



Floodplains by Design

• REDUCING RISK, RESTORING RIVERS •

Newsletter

May 2025

State Legislature Delivers Strong Support for Floodplains by Design

FBD RECEIVES \$75.7M IN FINAL LEGISLATIVE BUDGET TO CONTINUE CRITICAL FLOODPLAINS WORK

The 2025 legislative session concluded on time and with meaningful support for Floodplains by Design. Thanks to your dedication, partnerships, and advocacy, the legislature proposed a budget of \$75.7 million in state funding- an important investment in the resilience of Washington's floodplains. This total includes: \$59.6M in baseline bond funding and \$16.1M from the Climate Commitment Act.

Notes from the Floodplains by Design Team

A heartfelt thank you to everyone who hosted site tours, joined us for FbD Legislative Day, wrote letters, and most importantly- continued to deliver incredible, bipartisan-supported projects across Washington.

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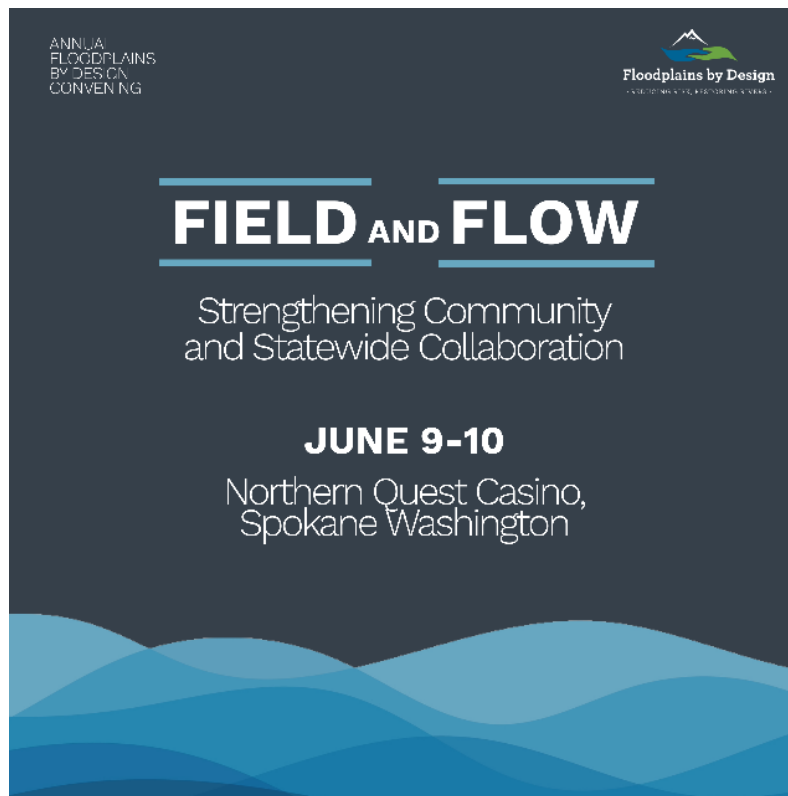
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Hood Canal Salmon Enhancement Group	Lower Big Quilcene River & Estuary Restoration
Snohomish County	Community Floodplain Solutions (CFS) – Phase 4 Implementation & Evaluation
North Olympic Salmon Coalition	Hoko River Floodplain Restoration at Upper Cowan Ranch
Stillaguamish Tribe of Indians	Stillaguamish Watershed: Improving Floodplains & Farmlands
Pierce County	Clear Creek Floodplain Reconnection Project [Near-Term Actions]
Stevens County	Chewelah Valley Restoration & Integrated Floodplain Management Project
Kittitas County	Upper Yakima River Floodplain & Habitat Restoration Implementation
Whatcom County	The Nooksack River: Floodplains that Work – Phase 4
King County	Snoqualmie River Collaborative Floodplain Restoration

FbD Capitol Budget Funding List 25-27

Floodplains by Design Upcoming Programming

Find upcoming events at floodplainsbydesign.org/participate/events



Field and Flow: Strengthening Community and Statewide Collaboration

FbD In-person Convening, June 9-10, 2025

Join us for Field and Flow, a two-day, in-person convening of partners working to restore and protect Washington's floodplains. This collaborative event will bring together Tribal staff, Washington Department of Ecology, floodplain managers, ecological restoration specialists, and community leaders to connect, learn, and advance shared solutions for resilient watersheds. Field and Flow will feature immersive site visits, peer-led sessions, and space for action-oriented dialogue.

RSVP

Floodplains by Design Upcoming Programming

Find upcoming events at floodplainsbydesign.org/participate/events



FbD Grant Update Advisory Group Meetings #3

May 27, 10AM-12PM

Goal: Reduce the time required in the application writing and review process, as well as adjust application questions to allow for more integration and less redundancy without compromising the integrity of the Floodplains by Design (FbD) program. And, to the extent possible, be mindful of how these changes could benefit future grant agreement negotiations and amendments.

Register [here](#)

Funding & Policy Action Group

Funding & Policy Action Group Spring Meeting

May 29, 2025

The Floodplains by Design Network fosters collaboration among experts in policy, science, and community engagement. By hosting events like Funding & Policy Action Group, the network aims to share the latest research, convene meaningful discussions, and help practitioners adapt to ever-evolving challenges in flood risk reduction and natural resource stewardship.

Join [here](#)

Floodplains by Design Upcoming Programming

Find upcoming events at floodplainsbydesign.org/participate/events

Lunch and Learn

FbD Lunch and Learn

June 12, 2025

Join us for a conversation with Hilary Aten (Office of Farmland Preservation Coordinator) and Mike Poteet (Voluntary Stewardship Program Coordinator) from the Washington State Conservation Commission, as we explore how agricultural land use and floodplain management intersect and where we're seeing new opportunities.

Join [here](#)



FbD Grant Update Advisory Group Meetings #4

June 24, 10AM-12PM

Goal: More information to come.

Register [here](#)



Shellfish, Sea Level Rise, and the Power of Indigenous Climate Research

Q&A WITH CANDACE PENN OF THE SQUAXIN ISLAND TRIBE

Candace Penn B.A., M.P.A., Climate Change Ecologist with the Squaxin Island Tribe, sat down with Floodplains by Design to share the story behind their sea level rise research, the collaboration it required, and the cultural significance of this work. Her words reflect both the urgency and care behind Indigenous-led climate planning in the Pacific Northwest.

The Storymap referenced throughout this Q&A can be found here: [Squaxin Island Tribe Storymap](#).

PROJECT BEGINNINGS AND TRIBAL PRIORITIES

What are some key messages that the Squaxin Island Tribe wants to communicate through the story map? Who were the collaborators?

This has to start about four years ago, when we originally started working on the sea level rise. We initially started this research with the island itself, called Squaxin Island. It is a small island that's about four and a half miles long and a half mile wide- just a small little island where all of our people used to reside. It's now completely uninhabited.

But we have a lot of vested interest in shellfish there- in the intertidal zone and subtidal zone. We have clams, oysters... those are just some of our main ones, lots of other ones, but those are the focus for the Tribal economy. Many of our Tribal members make their living or earn their living on the beaches.

We have numbers for about 20% of Tribal members earning their living on the beaches. But I would argue, since COVID, that has increased. We haven't done more data on that, but just visually, being in the community, we have seen more participation on those beaches.

That means that's extremely important to the Tribe in many ways- now, and especially in the future.

When we started working on the sea level rise study, we knew we had to figure out how our shellfish were going to be impacted. So our first wave of sea level rise studies focused on shorelines and ultimately the species that would be impacted on those shores.

We found in some of the more extreme areas that we would lose up to 45% of our shellfish on those beaches, especially beaches that had large cliffs or armoring for protection of infrastructure. We were seeing little to

no clam land in existence. What was happening was a squeezing effect. As those tides were rising, that clam bed was getting smaller and smaller and eventually in some areas was nonexistent.

That made us take action along the shorelines first. But the second wave of this led to us moving up the creeks and streams.

So we started looking at the main area for residents of our Tribe. Where most of our people reside is in "downtown Kamilche." We're calling it downtown Kamilche, but really we're just a small junction between islands.

But that is where most of our Tribal members are. Our businesses, government services, our fire station, legal offices, behavioral health center, childcare center- you know, many large pieces of infrastructure, bridges, power, water, utilities. The things that serve our community.

So we were very concerned about what potential flooding might mean in these areas.

We moved up the creeks- Skookum and Kennedy-



North Fork Skookum Creek by Sam Judy



they're the two creeks that are adjacent to our reservation. We found very shocking evidence that shows us we have potential to see inundation in our children's and grandchildren's lifetime that will be shocking. It will be beyond what we, as a community, thought and what we were prepared for.

It's now our job to really allow the decision-makers to have the level of understanding that we've gathered in this project, and we've been doing that slowly but surely.

METHODOLOGY AND MODELING

How did your research team incorporate dynamically downscaled climate projections into the simulations? Why is that important?

We incorporated downscaled climate modeling, or climate projections- into almost every piece of our research. That basically is stating that there's research that's come before us that will tell us approximate sea level inundation height.

So we can't just go into those with just our localized

data and localized numbers. We had information that informed our models, that allowed us to make appropriate hypotheses around the projections.

So "*Mapps et al.*" was a big part of this one. And we were not the only study to incorporate those types of models. So typically you'd be able to reference a lot of studies, but this was somewhat new cutting edge in science.

This is something that's been pretty common along the East Coast, or in areas that had large hurricane events or large storm surges, like New Orleans. They'd see these types of actions coming after the storm surge events. These rivers, creeks and streams were so impacted that it caused, you know, x, y, z to happen. One of them being infiltration of saltwater into the freshwater system.

There's also concern for sewer and adjacent streams to shorelines. You're not necessarily thinking about storm surges or king tides affecting that, but it is.

I was standing on the creek when we did that, and I remember thinking, "There is no saltwater or marine influence around us right now." We brought a group of students down there from Evergreen and said, "Yeah, look around. Is there anything that gives you an

inclination that we might see sea level rise here?”

A lot of the answers were “No,” but in fact, we likely will. And if not in my lifetime, by 2050 we’re considering that in my lifetime. I know that will likely happen in our next generation’s lifetime, or our grandchildren’s lifetime.

They will see some very extreme sea levels that we really haven’t discussed. And this is something that we’re very much excited about. The fact that we have this research and knowledge.

To be fair, this is something that we’re very happy about. But it is also extremely daunting knowledge to have—knowing certain cultural sites are going to be inundated and are already inundated like 15 days per year.

These creeks are going to be inundated 30 days per year by 2050. And by 2100, that number will double or even triple.

These are very unfortunate realities and not just for Squaxin, but many coastal Tribes. All of our brother and sister tribes along the West Coast are also in this.

That’s another big part which is sharing that information with those Tribes that maybe haven’t looked into this yet, don’t have the capacity. Sometimes they’re very, very small. They just don’t have the resources.

TECHNICAL CHALLENGES AND DATA LIMITATIONS

Were there any challenges you faced when it came to calibrating stream temperature models or collecting reliable sea level data?

The original inspiration for this came from a challenge that we faced, which was really that we weren’t sure what would happen. We had our hydrologist take what a lot of hydrologists do during high-flow season—taking high-flow measurements. I think this would be really common knowledge if we had a hydrologist sitting here, they’d be like, “Oh yes, obviously.” But we were there taking high flows, and it just didn’t make sense. The data wasn’t lining up.

We kept looking at it, and twice a day, our creeks were eventually rising 3 to 5 feet. We couldn’t figure out if the device was broken. After having a GoPro set out to watch the actual event occur alongside the gauge. That video is featured in our story map. We saw the creek rising upstream in areas you would never think would see sea level rise.

GoPro footage can be found within the storymap: <https://maps.squaxin.us/portal/apps/storymaps/stories/f362e49fb5104116a00158e80381f4bd>



*Skookum Creek Rise Filmed by Joe Puhn and
Time Lapse by Amanda Hsu*

That was happening, and we were trying to figure out what was causing that. It was something we discovered in-house. We were looking at the data and someone said, “It looks like it occurs two times a day, in what looks like regimented intervals.” Someone else said, “It looks a lot like the tide.”

We realized: this needs more work. We need more research to figure out just how far this goes up.

We also had challenges in the project itself with stream temperature modeling and low-flow conditions. I would definitely want to lean on my hydrologist to answer that part in detail.

But in terms of sea level rise data, we’re likely not going to get the best quality because we are within the deep South Sound. We have areas that are long inlets, and modeling those for 50 or 100 years has disadvantages.

We are a little more protected from hurricanes and storm surges because of those dynamics, but it makes it a real challenge.

A lot of the challenge also comes from not having access to the best data. I’m always striving for better. Even if it’s not possible now, we need to be thinking about it for the future.

Our current sea level rise data is taken out of Seattle, which is an hour drive from us, a long way by water. We are using those models to predict sea level rise in our area, and that just isn’t going to be as accurate as it should be. We should have a tidal station in the South Sound.

What we are doing in-house is trying to grasp the best possible data sources available- even taking some ourselves. For our first story map, we actually established a tidal station on Squaxin Island. We worked with Taylor Shellfish, a local company, to design a sea level rise gauge. That allowed us to collect sea level rise data locally.

NOAA actually contacted us because they wanted our data. They didn’t have localization up here. That’s something we’d always talked about. These are very expensive. A lot of payments would probably look like a partnership with USGS and the Tribe- not just my Tribe, but Tribes in general to take on a large-scale project. Definitely doable.

Unfortunately, we’re still using what they call sea level rise predictions for our area, which is sufficient for what we need, and we were able to determine what our shorelines will look like. But again, I’m always going to strive for it: we should definitely have a tidal station in our area.

What implications does a 14-inch sea level rise and increased flood frequency have for coastal communities and tribal lands?

It definitely touches on a few things already. The impacts that we’ll see to our shellfish, and the impacts we’ll see to our shorelines in general. Also, for us as Tribal peoples, we utilize a lot of the nearshore space for many different things. Most of those practices are related to shellfish, but some are related to fishing.

In order to fish, you need a small section of beach and not a lot, but it needs to have some kind of gravel on them and not be too steep, bluff-facing. It has to be somewhat leveled out to allow for fish to swim in the current and proper anchoring. That’s a big impact.

There’s this complicated visual image in the story map. Charts that explain approximately how our inundation levels are going to be, with verbal explanations of their probabilities and approximate times. It’s complicated.

So sea level rise is really complicated. I like to explain it like this: In the last 100 years, sea level has risen about 4 to 6 inches- that’s ankle height. By 2050, we’ll likely see seas rise to knee height. In our children’s lifetime and our grandchildren’s, we’ll see 4 feet or more. In extreme events, that could reach shoulder height.

That’s how I explain it in presentations. If I’m talking to a tribal council member thinking about building roads or infrastructure, I say “imagine the water at your shoulder.” It’s just an easier way to picture it.

In the Pacific Northwest, we all know about Xtratuf boots. So I say the sea level rise goes from an Xtratuf shorty boot (our lifetime) to a knee-high (by 2050), and then possibly over your head (by 2100).

How might a projected 7-degree increase in stream temperature impact salmon and aquatic species?

We are extremely concerned about the temperature change. Along with that, we’ll see precipitation changes that won’t help the thermal challenge.

We’re already seeing it. The 2080s projection is, in my opinion, conservative. I think we might see that by the 2030s.

This impacts our salmon. We are salmon people. We carry so many traditions and cultural practices around them. To not have access to or not be able to hold our first salmon ceremony, to honor the salmon people that would narrowly break our existence.

I’ve unfortunately witnessed this with other tribes like

the Cowlitz Nation, who have to rely on neighboring Tribes just to get salmon. That's really hard to hear and witness. You don't get to go out with your family and harvest. Fishing boats get sold. It changes the entire community.

And it's not just salmon. There's also the native freshwater mussel. It's almost extinct. We have some of the last populations in Mill Creek. Even 1 or 2 degrees of temperature change can impact them. They're culturally significant, even if not economic.

During extreme heat events, like the one in 2021, we saw die-offs of clam species. This is life-changing for our Tribe.

How is this work being used to guide decision-making and planning?

Our first story map had a big impact. We were able to make recommendations to allow for the natural migration of the beach and to not block it with hard armoring.

We worked with municipalities like Olympia and Shelton to not over-issue permits. We've informed decision-makers in our Tribe: we're not going to build in inundation zones. If we have to rebuild, we'll use soft armoring.

For example, our enterprise building was very close to the inundation zone. It wasn't going to be flooded, but there was so much over-provision along the creek that it could collapse. So they chose not to remodel and instead relocate.

Our shellfish company, Salish Seafoods, just installed a new dock that lifts and allows natural sediment movement. Those are the types of solutions we're working toward.

We've only given the new presentation about five times internally, and a few externally. I gave the shoreline one 50 times. I know we need to keep getting this out. The research is only half of it- the other half is sharing it and getting it into the right hands.

How can Indigenous knowledge and community input enhance climate research projects like this?

Integrating Indigenous knowledge is so important. One of the pillars of this work is just thinking generationally. **It's thinking of resources as relatives and not as resources.**

Our people were some of the first scientists. There's an umbrella of Indigenous knowledge, and also very specific Indigenous practices. Like clam gardens- those are ancient practices being revitalized.

In steep, rocky beaches, you can build a 2- or 3-foot wall that causes sediment to build up. It creates more clam habitat. We didn't need to use clam gardens here traditionally because we had so much shellfish. But now, we might.

I went to the Indigenous Aquaculture Conference in Sitka, where I learned from Native Hawaiians, Alaskans, BC Tribes. They shared about fishponds, fish ladders—all practices that might help us too.

That knowledge sharing is invaluable. It's not always easy to get, and I don't take it lightly. When it happens, it changes everything. And that knowledge is integrated throughout this entire project.

URGENT ACTION AND FINAL THOUGHTS

What do you consider to be the most urgent actions needed to protect tribal heritage and land against future climate impacts?

The actions needed ultimately come from a higher policy level.

I feel like a lot of people are aware now that Tribal communities are disproportionately impacted. The capacity we have to deal with the impacts that we're going to see is phenomenal and it is way beyond what we can do individually as a Tribe.

Some examples I look to are ones I personally don't want to happen in my community- like the Quinault Nation. They've had to declare a state of emergency over a dozen times due to seawall breaches.

And it's not just my Tribe facing these issues. Everyone along the Pacific Northwest and the South Sound will see these impacts.

A way to safeguard our future for the next seven generations is to tackle the larger issue of carbon emissions that are ultimately impacting our Mother Earth. Those decisions, unfortunately, can't be made within our council chambers.

But what we are doing is the research. We are-

advocating. We are walking the walk and talking the talk. We've made major headway in terms of carbon emissions—we're doing a greenhouse gas inventory.

Even before going into it, we knew: we're a 1,200-member tribe. We don't produce that many emissions. We're likely not that impactful globally. But that doesn't mean we shouldn't try to reduce.

That doesn't mean we shouldn't serve as an example—to other communities, to cities, to other tribes—that this is important.

We need to hold ourselves to a higher standard and hope others will follow. I hope we can be an inspiration.

These impacts are so important. We set out to do this—and we're small—but we can make a big ripple. If we're not heard individually, if we speak together, our voices are very loud.





Charting a Course for Smart Growth and Floodplain Protection

INSIGHTS FROM JOE TOVAR

A recording of Joe's presentation can be found [here](#).
The slide deck from this presentation can be found [here](#).

HOW DO WE FOSTER DEVELOPMENT WHILE PROTECTING FLOODPLAINS?

This was the central challenge Joe Tovar addressed in his recent presentation to the integrated floodplain management network. Tovar is well-known throughout Washington State as a “guru in planning,” having served as co-lead author of the seminal Roadmap for Washington and holding faculty affiliations at Western Washington University and the University of Washington. His remarks provided a comprehensive look at the overlapping demands on local governments and how policies like the Growth Management Act (GMA) shape the future of our cities, counties, and critical floodplain areas.

Balancing Development and Resource Protection

One of the core themes in Tovar's presentation was the tension small communities face between encouraging growth (to meet regional population and economic needs) and protecting natural resources- particularly

floodplains. Under Washington's Growth Management Act (GMA), counties and cities must identify and protect critical areas (including frequently flooded areas) and resource lands. Tovar noted:

“From the get-go, the GMA has required local governments to designate critical areas and adopt regulations to protect them... That sounds great, but in practice, local approaches vary a lot.”

Because each locality interprets “best available science” somewhat differently, regulating land uses in floodplains can become patchwork and uneven, making regional conservation efforts more difficult.

A Look at Urban Growth Boundaries

Tovar highlighted the legal and practical complexities around urban growth area (UGA) boundaries. By law, new urban-scale development is supposed to be placed within UGAs rather than sprawling onto agricultural

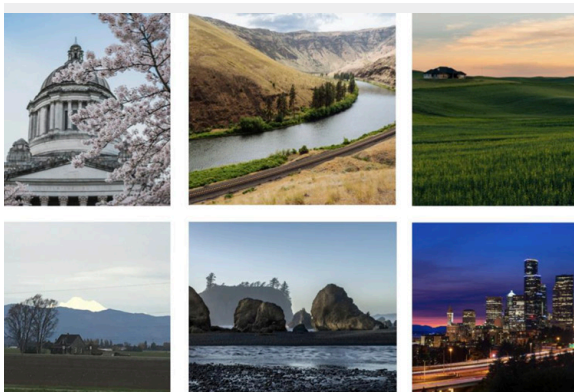


or flood-prone lands. Yet historical decisions, as in Snohomish County, often “grandfathered” areas of the floodplain into UGAs before more explicit restrictions were added to the GMA.

Snohomish County Case: In the 1990s, Snohomish County approved an expansion of its UGA into a triangular area in the floodplain. Conservation groups appealed it, but the courts ultimately allowed the expansion. Out of concern over long-term sprawl in floodplains, the legislature later amended the GMA to say new UGA expansions cannot occur in the 100-year floodplain in Western Washington, with very limited exceptions.

Modern Adjustments: Cities like Snohomish are revisiting old UGA boundaries, using GMA amendments that permit a “swap” of floodplain land out of the boundary in exchange for adding lower-risk, upland acreage. In Tovar’s words:

“We’ve been given flexibility now to correct what we saw as potentially an error from years ago about where floodplains should not be encroached upon.”



A ROAD MAP TO WASHINGTON’S FUTURE

Final Report Volume 1.

June 30, 2019

Executive Summary

WASHINGTON STATE UNIVERSITY
THE
WILLIAM D. RUCKELSHAUS CENTER
UNIVERSITY OF WASHINGTON

“Roadmap for Washington” - Joe Tovar Project Co-Lead

The Ruckelshaus Center ‘Roadmap’ Collaboration

When the legislature and multiple stakeholders grew frustrated by a flurry of conflicting GMA amendment attempts, they turned to the William D. Ruckelshaus Center to lead an inclusive, statewide process. Tovar helped spearhead this [“Roadmap for Washington,”](#) which convened stakeholders- cities, counties, tribes, realtors, builders, and environmental advocates to identify shared priorities and next steps. Among the most notable themes to emerge:

1. **Funding and Revenue:** Chronic underfunding hinders communities trying to meet GMA mandates (for planning, infrastructure, restoration, etc.).
2. **Adaptive Planning at Regional Scales:** Stakeholders repeatedly stressed that a “one size fits all” approach does not account for vastly different geographic, economic, and cultural contexts.
3. **Tribal Consultation:** Recognizing tribal governments as sovereign partners who have an integral role in shaping land-use decisions.
4. **Resilience to Climate, Disasters, and Changing Conditions:** A call for forward-thinking planning around emergent hazards, including flood risks driven by climate change.
5. **Statewide Water Planning:** Many local floodplain concerns interconnect with broader water-use and water-quality issues.

Grappling With Local Capacity Gaps

Tovar drew attention to a growing workforce challenge: local planning agencies across the state are overloaded with new mandates whether for critical areas, affordable housing, climate resiliency, or middle-housing requirements. Meanwhile, there are not enough qualified planners, biologists, and support staff to meet those demands.

“We hear from city directors: ‘We can’t fill positions. We don’t have the capacity. Too many mandates—too few people.’”

The Ruckelshaus Center and Western Washington University have surveyed municipalities to quantify these staff shortages, hoping to inform legislative funding decisions or potential streamlining of GMA requirements.

KEY TAKEAWAYS

Urban Growth Boundaries and Floodplains

GMA now strictly limits new expansions of UGAs into 100-year floodplains, though historical expansions still pose challenges.

Adjusting Past Decisions

Legislative amendments allow local governments to “swap out” flood-prone land in UGAs for safer upland areas, preventing future encroachment into floodplains.

Collaboration Is Essential

The Ruckelshaus Center’s “Roadmap” process emphasized that agency, tribal, environmental, and community voices must align on best practices, as local policies alone can vary widely.

Local Capacity Shortfalls

Planners and stakeholders often lack the funding and workforce to implement the GMA’s many mandates, signaling a need for statewide solutions and possible adjustments to the law.

Regional Adaptation

With climate change accelerating flood hazards, a more unified regional planning approach can enhance overall resilience and better protect critical areas.

Moving Forward: A Collaborative Vision

In closing, Tovar remained optimistic that, with the right processes and funding in place, Washington State can manage growth in a way that respects both environmental constraints and community needs. He encouraged continued dialogue between local governments, tribes, state agencies, and grassroots stakeholders—particularly on issues like floodplain protection, where regional coordination can spell the difference between success and piecemeal outcomes.

Join the Conversation

For communities, nonprofits, Tribal nations, and government agencies working to balance growth and floodplain conservation, Joe Tovar’s perspective highlights the necessity of collaboration and the importance of statewide clarity in the face of local differences. As Tovar said, “One size does not fit all.” By building partnerships and sharing knowledge, we can chart a more sustainable course for Washington’s future—one that safeguards vital floodplains while fostering vibrant, livable communities.

If you would like more details, or to connect with others engaged in integrated floodplain management, please sign up to the FbD mailing list.

Disclaimer: The information in this article is drawn from a presentation by Joe Tovar and reflects both his insights and legislative frameworks current as of 3.18.2025. For the latest updates on the Growth Management Act, floodplain legislation, and local land-use requirements, consult the Washington State Legislature website and your local government’s planning department.



Shaping a Resilient Future

INSIGHTS FROM HANNAH PERLS

The FbD Network recently welcomed Hannah Perls, Senior Staff Attorney at Harvard Law School's Environmental & Energy Law Program, to discuss new developments in federal environmental and disaster policy. Drawing on her experience as a geochemist and lawyer, Perls highlighted a host of challenges and opportunities facing states, tribes, and local organizations working toward comprehensive floodplain and disaster management.

The recording to Hannah's presentation can be found [here](#).

A Multi-Faceted Legal Background

Early in the discussion, Perls noted her diverse background first as a geochemist managing Superfund sites in the Pacific Northwest, then as an environmental law researcher. This blend of science and legal advocacy shapes her approach:

"I was a geochemist...about 15 years ago. It's in there, but it's way back."

Now at Harvard's Environmental & Energy Law Program, Perls focuses on federal environmental justice

initiatives, disaster preparedness and response, and policy analysis for emerging challenges. Although not a litigation clinic, her team provides thorough legal and regulatory research, convening stakeholders to share knowledge and find common ground.

Tracking Evolving Federal Policy

One key theme Perls addressed is the fluid and sometimes uncertain state of federal environmental and disaster policies. She described how recent executive orders and ongoing legislative changes have left agencies grappling with unclear or outdated rules, particularly around the [National Environmental Policy Act \(NEPA\)](#).

- NEPA's Changing Landscape: According to Perls, the Council on Environmental Quality (CEQ) withdrew all of its rules implementing NEPA and issued interim guidance for federal agencies to update their own regulations. However, each agency has different rules many not revisited since the 1980s creating a



ENVIRONMENTAL & ENERGY LAW PROGRAM HARVARD LAW SCHOOL

Hannah's Research Areas: Disaster Policy, Environmental Justice, Inflation Reduction Act

Her work focuses on equitable disaster preparedness and response and federal environmental justice initiatives. She previously worked as a program assistant and development director for Cristosal, a human rights non-profit based in El Salvador, providing legal and humanitarian assistance to families internally displaced by violence. Hannah also worked as an environmental scientist specializing in coastal Superfund sites for AnchorQEA. She received her J.D. from Harvard Law School and her B.A. with honors in environmental science and sustainable development from Columbia University. Hannah serves on the Environmental Justice Legal Advisory Board for Alternatives for Community and Environment (ACE) in Roxbury, MA.

“patchwork” of standards. This complicates how states, tribes, and local bodies determine what triggers a “major federal action,” which in turn decides if full NEPA review is required.

- **Disaster Declarations and Funding:** Turning to disaster response, Perls underscored that the Stafford Act grants the president significant discretion in approving or denying requests for federal disaster declarations. While FEMA’s professional recommendations, guided by regulation, usually govern these decisions, there is no binding legal requirement that the president follow FEMA’s lead. This uncertainty raises questions about consistent treatment of states and tribes facing natural disasters.
- **Grant Language Under Review:** Perls noted that some agencies have begun to scrutinize (or remove) language such as “equity” and “environmental justice” in grant proposals. This broad policy shift could affect ongoing awards or require amendments to existing agreements. While the specifics vary by agency and location, the overall trend suggests a closer—sometimes politicized—review of climate- and equity-focused program language.

Data Preservation and Tools

Another highlight was Perls’s discussion of data transparency. Her team collaborates with groups to preserve critical information sets—such as FEMA’s Future Risk Index and various agency climate adaptation plans—[through Harvard’s publicly accessible “Dataverse.”](#) This backup ensures vital datasets remain available if federal websites remove or alter them:

By archiving and sharing resources, Perls and her colleagues aim to help communities and researchers keep developing targeted, science-based floodplain management strategies, even under shifting federal rules.

Collaborations with Tribal Governments

Perls highlighted active work supporting the Northwest Climate Resilience Collaborative’s Tribal Coastal Resilience Portfolio, co-led by the Affiliated Tribes of Northwest Indians (ATNI) and the University of Washington Climate Impacts Group. Her team, along with the Native American Law Center at the University of Washington and the Environmental Policy Innovation Center (EPIC), are focused on:

1. **Funding Mechanisms** – Creating resources that help tribes navigate complex cost-share and reporting requirements, as well as identifying which streams may be most vulnerable to federal clawbacks.

2. Expanding Self-Determination Contracts –

Assessing how to broaden the use of 638 contracts and compacts and similar frameworks, which allow tribes to administer federal programs.

3. Improving FEMA Access –

Supporting measures that streamline the disaster declaration process for federally recognized tribes.

These efforts illustrate how legal tools—when effectively applied—can significantly expand self-determination for tribal communities facing flood and climate vulnerabilities.

Moving Forward with Integrated Solutions

Concluding her presentation, Perls emphasized collective knowledge-sharing among agencies, nonprofits, tribes, and academic centers. She underscored the vital role of transparent data, reliable legal analysis, and ongoing dialogue to build resilience:

For floodplain managers and stakeholders nationwide, Perls’s work signals both caution and optimism. As policies shift, a proactive approach—tracking regulatory changes, preserving data, and forging partnerships—remains key to safeguarding waterways, habitats, and communities on the frontline of climate impacts.

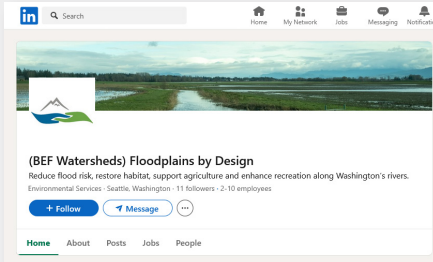
About the Funding & Policy Action Group

The Floodplains by Design Network fosters collaboration among experts in policy, science, and community engagement. By hosting events like Funding & Policy Action Group, the network aims to share the latest research, convene meaningful discussions, and help practitioners adapt to ever-evolving challenges in flood risk reduction and natural resource stewardship. If you would like more details, or to connect with others engaged in integrated floodplain management, please sign up to the [FbD mailing list](#).

For Further Information

- [Harvard Environmental & Energy Law Program](#)
- [Archived Data Tools](#)
- [Harvard Dataverse](#)

Announcements



FbD LinkedIn

This page is managed by BEF Watersheds, a partner supporting the WA Department of Ecology's Floodplains by Design program. We're excited to bring you timely updates, event reminders, and stories of impact in a more accessible way.

[Follow Us](#)

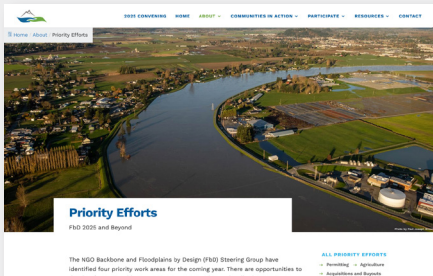


FbD Communications Survey

We've created a short survey to better understand your preferences for receiving updates and information about floodplain correspondence in WA.

Your input will help us tailor our communication channels to meet your needs.

[Take the Survey](#)



FbD Priority Efforts

Key focus areas include FbD Grant updates, acquisitions and buyouts, agriculture-related floodplain issues, and permitting challenges.

There was an emphasis on coordinating efforts with state and federal agencies to streamline permitting processes for restoration projects.

[Learn More](#)

Past Events & Updates

FbD Grant Updates Meetings 1 & 2 Recap

As 2027-2029 Floodplains by Design grant cycle improvement planning takes shape, there is a need and desire to consult applicants and other experts in processes to ensure that improvements are meaningful, address key opportunities, and work as intended. Please visit the [Grant Updates webpage](#) to find the meeting notes and recordings.

Funding & Policy Action Group Meeting 3.11

Purpose: To provide updates and facilitate discussions among Washington's integrated floodplain management community, including funding opportunities, legislative updates, and collaborative floodplain management strategies.

Recording of the full FPAG meeting can be found [here](#).

FbD Day in Olympia

Thank you all again for a wonderful day in Olympia on January 30th! For those of you that were unable to join us or unable to attend the debrief call on Friday, it was a very successful day all in all with a ton of good engagement with 25+ legislative meetings and 7 legislators showing up to the evening reception. All voiced strong support for the program, but as we all know it's a tough budget year so it's just a matter of how much funding they can stretch for FbD.



FbD Lobby Day by Austin Bernales



Fish War Screening held in Seattle's King Street Station, hosted by Red Eagle Soaring

Fish War Documentary Screening Recap

A huge thank you to [Northwest Treaty Tribes](#) and everyone who joined us for the screening of Fish War at Red Eagle Soaring Native Youth Theater in Seattle!

It was truly special to share this powerful film in such an intimate and meaningful space. This film highlights the strength and resilience of those who have fought—and continue to fight—for Indigenous fishing rights. Having a space to gather, reflect, and discuss these historical moments is invaluable.

We appreciate every one of you who took the time to be there, and we look forward to continuing these important conversations.

The Impact of the Habitat Recovery Pilot Program and Efforts to Make it Permanent (January, Lunch & Learn)

The Habitat Recovery Pilot Program (HRPP) is designed to streamline the local and state environmental permitting process for habitat recovery projects. Over the past four years, the HRPP has helped streamline permitting for over 40 projects statewide, with implementation partners reporting saving up to \$80,000 and a year on project timelines. Absent legislative action the program will expire in June 2025. Many FbD network partners have benefited from the program and expressed a desire to make it permanent.

[Watch the recording](#)

Lessons from the Tulalip Tribes' Conservation Work in the Snohomish Basin (February, Lunch & Learn)

Two leaders in conservation efforts with the Tulalip Tribes, share their experiences and insights from a recent floodplain acquisition project in the Snohomish Basin at the confluence of the Skykomish and Snoqualmie Rivers. This session offers a deep dive into the acquisition strategies, challenges, and lessons learned during their work to protect and restore in the future a critical floodplain area. This session also explores the broader significance of riparian conservation projects and the importance of long-term, scalable funding strategies.

[Watch the recording](#)

Bolstering Resilience Through Hazard Mitigation Planning (March, Lunch & Learn)

Two leaders in hazard mitigation with the Washington State Emergency Management Division. Ellen and Kevin share their experiences, insights, and recommendations on how to intersect hazard mitigation planning with community conservation, resilience and restoration goals. The session will include a brief introduction to hazard mitigation planning with a focus on data and resources to support practitioners in making the most of their mitigation plans.

[Watch the recording](#)

BRIC Funding Cancelled - Press Release

FEMA is ending the Building Resilient Infrastructure and Communities (BRIC) program and canceling all BRIC applications from Fiscal Years 2020-2023. If grant funds have not been distributed to states, tribes, territories and local communities, funds will be immediately returned either to the Disaster Relief Fund or the U.S. Treasury.

[Learn More](#)

Washington State Food Policy Forum Recommendations Report

The impact of climate change on the availability of water for all food production impacts the economic viability of agriculture and will have repercussions for the food system in general. Secure, legal reserves of agricultural water supplies will be critical to continued agricultural viability in both Eastern and Western Washington. There is a pressing need for thoughtful negotiation, immediate policy development, and significantly increased investment to secure water availability for food production across the state. Policy makers need to work collaboratively to ensure agricultural adaptation resources are well coordinated, funded, and staffed to support farmers in making informed business decisions in a changing climate.

[Learn More](#)

Article: Earthquake-driven land sinking could increase flood risk in Pacific Northwest

A recent study led by Virginia Tech geoscientist Tina Dura highlights the increased flood risk in the Pacific Northwest due to potential land subsidence from a major earthquake along the Cascadia Subduction Zone. The research indicates that such an earthquake could cause coastal land to sink by up to 6.5 feet, expanding the 1% annual chance floodplain by 35 to 116 square miles.

[Learn More](#)

Work with the Quinault Indian Nation: Three Key Roles Now Open

The Quinault Indian Nation is currently hiring for three impactful roles within its Fisheries Department, offering a chance to contribute directly to salmon recovery, habitat restoration, and sustainable resource management. Open positions include:

[Enhancement Program Manager](#) – Lead hatchery operations and salmonid enhancement efforts across Tribal fisheries facilities.

[Senior Restoration Project Manager](#) – Manage complex habitat restoration projects in the Quinault, Queets/ Clearwater, and neighboring watersheds.

[Fisheries Biometrician](#) – Apply advanced statistical methods to fisheries data to guide sustainable management and conservation strategies.

These positions are ideal for professionals committed to environmental stewardship, science-based management, and Indigenous leadership in resource conservation.

[Apply Now](#)



Tribal Perspectives on Flooding (April, Lunch & Learn)

A huge thank you to David Troutt, Jaime Pinkham, Anna Allen & Elaine Harvey!

Together, they explored the realities of flooding and floodplain management across different geographies, while reflecting on cultural values and relationships to land and water. This is a wonderful opportunity to hear grounded perspectives shaped by generations of stewardship, governance, and lived experience.

[Watch the recording](#)

Proposed changes to ESA definition of “harm”

The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (collectively referred to as the Services or we) are proposing to rescind the regulatory definition of “harm” in our Endangered Species Act (ESA or the Act) regulations. The existing regulatory definition of “harm,” which includes habitat modification, runs contrary to the best meaning of the statutory term “take.” We are undertaking this change to adhere to the single, best meaning of the ESA.

DATES: Comments must be received by May 19, 2025.

[Submit a public comment](#)

WOTUS Slide deck and comment period

The EPA and the Department of the Army intend to engage with State and Tribal co-regulators; industry and agricultural stakeholders; environmental and conservation stakeholders; and the public on certain key topics related to the implementation of the definition of “waters of the United States” in light of the Supreme Court’s 2023 decision in *Sackett v. Environmental Protection Agency*. The written comment period closed April 23, 2025, but public comment will be heard with equal weight:

May 6, 3:00 - 5:00pm ET (Virtual)

[Listening Session for Local Governments](#)

To be Announced

[Check here for Listening Sessions for the Public](#)

Washington Collaborative Elected Leaders Institute

The AWC Center for Quality Communities and our partners are excited to open applications for the second cohort of the Washington Collaborative Elected Leaders Institute (WA-CELI).

This immersive, three-month training program equips small teams of city elected officials with the leadership skills to tackle real-world challenges collaboratively. Under the guidance of expert facilitators, teams learn and practice a broad range of strategies to engage with differing viewpoints and build consensus.

[Learn more and Apply](#)