



Fish Passage Workgroup – Fall 2021 Meeting

Monday, September 20th, 2021; 10:00-11:45 ET

[Meeting Materials can be found at this link](#)

Participants:

Mary Andrews, Chair, NOAA	Katlyn Fuentes, Staffer, CRC	Alan Weaver, VA DWR	Catherine Gatenby USFWS
Chris Guy, USFWS	David Dippold, PA Fish & Boat Commission	Gina Hunt, MD DNR	Jessie Thomas-Blate, American Rivers
Jonathan Watson, NOAA	Julie Devers, USFWS	Kevin Mulligan, USGS	Lisa Moss, USFWS
Raymond Li, USFWS	Serena McClain, American Rivers	Sheila Eyler, USFWS	Tammy O’Connell, VA DWR

Meeting Notes:

Welcome and Introductions:

NEW PERSONNEL:

- **Katlyn Fuentes** – Bay Program Staffer for the Fish Passage Workgroup
- **David Dippold** – new PA Fish Passage Coordinator
- **Tammy O’Connell** – VA DWR

BAY PROGRAM SRS REVIEW AND ACTION PLAN:

- Fish Passage Workgroup – part of the Healthy Watersheds Cohort – is currently undergoing the Strategic Review System (SRS) process. As part of this biennial review cycle, the workgroup is updating the 2022-2024 work plan.
- **Workplan can be found at [this link](#)** and will be sent out to members for “red-flag” edits.
 - **ACTION: Please send “red-flag” edits on the workplan to Mary Andrews (mary.andrews@noaa.gov) and Katlyn Fuentes (fuentesk@chesapeake.org)**

PROPOSED UPDATES TO THE CHESAPEAKE FISH PASSAGE TOOL:

- The workgroup has submitted a proposal for the upcoming GIT Funding cycle, to update the Chesapeake Fish Passage Tool.
- These new updates will include a new IT platform for the tool, a new feature that allows users the ability to download datasets, as well as updates to JavaScript.
- Final proposal reviews will occur in late November 2021, and funding awards will be announced shortly thereafter. If the project is selected for funding, we will schedule a meeting with Erik Marten

(tool developer) and workgroup members, to go over possibilities or limitations to this tool update, as well as facilitate a discussion as to what features we want to include in the tool.

- **ACTION: Please send any ideas for future projects (either through GIT Funding or other funding venues) TO Mary Andrews (mary.andrews@noaa.gov)**

- **QUESTIONS & COMMENTS:**

- **Alan Weaver:** It would be great to include a layer in this tool update that would show all the fish passage projects in all the states within the Bay Program.
 - **Mary Andrews:** I agree, that's one of the features that I would like to make readily accessible to users. If we were to move forward with this project in the GIT Funding process, the workgroup would meet together to have a discussion on features that we want on this tool. there will be an opportunity to discuss the tool updates in greater detail in the near future.
- **Serena McClain:** It would be great to have contacts available, so that if someone hovers over a Fish Passage barrier, they can see who to contact to get more information on the project. Additionally, we could pull in GIS data to add any social layers to the map (e.g., MD Environmental Justice Screening). Depending on which stakeholders are using this tool, the prioritization may look different.
 - **Mary:** However, there shouldn't be any issues in including any additional layers, therefore giving users the ability to use the tool in their decision-making processes.
- It would be nice to export the data or certain layers to KMZ files – making the data easier to download and then visualize in Google Earth.

FOLLOW-UP ON ACTION ITEMS FROM LAST MEETING: At the last workgroup meeting, ideas were solicited from the members on subjects that the workgroup could host future meetings about.

WORKSHOP UPDATES:

- **Sedimentation workshop (AR/NOAA) – no progress**
 - *Mary and Serena are working on this.*
- **Culvert workshop (USFWS) – need USFWS lead**
 - Julie was in charge but has since moved on to NRCS and can no longer take point on this project.
 - **ACTION: We need someone to take over for Julie. If you are interested in taking over this project, please contact Mary Andrews.**
- **Facilitating NAACC Trainings (USFWS) – the following updates on personnel training provided by Lisa Moss**
 - In June, the Virginia Fish & Wildlife Conservation Office trained eight biologists in Augusta County (DWR). Lisa Moss worked with Louise Finger on this project. The purpose of the trainings were to get culverts assessed on their wildlife management areas as a priority, then post-training: the biologists would have the skillset to venture out onto other lands and help with state-wide inventory of assessments. There has been ongoing data-entry since the completion of trainings, and Lisa Moss has been elevated to an L2 coordinator position, which allows her train, certify, and review data.

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- There's been a lot of coordination and communication with Scott Jackson (central lead at U Mass for NAACC).
- Lisa Moss also worked with Rivanna Conservation Alliance (Charlottesville), to train personnel to complete a project funded through the National Fish Passage Program to conduct assessments in the Ravenna River drainage. The goal for this project was 250 assessments.
- Lisa also worked with the James River Association on some of their NFWF grants, training personnel for on-the-ground projects.
- Moving forward, Lisa will continue providing trainings for watershed groups, state agencies, etc. **If you have a need or interest for this type of training, please email Mary Andrews (mary.andrews@noaa.gov) and Lisa Moss (lisa_moss@fws.gov).**
- Mark Secrist has taken over as the L2 Coordinator for MD. He also has a couple people trained in the FWS office, so **if anyone in Maryland needs training, they can also contact Mark (mark_secrist@fws.gov).**

DISCUSSION UPDATES:

- **Monitoring at fish passage sites including eDNA (SERC/UMCES)**
 - **ACTION: Mary will contact Matt Ogburn for update and to discuss how this webinar would work.**
- **Invasive species discussion (USFWS):** *there was a small group discussion last spring, do we need additional meetings?*
 - **STATUS OF CONOWINGO** (*provided by Sheila Eyler*): the policy committee for the Susquehanna River Anadromous Fish Restoration Cooperative met last Tuesday (09/14) to discuss drafting a policy on invasive species passage and fish passage on the Susquehanna. The agencies are currently too widespread in their priorities and lack a singular common priority or message. The states are very concerned with invasive species passage, while the federal agencies are slightly less concerned and are more focused on migratory fish restoration. However, invasive species will continue to be an issue, and will perhaps be of higher concern in the near future.
 - **Mary Andrews:** Do you see anywhere that the workgroup could be helpful in those discussions?
 - **Sheila:** No. States are taking it upon themselves to accomplish these tasks. I will keep you updated.
 - **Additional conversations regarding drafting specific guidance for the fish passage workgroup on this matter will continue offline, as invasive species are almost a project-by-project determination.**
 - **Serena** recommends creating a special internal" workshop with members of this group to come up with this guidance.
 - **ACTION: Mary will follow-up with the workgroup re: what the guidance might look like.**
 - **David Dippold** confirms that aquatic invasive species is an emerging issue in PA. and the state is moving towards pre-removal AIS sampling at many potential dam-removal sites.
- **Dam removal mitigation bank** – *no final calculator at this time; there has been no movement on this in the past several months.*

- Corps of Engineers is very focused on finishing the Stream Mitigation Calculator and they want to finish it first before determining what the Dam Removal Mitigation Calculator would look like. There is a calculator already in use, but the Corps of Engineers do not want to utilize the tool in its current state. so there have been ongoing negotiations over the past two years on what this new calculator might look like. No progress has been made in this regard.
 - **Raymond Li:** The current changes to being made in the Stream Mitigation Calculator is units of measure: shifting from a linear feet of stream mitigation to a more functional foot “currency”. It’s important to figure this out prior to working on the Dam Removal Mitigation Bank, as it would likely use the same currency.
 - **Mary Andrews:** Is that linear foot conversion holding up the stream calculator right now?
 - **Raymond:** Yes. The initial hope was that the stream calculator would roll out some time summer 2021, but that obviously hasn’t happened. Once a beta model is created, the expectation would be that we could then discuss the specifics of the dam removal calculator.

UPDATES ON MARYLAND CULVERT GUIDANCE DOCUMENT AND MARYLAND DAM REMOVAL MITIGATION CALCULATOR, Mary Andrews (NOAA) [LINK TO DOCUMENT](#)

- This document is done; however it’s still considered a “work in progress” as it may be updated in the future.
- It is up to the workgroup to decide what our next steps are with this document. Mary proposes convening a smaller working group to focus on this task and determine how to move this process forward.
 - **ACTION: If you have any interest in culverts, please send Mary Andrews and Katlyn Fuentes a message detailing your interest in getting involved with this project, and we will convene a meeting specific to the road stream crossings. (David Dippold and Serena McClain expressed interest in joining this smaller working group.)**
- Out of the SRS review, it was brought to our attention that we have a Local Citizens Advisory Group as well as local governments who are interested in working with us to promote this. We need to provide direction on where we want to head with this.
- **This document is Maryland-specific.**
 - **ACTION: Pennsylvania and Virginia should begin thinking about what’s next on their fronts: is this type of document necessary in your state, and if so, can you modify this document to fit the needs at your state-level?**
- **QUESTIONS & COMMENTS:**
 - **David Dippold:** speaking for PA, our eventual goal as a state would be to produce a similar type of guidance document, perhaps using the MD document as a guide/template. We have some programs in the state (e.g. Center for Dirt and Gravel Road studies) that are also working towards program-specific guidelines. So our hope is that once the MD and Center for Dirt and Gravel Road documents come out, that we can then look at those collectively and perhaps create a more state-wide guidance document focusing more on stating the issue and providing general considerations, rather than specific designs or engineering criteria.

- **Alan Weaver:** Is MD Department of Transportation on board with this?
 - **Julie:** Yes. SHA was one of our partners and they provided a plethora of comments. They weren't 100% happy with the end-products, as some of the comments provided did not match with the intent of describing what was best for Fish Passage, but they were still willing to sign-on as a cooperator. If you move forward in creating a document like this, I recommend that you bring on DOT early into the conversation.
 - **Alan:** In VA we have a legislation that passed a couple years ago that requires we create a wildlife corridor action plan and it has an aquatic component. There's also been non-profits pushing for additional legislation on aquatics. VDOT is involved in listening and partnership, but as far as implementation, VA has a long way to go.
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Possible New Dam Removal Related Legislation, Serena McClain (American Rivers, leading National Dam Removal Program): ****Serena's detailed list of talking points is forthcoming and will be distributed to the membership in the near future.***

- **TWENTY-FIRST CENTURY DAMS ACT:** introduced by Rep. Kuster and Senator Feinstein in July 2021
 - Focuses on dam safety, energy through hydropower, and restoration of river ecosystems
 - Proposal: create an inter-agency stakeholder and advisory committee to help administer funding climate resiliency and conservation – specifically for dam removal.
 - \$7.5B for multiple agencies over a 5 year period.
- **FY22 BUDGET OPPORTUNITIES – INFRASTRUCTURE BILL/COMMUNITY INVESTMENTS:**
 - The Infrastructure Bill passed senate in August 2021.
- **QUESTIONS/COMMENTS:**
 - **Catherine Gatenby:** In parts of Appalachia, culvert removal can be sold to stakeholders, but this idea is largely dismissed by coal-mining and legacy contamination. Because of the sense of distrust, restoration experts are having to explore other incentives for culvert removal. Any thought to incorporating green energy into incentives? Such as “free” solar technology for local habitat restoration projects?
 - **Ray Li:** I work for USFWS in Maryland and there is a small group of us that are just starting to talk about potential projects re: to the infrastructure bill or other funding pipelines. You mentioned coordination from American Rivers with different agencies – what level is that happening at, so we don't duplicate efforts?
 - **Serena:** We've been talking with Eric McMillan and Will Duncan but will be reaching out to Ray and Mark in the near future to have these collaborative conversations.
 - **Mary:** I would recommend we start discussing this not as agency-specific, but as a comprehensive workgroup that has priorities as dictated from our tool and develop a spreadsheet that all of us have access to and can coordinate on.
 - **ACTION: develop a Google Spreadsheet with a potential dam removal and culverts projects moving forward that the entire workgroup has access to.**
 - **Serena McClain:** the culvert funding (in roads and bridges) will definitely go through transportation departments. Would be great for them to for them to focus on culverts and

dams funding (because the intent of the groups advocating has always been dams) to focus on dam removal.

STATE FISH PASSAGE COORDINATOR UPDATES → Question for coordinators: what things could we do differently with an infusion of funds?

JIM THOMPSON (MD Dam Removals and Culvert Projects)

- **Several projects on the way:** 3 of the 4 current projects that are being worked on are being counted with fish ladders or have already been breached, but we're working to completely remove them. The projects are:
 - **CYPRESS BRANCH** – herring & hickory shad project; have been a partial blockage since the dam breaches in the 1970's or 1980's; CBP considers it "open" but work is still ongoing. Design plans have been drafted, the team met in early spring, and are hoping to go into construction in late summer 2022.
 - **DANIELS DAM ON PATAPSCO RIVER** – no concrete decision from DNR as to whether this dam will be removed. The dam has a fish ladder that is not fully functional and not many fish have returned. However, target fishes such as herring have been reported. There is also an eel ladder that is functioning extremely well, and 611 eels have been reported this year. There have been some snakeheads spotted below the dam, and there are ongoing conversations as to what to do re: downstream snakeheads.
 - **FORT MEADE DAM** (owned by Army): has a fish ladder that was built in the 1990's, but the river has since cut a channel around the dam. There are ongoing efforts to take out this dam and there's a scheduled call on Wednesday (9/22) to discuss this further. This dam has herring and hickory shad, and potentially American shad as well.
 - **GIRL SCOUT DAM:** a small, concrete/rubble dam in a tributary to the Susquehanna River, above the Conowingo dam. This dam removal is for herring as well as endangered Chesapeake logperch. This creek, Conowingo Creek, has a very high population of logperch. This project is being funded entirely through mitigation credit money, perhaps the first to be done in the state.
- **ANSWER TO QUESTION (what things could we do differently with an infusion of funds?):**
 - **DAM REMOVAL INCENTIVES** currently the biggest problem is that we have a list of projects that we want to do and we have the tools, but we're having a hard time getting owners to say yes. It would be great to get the tax incentives and mitigation credits tool, to better incentivize dam owners to remove these dams.
 - **EDUCATIONAL MATERIALS:** We also have more removals now in the Bay region, it would be great to create educational material to show dam owners the benefits of dam-removal.
 - **Julie Devers:** there will soon be three new culvert replacement projects in western MD. Could be used for a brochure?
 - **Gina Hunt:** the CBP Communications team could help with brochures.

- **Serena McClain:** Assuming you'd be featuring case studies in these educational materials – do you have an idea of what you'd want these materials to look like?
 - **Jim:** both a physical brochure that could be distributed during site visits, as well as a digital (.pdf) copy that could be emailed out to interested parties.
 - **ACTION: Serena will send out the brochure from a few years ago on the outreach done on the Eastern Shore in MD about overall fish passage. Perhaps this brochure, plus additional ones on case studies would be useful to hand out.**
 - **CBP would be interested in helping if the content is provided.**
- **DEMONSTRATION CULVERTS:** Also, one or two fish-friendly demonstration culverts done in MD. Now that the fish-friendly guidance has been completed, we need to demonstrate that this work can be done, and so we can study them and see how they work. Ultimately, I'd like to see SHA take a culvert that they own to do this fish-friendly culvert and gain the mitigation credits.
- **EEL LADDER AT EDEN MILL:** this dam will not be removed any time soon and will not provide benefits to fish passage. However, a cheap eel ladder would be very helpful here. This dam is county-owned and is located at Deer Creek, tributary of Susquehanna river, and has one of the highest populations of American eels in the state of Maryland. Tim has spoken with the owners, and there's an educational component built into the dam.
- **DANIELS DAM:** would like to retrofit the eel ladder. The dam won't be removed for another 3-5 years, and in the meantime, many eels are passing through. However, the existing eel ladder is in need of approx. \$15,000 worth of upgrades, plus an addition \$10-15k/year to monitor it. This would give us pre-removal information on American Eel passage.
- **ADDITIONAL COMMENTS/QUESTIONS:**
 - **Mary Andrews:** In the past, when we've engaged in dam safety programs here in Maryland, one of the biggest problems has been the lack of staffing to deal with some of the issues that we need them to focus on. What would the state think about the possibility of funding a person at MDE in the Dam Safety Program that is specifically there to address these types of issues?
 - **Jim:** Yes, a staffer would help, but a better way of addressing these issues would be for the implementation of better communication avenues between fish passage and dam safety.

DAVID DIPPOLD (PA Dam Removals and Culvert Projects)

- Lots of continuing projects throughout the state.
- One of the emerging issues is the role or idea of the legacy sediment behind these dams. This is especially relevant to some of the areas along the Susquehanna.
- **ANSWER TO QUESTION (what things could we do differently with an infusion of funds?):**
 - There have been internal conversations re: creating a counterpart of David's position.
 - Creating a state-wide guidance document.
 - Having additional funds for projects focusing on design-work, as some funding sources do not cover the necessary expenses for the design phase of work.

- **QUESTIONS/COMMENTS:**

- **Julie Devers:** PA gravel roads is a good model. If people want the funding, they have to follow the guidance (that they are working on).
- **Mary Andrews:** How many dam removals did PA complete in 2020?
 - **Dave:** I think there were 9 projects – I will look into it further and talk to Ben.
 - **ACTION: Mary will send Dave the spreadsheet, so he can verify that the information is correct.**

ALAN WEAVER (VA Dam Removals and Culver Projects)

- **AMERICAN SHAD:** It's been a bad year for American Shad in the James and Rappahannock. Very few in the Lower James, and very few at Boshers'.
- Normal amounts of sea lamprey and American gizzard shad.
- **BOSHER'S FISHWAY:** Approximately 30 species of fishes documented in the Boshers' fishway. The fishway has been left open, and it's undetermined if it'll be kept open through winter.
- Goal for next year is to upgrade the shad cam from still to live images.
- **WALKERS FISHWAY:** Continued Walkers fishway count - American shad were observed for the first time passing through the fishway. Fish numbers are down – estimating 50,000 herring passing through.
- Conducting summer juvenile sampling on the James, Rappahannock, and Chickahominy rivers.
- Will be hiring a fulltime assistant fish passage biologist/ technician which will help with workload. Working on first round of interviews.
- **FLOWERDEW HUNDRED:** Working on project with VDOT, USFWS, and James River Association. It was a minor barrier. The site was going to be retrofitted, but now VDOT considers this road "abandoned" and has plans to remove the culvert. There is also plans for stream realignment. No herring have been spotted via electrofishing surveys, but they're present downstream.
- **ASHLAND MILL DAM:** number one anadromous fish passage need in VA. There is a private company that's willing to buy the dam from the owners, and if the purchase goes through, they can remove the dam and get their credits.
- **RAPIDAN MILL DAM:** stripers and eels observed, sea lampreys are probably there, and eDNA indicates herring. The big question right now is the sediment currently behind the dam, but because of the presence of an endangered mussel, it's unknown right now what steps will need to be taken to protect this species.
- **CHANDLER'S DAM WEIR AND FISHWAY PROJECT:** In the past year there's been two major post-construction floods, major damage to the spillway, and what they're proposing to do is lower the pool level by 1 ft.
- **HAMPTON ROADS BRIDGE TUNNEL LANE EXPANSION:** working with USFWS, James River Association, and Virginia Commonwealth University. Conducted electrofishing surveys last spring and are awaiting eDNA results.
- There's ongoing conversation with Trout Unlimited re: Little Stony Creek Woodstock Dam removal.
- Bolton Branch culvert removal is finished.
- **ANSWER TO QUESTION (what things could we do differently with an infusion of funds?):**
 - Hire additional technicians for more monitoring work

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- **STREAMLINING FUNDS FOR PROJECTS TO REDUCE FUNDING GAPS:** Additional funds would be beneficial to be able to funnel funding to groups working on feasibility of dam removals (e.g., Rapidan Mill Dam Project), or perhaps funding that could go straight to NGOs.
 - **ACTION: Mary will send Alan Weaver documentation on Bloede removal for reference on crediting.**
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Meeting Adjourned.