPOSED STRUCTURE	36 ft x 12 ft x 120 ft	
COST ESTIMATE	\$1,412,000	
COST BENEFIT	\$28 Per Foot / \$145,119 Per Mile	
GAIN TO NEXT BARRIER	9.73 Miles	
HABITAT QUALITY GAIN	Habitat consists of a healthy intact riparian buffer, excellent spawning and rearing opportunity, and good water quality.	
PROJECT READINESS	The county has done preliminary scoping, but additional scoping and designs are needed.	
ADJACENT RESTORATION (WITHIN LAST 5 YEARS)	2 Private RMAP fish passage repairs	
COMMENTS	Upstream habitat is excellent and capable of supporting healthy numbers of salmon. The estuary is also intact and undeveloped.	

Amount of Habitat Opened

SITE #	SITE ID	DISTANCE BETWEEN BARRIERS				COST ESTIMATES
1	160508	51,378	ft.	9.73	mi.	\$1,412,000
	TOTAL	51,378	ft.	9.73	mi.	\$1,412,000

Fish Barrier Removal Board Grant Program

Match Certification Credit Form

The preference of the Fish Barrier Removal Board is for the project sponsor to provide a 15% match of the grant award. However, the board recognizes that under certain circumstances a project match may be a hardship for the project sponsor. A match certification credit may be used to meet the spirit of providing matching resources and help increase coordination within a watershed (at a HUC 10 scale).

1. Project Information:

Sponsor Name: _____

Email & Phone: _____

Recovery Region: _____

Stream Name: _____

WDFW Site ID: _____

Total Project Cost: _____

2. Select which Match Certification Credit you are applying for:

- Another fish passage barrier removal within the same watershed** – Another fish passage barrier removal within the same watershed (HUC 10 Scale) may be used as match for Fish Barrier Removal Board funding if all of the following criteria are met:
- a. The matching project was not funded by the Fish Barrier Removal Board or previously used as match.
 - b. The matching project must be congruently under contract (construction or grant) with the FBRB contract or have been constructed within the previous four years from the time FBRB funds become available.
 - c. If already constructed, the matching project must be 100% passable per WDFW barrier assessment guidelines.
 - d. Eligible matching projects include design work, feasibility studies, and other activities that are specific to a particular barrier removal. Watershed inventory, assessment, and prioritization efforts are not eligible to use as match.
- Project Sponsor Hardship**– The project sponsor is not able to meet the minimum 15% match and there are no other fish passage barrier removal projects within the watershed that can be used as match.

3. The project sponsor must provide the following materials based on the type of Match Certification Credit being applied for:

- a) ***Another fish passage barrier removal within the same watershed***
 - i. Completed Match Certification Credit Form (plus attachments listed below)
 - ii. A letter from the sponsor or owner removing the barrier (e.g., state, county, city, forest landowner, RFEG or CD) certifying the matching project is either under contract (construction or grant), included on a public works list and in the design or permitting phase, or a grant application is in the process of being awarded to remove the barrier. The letter must be signed by someone with signature authority within the organization.
 - iii. Submit a map and description of the project.
 - iv. Provide photos of the site.
 - v. Provide barrier assessment information, when and who conducted the survey.
 - vi. Provide a preliminary design, final design, or as-built drawings.
 - vii. Estimated or final cost of the project and completion date with supporting documentation.
 - viii. Must certify that the match is not being used or will be used for any other project.

- a) ***Project Sponsor Hardship***
 - ix. Completed Match Certification Form (plus attachments listed below)
 - x. Provide a statement describing the match amount (or percentage) your organization can commit. Please detail the type of match and dollar or in-kind value.
 - xi. Explain the resources that have been investigated for potential match
 - xii. Explain the organizational hardship

4. Please submit the completed Match Certification Credit materials to:

Fish Barrier Removal Board
c/o Tom Jameson, WDFW Fish Passage Division Manager
PO Box 43200
Olympia, WA 98504-3200
Thomas.Jameson@dfw.wa.gov

The Fish Barrier Removal Board will review match eligibility for all proposed projects and may approve or deny match eligibility on a case-by-case basis. The Fish Barrier Removal Board will track match sources to avoid double matching.



**FISH BARRIER
REMOVAL BOARD**

**Request for
Fish Passage
Project Proposals**

February 1, 2018

**2019 - 2021
Coordinated
Pathway**

ABOUT THE FISH BARRIER REMOVAL BOARD GRANT PROGRAM

The Legislature established the grant program of the Brian Abbott Fish Passage Barrier Removal Board, called the Fish Barrier Removal Board (FBRB) for short, in 2014 to assist in identifying and removing impediments to salmonid fish passage. All FBRB-funded grant projects shall match the principles provided in Revised Code of Washington 77.95.180 and are reviewed and approved by the FBRB. The grant program is administered jointly by the Washington Department of Fish and Wildlife (WDFW) and the Recreation and Conservation Office (RCO).

REQUEST FOR PROPOSALS

The FBRB is accepting proposals for the FBRB Grant Program's Coordinated Pathway funding strategy. The Coordinated Pathway approach is intended to leverage fish passage investments that have been made by the Washington Department of Transportation, forest industry, local governments, and other entities by funding barrier corrections near or in coordination with other fish passage investments.

Proposals may be for either of 2 project types: Planning or Restoration. Planning projects that are approved for funding will be developed to full design. Restoration projects that are approved for funding will be constructed within the grant award period.

For more information about the Coordinated Pathway funding strategy, see Manual 22 (link provided in Resources section).

ELIGIBILITY

The project must correct a complete or partial barrier to salmon, as defined in the Washington Department of Fish and Wildlife's barrier assessment manual (link provided in Resources section). The project must also be in coordination with (i.e., upstream or downstream of) another barrier correction project that has been completed since 2010 or is currently funded and scheduled for construction by 2021.

Eligible fish passage project types include culverts, small dams, tide gates, irrigation diversion-associated barriers, and other physical, human-made instream barriers.

Ineligible project types include natural barriers (beaver dams, waterfalls, etc.), irrigation diversion screens (unless necessary as a part of a fish barrier removal project), and side channel and floodplain connection projects.

Restoration projects must have permit-level designs, i.e., ~60% design, submitted with full proposal, unless the total requested amount is less than \$250,000.

It is not the intent of the FBRB Grant Program to fund mitigation obligations.

PROJECT SCORING CRITERIA AND EVALUATION PROCESS

The FBRB and the FBRB's Technical Review Team (TRT) review project proposals to ensure that the approved projects create actual benefits to salmon, have costs that do not outweigh the anticipated benefits, have a high likelihood of being successful, and satisfy the founding principles outlined in [Revised Code of Washington 77.95.180](#).

Pre-proposals will be reviewed for eligibility and potential benefits to salmon. During this initial review, projects will be scored and ranked based on the following criteria:

- Barrier severity (10 Points)
- Absence of downstream barriers (10 Points)
- Linear habitat gain (10 Points)
- Number of anadromous species that would benefit (5 Points)
- Habitat quality (5 Points)
- Project readiness, i.e., design level, permits, sponsor capacity, etc. (5 Points)
- Clearly outlined anticipated costs (5 Points)
- Design approach and climate change resilience (5 Points)

Proponents of high priority projects will be invited to submit full proposals that will be further evaluated based on:

- Benefits to productivity and life history stages (15 Points)
- Level of coordination with other fish passage projects, i.e., estimated total benefits from recent restoration efforts that would be realized as a result of the proposed barrier correction (5 Points)
- Clearly identified and appropriate project scope, goals and objectives, milestones, and schedule (10 Points)
- Cost effectiveness and a clear, detailed budget (10 Points)
- Stock status of anadromous species that would benefit (3 Points)
- Other relevant information presented by project proponent (5 Points)

The final prioritized list of fish passage projects is the culmination of a thorough scientific review and investigation of the merits of each project proposal. The FBRB will submit a funding request to the Legislature for the final prioritized list of fish passage projects.

MATCH REQUIREMENTS

A minimum of 15 percent match of the grant award is required. Matching resources may include cash, bond funds, grants (unless prohibited by the funding authority), in-kind labor, equipment, and materials. See Manual 8 (link provided in Resources section) for information on match and reimbursements.

SCHEDULE

TASK	DATE	DESCRIPTION
Request for Proposals	01 FEB 2018	Publication of FBRB Coordinated Pathway Request for Proposals
Pre-proposals due	31 MAR 2018	Submit pre-proposal materials into PRISM
Invitation to submit full proposals	01 JUN 2018	After initial review of pre-proposals by TRT and FBRB, selected projects are invited to submit full proposals
Full proposals due	01 JUL 2018	Submit full proposal materials into PRISM
Presentations	01 AUG 2018	Presentations by project proponents to FBRB, as requested
FBRB project request submitted	01 SEP 2018	Ranked project list and funding recommendations published and submitted to the Office of Financial
Funding notification	TBD	Funding notification dependent upon final 2019-2021 state budget. Funds expected to be available 01 JUL 2019

APPLICATION REQUIREMENTS

To submit proposals, project proponents will enter application materials into PRISM, RCO's online grant management system (link provided in Resources section). Links and instructions for application materials available in PRISM and Manual 22.

Minimum requirements for pre-proposals:

- Complete Project Details section in PRISM
- Barrier Evaluation Form
- Expanded Barrier Evaluation Form
- Map: Restoration Worksite
- Photos
- Landowner Acknowledgement Form
- FBRB Pre-Proposal - responses to questions about project readiness, anticipated costs, habitat quality, design approach, and coordination.

Minimum requirements for full proposals:

- Complete Metrics, Costs, Application Questions, and Project Permits sections in PRISM

- Application Authorization Form
- Cost Estimate Spreadsheet
- Design Document (Restoration projects only)
- Map: Area of Potential Effect (APE)
- Landowner Agreement Form
- Match Certification Credit Form and materials
- FBRB Full Proposal - responses to questions about limiting factors, level of coordination, project scope, and additional supporting information.

CONTACTS

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WDFW FBRB Technical Review Lead

RESOURCES

WDFW Fish Passage Program: http://wdfw.wa.gov/conservation/habitat/fish_passage/. Includes links to WDFW's barrier assessment manual, training materials, barrier map, and design guidance.

PRISM: http://www.rco.wa.gov/prism_app/about_prism.shtml. Login and link to create a PRISM account.

RCO Grant Manuals: http://www.rco.wa.gov/doc_pages/manuals_by_number.shtml. Includes links to Manual 22 (Brian Abbott Fish Barrier Removal Board Grant Program) and Manual 8 (Reimbursements).