

Chesapeake Bay Program: Fish Passage Workgroup

Fall 2024 Meeting Minutes



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Prepared by:
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Habitat GIT Staffer





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FISH PASSAGE WORKGROUP FALL 2024 MEETING

Thursday, November 21th, 2024, from 1:00 pm - 4:00 pm ET

[Link to Meeting Materials](#)

ATTENDEES:

- Staten, Nick (Chesapeake Research Consortium)
- Gaffney, Matthias (DWR)
- Kirsch, Joseph E (USFWS)
- Harrison, Rachel (WVDNR)
- Hudson, Meredith (EPA Region 3, Wetlands Branch)
- Thompson, Jim (MD DNR)
- Weaver, Lawless (VA DWR)
- Li, Ray (USFWS)
- Blackburn, Ian R (DEC)
- Thomas-Blate, Jessie (American Rivers)
- McQueen, Abigail (Trout Unlimited)
- Vidal, Alexander (Alex) (USFWS)
- Cloyd, Rese (DOEE)
- Andrews, Mary (NOAA)
- Davis, Sandra (USFWS)
- Sowers, Angie (USACE Baltimore, Planning)
- Guy, Chris (USFWS)
- Young, Emily (ICPRB)
- O'Connell, Tammy (MD DNR)
- Maloney, Lori (EBTJV)
- Ombalski, Katie (CBP Brook Trout Workgroup Co-chair)
- O'Brien, Dave (NOAA)
- Hunt, Gina (MD DNR)
- Bradley, Ben (Trout Unlimited)
- Earley, James (USFWS)
- O'Brien, Dave (NOAA)

1:00 – WELCOME, ROLL CALL, & INTRODUCTIONS (15 minutes)

Presenters: Workgroup Co-Chairs Ray Li (USFWS) and Jim Thompson (MDNR)

1:15 – UPDATES AND ANNOUNCEMENTS (10 minutes)

- **BROOK TROUT WORKGROUP'S STAC PROPOSAL :** *Blueprint For Building Partnerships And Recommendations For Scaling Brook Trout Restoration In Stronghold And Persistent Patches.*
 - o Identify possible areas of collaboration with the Brook Trout Workgroup
 - Question posed by Jim Thompson: Should we consider Thermal Barriers and AMD Barriers as fish barriers within our workgroup's database
 - o POC: Katie Ombalski
- **NEW OPENED MILEAGE REPORTING PROTOCOL**
 - o In need of a Delaware and New York Coordinator.



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- o New addition to the protocol: Need to include the SARP ID Number for each project in the spreadsheet supplied by the Fish Passage State Coordinators.
 - o SARP tool will act like the master database that the Chesapeake tool will pull from.
 - o **Alan Weaver:** SARP is pretty easy to use, you just look up the dam name on their tool and copy the SARP number, do you also use the CFPPP number in front? and NID number?
 - o **Jim Thompson:** I usually use the whole number.
 - o **Alan Weaver:** What about the NID number?
 - o **Jim Thompson:** If you have those great, if not we can get that.
 - o **Alan Weaver:** Do you want the stream names or big watersheds?
 - o **Ray Li:** Don't worry about it, we have direct locations.
 - o **Jim Thompson:** as long as the coordinates are the same we can pull all the necessary data
 - o **Ray Li:** pitch for state coordinators: we need coordinators for NY, DE, and DC. They do not need to be from a state agency, they can have any affiliation.
 - o **Jessie Thomas-Blate:** we just put out our call for dam removals for 2024. Historically we get the data, we would vet it, check the data as much as possible, and Mary has taken the data from the dam removal part that you guys are accounting for once our data at American Rivers is ready for distribution. Do you still want to do this? It doesn't help with the road stream crossing acquisition.
 - o **Jim Thompson:** If you want we can get all of our dam projects from our coordinators and piece them together so you can take what you need out of that data.
 - o **Jessie Thomas-Blate:** If you find that we are missing something when we send out our materials let me know. We are just going to hope that people submit data to us using our form.
 - o **Ray Li:** Are you not moving towards SARP being the master tool?
 - o **Jessie Thomas-Blate:** We work closely with SARP, they are the main inventory, we are the main collector of dam removal data. When we have our database finalized, we send it over to SARP.
 - o **Mary Andrews:** the protocol for counting in the Chesapeake is different from what American Rivers uses sometimes. If you are looking at Jessie's database don't rely on the upstream function miles because the protocol is different.
 - o **Ray Li:** Ok so the plan now is that the SARP tool becomes the master tool in terms of the inventory of dams in addition to fish passage restoration projects. Eric with TNC with periodically refreshing the TNC tool so it uploads that inventory as well as the fish passage. Everything else such as up-stream functional miles and what Jim and I run (Bi-annual reporting for the Bay Program) will be out of the TNC tool.
- **HABITAT GIT FALL MEETING:** The Habitat Goal Implementation Team Fall Meeting was on October 2nd and 3rd. This was a hybrid meeting with the in-person location at Virginia Institute of Marine Sciences.
 - o [LINK TO DAY 1 INFORMATION](#)
 - o [LINK TO DAY 2 INFORMATION](#)
- **Upcoming Meetings:**
 - o The Habitat Goal Implementation Team Spring Meeting will be during the week of **April 28th or the following week May 5th**. More information on this to come.
 - o Pick the Next Fish Passage Workgroup Meetings for 2025
 - **Tammy O'Connel:** The first week of May is the ASMFC spring meeting. That may not impact anyone on this call. Just something to think about.



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- We will use the same dates from 2024, send out a poll to make sure it is okay for everyone, or if we should move it a day before or after.

1:25 - Tentative: INTRODUCTION TO BROOK TROUT WORKGROUP'S STAC WORKSHOP (15 minutes)

Presenter: Katie Ombalski

- Meetings will take place around May/June.
- Intent of these STAC workshops: create a blueprint of a restoration plan focused on brook trout strongholds within MD and PA. We will work with the partners in these states so the restoration plan can be replicated anywhere else.
- We will have focused meetings (~50 ppl) with all agencies and conservation partners to identify threats in each place and come up with a concerted restoration effort.
- In MD, we are looking at Carol and Baltimore Counties (Gunpowder watershed) and Garrett county for the Savage watershed.
- In north-central PA, we will be focusing on Clearfield and Potter counties.
- Fish passage is obviously important for BT restoration.
- We just finished up a GIT funded project with Trout Unlimited and EBTJV, and I can really see these two things coming together.
- Recommendations/outcomes from the report
 - Provided a tracking tool for brook trout habitat.
 - Areas of cross GIT/workgroup collaboration
 - Possibly thermal and AMD barriers are additional areas to collaborate on.
- A lot to talk about, but we are in a pause moment right now due to the Management Board Outcome Assessment charge to the workgroups.
- We will pick this process up after february.
- Here is a list of some of the recommendations coming from the TU and EBTJV report as it relates to fish passage:
 - Have FPWG give a demo on how the Fish Passage Prioritization Tool works with the Brook Trout scenario (TU said this was a functionality we haven't explored much)
 - Have BTWG provide updates to the FPWG annually to update the habitat tracker application with fish passage data.
 - Utilize Maryland's Stream Crossing Guidelines for a Chesapeake Bay Wide application
 - Develop Brook Trout monitoring plans for watersheds of shared interest.

1:40 - MEMBER UPDATES (30 minutes)

Maryland (5 minutes) Jim Thompson

See Appendix I for notes and slides.



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- **Jessie Thomas-Blate (Chat):** I'd like to invite anyone who is interested in dam removal to join American Rivers' National Dam Removal Community of Practice:
<https://www.americanrivers.org/national-dam-removal-community-of-practice/>
- Removal of Daniels Dam is pending a formal decision to move forward with removal by MD DNR. The project will begin this winter with a feasibility study to inform decision-making by DNR.
- **Mary Andrews (Chat):** NOAA's final round of fish passage BIL funding out now:
<https://www.fisheries.noaa.gov/grant/restoring-fish-passage-through-barrier-removal-grants>

Closing Date

February 10, 2025

Grant Type

Competitive

Award Period

Approximately three years

Funding

Award amounts range from \$750,000 to \$8 million for the entire award

- **Jessie Thomas-Blate (Chat):** Is the Girl Scout Dam at Camp Conowingo?
- **Jim Thompson:** Yes it is
- **Lori Maloney (Chat):** A community funding opportunity for diadromous fish and recreational engagement - you'd need to work with Simen Kaalstead at ACFP/ ASMFC [FY25 FHP Rec Fish Call for Proposals.docx.pdf](#)

Pennsylvania (5 minutes)

- **Jessie Thomas-Blate (Chat):** PA has at least 31 dam removal projects in some stage of consideration in the Susquehanna watershed.

Virginia (5 minutes) Alan Weaver

See *Appendix III* for slides.

- Ashland Mill Dam on South Anna River was removed. 252 upstream functional network miles reconnected. Anticipated benefits and abbreviated project history captured in slide deck.
 - Re-initiated monitoring efforts to further document the presence of the target species.
 - 10 years of monitoring planned.
 - Next steps in slides.
- Baber's Mill Dam removed. 43 upstream functional network miles reconnected.
 - On the day of removal just before demolition started, Sea Lamprey were visible in the stream even before capturing some with backpack electroshocking.
- Other projects:
 - Cornelius Creek potential road crossing fish passage project in Henrico County
 - Lynchburg College Dam removal near completion on Blackwater Creek (trib to James in Lynchburg)
- **Jim Thompson:** curious for the mitigations credits, you have to have presence of those fish 3 different times?



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- **Alan Weaver:** 2 years. I am not sure what we will do with American Eels yet
- **Jessie Thomas-Blate (Chat):** Next VA Stream Barrier Removal Task Force Meeting to see Ashland Mill Dam site on 12/3. If you would like more information, reach out to me.
- **Jessie Thomas-Blate (Chat):** Fun recent animation from AR on How Removing Dams Benefits People and Rivers: <https://youtu.be/QqLugGIQj6k>

New York (5 minutes) Ian Blackburn

See Appendix IV for written update.

- **Jim Thompson:** What is the status of dam removal project adoption?
- **Ian Blackburn:** It has been on the increase and habitat management is gaining emphasis. I anticipate the pace will increase.
- **Jim Thompson:** Since you are so far from the watershed how do you get funding?
- **Ian Blackburn:** We have been seeing juvenile eels, so eels have been an avenue.
- **Jim Thompson:** Is there a source of mitigation banking?
- **Ian Blackburn:** I am not aware of that, I can talk to our chief to clarify.
- **Jim Thompson:** We can help you with that and let you know how we have gotten that going.
- **Ray Li:** Are you involved in the Upper Susquehanna Coalition, Ian?
- **Ian Blackburn:** Yes, Emily Zalweg in my office is active on the USC stuff.

Delaware (5 minutes)

- **Jessie Thomas-Blate (Chat):** All of the Delaware projects that I am aware of are Delaware River watershed.

West Virginia (5 minutes) Rachel Harrison

See Appendix VI for slides.

- **Jim Thompson:** Are your projects more based on local species like brook trout, how do you get funding?
- **Rachel Harrison:** Yes a lot of it is focused on resident fish and eels. Some of it is mitigation banking, and I will get back to you on other funding sources.
- **Jim Thompson:** Yes let us know how we can help open up funding.

DC Rese Cloyd

See Appendix VII for written update.

- **Rese Cloyd:** We do not have any currently active, but we are putting out for bid a few projects later this year, and a few more coming after that.

2:10 - BREAK (15 minutes)

2:25 - BIPARTISAN INFRASTRUCTURE LAW: Aquatic Organism Passage In Potomac Headwaters (30 minutes)

Presenter: Abigail McQueen (Trout Unlimited)

See Appendix VIII for slides

- TU has staff embedded in multiple areas in priority watersheds where we have decided to focus restoration of native and wild trout.



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- Actively looking for on the ground projects (habitat enhancement, dam removals, all things cold water habitat restoration).
- Recently been lumping together small projects to qualify for BIL funding.
 - pitching a suite of projects to fish passage program for BIL funding.
- Successful for the potomac headwaters projects.
 - MD, VA, WV
- Year 1 MD DNR and VA NRCS
 - Top: Before (left) and After (right) photos.
 - Bottom: Before (left) and After (right) photos.
 - TU prioritizes multiple benefits on projects including reducing cattle access to streams and riparian buffer planting.
- Year 2 combining additional BIL funding- USFS
 - Monongahela National Forest
 - USFS Big Mountain Project Area
 - A little larger than a huc12 watershed.
 - TU did a study to understand what kind of measures could be put in place to lift the ecological health and function of this area.
 - measures studied included fish passage projects, large wood additions, riparian planting, and road decommissioning.
 - AOP and road stream crossings are higher dollar projects that are lagging behind for some of these watershed efforts.
 - before and after photos always taken at low flow, so they are not encompassing on the ability of fish to move through these streams
 - top before(left) after(right)
 - bottom before(left) after(right)
- Year 3 - more partners/miles - Garrett County (MD)
 - Culverts failing for multiple reasons.
 - County originally wasn't planning on removing the culverts in their temporary solution.
 - TU approached the county with funding to consider a long term solution.
 - TU purchased the materials and supplied tools.
 - Garrett provided the crews and laborers.
 - Before (top) After (bottom)
- Year 3 - more partners/miles - WV DOH - USFS
 - Seneca Rocks Visitor Center
 - Low flow culverts
 - removing the structure allowed connectivity for large robust brook trout.
 - created an access point to the rocks for climbers and the access point for emergency services.
 - DOH did all the contracting of the bridge but approached USFS and TU to do some stream channel shaping and bank protection work (Bottom right picture).
- Year 3 - more partners/miles - WV NRCS RCPP
 - Using NRCS 396 Aquatic Organism Passage Practice
 - In an attempt to get NRCS to start utilizing this practice, TU proposed a regional Conservation Partnership project, also called an RCPP project.
 - Specifically to get the NRCS to start utilizing and implementing this practice.



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- This is the 3rd or 4th of the total of maybe 9 projects that TU had identified and secured financial assistance for under that RCPP program.
- 2025 and Beyond:
 - Half of the BIL/USFWS projects still to be completed.
 - Another suite of projects identified.
- Topics of interest - partnerships/roles
 - cyclical approach for the first couple steps of projects
 - Identify/prioritize: Wheel is always turning
 - Assess/Design: Not a linear design process as you gain new insights to a site.
 - Implement
 - Review: funders have different things they are looking for. Meet all the expectations of your funders.
 - Compliance and permitting: State/state variance.
 - Construction management and contracting
 - Monitoring
 - Ancillary
 - Monitoring: usually not included in the original proposal because people want immediate results. People want to see the monitoring but not pay for it. Also grant timelines are not long enough to have robust post-project monitoring.
 - Outreach
 - Education
 - Advocacy
- Topics of interest - Landowner willingness
 - Private sector challenges
 - Reservations about federal programs
 - try to educate them about these programs and then some people change their minds.
 - Out of pocket cost
 - try to reduce or eliminate out of pocket costs which is a huge selling point.
 - Maintenance
 - concern for maintenance even though culverts are less reliable
 - The unknown factor.
 - Aesthetics
 - Don't want to see shiny aluminum on their property .
 - Always a question: how long will it take
 - Public sector
 - Competing interest
 - Ex. recreational services vs fish passage.
 - Cost justification questioning.
 - Education and training of cost benefits could be helpful.
 - Review process can be lengthy.
 - Inspections can be of a concern for people long term.
 - Capacity to complete the projects is limited with the workload already on people.
 - Always a question: how long will it take



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- How do you set these expectations? Set them on the front end, these projects take time.
- **Jim Thompson:** Are you working with Seth Musinger with DNR?
- **Abigail McQueen:** Yes, quite a bit.
- **Jim Thompson:** I need to make sure these projects are being reported toward the Bay Program goal.
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- **Jim Thompson:** I noticed a lot of culvert replacement structures where you take an older structure and replace it with a new one. How do you talk to landowners about dam removals because they aren't getting a new dam after removal?
-
- **Abigail McQueen:** Yes this is a struggle we have as well, landowners do not want to lose their pool upstream of their dam.
-
- **Alexander Vital:** I want to commend your partnership building. We should model what you were doing with Garrett County by partnering with whole counties to extend our reach.
-
- **Jim Thompson:** That is a good point a lot of culverts are on state and federal lands.
-
- **Joseph Kirsch:** Relative to the apprehension that private landowners may have working with a federal agency or program, I recommend setting up a site visit to have those agency staff meet and talk with the landowners so they can establish trust/relationship.

2:55 - SOCIAL SCIENCE WORK: FUNDING AVENUE DISCUSSION (10 minutes)

Presenter: Jim Thompson (MD DNR)

- American Tivers asked Jim to be a part of a social science grant with NOAA where the concept was that we know the priority projects, but it has been very difficult to get land owners on board.
- A lot of the projects we have done were on public lands.
- Goal : Find out why people are saying no.
- Grant didn't get funded.
- We tried to do the same with GIT funding on a smaller scale but that wasn't funded either.
- We met with Jake Reilly with NFWF who was very enthusiastic about this opportunity
- Want to bring in American Rivers.
- Idea of bringing dam safety into the conversation using NFWF money to fund modeling of dam failure situations.
- **Jessie Thomas-Blate:** MD has a good dam breach inundation mapping tool now. <https://mdewin64.mde.state.md.us/WSA/DamSafety/>
- **Alan Weaver:** Jessie got some funding for VA dam owner feasibility study. Letters sent out to all these dam owners saying dam safety and things. Very little response.



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- **Jim Thompson:** Yeah this would be paying someone like a consultant to look at 30 top projects and do a little more research on those dams to find out their status. and then approach the landowners with a very specific plan.
- **Chris Guy:** A parallel is that TNC got some funding on the eastern shore where we heard from farm owners as it relates to wetlands. We heard a lot of the same things. Question TNC was asking: What are the barriers to entering these programs to put wetlands on your property? Folks were intimidated and didn't know what the process would look like. Others said they never heard of it. At the end of the project the real concern we had was that we had such a large list of interested landowners, are they going to lose interest before we can service all these people? We should have folks tell us why they aren't engaging rather than showing them what we have and asking them to take it.
- **Jim Thompson:** Forgot to mention in my MD update that I have been talking with USGS to do some work with efficiency of needle fish ladders from 30% to 80%. <https://www.usgs.gov/centers/eesc/science/development-and-evaluation-novel-east-coast-fish-ladder>
- **Jessie Thomas-Blate:** Bring up "Joined Layer List" and toggle on the DSS-WISE layers. You can also request access to DSS-WISE if you want to play more in depth: <https://dsswiseweb.ncche.olemiss.edu/>
- **Chris guy:** In response to Jim's link: went to Conte lab last year in person to see this technology. Very impressive
- **Jessie Thomas-Blate:** Here's a webinar about dam inundation mapping. John Roche (MDE Dam Safety) participated: <https://www.youtube.com/watch?v=KasIa5zGXic>

3:05 - Outcome assessment (20 minutes)

Presenter: Gina Hunt

Outcome Assessment:

- Fish Passage to supply 1st round of documents to the Management Board on January 30th.
 - 2 Pager Document explaining "What advice do you have for the Management Board on how to consolidate, reduce, update, remove, replace, or add new outcomes within your GIT?"
 - Do not need to have new outcome language yet.
 - Question to ask: What is the value added by the Bay Program by having Fish Passage Outcome a part of the partnership?
- Timeline:
 - Jan 6-17 Workgroups should meet to discuss their 2-pager.
 - January 30th 2-pager due.
- **Jim Thompson:** What I am suggesting is for Ray and I to take an initial stab at it and then come back to the workgroup? Or do you think we should do this all together?
- **Gina Hunt:** I gave a very abbreviated picture. The full picture includes the secret sauce and pillars of the bay program. but you also need to discuss outcome vs outputs. Where does fish passage fit? This group then won't have the benefit of understanding that distinction. If you read the 2025 ERG report that is where this comes from.
- **Alan Weaver:** Your suggestion Jim seems to work in the past. That may be easier for you guys to concentrate on that and formulate at least something to start with.
- **Jim Thompson:** I think as a workgroup we have been successful. Unlike other workgroups our outcome is pretty straightforward. the bay program is helpful in bringing us together. They have provided funding in the past. Maybe we should have a smaller group talk about this and then bring it to the workgroup again in january.



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- **Mary Andrews:** I think your approach Jim is a good one. What is the benefit for the Fish Passage workgroup to develop an outcome in the next iteration of the bay program? What I am asking Gina and Chris is: is the bay program thinking about how it will support its outcomes. I want to know why it is important to be a part of the bay program.
- **Jessie Thomas-Blate (Chat):** I support your proposed approach, Jim and Ray. At least something to react to that maybe highlights points of needed discussion or open questions.
- **Tammy O'Connell (Chat):** I like the idea of a small workgroup rather than tasking the chairs
- **Jim Thompson(Chat):** If we had a smaller subgroup are there folks here that would like to be involved?
- **Chris Guy:** Well that is the question we are turning on you. The idea is that we would provide your input to the Management Board and then State directors. An example of value added are small watershed grants which is a dedicated funding to the bay program outcomes. If you are not an outcome or output you won't be able to be a part of that funding. Another benefit of being a part of the program is the joint meetings and sharing of science.
- **Mary Andrews:** In our outcome development can we ask for things? When the FP workgroup was first formed the bay program directly funded projects and monitoring. Is the new bay program agreement going to be moving to that previous model or stay like something we were seeing today with minimal resources provided to the fish passage workgroup.
- **Chris Guy:** It's true there was original seed money, but it was never intended to be permanent. With a new administration resources are uncertain. Bay program funding is a function of congress. BIL has about a year or two left.
- **Mary Andrews:** I wasn't just talking about federal funds, so another example would be you mentioned states being involved in the agreement and so we have not had financial positions for fish passage at various states. We have for the ones I've mentioned, but for like West Virginia, Delaware, New York, you know, maybe there's a venue to have an actual person dedicated through the state government, working specifically on fish passage issues. Are those the types of things that we're talking about as we're developing a new Bay program agreement or again, are we just kind of talking a status quo? I mean, those are the questions that I'm asking and those are opportunities for us.
- **Chris Guy:** That is a very specific question. Historically that has come from the workgroup up to the GIT and then the Bay Program want to give that resource or not.
- **Alan Weaver (Chat):** I don't remember exactly the last year the BP funded my position but it was for many years out of the 31 I've been doing this. Fortunately, DWR found a different source to allow me to continue doing fp work in VA, mostly in the CB ws.
- **Mary Andrews:** So what I am hearing is that value that I have brought up could be discussed internally within the Bay Program.
- **Gina Hunt:** Let me clarify two things: (1) the GIT will be responding for this outcome whether the workgroup sees value or not. What we want this workgroup to do is to tell us what they think the answers to any of those questions are. (2) When they are taking the 2 pagers and other reports into consideration they are going to the jurisdictions and also asking: "are you required to do this work already?" and "what is the value added from the Bay Program?"
- **Chris Guy:** If you are not an outcome the jurisdictions are not required to do anything as per the bay agreement. folks may lose resources in case this becomes a less of a priority
- **Jim Thompson:** The states have priorities to remove dams regardless of the bay program. Fish passage would still go on regardless if we were a part of the bay program. I do see value in being in the bay program to bring us all together, but I don't think the work would drop off drastically if we were not apart of the program.
- **Mary Andrews:** and I hope my question doesn't sound like let's leave the bay program. I was just wanting to hear a sales pitch as to what the benefits were to us, whether the agreement will look different, etc.

3:25 - DEBRIEF; CLOSING REMARKS (5 minutes)



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3:30 - MEETING ADJOURNED

Action Items from the meeting:

1. Set up a meeting in early January for the entire Fish Passage Workgroup to meet to go over the 2-pager Ray and Jim have drafted.
2. Follow up with Ian Blackburn on helping with getting a mitigation banking effort in New York.
3. Consider involvement with the Upper Susquehanna Coalition.
 - a. Contact: Emily Zalweg is a colleague of Ian Blackburn that does USC work.
4. Follow up with Rachel Harrison of WV on funding sources to see if there is opportunity for the workgroup to help.
5. Ensure Trout Unlimited Projects are being reported toward the Bay Program goal.
6. Consider Joseph Kirsch's comment "Relative to the apprehension that private landowners may have working with a federal agency or program, I recommend setting up a site visit to have those agency staff meet and talk with the landowners so they can establish trust/relationship."
7. Familiarize yourself with MD's dam breach inundation mapping tool:
<https://mdewin64.mde.state.md.us/WSA/DamSafety/>



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APPENDIX I: Maryland Updates

Fish Passage Workgroup Update

11.21.24 Supplied by Jim Thompson:

American Rivers received \$1.8 million from NOAA to conduct a feasibility study Daniel's Dam. If DNR moves forward with removal, this would open 248 miles, though these miles have already been counted as opened since there is a Denil Fish Ladder at the dam.

Cypress Branch Dam Removal will begin next month. This is a small dam removal/stream restoration project on a tributary to the Chester River. We expect this project to be completed by spring 2025.

Coordination continues with the Cumberland dam removal project. The City has raised over \$10 million dollars of an estimated \$25 million. This project would open 311 miles for resident fish and American eels and is considered a DEIJ project.

Construction of an eel ladder will begin in January of 2025 and will be ready for passage in the spring. This project is on Deer Creek, the first main tributary below Conowingo Dam on the Susquehanna River and has a large population of American eels. We anticipate high passage numbers into 46 miles of upstream habitat.

Several other projects that could begin in the near future include:

Girl Scout Dam Removal, a Chesapeake Log Perch Project above Conowingo

Broad Creek Scout Dam - Also above Conowingo but could benefit herring. The scouts are looking for private contractors to tackle the project in exchange for mitigation credits.

Atkinson and VanBibber Dams - 2 very large projects in the Upper Bay are gaining support but likely 3-5 years before any on the ground work takes place

Slides:

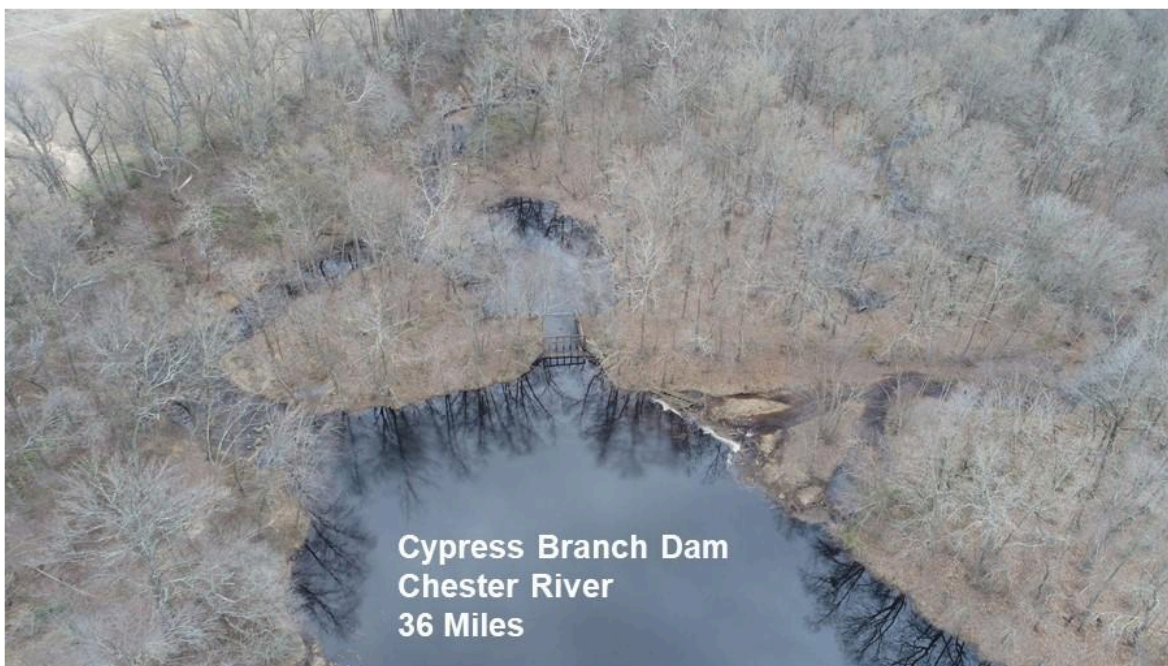


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Daniel's Dam
Patapsco River
248 Miles



Cypress Branch Dam
Chester River
36 Miles



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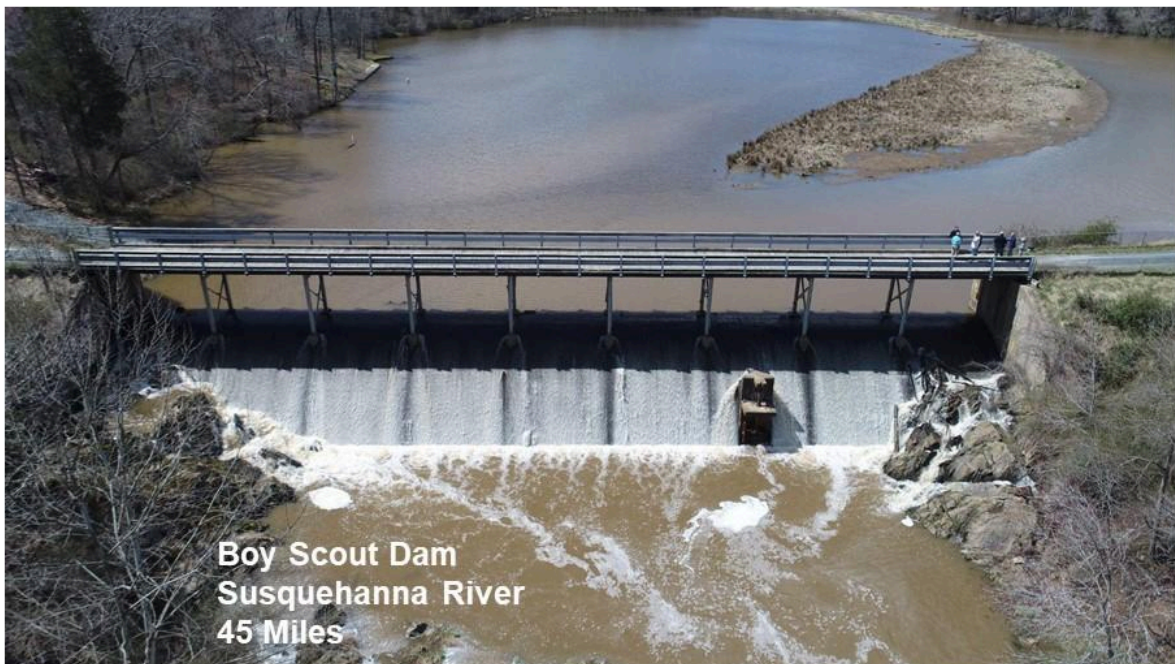


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Girl Scout Dam
Susquehanna River
62 Miles

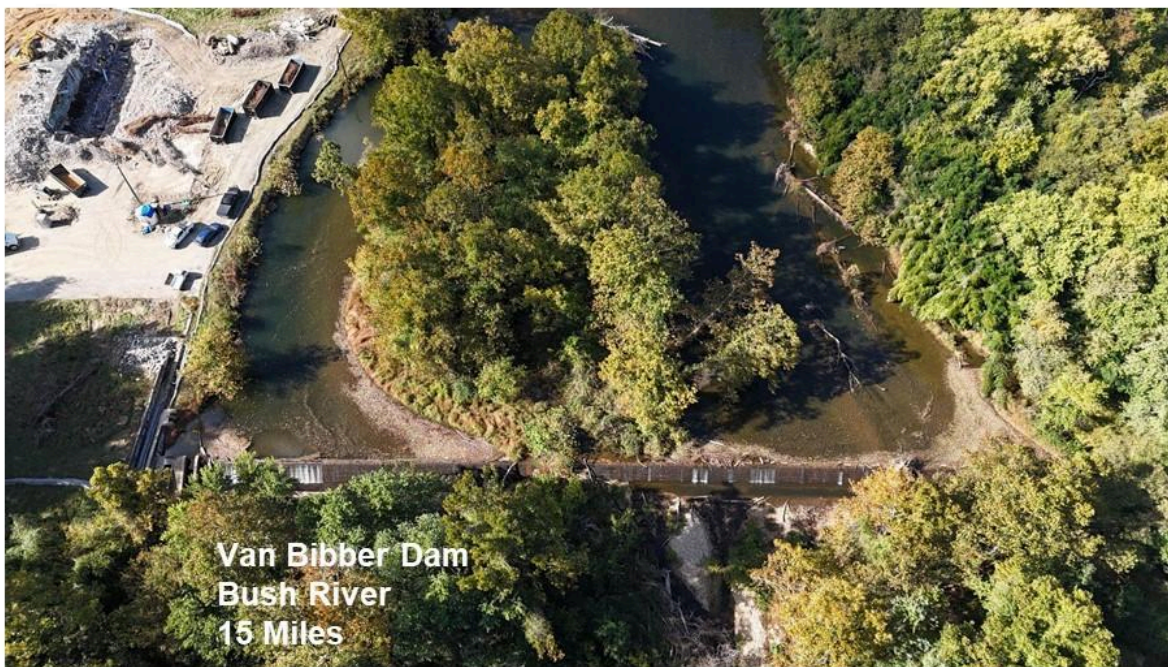


Boy Scout Dam
Susquehanna River
45 Miles

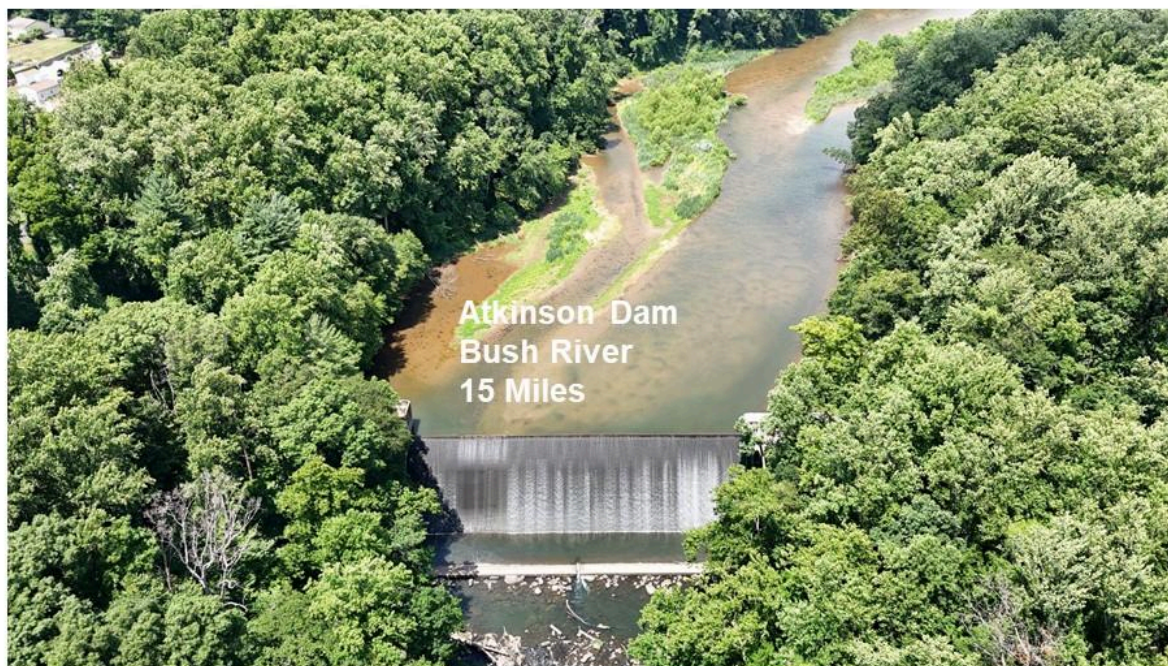


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Van Bibber Dam
Bush River
15 Miles



Atkinson Dam
Bush River
15 Miles



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APPENDIX II: Pennsylvania Updates

Supplied by David Dippold:

There were 6 dams removed in PA in the CB watershed during 2024.

- Beiler Farm Dam
- Benner Springs Dam
- Upper Spring Creek Dam
- Bascule Gate Dam
- Brush Mt. Dam
- Detweiler Dam

In addition to these dam removals, we continue to make good headway identifying, prioritizing, and replacing crossings that prohibit fish passage.

APPENDIX III: Virginia Updates -

Supplied by Alan Weaver:

If You Remove It, They Will Pass:
Ashland Mill Dam, South Anna River

**Chesapeake Bay Program Fish Passage
Workgroup
November 21, 2024**

**Alan Weaver
DWR Fish Passage Coordinator**

*Davey/WSSI webcam

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Dr. Chas Gowan - RMC

13' x 200' Concrete dam built in 1916. Preceded by timber crib/rock dams. AMD Used for hydromechanical power (3 turbines to grind grain). Building fire in 1980's harmed complete historical context.



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Anticipated Benefits

- Reopen and reconnect 252 Upstream Functional Network Miles (South Anna plus all accessible tributaries)
- TNC's Ches. Bay Prioritization Tool: AMD ranks in the top 1% of 7,000 dams in CB watershed
- Hypothesis: more habitat = more fish
- Target Species: All four alosines (shad and herring), Striped Bass, Sea Lamprey and American Eel AND...
- Benefits to freshwater mussels by passing host fish species
 - T&E mussel improvement potential
 - e.g., FE Dwarf wedgemussel (*Alasmidonta heterodon*)
- Convert 2.3 miles from lentic to lotic (impoundment plus "functional impounded" reach of South Anna River)
- Restore stream to its natural form and function (water quality improvements)
- Remove a boating safety hazard (owner liability alleviated)



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Abbreviated Project History

- **DWR** attempts to build a Denil fishway in the 1990's – monitoring by DWR shows 7 target species below dam (up through 2009)
- 2009: removal planned as mitigation for King William Reservoir. *Credits agreed upon* by Newport News and the IRT. Project dies so mitigation projects die. - **DWR** begins working with **Randolph Macon College** on monitoring plan and efforts toward removal
- 2020 – **Restoration Systems** proposes removal as a mitigation bank
- 2021: **Davey Mitigation, DWR, and RMC** seek money through National Fish Passage Program Bipartisan Infrastructure Law (mitigation/federal \$ possible if pro-rated but too complicated)
- NOAA BIL grant funding also considered (**RMC** as applicant)



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Abbreviated Project History cont...

- 2023: **Davey** proposes removal as a mitigation bank
- Spring 2024: **DWR and RMC** reinitiate pre-removal diadromous fish sampling (boat electrofishing) below the dam
- May 2024: stop log board fail – impoundment drains – totally coincidental (not repaired due to impending removal)
- July 2024: The **USACE and DEQ** approve an **MBI** that establishes the criteria for **Davey Mitigation** to pursue credit releases as criteria are met
- August 2024: **Wetland Studies and Solutions** sets up webcam
- September 24, 2024: Demolition by **Backwater Environmental** begins!!
- **October 21, 2024: Ashland Mill Dam removal is complete**
- **October 31, 2024: BWE** completes river right bank stabilization wall



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**DWR and RMC Boat EF
below Ashland Mill Dam
Spring 2024**



American Shad



Photos: Melinda Weaver

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Table 1. Resource Type and Mitigation Credits

Mitigation Activity	Credit Ratio	Linear Feet	Credit
Baseline Impoundment Length (IL): Riverine Lotic Habitat	1.0	12,250	12,250
Dam Removal on State Priority List AF	0.3	12,250	3,675
River Order (5th) AF	1.2	12,250	14,700
Water Quality, Aquatic Habitat/Communities AF	0.1	12,250	1,225
Rare, Threatened, and Endangered Species or Communities AF	0.3	12,250	3,675
Diadromous Species Fish Passage AF			
American Shad	0.1	12,250	1,225
Blueback Herring	0.1	12,250	1,225
Hickory Shad	0.1	12,250	1,225
Alewife	0.1	12,250	1,225
American Eel	0.1	12,250	1,225
Striped Bass	0.1	12,250	1,225
Sea Lamprey	0.1	12,250	1,225
Conservation Easement Credits (1%)	N/A	N/A	441
TOTAL			44,541



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No Fish, No Credit!



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Project Players

- **Davey Resource Group** – private funding investment in pursuit of mitigation credits
 - **Davey Mitigation** – Project Manager; planning, credit negotiations, permitting, and project oversight
 - **Wetlands Studies and Solutions** – Design and project oversight (in-stream work)
- **Backwater Environmental** – construction company for dam demolition; streambank stabilization project
- **DWR** – fish passage planning for 30+ years; original fish monitoring; pre and post diadromous fish monitoring; technical assistance during MBI development (no financial investment or return)
- **Randolph Macon College** – dam removal efforts for 20 years; pre and post diadromous fish monitoring (ef with DWR and eDNA studies); physico-chemical monitoring pre and post; funding neutral (some equipment funding from Davey for monitoring and eDNA analysis)



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Dam removal began on September 24, 2024



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Short video of jack hammering center section near bottom of dam. For visual and for sound effect.



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Going Forward...

- 10 years of monitoring are planned
- Early post-removal electrofishing monitoring (tote barge) started in October (DWR and RMC faculty and students) at three upstream locations
 - Recently found 4 darter species, sunfish, minnows, eels, bullheads immediately upstream
- Davey Mitigation needs to meet the performance criteria in the MBI to have the IRT release credits (e.g., target fish species must be found in at least two years upstream)
- Physical stream changes and water quality will also be monitored long-term
- Looking forward to Spring 2025 to start monitoring the movement of Alewife, Blueback Herring, and the other target species upstream into the previously blocked habitat



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[Sensera Public View](#)



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Baber's Mill Dam

Rock Island Creek (James trib)

About 6' in height (remains)

Built in 1827 (saw mill)

Owned by Weyerhaeuser

DWR design, permit assistance and construction oversight (Louise Finger)

Funding: DWR obtained USFWS SWG funds; Weyerhaeuser; anonymous donor

DWR monitoring

Mussels (Brian Watson)

Fish (Alan Weaver)



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Sea Lamprey found on April 29, 2024, below dam moments before removal began.

Several thousand pass through Boshers Fishway annually so they were suspected to be using Rock Island Creek.



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43 UFN miles reconnected



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Questions ???



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APPENDIX IV: New York Updates

Supplied Ian Blackburn:

“[In NYSDEC Region 7], we are currently working collaboratively (mostly advisory capacity) with TU on a dam removal (Candor Dam) on Catatonk Creek, a tributary to the Owego Creek, which drains into the Susquehanna at Owego, NY (Tioga County). This is a 4-5’ high concrete dam that no longer has any useful function, and is, with the exception of extreme floods, impassable in the upstream direction to all fish species. We are in the earliest stages of the project, e.g. getting the town on board with removal. TU is going to be working on feasibility study funding and we’ll go from there. We anticipate benefits to 1. Green floater and other listed and/or native mussel species potentially present in the system, 2. Improved access for American eel, and other anadromous species as passage improves lower in the Susq. System and they show up in greater abundance in our upper reaches, 3. Restored passage seasonally for migratory brown and brook trout in the Owego Creek watershed, and improved passage for warmwater species as well (the mainstem Catatonk Creek is technically a warmwater stream most of the year).

In NYSDEC Region 8 there have been no dam removals of note and none planned in the Chemung drainage. In NYSDEC Region 4, Oneonta Southside Dam (on the Susquehanna proper) is currently in the earliest stages of the removal process as well.”

APPENDIX V: Delaware Updates

N/A

APPENDIX VI: West Virginia Updates

WV Chesapeake Bay Fish Passage Workgroup Update
12/12/24 Supplied by Rachel Harrison:

Upcoming Projects: Jefferson County has applied under the Dam Control and Safety Act for approval to remove the Dry Run No. 1 and No. 2 dams near Leetown, WV. The dams are earthen structures used for recreational purposes and are classified as high hazard. The project will be done in two phases: Phase 1 will be removal of the two dams, and Phase 2 will include installation of new dams in their place.

The Millville Hydroelectric Project plans to install a modified eel passage sluice pipe. This project is in the planning phase and will open up 433.21 miles of upstream habitat for the American eel.

Coordination continues with the Albright Power Station Dam Removal. The goal of the project is to restore aquatic connectivity to the main stem of the Cheat River. The project has support from multiple partners and would open up 1,046 miles of upstream habitat for the Eastern hellbender, walleye, and smallmouth bass



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APPENDIX VII: DC Update

Rese Vloyd (DOEE) (In Chat): Dropping a note in the chat, since DC isn't on the list to give a verbal update: DC has not completed any fish passage projects in the past year. We have one that will go out for bid in early 2025, but work isn't expected to commence until late 2025 or early 2026, We have a few others that are still in the concept or design phases, but work is still a few to several years out.

APPENDIX VIII: Aquatic Organism Passage in Potomac Headwaters Bipartisan Infrastructure Law - Abigail McQueen Slides



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Aquatic Organism Passage in Potomac Headwaters Bipartisan Infrastructure Law

Abigail McQueen

Chesapeake Bay Program Fish Passage Work Group Fall 2024 Meeting (11/21/2024)



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Project Evolution

- Trout Unlimited – Priority Waters
 - Western Maryland Initiative
 - Potomac Headwaters (West Virginia and Virginia)
- Identifying projects and collaborating with partners
- Coordinated project list with USFWS Fish Passage coordinator – submitting one or two projects a year for funding through the USFWS National Fish Passage Program (NFPP) appx \$50k per project
- Bipartisan Infrastructure Law > Influx of funding into NFPP for larger projects



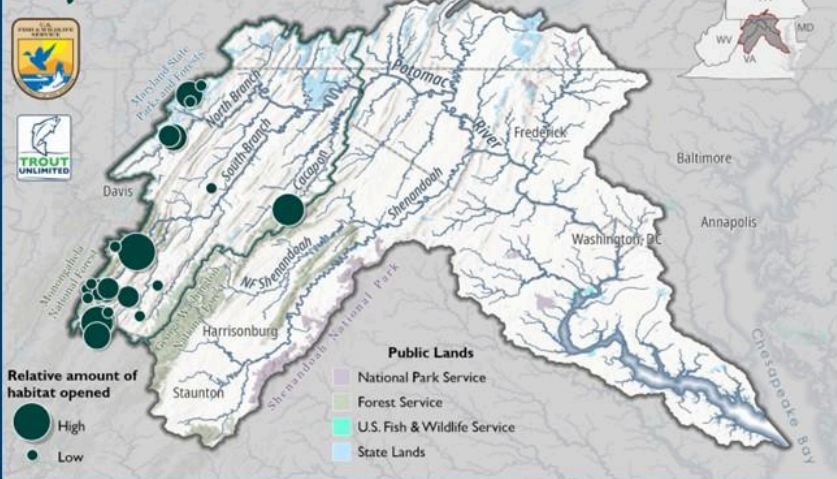


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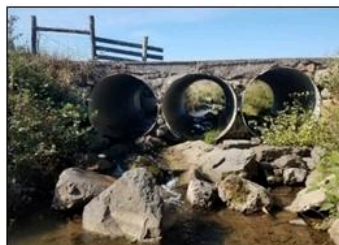
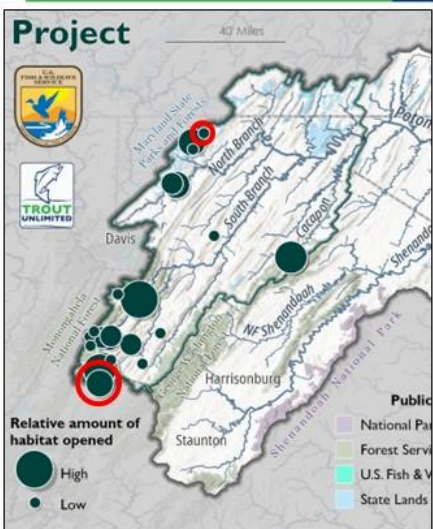
Project Goals

Potomac Headwaters Fish Passage Restoration Project



- Remove 16 of 24 priority barriers
- Open up to 195 miles of habitat across 3 states
- Build and strengthen partnerships
- Improve resiliency of human and ecological infrastructure

2022 – year I – MD DNR and VA NRCS

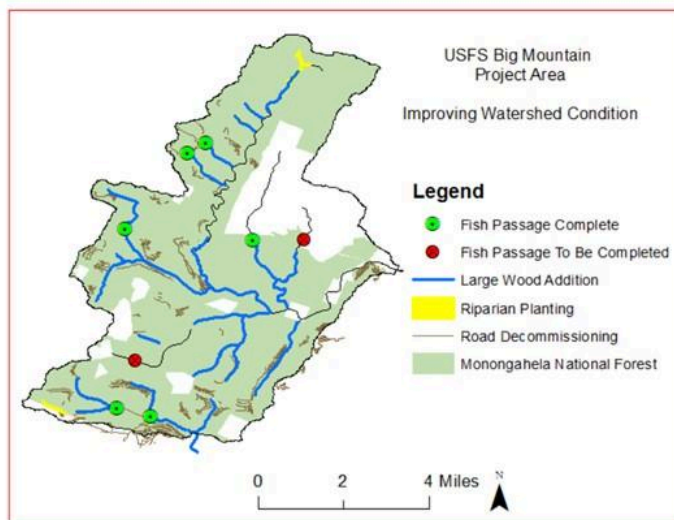
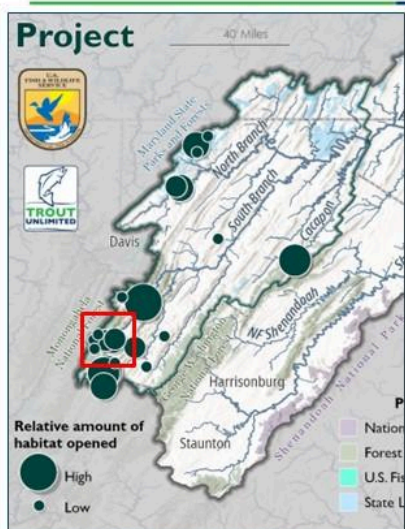




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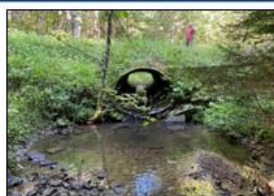
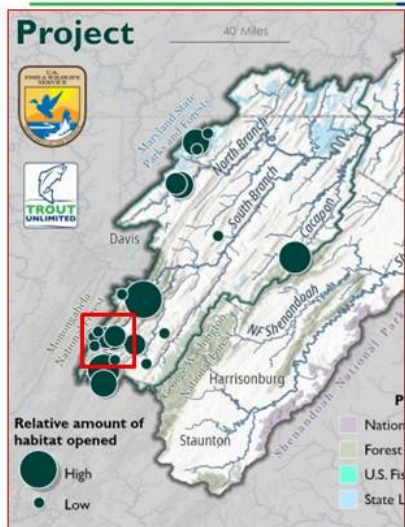
2023 – year 2 – combining additional BIL funding - USFS



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2023 – year 2 – combining additional BIL funding - USFS



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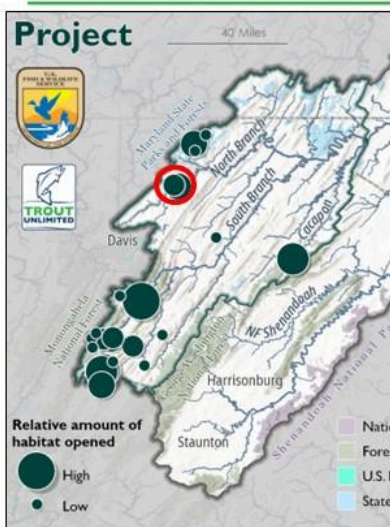
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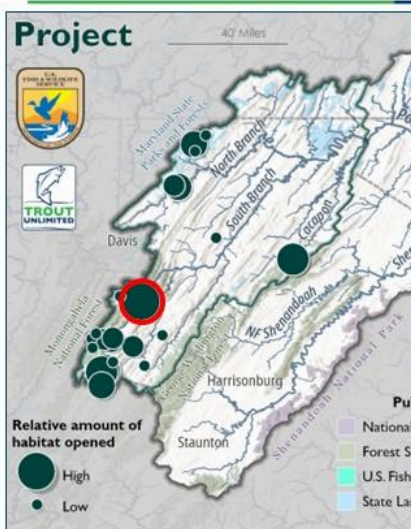
2024 – year 3 – More Partners/Miles – Garrett County (MD)



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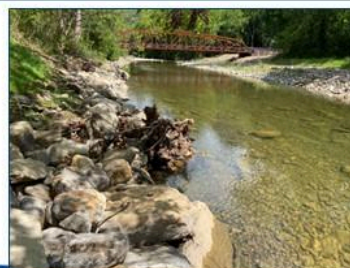
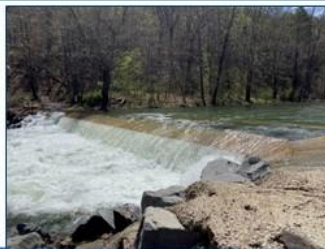
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2024 – year 3 – More Partners/Miles – WV DOH - USFS



Roads to Prosperity replaces low water crossing with new bridge at Seneca Rocks

2/15/2023



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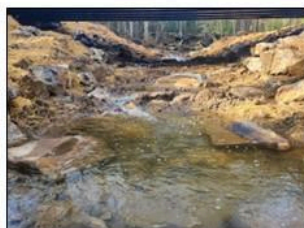
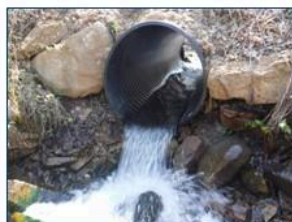
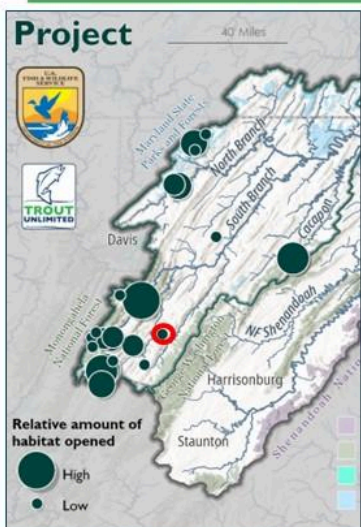
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2024 – year 3 – More Partners/Miles – WV NRCS RCPP

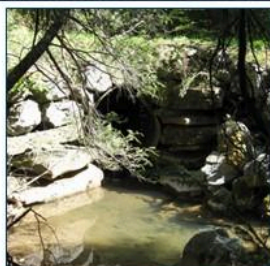
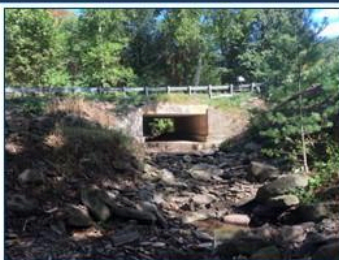
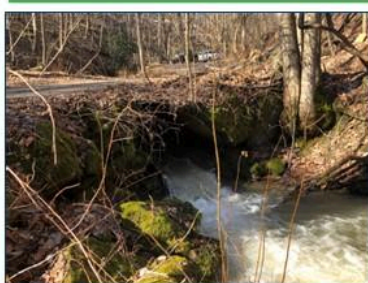




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2025 and beyond



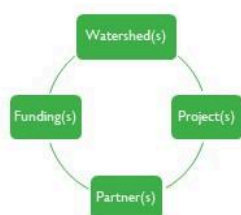
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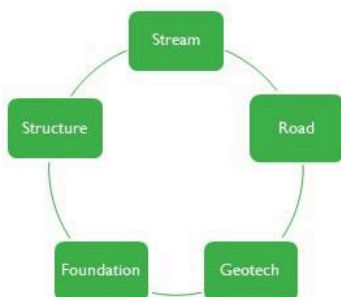
Topics of Interest – Partnerships/Roles



Identify/Prioritize



Assess/Design



Implement

- Review
- Compliance
- Permitting
- Contracting
- Construction Management
- Monitoring

Ancillary

- Monitoring
- Outreach
- Education
- Advocacy

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