



FISH BARRIER
REMOVAL BOARD

WE'RE UNDERWAY

A coordinated statewide strategy to remove an estimated 40,000 barriers to salmon and steelhead spawning and rearing habitat in Washington state





FISH, MEET HABITAT

For over 15 years, people across the state have invested thousands of hours and millions of dollars restoring salmon habitat.

Now we need to restore access to it.

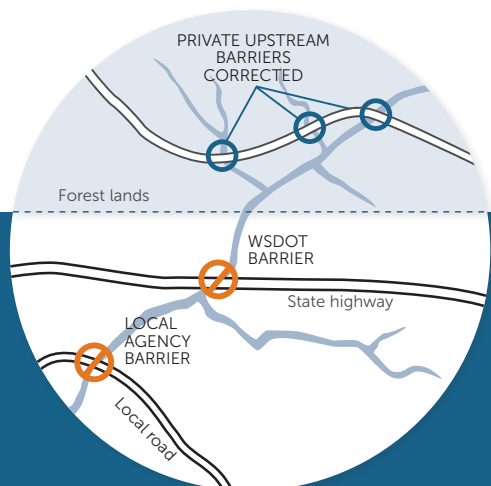
The Fish Barrier Removal Board has been established by the State of Washington to guide the coordination of barrier removal by counties, cities, the State, tribal governments, Regional Fisheries Enhancement Groups, Conservation Districts, private landowners, and others. The goal is to restore access to prime spawning and rearing habitat.

"We have a legal and moral obligation to restore wild salmon to Washington State. Every investment we make in salmon recovery is an investment we make in our future."

—GOVERNOR JAY INSLEE

Downstream barriers

Upstream barriers have largely been fixed on forest lands. Now we need to tackle downstream barriers which are largely state- and locally-owned.





BEFORE

AFTER



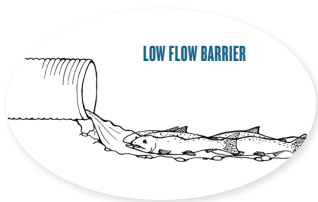
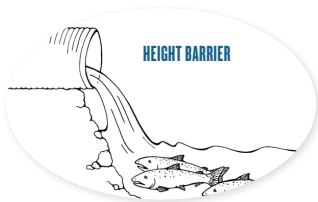
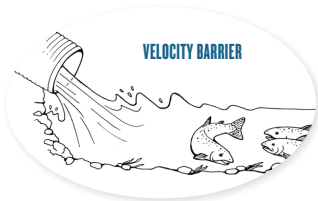
SAFE PASSAGE BENEFITS PEOPLE AND FISH

The barriers that block fish migration also contribute to flooding, disrupt transportation and commerce, damage property, and pose a threat to human health and safety.

BARRIERS TAKE MANY FORMS

- Aging culverts not designed for fish passage or 21st century flood levels
- Gates and screens
- Washed out road crossings
- Weirs
- Dams and other water diversions

NOT ALL CULVERTS ARE CREATED EQUAL



Many older culverts were not designed for fish passage:

- A steep or too narrow culvert will cause a stream to flow too fast
- A culvert too high above the stream bed will defy even the hardiest jumpers
- An undersized culvert can be overwhelmed by storms and debris and cause flooding.

STRATEGIC APPROACH: MAXIMIZE BENEFIT, MINIMIZE DISRUPTION

Fish passage barrier removal is being staged to maximize benefit and minimize disruption:

- Washington's Department of Fish and Wildlife is producing a statewide inventory of fish passage barriers and working with Regional Salmon Recovery Organizations to prioritize them.
- Washington State Department of Transportation has been making major investments to fix high priority barriers under state highways for many years. This effort is significantly increasing in scope, bringing many opportunities for partnerships and coordination, leveraging the benefits of fish passage improvements.
- Washington's Department of Natural Resources is sharing its decades-long experience assisting large and small private forest landowners with barrier removal.
- The Fish Barrier Removal Board is working closely with city, county, and tribal governments to make resources available for those considering or already moving forward with infrastructure projects that will improve fish passage.



- **Known barriers with total fish blockage**

PRIORITIZING: GREATEST CONTRIBUTION TO SALMON RECOVERY

The Fish Barrier Removal Board is refining its priorities:

- 1** Remove downstream barriers first
- 2** Work with Regional Salmon Recovery Organizations to identify priority salmon watersheds and ensure the highest contribution to salmon and steelhead recovery
- 3** Work with cities and counties to identify opportunities for barrier removal adjacent to other recently completed fish passage projects.

"Many people are unaware of the huge scale of the problem. It's a significant issue...It's one of the highest priorities we have for salmon recovery."

—JEFF BRECKEL, EXECUTIVE DIRECTOR, LOWER COLUMBIA FISH RECOVERY BOARD
FROM "STATEWIDE EFFORT AIMS AT REMOVING BARRIER THAT BLOCK FISH" BY ERIC FLORIP, *THE COLUMBIAN*, JUNE 9, 2015

"We can't remove every barrier all at once. The board is committed to helping all parties work together in a coordinated manner to tackle priority projects first, take advantage of opportunities where they arise, and assist agencies and governments trying to minimize disruption for this great long-term gain."

—DAVID PRICE, CHAIR, FISH BARRIER REMOVAL BOARD

VOTING MEMBERS

David Price, *Chair, WA Department of Fish and Wildlife*

Brian Abbott, *WA Governor's Salmon Recovery Office*

Casey Baldwin, *Confederated Tribes of the Colville Reservation*

Jon Brand, *Washington State Association of Counties*

Joe Shramek, *WA Department of Natural Resources*

Carl Schroeder, *Association of Washington Cities*

Jonalee Squeochs, *Confederated Tribes and Bands of the Yakama Nation*

Megan White, *WA Department of Transportation*

FISH BARRIER REMOVAL BOARD

The Fish Barrier Removal Board is on track to develop by June 2016 a list of priority projects, and a coordinated statewide approach to implementing them.

To learn more, please visit:
wdfw.wa.gov/about/advisory/fbrb

ALTERNATE MEMBERS

Lee Carlson, *Confederated Tribes and Bands of the Yakama Nation*

Dave Caudill, *WA Recreation and Conservation Office*

Alison Hellberg, *Association of Washington Cities*

Donelle Mahan, *WA Department of Natural Resources*

Gary Rowe, *Washington State Association of Counties*

Paul Wagner, *WA Department of Transportation*