



Floodplains by Design

• REDUCING RISK, RESTORING RIVERS •

Newsletter

June 2022



Photo Credit: Courtney Baxter

By the Numbers: Nelson Dam Removal and Replacement Project

“This project is the linchpin that sets the stage for more fish passage improvement, recreational opportunities, and flood risk reduction. The project was only successful because of the partnerships. We would not have gotten funded nor permitted without the support of our partners.”

—David Brown, Assistant Public Works Manager for the City of Yakima

UPSTREAM SUPPORTING WORK BY YAKIMA COUNTY:

3,000

feet of
upstream levee
removed

2,600

feet of
upstream
pilot channel
created

2

FbD grants for
Yakima County
based part of
the project

1

junkyard
removed from
floodplain

IN THIS ISSUE:

- 1 By the Numbers
- 3 Floodplains for whom? Research Summary and Story Map
- 5 FbD Lunch n Learn Series Summary
- 7 Introduction to New FbD Backbone Member: Ryan Anderson
- 9 Introduction to New DoE Floodplain Management Unit Supervisor: Mary Huff
- 11 Houseless Advocates Resource Highlight
- 12 Events and Opportunities

NELSON DAM REMOVAL AND REPLACEMENT PROJECT:

25 years

in the making

\$20,081,311

for Nelson Dam removal and replacement

11

major project partners

6

funding sources for City of Yakima project including FbD grant

8

road closures during construction

3,000

super sacks used in river

285 feet

increase in width over new “structure”

200

fish Rescued by Partners during construction

- **104** Rainbow Trout
- **74** Chinook Salmon juveniles
- **22** Coho Salmon juveniles

PROJECT OVERALL:

100 year

flood elevation lowered 6 feet over 2,400 feet of stream length

“Planning, modeling and design of this project was not taken lightly. The County, City and others partnered throughout the process, which also included the construction of a 33’x63’ physical hydraulic model and subsequent analysis of design alternatives and future conditions scenarios.”

“Floodplains by Design funded this project in part through two grants. The warm support and cooperation provided to the County throughout the life of those grants really made a difference.”

—Troy Havens, Yakima County Water Resources Division Manager

“The fall spawners will benefit the most from this project. Coho, and summer chinook will most likely spawn in this reach of the river. The Yakama Klickitat Fisheries Project (YKFP) has worked for over 20 years trying to reintroduce Coho and nearing 10 years for summer chinook, both occupy the habitat in this area.”

“Out-migrating juveniles will also benefit from removal. The dam created an artificial bottleneck and a violent backwash that allowed for predators to ambush the migrating fish. The adult fish ladder and the juvenile bypass were just not adequate”

—Todd Newsome, Research Scientist, Yakama Nation Fisheries, Yakama-Klickitat Fisheries Project

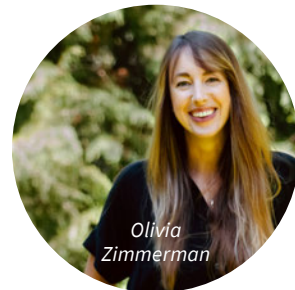
Are you interested in sharing information about your project in a future newsletter?

Contact Hannah at hbuehler@b-e-f.org

Floodplains for whom? Research Summary and Story Map

Integrated resource management offers an important solution to enhance collaboration, holistic thinking, and equity by considering diverse perspectives in decision making. Floodplains by Design emphasizes bringing together diverse stakeholders and supporting conversations between local, state, and Tribal governments while enhancing environmental justice in the region.

Two University of Washington graduate students, Olivia Zimmerman and Tanya Eison, interviewed 21 Tribal natural resource managers representing 14 tribes from across Washington state to assess the degree to which they felt FbD was supporting their community's needs.




Puyallup River. Photo Credit: Nick Hall

THEIR RESEARCH ASKED THREE QUESTIONS:

- 1 What Tribal needs and inequities associated with floodplains are identified by Tribal natural resource managers?**
- 2 Are these needs and inequities being addressed by FbD?**
- 3 How can FbD better address these needs and inequities moving forward?**

They found that while the integrated approach of FbD was driving solutions in some realms, there are ways in which the program could better support needs and address inequities in Tribal communities.

Their research also found that conventional responses to environmental challenges are rooted in modernist paradigms that have created persistent dualities, including that of human-nature and human-nonhuman. Such a paradigm is in conflict with wellbeing and self-determination of Tribal cultures that are deeply connected to Pacific salmon.



Floodplains for whom?
A research project confronting inequities and supporting needs of Indigenous communities living near floodplains in the Pacific Northwest
Olivia Zimmerman
June 4, 2022

To read their full draft report, [click here](#).

To view their story map illustrating their findings, [click here](#).



FbD Lunch n Learn Series Summary

BY ALLAN WARREN

Over the last four months the backbone team kicked off the new Floodplains by Design Lunch & Learn series by focusing on a project management theme. As we shift gears a little bit to start thinking about other topics that you all have expressed interest in, such as Communications & Elected Official Outreach (July’s Lunch n Learn topic), building trust in complex collaborations, and many more; we wanted to take a moment and reflect on what we’ve done and to say thank you to all the local partners that took the time to share knowledge.

In March, we wanted to get things going with something kind of different to help partners throughout the FbD network realize that strange things come up, and not only do project managers have to be nimble, but there’s a whole network of people out there that have experience and knowledge to share. In the Unexpected Challenges and How to Overcome Them session, Robert Knapp from the Jamestown S’Klallam Tribe, Kristin Marshall from the Snohomish Conservation District, and Helmut Schmidt from Pierce County Surface Water Management shared stories ranging from dealing

with a renter pulling a gun on staff after a property acquisition, to unexpected sinkholes dropping out of a road, to working through the challenges of houseless populations creating encampments at project sites. We then pulled all the participants into breakout rooms to connect in small groups and share their own stories.

In April, Mallory Sashko, a Grant Accountant from Pierce County Planning and Public Works, gave a great presentation on Contracting Efficiencies full of tips and tricks on everything from preparing an FbD grant application to the post award process.

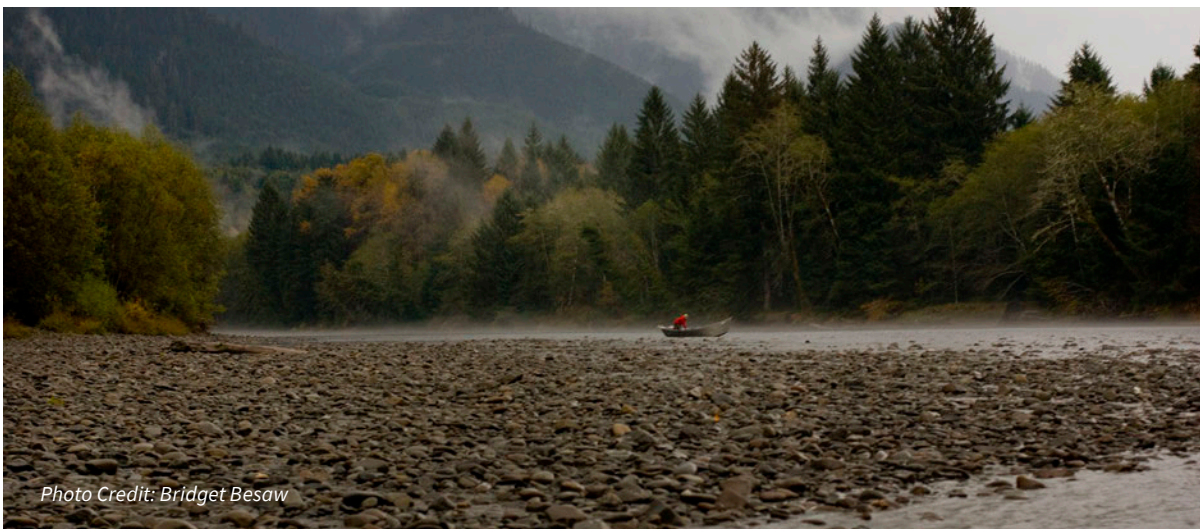


Photo Credit: Bridget Besaw

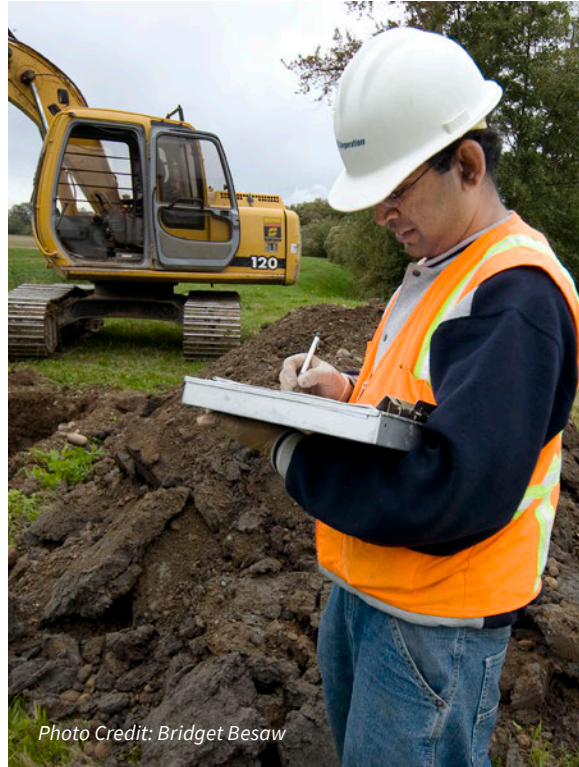
Mallory's presentation prompted a great conversation amongst local partners and Ecology staff about the administrative burdens that match requirements put on both local proponents and Ecology grant managers. This kickstarted an effort currently underway to get approval to waive the match requirement in the upcoming funding round!

In May, Jon Hansen, the Capital Projects Managing Supervisor for King County's Ecological Restoration and Engineering Services Unit, and Bill Blake, Executive Director of Skagit Conservation District, joined us to present Ways to Add Capacity To Get More Work Done, More Quickly. Jon presented a fascinating look at how he's worked to build a business case for decision makers to highlight why we need to invest in more people power if we're going to get more restoration work done. Bill shared ways they're providing more training and support to staff to handle more of the engineering services they provide to local landowners in house to streamline design and permitting processes.

Finally, in June we were joined by Chris Roberts from Active Construction, Inc. and Chris Collins from the Lower Columbia Estuary Partnership to discuss Ways to Work More Efficiently With Contractors. Chris Roberts shared some great insight into the construction industry and ways to better involve them earlier in the process to reduce risk and uncertainty. Chris Collins then gave a detailed presentation of the benefits of working with a contractor management firm for large, complex projects. The attendees were so engaged in questions that we ended up keeping the session going an extra 20-minutes. More importantly, a number of attendees engaged in the chat to answer each other's questions and provide support for each other.

All told, 143 people participated in the first round of the FbD Lunch & Learn series. We look forward to keeping these conversations going and helping connect all of you to each other and the knowledge that can support the work of integrated floodplain management, and hopefully help make this work easier and more efficient!

It's vitally important that we keep the topic of the Lunch & Learn series relevant and helpful to local practitioners, so if you have ideas of topics you'd like to explore, please reach out to Allan Warren at awarren@b-e-f.org to share them.



Mark your calendars for our
July Lunch n Learn!

**Paying it Forward: Elected Official
Outreach and Communication**

July 7, 12pm-1pm

Join us to learn about materials and support the backbone team can provide and how effective communication with elected officials can build support for on the ground work. Please contact awarren@b-e-f.org for more information!



Introduction to New FbD Backbone Member: Ryan Anderson

What excites you most about being a part of FbD?

Rivers, people, and landscape interaction have always fascinated me. The technical part of watershed recovery and river restoration has always been an interest of mine and working with people that energetically share this interest is super exciting to me. The Floodplains by Design program has so many brilliant, energetic, and dedicated people working on complex challenges together. These situations usually bring out the best in us. It is exciting and I'm grateful to work with groups like this solving challenging problems to help communities be safer, restore salmon habitat, and protect farmland. Projects and project leaders in the FbD program have solved some big problems during the last decade of work and we have identified new big challenges to work together to solve. There is a lot of hope that we will be successful together and I'm grateful to be part of this work.

What past professional and life experiences will inform your work on FbD?

I grew up in northern Idaho and my grandparents lived on Fidalgo Island, Washington. On road trips to see family on the island, I spent a lot of time looking out the windows of our car and thinking about floods, rivers, mountains, and people and how all of this stuff fits together. It was an early interest. My grandparents and their friends loved to fish, but spent equal time talking about declining runs of salmon and steelhead and declining opportunities outdoors compared to their youth. Lots of ideas were thrown around about why declines were occurring and I developed a sincere interest in finding a career that involved helping find solutions.

I moved to Yakima in 1997, and since then I have worked for the State of Washington, local government, and non-governmental organizations helping people work together for these solutions. My experiences would reaffirm what many of us know already:



Yakima River. Credit: Benjamin Drummond

complex environmental challenges require many of us to work together. Going after the next tier of successful integrated floodplain restoration that is above the “low hanging fruit” is going to require continued collaboration, collective problem solving, and investments in time and money. It is a welcome responsibility to be part of the team working with you all to achieve this.

What else do you want the FbD community to know about you?

Environmental Justice has always been important to me. Admittedly, my good intentions have not always led to better outcomes for everyone. This work started to clarify for me once I started to work on myself and became less afraid to examine and correct my own biases and mistakes. I will be working with a group of people from the FbD NGO backbone to develop awareness, dialogue, and actions that will help us support diversity, equity, inclusion, and environmental justice moving forward. The group is dedicated and working hard on this and it is with gratitude and optimism that I get to help with this critical work.

What about your interests outside of work?

I live in Yakima, Washington with my family where we like to play outside and enjoy time with friends and family in the valley and out of town. Our boys recently grew big enough that the four of us no longer safely fit in one canoe, so we are trying to figure all that out... but we try to get to the water and mountains to swim, fish, and play during the summer and the hills to ski in the winter. The shrub steppe ecosystem and thousands of acres of irrigated agriculture surround Yakima so we have this wonderful landscape and lots of good food, beer, and wine locally available.

I also like to volunteer with a few different community based organizations. I am a member of the Yakima Schools Foundation Board and the Rotary Club of Yakima. A lot of my involvement with both focusses on education, activities for youth, and diversity, equity and inclusion.

Yakima is both a small town and a big city where after a while you feel like you might just know everyone, then, you try something new and meet new, wonderful people and have instant new best friends. Sure, we are unique in that way just like everywhere else, but, I love that about this place.



Ryan and family. Credit: Ryan Anderson



Credit: Ryan Anderson



Introduction to New DoE Floodplain Management Unit Supervisor: Mary Huff

I joined the Washington State Department of Ecology in March 2022, filling a new position within the agency’s headquarters: Floodplain Management Unit Supervisor. The number of Ecology staff doing flood-focused work has steadily increased over the last decade+, and as a result of thoughtful reorganization several years in the making, we now have a dedicated group of environmental planners, an environmental engineer, and an IT data manager all working together in this unit on a statewide level. Our unit also helps lead, plan, and support implementation of the work of our six regional flood planners. I am privileged to lead this highly skilled and dedicated team of professionals.

What excites you most about being a part of the FbD network?

Everything! Public-private partnerships open doors to so many opportunities, and FbD has an amazing track record of delivering projects on the ground with support from a broad array of stakeholders. I love “getting stuff done” and “win-win” situations. Last but not least, the visionary, inviting, can-do energy that I have seen the people involved with FbD exude is infectious.

What past professional and life experiences will inform your work on FbD?

I am new to flood-focused work, but not new to the fascinations and challenges of the aquatic-land interface or to public service in the natural resources field. In particular, I have been working for the State of Washington full-time since 2015, focusing primarily on ensuring that land uses include measures that protect aquatic and riparian ecosystems, including sensitive fish

and wildlife habitat. I started out with the Washington State Department of Natural Resources (DNR) as an Aquatic Land Manager and then was promoted to Aquatic District Manager, based out of DNR’s Northwest Region office in Sedro-Woolley, Skagit County. In these roles, I was involved with developing and managing land use authorizations (leases, easements, and rights of entry) for everything from temporary ecological restoration projects, such as placement of engineered logjams, and dike breaching; to ongoing uses like public and private boat ramps, marinas, and underwater and overhead utility crossings. In 2019, I relocated to South Puget Sound to join the Washington Department of Fish and Wildlife (WDFW) at their headquarters, where I worked for three years on land use conservation and policy and managed the Priority Habitats and Species (PHS) program in the Habitat Program. In that position, I coordinated regularly with staff at other state agencies that administer or—like WDFW—have technical assistance roles within the state’s three major

Top photo: One of the best parts of my time working for the Aquatic Resources Division at the Washington Department of Natural Resources: sunny days out on the boat! Photo Credit: Mary Huff



land use planning frameworks: the Growth Management Act; the Shoreline Management Act; and the Voluntary Stewardship Program.

Earlier in my career, I started building up my environmental experience with a fair amount of seasonal, part-time, and volunteer work. In most of these positions I was doing education and outreach but I also got some fieldwork experience with bird banding and invasive weed control. Separately, I also worked full time as an onsite contractor for the military: First as the Installation Sustainability Coordinator for the Army at Fort Lewis; and later as a NEPA Specialist (doing environmental impact analysis) for Joint Base Lewis-McChord.

What else do you want the FbD community to know about you?

I sometimes say that it took me longer than the average bear to figure out what I wanted to be when I grew up. I have a somewhat non-traditional background for someone in this line of work, with bachelor's and master's degrees in history and political science, respectively. I have supplemented those degrees with hard science academic courses; as well as with professional and continuing education on subjects like environmental law and regulation.

I am also a military veteran, having served four years on active duty in the U.S. Army as a Tactical Intelligence Officer. Most of that time was spent overseas in Europe, including an 11-month deployment to Bosnia-Herzegovina as part of a NATO-led peace enforcement mission. Leadership is very important to me.

I also care deeply about seeing good public policy developed and implemented. This is one reason that drives me to be a strong advocate for inter-agency coordination and collaboration.

Completely separate from work... I am a native of this state: born in Anacortes, and raised in Kirkland. Any day



Birdwatching is my primary hobby, and ducks are some of my favorite birds to watch. Photo Credit: Mary Huff

that “the mountain (Mt. Rainier) is out” is a good one! I now live in Grays Harbor County with a senior rescue cat named Hamilton, a.k.a. “Hammy”, who you are likely to see if you are ever in a Zoom or Teams video call with me when I am teleworking. Both my parents and my sister and niece also live in the Puget Sound area. My favorite hobby is birdwatching. Over the last two years, I have been working to landscape my small yard with mostly native plants, with a focus on those that are the most wildlife friendly. (So far, the slugs and the moles seem to be the most impressed—Ack!)

Houseless Advocate Resource Highlight

Increasingly, floodplain managers and land stewards are encountering houseless people living in floodplains and riparian areas.

Early outreach to and relationship building with community-based organizations that serve and represent houseless people can offer critical insight, support, and access to resources and increase capacity for outreach and engagement. Research has shown that strong pathways of communication and social networks aid unhoused people in getting access to the services they need.

We're working to compile a list for each Washington county of houseless advocacy and service organizations that can provide floodplain managers and land stewards with people to call that can assist in providing services, understanding local systems and learning key background information to inform engagement.

In this edition of the newsletter, we're highlighting community groups working in Clallam and Snohomish County. Building relationships with houseless community members and community-based organizations that have strong relationships with unhoused community members takes time, intentionality and resources, but can be critical in yielding better long term outcomes and help with more effective and humane problem solving.

Clallam County

[Serenity House](#)

[The Answer for Youth](#)

[Community Resource Connections](#)

Snohomish County

[Everett Gospel Mission](#)

[Esther's Place](#) (Women & Children)

[Cocoon House](#) (Assistance for unhoused youth)

Are you struggling with communication and rules enforcement with folks living unsheltered in floodplains? Or are you looking for more resources and peer support around engaging unhoused folks in floodplains?

Join us from 1:30-3:00pm PST on July 21st for a peer support discussion with Trauma Informed Care facilitators around engaging with unhoused populations in natural areas. [Click here](#) to register for our July peer support session

If you'd like to sign up for a new newsletter featuring updates and resources on Trauma Informed engagement with people living outside, [click here to sign up!](#)

We'd love to hear from you.

Would you like to see more information on community resources in other counties? Do you have information on your local organizations that you'd be willing to share? Please contact hbuehler@b-e-f.org with comments or information.

Events & Opportunities

Missed our HRPP/MART Webinar and want to find out more?

The region is on track to see an unparalleled amount of federal funding become available for infrastructure investment. As tribes, agencies and NGOs and communities prepare to take advantage of this opportunity, barriers to implementing ecological restoration projects take on new urgency. The Habitat Recovery Pilot Program (HRPP) and Multi Agency Review team (MART) represent two unique permitting pathways to increasing efficiencies while managing risks.

1. The HRPP is designed to streamline the local and state environmental permitting process for habitat recovery projects that benefit freshwater, estuarine, or marine fish, or their habitats
2. The federal-state MART used a facilitated, coordinated team approach to evaluate and permit ecologically beneficial marine pilot projects including soft shore projects and found that collaboration improves interagency communication and permitting efficiency. The MART is transitioning from pilot to expanding its scope to freshwater habitat restoration projects in addition to marine projects.

Click learn more below to watch the webinar, featuring staff from EPA, Ecology and WDFW to learn more about what has happened, what is next and learn about eligibility for these programs.

[Learn More](#)

Hazard Mitigation Grant Program (HMGP)

Pre-Application form submission deadline: July 08, 2022

A new Hazard Mitigation Grant Program (HMGP) round is now available in Washington State through the federal Major Disaster Declaration DR-4650-WA, which was declared on March 29, 2022, for severe storms, landslides and flooding that occurred in January 2022.

[Learn More](#)

Lower Columbia Fish Enhancement Group Project Manager Position

Lower Columbia Fish Enhancement Group is seeking a Restoration Project Manager to join our team of conservation-minded professionals. Project managers are a critical part of our restoration work—they scout, plan, seek funding and permitting, and oversee habitat restoration projects.

[Learn More](#)

Announcement of Two Fish Passage Funding Opportunities Open Under the Bipartisan Infrastructure Law, One Focused on Indian Tribes

Up to \$65 million in funding is available in the NOAA Restoring Fish Passage through Barrier Removal Notice of Funding Opportunity under the Infrastructure Investment and Jobs Act. This funding will support transformational projects that reopen migratory pathways and restore access to healthy habitat for fish around the country. In collaboration with NOAA, selected partners will use these funds to implement locally-led removals of dams and other in-stream barriers to rebuild sustainable fisheries, contribute to the recovery of threatened and endangered species, enhance watershed health, and improve economic vitality. NOAA will accept proposals with a federal funding request of between \$1 million and \$15 million over the award period.

Application deadline: August 15, 2022

Up to \$12 million in funding is available for fish passage and tribal capacity building under the Restoring Tribal Priority Fish Passage through Barrier Removal Notice of Funding Opportunity under the Infrastructure Investment and Jobs Act. NOAA received tribal input to inform this specific funding opportunity program. This funding will support Indian tribes, tribal commissions, and tribal consortia in building tribal organizational capacity and implementing projects that reopen migratory pathways and restore access to healthy habitat for tribally-important species. NOAA will accept proposals between \$300,000 and \$5 million.

Application deadline: August 29, 2022

[Learn More](#)

Transformational Habitat Restoration and Coastal Resilience Grants

Application deadline: September 6, 2022

NOAA announces up to \$85 million in funding for transformational habitat restoration and coastal resilience projects. This funding will help support sustainable fisheries, contribute to the recovery of threatened and endangered species, promote resilient ecosystems and communities, and yield socioeconomic benefits.

[Learn More](#)

Events & Opportunities

Coastal Habitat Restoration and Resilience Grants for Underserved Communities

Application deadline: September 30, 2022

NOAA is concurrently announcing up to \$10 million in funding for habitat restoration and resilience awards for underserved communities. Through this funding, NOAA will engage underserved communities in habitat restoration activities that promote resilient ecosystems and communities.

[Learn More](#)

Additional Resources

Set It Back: Moving Levees to Benefit Rivers, Wildlife and Communities

Removing dams is one thing, but thousands of levees also restrict rivers in the United States — and they're not working as intended.

[Learn More](#)

If this Dike Fails, Stanwood Goes Underwater

The levee is over a hundred years old. And it shows. But efforts have lagged to fix it before it's too late.

[Learn More](#)

Building For The Future: Five Midwestern Communities Reduce Flood Risk

In early 2020 Headwaters Economics researchers interviewed more than 60 experts on flood risk and mitigation strategies across the Midwest

[Learn More](#)

The Coalition Current

This American Flood Coalition blog includes deep dives into best practice and policy solutions related to flooding and sea level rise

[Learn More](#)

Adaptation for All: How to Build Flood Resilience for Communities of Every Size

The American Flood Coalition, in partnership with the Embassy of the Kingdom of the Netherlands and Arcadis, has created this guide to help local leaders determine the approaches to flooding or sea level rise that can work best for them.

[Learn More](#)

Flood Funding Finder Tool

After sifting through hundreds of programs across 26 federal agencies, the American Flood Coalition identified a set of federal funding opportunities that have a clear trend of providing assistance to projects in small communities that address flooding and sea level rise. This interactive tool is primarily targeted toward communities with populations of 50,000 or fewer, but communities of all sizes may find its information helpful.

[Learn More](#)