



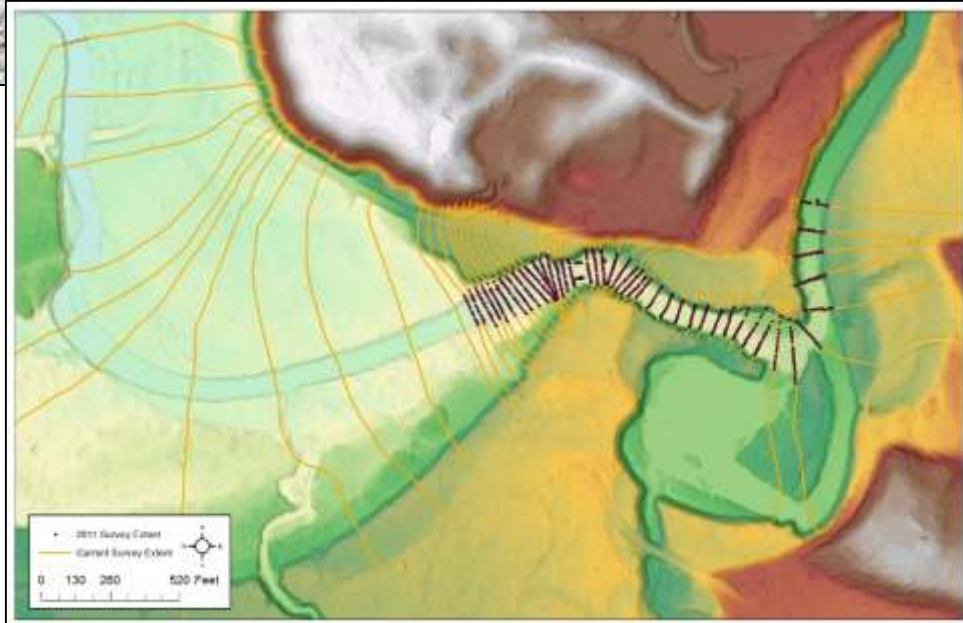
Getting Public Support:
Defining Goals for Successful
Outreach & Buy In
Dam Removal/Eco Restoration 101 Training

Neil Shea, *Restoration Program
Director*

Ipswich River Watershed Association



Outline



- Why care about public support?
- Translating the science
- Strategies for people
- Case Studies



Why care about public support?



The legacy of human efforts to control our waterways:

- Over 14,000 dams throughout the New England region
- Dams are linked with local history and culture
- Conservation of the environment created by dams

**The majority of dams in New England are privately owned...
With a willing landowner, why not just take them out?**

The reality is that whether a dam is privately owned or owned by a municipality, these projects are very public

- Can have wide-reaching impacts
- Input from a variety of stakeholders (abutters, businesses, water suppliers, environmental groups, etc.)
- Divisive – lots of issues



Why care about public support?

RESEARCH ARTICLE

I'll be dammed! Public preferences regarding dam removal in New Hampshire

Natallia Leuchanka Diessner^{1,*}, Catherine M. Ashcraft², Kevin H. Gardner³, and Lawrence C. Hamilton⁴



Competing Ideas of 'Natural' in a Dam Removal Controversy

Dolly Jørgensen

University of Stavanger, Stavanger, Norway; dolly@jorgensenweb.net

“You kill the dam, you are killing a part of me”: Dam removal and the environmental politics of river restoration

Coleen A. Fox,^{1*} Francis J. Magilligan,² and Christopher S. Sneddon³

So...why work for buyoff?

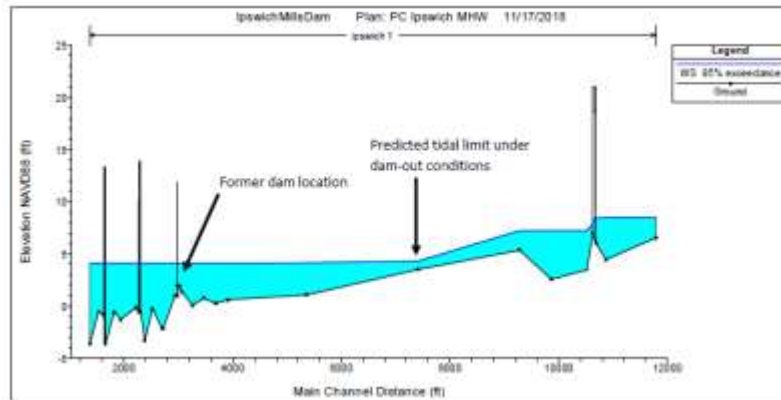
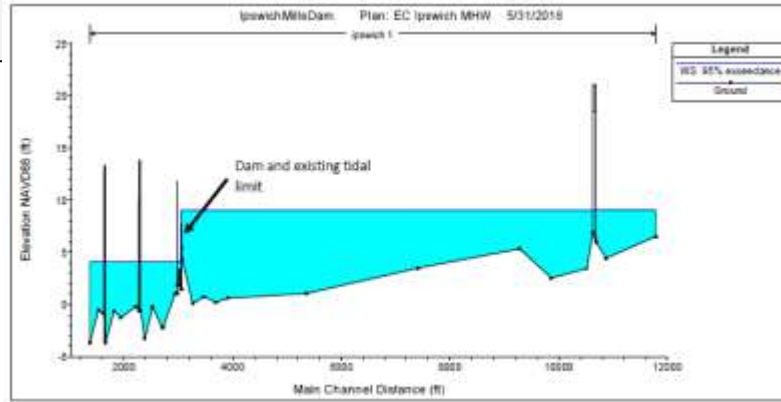
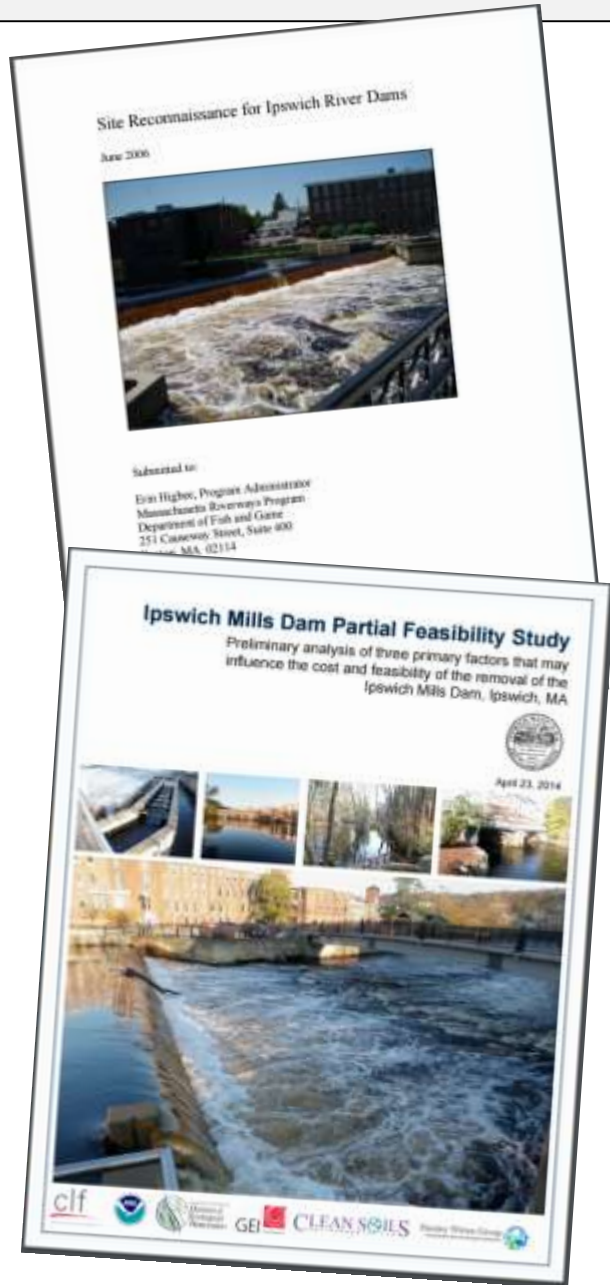
Every dam project is different and offers its own unique set of challenges. But there is one common link:

The more support a project has, the less resistance it will encounter

Research shows that in general, people are in support of dam removals. BUT the margins narrow when the dam has a real (or perceived) function.

How do you talk about these projects in a way where you can make sure the margins are in your favor?

Translating the Science



- Hydraulic and hydrologic modelling → How will water levels change?
- Sediment and water quality → What's behind the dam and where is it going to go?
- Infrastructure impacts → Will any buildings, roads, bridges, or public utilities be impacted?
- Archaeology assessment → What is the historical significance of the site?

Translating the Science

Use clear maps and figures to tell the story



CONDITION DEPICTED: HIGH FLOW (ONLY EXCEEDED 5% OF THE TIME) & HIGH TIDE (APPROXIMATE RIVER ELEVATION 5.8 FEET NAVD88)



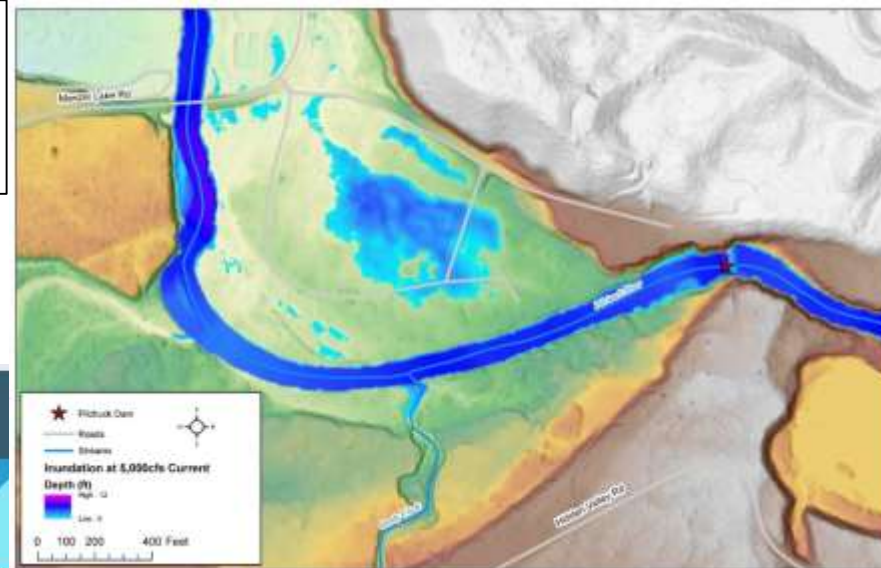
CONDITION DEPICTED: AVERAGE FLOW (EXCEEDED 50% OF THE TIME) & LOW TIDE (APPROXIMATE RIVER ELEVATION 3.8 FEET NAVD88)



CONDITION DEPICTED: LOW FLOW (EXCEEDED 95% OF THE TIME) & LOW TIDE (APPROXIMATE RIVER ELEVATION 2.8 FEET NAVD88)

- 1 For reference, the elevation of top of wall is 12.73 feet (NAVD88)
- 2 For reference, the elevation of viewing platform is 13.46 feet (NAVD88)

Detailed renderings will help with one of the most common questions – what will it look like?



**IPSWICH
MILLS DAM**
FREQUENTLY ASKED QUESTIONS 2.0 OCT. 2023

A good FAQ document will capture and summarize your distilling efforts – but won't be the end all be all

Translating the Science



Public meetings can be a good opportunity to inform and educate – but people need to feel that they've been heard




You're invited to an

Open House

Tuesday, March 19, 2019
from 4 to 7 pm with snacks provided

Granite Falls Library
815 E Galena St
Granite Falls, WA 98252

Staff from the Tulalip Tribes and the City of Snohomish will be on hand to answer questions regarding the dam removal project.



Pilchuck River DAM PROJECT

Reconnecting Critical Habitat

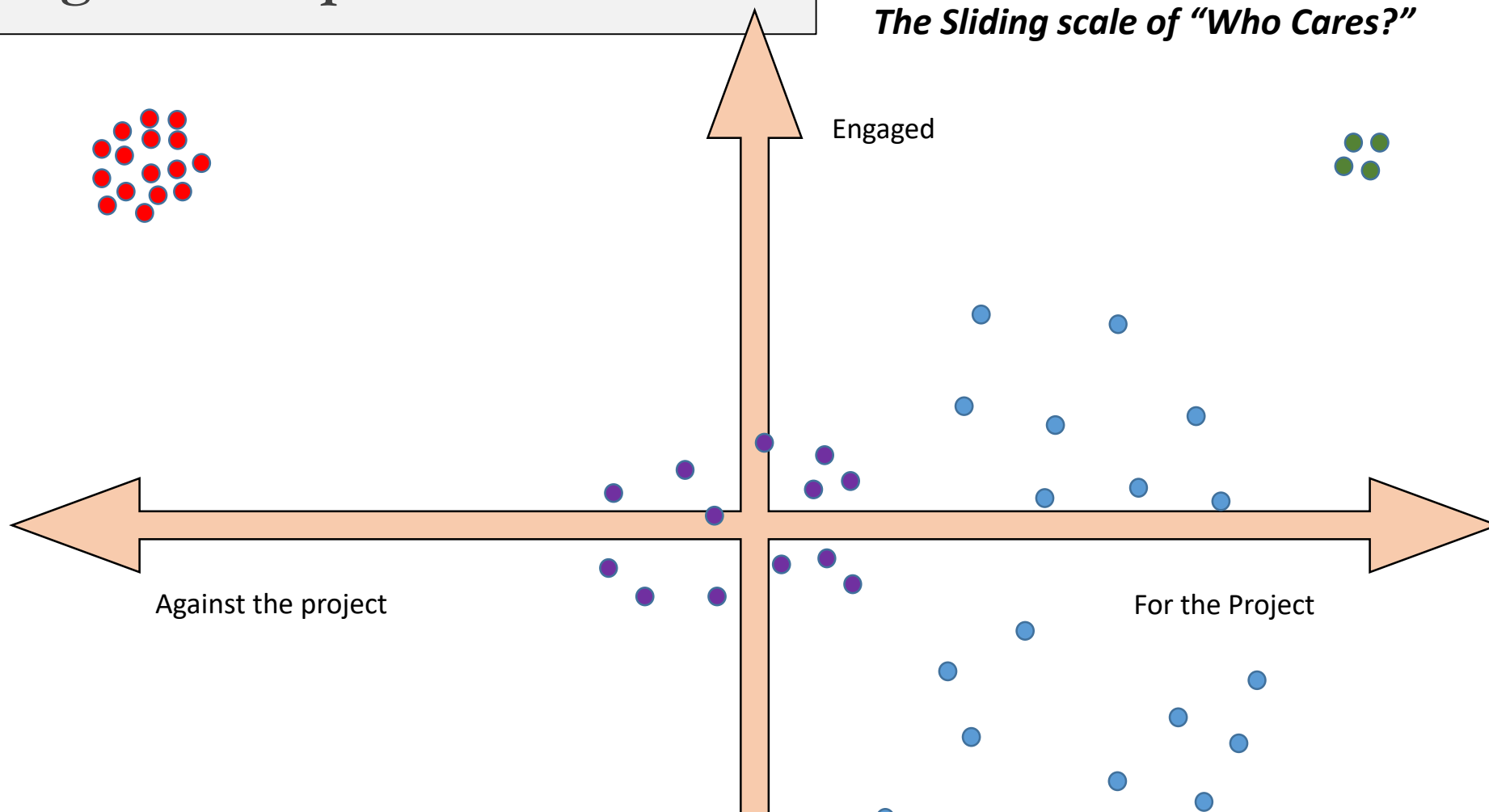
☞ Chinook, coho, steelhead and other species in the Pilchuck River are vital to our culture, and are iconic to our region. ☞

— Marie Zackuse
Tulalip Tribes Board of Directors



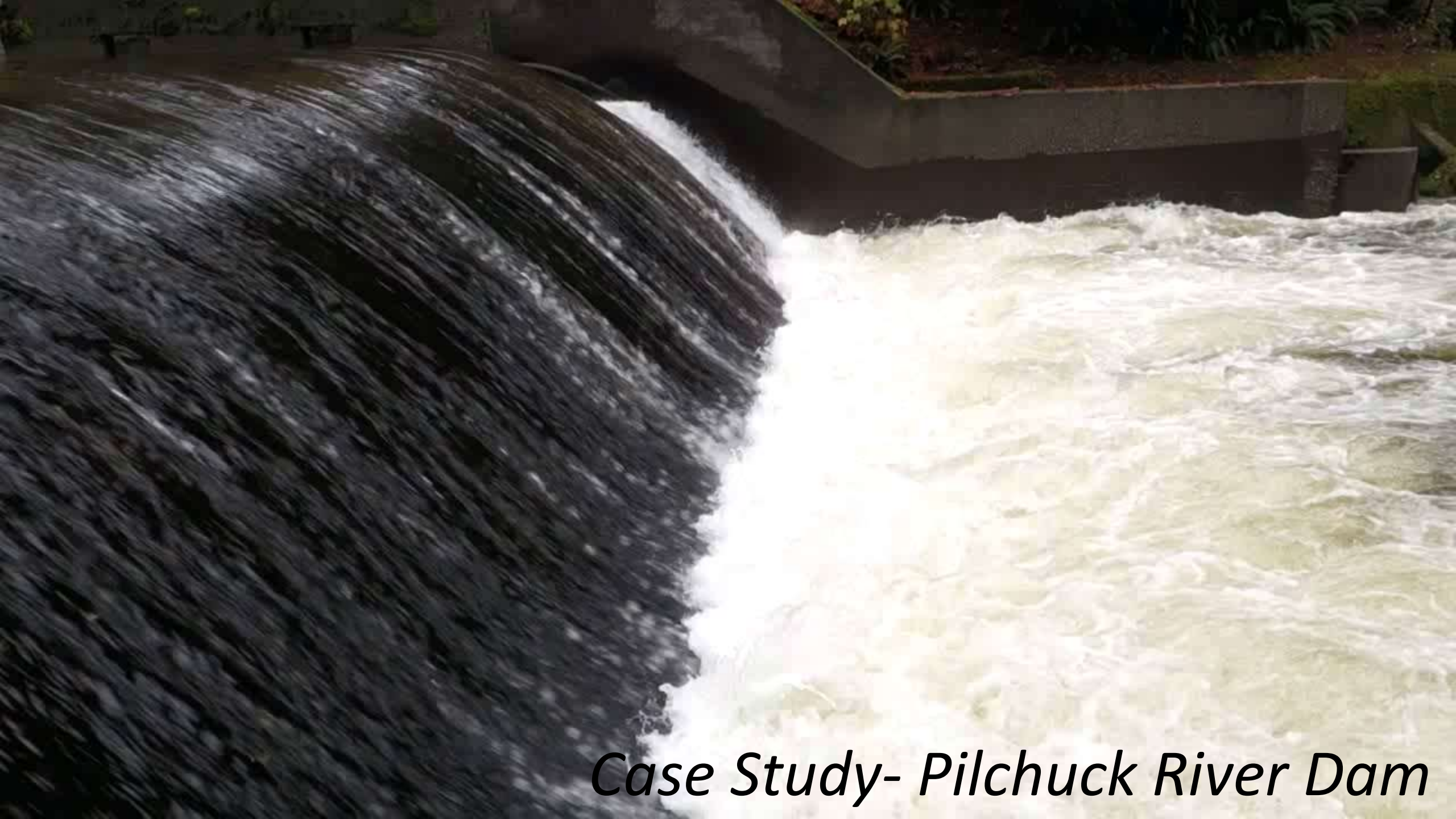
Strategies for People

The Sliding scale of "Who Cares?"



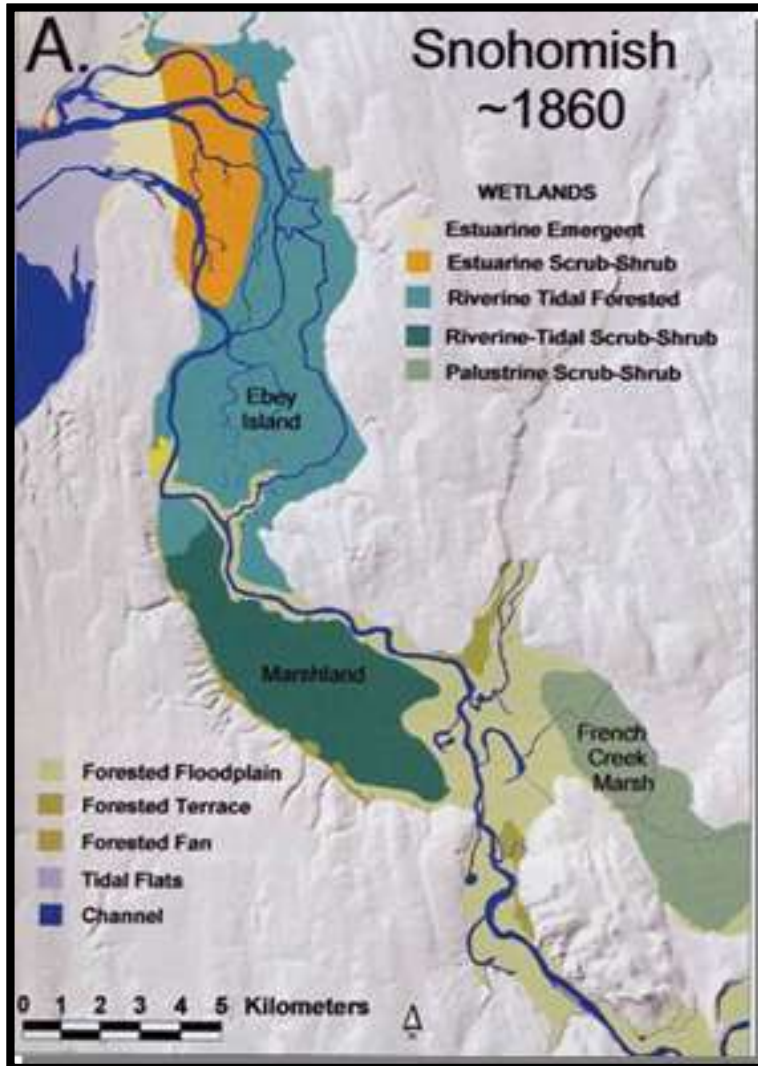
How to garner support

1. *Who is your audience*
2. *Figure out the pros to your specific dam removal (not just ecological)*
3. *Figure out the most popular reasons people would want to keep the dam (even if they're not based in fact)*
4. *Start having conversations*



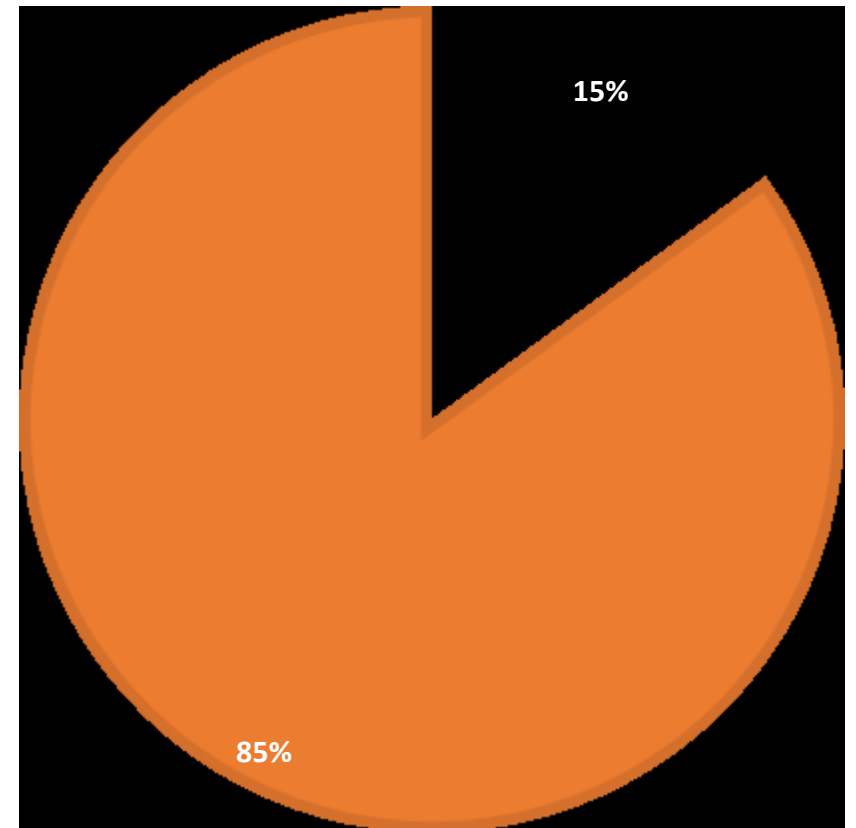
Case Study- Pilchuck River Dam

Habitat Loss

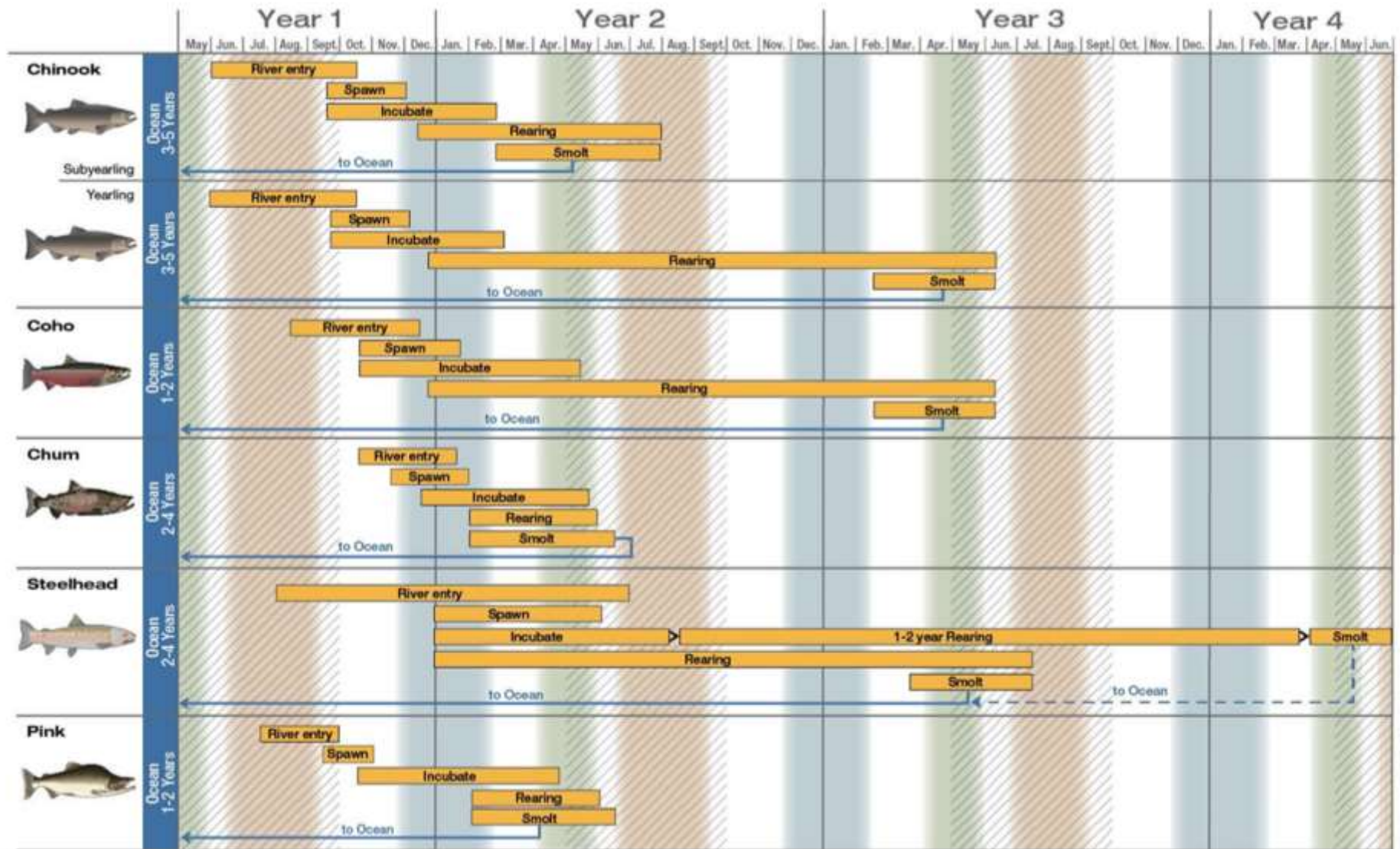


% HISTORICAL TIDAL MARSH

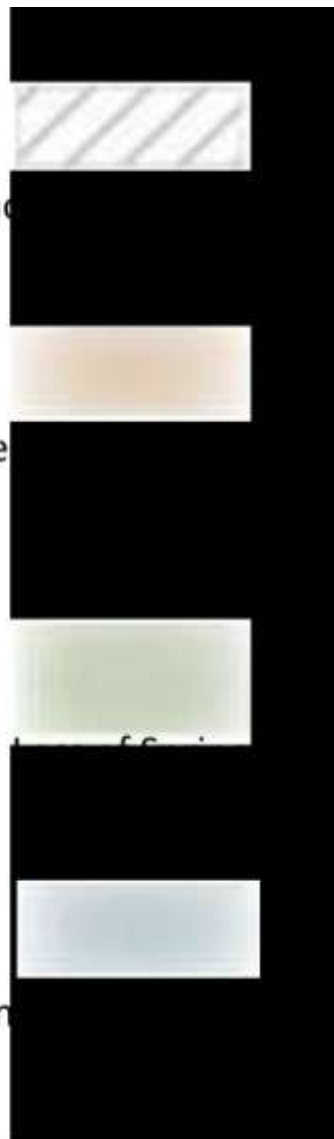
■ Remaining ■ Disconnected



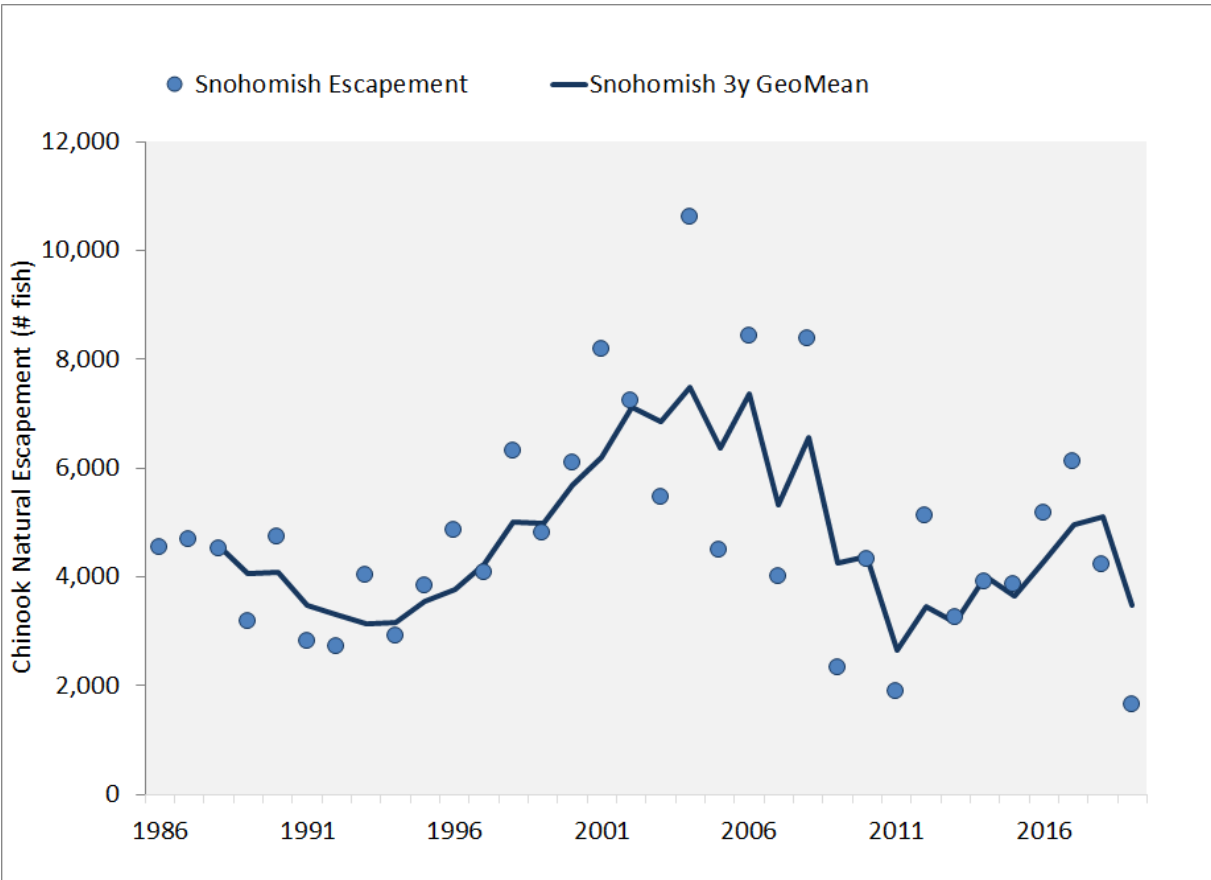
Climate Change






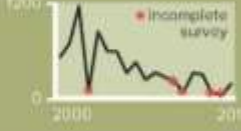








1701_8214L_WF_Sal_ClimatImpacts.sxi



Declining Populations



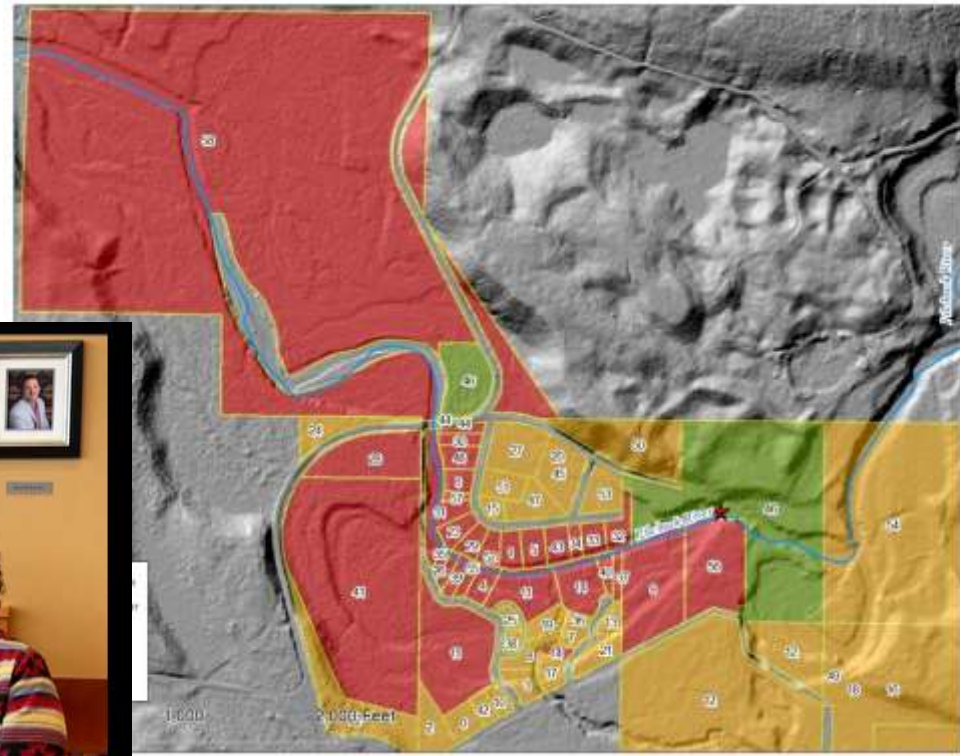
ENDANGERED SPECIES ACT THREAT LEVEL	SPECIES	2018 SPAWNERS*	STATUS
THREATENED	CHINOOK 	4,210	Well below recovery target of 64,000 
THREATENED	STEELHEAD 	1,252	Downturn in 2017-2018 
THREATENED	BULL TROUT 	Estimate: 196 NF Skykomish 10 SF Skykomish	Partial surveys - preliminary data. At risk due to warming. 
SPECIES OF CONCERN	COHO 	57,363	5 years of low returns 
	CHUM 	5,862	12 years of low returns 
	PINK 	0 (Only spawns in odd years)	2017 - lowest on record 

Outreach

Public Outreach and Stakeholder Engagement Plan



Unleashing the Potential to Create Positive, Enduring Change



PILCHUCK RIVER DAM Quick Facts

Measurements

- Originally built in 1957, it is now 80-foot wide and 70-feet tall.
- Blocks over a third of the primary river.
- Blocks a total of 87 miles of river and tributary stream salmon habitat.
- Fading fish access are still a barrier to iconic fish species (Chinook, Coho, Steelhead, Quill, Pink, Cutthroat, Bull Trout, and others).

Water

- The dam has no function, it no longer provides drinking water to the city of Snohomish.
- Water with no value is difficult at this location due to our city's tilt in the water and low sand flows.
- The dam has no reservoir, so there is no flood protection from the dam.

Reconnecting Critical Habitat

— Contact —

Brett Spatzak
Sustainable Manager

Tulalip Tribes
Natural Resources Department
6406 Marine Dr.
Tulalip, WA 98271
360.716.7618
naturalptrs.com

— Partners —

Reconnecting Critical Habitat

An agreement between the Tulalip Tribes and the City of Snohomish to work together to restore the Pilchuck River.

Groups rush to fix Washington's 'dam' problem



Dam removals like Pilchuck, Nooksack clearing way for salmon survival

By Emma Salas-Ferrera | Published July 19 | News | Q13 FOX



Latest News

Package to cut trap levels in 1,000 ft long, Aljuncos

New Orleans prohibiting March 2025 parade in 2025

SDA wants pregnant women to avoid pool releases

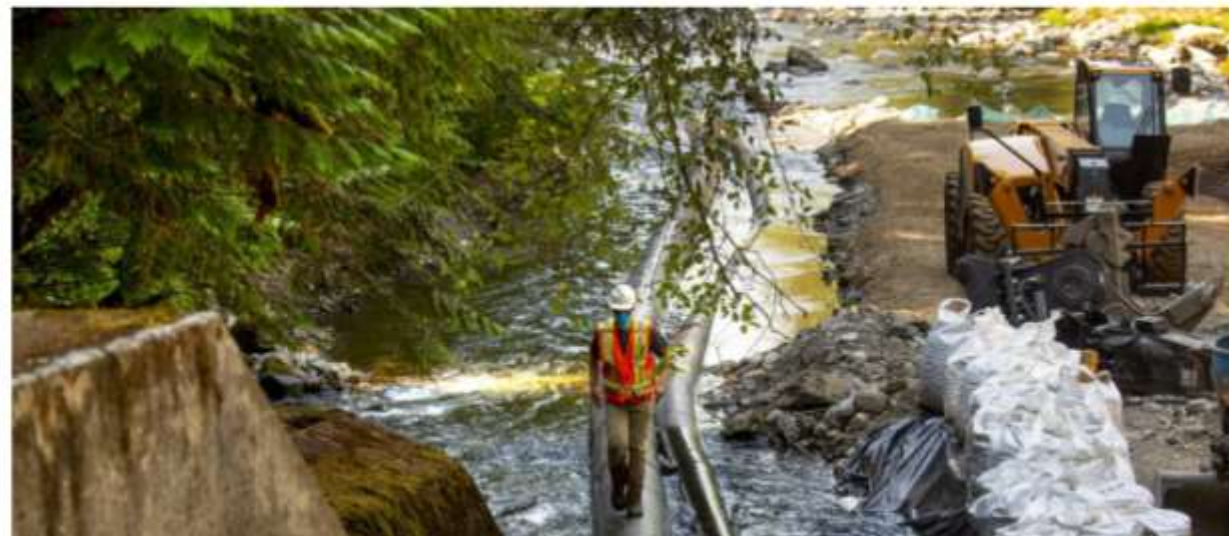
Police seek to identify suspect



The Seattle Times

Another Washington dam removal — and 37 more miles of salmon habitat restored

Aug. 5, 2020 at 6:00 am | Updated Aug. 5, 2020 at 9:18 am



Your Connection To Jazz, Blues and NPR News

Listen Live

On The Air News Jazz & Blues Features Calendar Support KNKX Connect About

Pilchuck Dam removal nearing completion, with 37 miles of good fish habitat upstream

By BELLAMY FALCHORP • AUG. 3, 2020










































*Case Study – Ipswich Mills Dam*³³

Brief Background

Project History

- 2006 – Initial recon
- 2014 – Pre-feasibility study. 2015-2019 Full feasibility study
- **2020-2021 Updates to feasibility study**
- **Named a project to watch by American Rivers**
- **2023 – Filed with MEPA**

Ipswich Mills Dam and South Middleton Dam, Ipswich River, Massachusetts



QUICK FACTS

- # Dam Removals: 2
- Dam Use: Mill
- Upstream River Miles Blocked: 106+ miles

The Ipswich River Watershed Association has been working for years towards the removal of the Ipswich Mills and South Middleton dams on the Ipswich River in Massachusetts. The Ipswich Mills Dam removal project has experienced slow and sporadic progress over more than 20 years because of its delicate location within the heart of historic downtown Ipswich, Massachusetts. As a head-of-tide dam and first significant barrier along the mainstem of the Ipswich River, the Ipswich Mills Dam has interrupted the ecology of the river for almost 400 years. As one of *America's Most Endangered Rivers*® of 2021, the Ipswich River is in dire need of an investment in restoration and conservation. This project would increase the climate resiliency of a river in need and be a triumph and testament to the hard work and dedication of the community, local and state government, and the multitude of organizations who have contributed to advancing this project.

The removal of the South Middleton Dam has been many years in the making, but 2022 promises to be a big year for the project. Ipswich River Watershed Association is partnering with Bostik (dam owners), Inter-Fluve, Massachusetts Division of Ecological Restoration, U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration on what will be the first major dam removal project to take place on the Ipswich River. The removal of the South Middleton Dam will

CONTACT

Neil Shea
Ipswich River Watershed Association
978-412-8200
nshea@ipswichriver.org

Courtesy of the Ipswich River Watershed Association



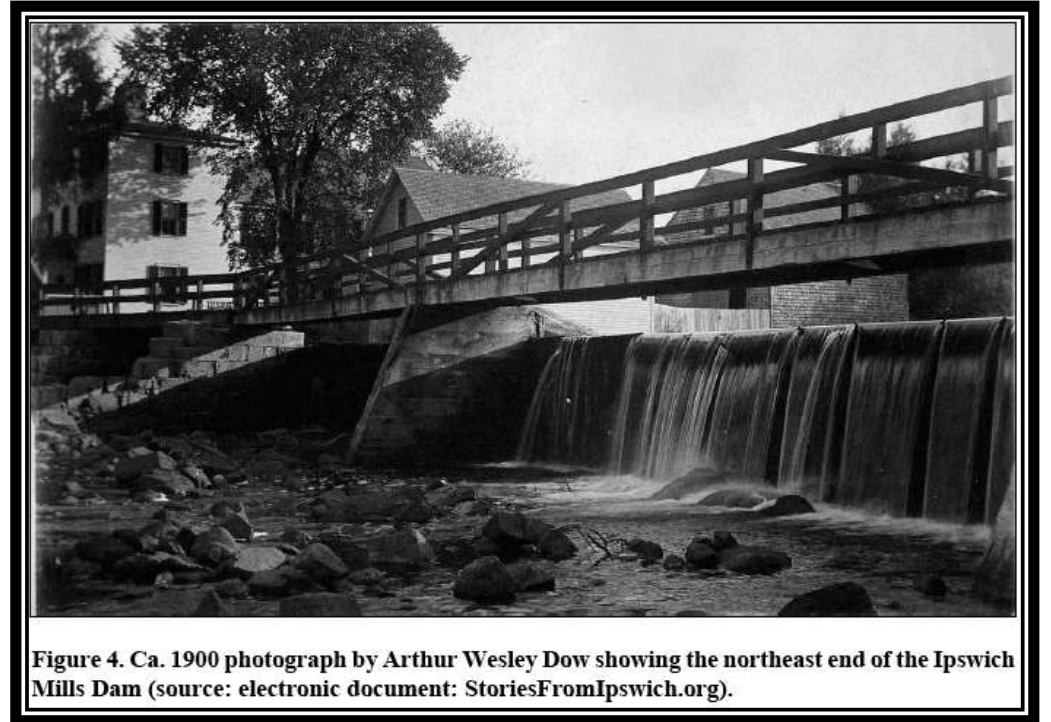
Copeo 1 Dam, Klamath River; Photo Credit: Daniel Nylen

Thousands of dams need to come down in the U.S., and there are opportunities for river restoration at every size and scale. American Rivers curated the following list of 25 dam removal projects to watch for in 2022 and beyond which is meant to illustrate examples and highlight opportunities of the types of dam removal projects that exist across the country. The "projects to watch" list is not exhaustive. The projects range from small dams with willing owners where river restoration will deliver important local benefits, to bigger dam removal efforts that are vital to saving species from extinction and addressing longstanding injustices across entire regions.

1. Ipswich Mills Dam and South Middleton Dam, Ipswich River, Massachusetts
2. Mahoning River Dams, Mahoning River, Ohio
3. Scott Dam, Eel River, California
4. Snake River Dams, Snake River, Washington

Brief Background

- Ipswich Mills ranks in the 95th percentile for restoration value for all coastal dams from Maine to Virginia
- 49 miles of habitat and ecosystem restored
- Water levels above the dam will lower; water levels below the dam will remain the same
- New water elevations would vary based on seasonal flows and daily tides
- Removal would lead to reduced flooding risk to buildings and property upstream of the dam; if dam is left in place, downstream infrastructure remains at risk
- Enhanced passage for fish, wildlife, and recreators!



**IPSWICH MILLS DAM REMOVAL
FEASIBILITY STUDY FACT SHEET**



Downtown pop-up shop

- Spring 2023 Town Meeting Vote – Formal vote on the project for the first time
- IRWA rented a downtown space and set up a pop-up shop
- Allow people to come chat face-to-face, view project documents, maps, etc
- Host weekly events and engagement opportunities

ARTICLE 14 – Ipswich River

To see if the Town will vote to... necessary for the Ipswich River... and for the implementation of... Environmental Protection Act

Summary: The Town is pursuing... of a larger effort to address... project has been awarded a \$... Administration (NOAA), a public... engagement process for the Ips... Town Meeting for the Select B



By: Select Board

any and all permits... val of the Ipswich Dam, ...achusetts

ich Mills Dam as part... eds. This larger... ospheric... is, and continued public... express the support of... removal project.

Board Recommend: 3-1

Downtown pop-up shop

- Spring 2023 Town Meeting Vote – Formal vote on the

pr

- IR

sp

shop

- Allow people to come chat face-to-face, view project documents, maps, etc
- Host weekly events and engagement opportunities

ACTION: Yes: 314 No: 144. Article 14 carries by the necessary majority.

**LEARN ABOUT THE
BENEFITS OF DAM
REMOVAL**



LIABILITY REMOVAL

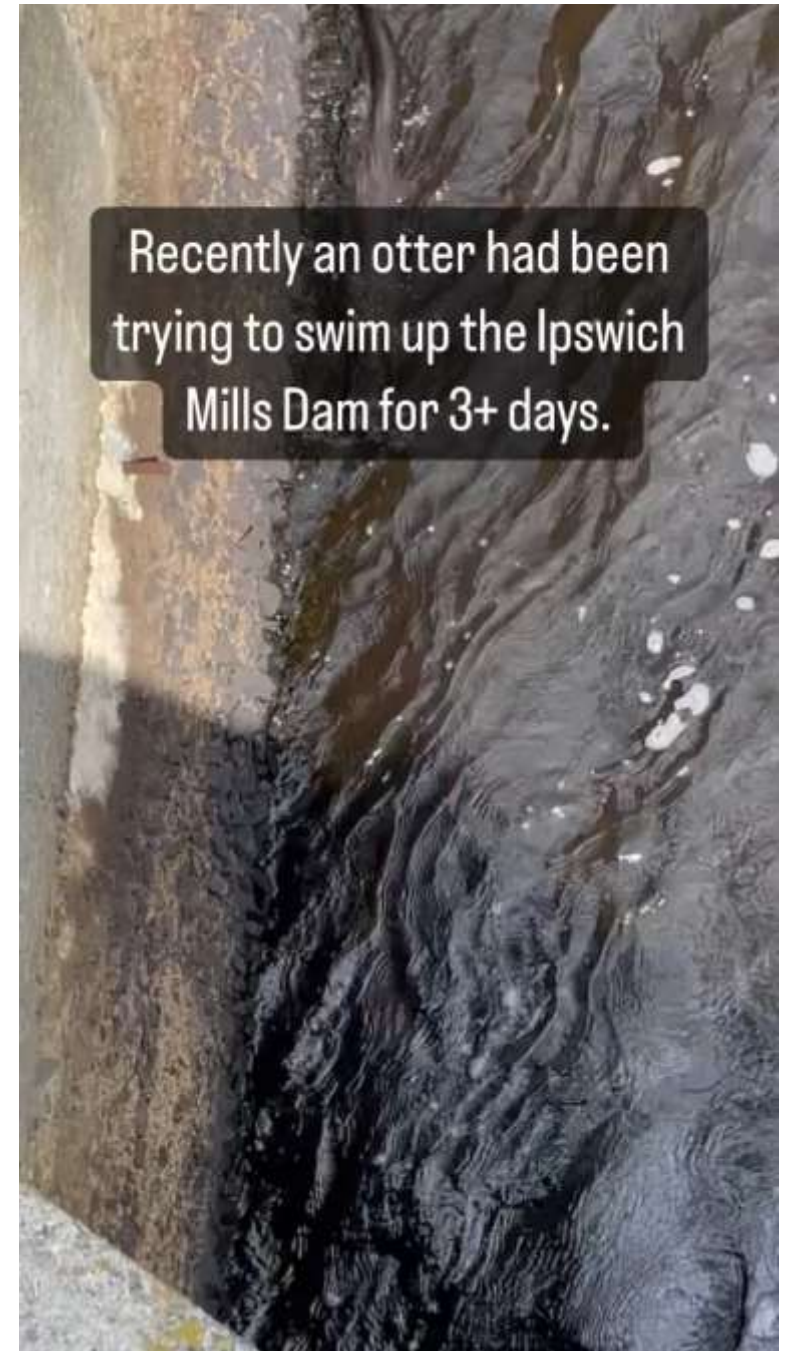
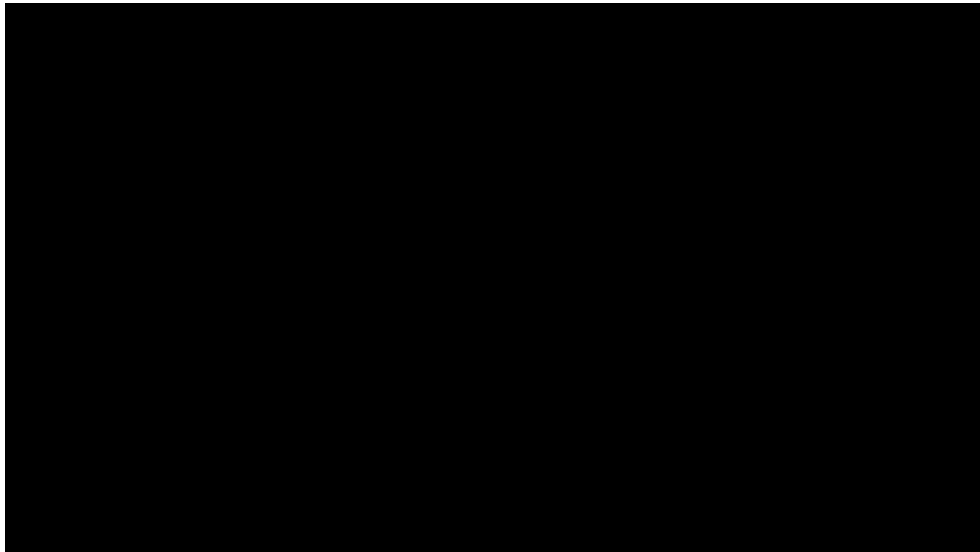
RECREATIONAL IMPROVEMENTS

IMPROVED WILDLIFE PASSAGE



Lessons Learned

- Be clear about decision making
- Be strategic about where you spend your time
- People love wildlife



Thank You



Neil Shea



978.471.9321



nshea@ipswichriver.org



IPSWICH RIVER
WATERSHED ASSOCIATION
The Voice of the River

