Chesapeake Bay Program
Science. Restoration. Partnership.

Fish Habitat Action Team
Meeting Notes

November 5, 2020 1:00 - 3:00pm

Attendance

Gina Hunt (MD DNR, Coordinator)	Justin Shapiro (CBP/CRC Staffer)
Suzanne Skelley (NOAA)	Bruce Vogt (NOAA)
AK Leight (NOAA)	Julianna Greensberg (CBP/CRC)
Steve Faulkner (USGS)	John Young (USGS)
Tom Ihde (Morgan State)	Matt Ogburn (SERC)
Pat Geer (VMRC)	Julie Nguyen (NOAA)
Edna Stetzer (DNREC)	Peter Tango (USGS)
Michael Hutt (VDACS)	Angie Wei (CBP)
Kelly Maloney (USGS)	Rachel Dixon (VIMS)
Richard Walker (USGS)	Donna Bilkovic (VIMS)
Chris Guy (FWS)	Angie Sowers (USACE)
Margaret McGinty (MD DNR)	Kevin Krause (USGS)
	Julie Devers (US FWS)

Introduction (*Gina Hunt, MDNR: 10 min)*

- Local government fisheries economic pamphlets are complete. The economic benefits of clean water expressed through county fishing license sales.
    - *Action: Please share them across organizations/jurisdictions*
    - *Hooked on Clean Water: Virginia*
    - *Hooked on Clean Water: Delaware*
    - *Hooked on Clean Water: Maryland*
    - *Hooked on Clean Water: Pennsylvania*

- Stakeholder needs reports with NOAA/USGS have been compiled into one document (Action 4.1)
    - This document can be found here
- Habitat GIT meeting is scheduled for the second week of november (November 16-17th).

- There will be a presentation on shoreline hardening in the context of landowner behavior change (Nov 16th)
- Step 2 of this shoreline behavior change project has gone out for bid through the Chesapeake Bay Trust. Fish Habitat team is the lead and we were approved for this funding last year (Action 4.4). This project will take survey results and build out communication products from these findings
- *Action: Justin will resend the HGIT agenda following this meeting*
- *Action: Donna Bilkovic (VIMS) will share published shoreline behavior data*

Updates:

- **GIT Funded Projects 2020** (*Justin Shapiro, CRC: 10 min)*
  - Recently completed 2020 GIT Funding
    - Fish Habitat did not submit a project
    - Modeling Climate Impact on Submerged Aquatic grasses (SAV) in Chesapeake Bay
      - Could have a lot of overlapping interest with Fish Habitat
  - Link to Video Proposals
  - Link to Funded Project List
  - Discussion:
    - Bruce Vogt (NOAA) mentioned that DEIJ seemed to be a common theme in this round of funding and being put into action across the bay program
- **Discussion about Healthy Watersheds Assessment (HWA)** (*Gina Hunt: 10 min)*
  - Big question for the FHAT: Where does the fish habitat assessment fit into the HWA?
    - Regional assessment may add beneficial data
  - Our team met with HWA coordinator Renee Thompson to talk about this question
    - As they move forward they are looking to add macroinvertebrate data
    - They began a pilot in MD to allow jurisdictions to input own data sets
    - Idea that arose - Comparing metrics in Choptank to what is in the HWA
    - Healthy Watershed GIT will be having a meeting in Early December and that's when they will be unveiling their story map.
  - Group input:
    - Steve Faulkner (USGS) - Within USGS/CBP there will be integration between HWA and other assessment work
- **Assessment Framework Workshop Outcomes** *(AK Leight, NOAA: 10 min)*
  - Formed a team at NCOCS to address the framework of assessments. Looking at various uses of spatial/temporal data. (Action 2.3)
  - Because of covid these were pivoted to virtual workshops that took place at the end of October.
  - Next Steps:
    - Committed to make a high level summary and get it back out by next Friday
    - Ultimately, we're on schedule to deliver a set of recommendations based on what we heard by the end of January
  - Group discussion:

        - Continuing message of the issues of data gaps, heard a lot about utility of the framework and the integration of potential data is based on the use of it
            - How you can leverage a framework like this is dependent on your management question
        - Gina Hunt (DNR) - Building out of examples would be great. Stakeholder needs report pointed us in a certain direction, as well as the questionnaire with local government planners. We know what they want, but we have not yet reconciled what people want with what we can provide.
        - Suzanne Skelley (NOAA) – Stakeholder report does have some use cases, going to send that to the technical team. Some feedback we heard was about particular datasets or very specific detailed needs. Because we need something for the whole watershed, there will be some tradeoffs.
        - Bruce Vogt (NOAA) – There were a couple of themes that stood out, worth trying to boil it down to a few management needs. Bay Program needs are different – want to connect living resources and water quality. Could be one use case of this tool.
- **Striped Bass Nursery Assessment (Action 1.2)** (*Rachel Dixon, VIMS: 10 min)*
    - Presentation:
        - Background
            - Objective is to quantify condition of suitable habitat and its effects on the long term sustainability of the striped bass stock
            - Study looking at suitability ranking and area of available habitat
            - Age 0 and age 1-4 striped bass are being analyzed separately as they have different habitat needs
        - Progress
            - Collecting existing survey data sets (1996-2019)
            - Obtaining model outputs (abiotic factors) matching times from the noted data sets
        - Next steps
            - Working to Identify most influential variables for habitat
    - Group questions:
        - Pat Geer (VMRC) - Can this data help explain discrepancies between MD and VA data?
            - Hopefully this work can shed some light on those discrepancies
        - Bruce Vogt (NOAA) - It would be beneficial to connect with Marjorie Freidrichs, who has been putting out a static assessment of the mainstem of the bay every year. habitat suitability work as this could help develop a future indicator.
        - Julie Reichert-Nguyen (NOAA) - It would be great to connect this work to Climate resiliency work across the bay program
- **Shoreline Hardening GIS Update (Action 3.3)** *(Angie Wei, CBP and Bruce Vogt, NOAA: 15 min)*
    - Background from Bruce Vogt:

        - Shoreline development is affecting habitat and forage. Resulting research shows 10-30% hardened shoreline can result in degraded habitat and population
    - Shoreline GIS update from Angie Wei:
        - Using VIMS shoreline inventory data
        - Visualizing data points over 30% was a priority (showing degraded habitat)
        - Virginia data layer is complete
        - Maryland data layer on the way
            - Some work is complete or underway, but additional funding is needed to finish ~10 Maryland counties
            - Data is at a finer scale than existing county data making new inventory work necessary
    - Group Comments:
        - Donna Bilkovic (VIMS) - The first MD counties being tackled (funding from EPA) are prioritized counties where most permitting is happening. Talbot, Calvert, Anne Arundel, and Dorchester counties - near completion; St Mary, Somerset, Worcester, Charles counties - next round
        - Gina Hunt - Can we use existing county data for the counties that are not done?
            - This work and county data are not compatible as they currently exist
            - *Action - Gina Hunt will speak with MDE if there is existing data in Maryland counties; but there is potential funding for additional counties*
        - Bruce Vogt (NOAA) - Can we phase out release dates of Maryland data (ex. Can we release Choptank in the near future to allow partners to use). Will want to make this data available to the contractor who is selected for the shoreline project
            - Angie believes Choptank data will be available for an early 2021 roll out
            - *Action - Justin and Angie will speak about connecting incoming Maryland data with applicable Eastern Shore partners*

Presentations:

- **Map of Fish Species Occupancy in Non-tidal Waters (Action 3.1)** (*Kevin Krause, USGS: 20 min)*
    - Presentation:
        - Compiled data sets from thousands of fish sampling events
        - It was decided an interactive, web-based, tool would be useful for watershed stakeholders (A few species examples were presented)
    - Group thoughts and feedback of current mapping:
        - Would people prefer separate maps for species, or a single map with multiple species layers?

- Gina Hunt - Are there species of interest not currently included? Is the map currently useful for permitting purposes?
    - *Action - Kevin happy to add any data that may help this tool benefit jurisdictions*. Post-meeting Gina asked Kevin if it would be possible to see all species in a given area at once, as opposed to only single species maps.
- Edna Stetzar (DNREC) - How will you handle maps of threatened or endangered species? Also, is it too late for Delaware data additions
    - Threatened and Endangered species is okay to show since it is generalized in the HUC 12.
    - *Action - Kevin and Edna will chat offline about including data*
- Julie Reichert-Nguyen (NOAA) - Is there data that can articulate abundance?
    - Becomes a question of data use allowances showing site specifics
- Julie Reichert-Nguyen (NOAA) - CRWG/USGS doing similar work with stream health and will stay connected with this
- Julie Devers (FWS) - Will fish data be updated once public?
    - Continual updates is something that will need to be discussed in more detail with the FHAT (Data management is not a part of the current scope, but something that we would like to figure out - Steve Faulkner, USGS)

Action Items to Review (Next steps to accomplish) (*Justin and Gina: 20 min)*

- 4.6 Habitat Tools summary that describes how fisheries management can use habitat tools to address habitat influences and improve management outcomes.
    - Do workgroup members have a memory of the purpose of this item?
        - Bruce Vogt (NOAA) - Can we narrow our focus to shoreline work, pilot assessment, habitat suitability projects, etc.
            - Summarizing this subset may make this task more manageable for the FHAT
        - Margaret McGinty (MD DNR) – There are two areas the assessment can be used: 1. use habitat information to target specific restoration or conservation areas; 2. In fisheries management it would be useful to look at habitat suitability work to use as a reference for stock assessment. Visualize how we could apply these in a management framework.
            - Gina Hunt – Analysis to use in for stock assessment would be a great objective to work toward. This action focuses on habitat tools and data, are there any that we can think of now that would be useful for that?
            - Margaret – In terms of tools, we've looked at impervious cover and worked backwards with assessment of egg abundance. Could be included in a stock assessment. Would be nice to push forward some of these ideas and gain traction in the fisheries community

        - John Young (USGS) – We have begun a project with American Eel to see what can be added to stock assessments from these habitat studies
- 5.2 Summary of lessons learned and variables used in previous fish habitat assessments
    - Update from AK Leight (NOAA/NCOCS)
        - Reviewed previous assessments that have been completed. Notes from other sources on lessons learned
        - A document was created highlighting challenges of FH Assessments
            - Lack of habitat specific abundances
            - Insufficient information on multi-species collection
            - Management of habitat data
            - Desire for centralized data collection
            - More biological threshold information needed
            - Better understanding of gear biases and its effects
        - Could pretty easily turn this into a white paper to share with the group
            - *Action - More discussions about disseminating this information is needed*

Aligning our Action Team with Membership Needs (*Justin and Gina: 20 min)*

- Use Jamboard to discuss these questions:
    - *Has your definition of success for the Fish Habitat outcome changed over the last year?*
    - *What is the greatest value the FHAT provides for your work/organization, and how can we be more relevant?*
    - *We have focused our strategies on developing assessment and communication products. We have made hardened shorelines a priority factor to be addressed. Are there other opportunities or factors we should look to next?*
        - Link to Jamboard

Links sent around during the meeting

- Stafford & Guthrie 2020 Wetlands
- Stafford 2020 Coastal Management
- Hypoxia stats for 2020 from VA. overall good year!