



Fish Habitat Outcome Office Hours - March 2025

Thursday, March 6· 2:00pm – 3:00pm EST

Meeting Notes

Action Item: Christina to send LR map to fish habitat group in next follow up email.

Action Item: Bruce to share with group the LR Charette information as it comes out

- **Recap and discussion on draft outcome language**
 - No comments from the group when asked if any changes needed for the updated outcome language (as of 03/06/2025).
 - Charette for living resources priorities assessment coming up - can share with the group
 - Last meeting, clarifying what we mean by conservation & restoration - Prioritizing conservation over restoration (most effective and cheapest)
 - No additional comments from the group in regard to conservation v. restoration
 - Anything additional we should do for outreach?
 - Will be speaking on all of this at the Fish GIT meeting (March 25th & March 26th)
 - Chris Moore is sharing this with other people in their sphere
 - Bruce received requests from a few folks (asking to see latest language on this) sharing this individually to folks as requests come in
 - Defining outcome v. outputs
 - Outcome: change we are trying to influence
 - Outputs: what are the major activities needed to do to allow for that change
 - Indicators: measuring progress for the change we are affecting
 - Latest MB office hours - purpose to define outcome/output - no clear definition/consensus decided on from that meeting
 - *Gina Hunt:* no size fits all- either MB gets comfortable with that or we fit square pegs in round holes. Fish GIT seems like on the right track- not everyone is going to be the same and that is okay
 - Will probably not get a clear answer on this until March 27th
 - Draft language is due on April 10th



- **Discussion on tidal v. nontidal:**

- *A.K Leight:* We have agreed on 92 segment analysis- focus on tidal- where does this leave the non-tidal component in this process?
- *Bruce Vogt:* no decisions yet, Gina put forward a couple of options
- *Gina Hunt:* Recommendation was to make this only tidal. Pulse check responses said nontidal is still important, where does it go? Agreement from MB that this should be updated but do not agree that nontidal goes away. 3 options: 1) tidal and nontidal outputs under fish habitat 2.) two different outcomes 3.) Nontidal fish habitat is an output of a different outcome (watershed, brooktrout). With no definition of what an output is- we cannot decide on this. Comments in pulse check want to lump fish habitat with all other outcomes- loses focus and efficiency. Where is there alignment and where is there not?
- *Peter Tango (in chat):* As stated, it seems we are ignoring the fact of how many key species use nontidal habitats to fulfill their life cycle.
- *Peter Tango (in chat):* On your first idea Gina, IF the Water Quality Goal opens up the scope of outcomes, work could provide key indicators of habitat integrity suitable for support of fish and other aquatic organisms habitat.
- *Gina Hunt:* GIT chairs meeting at end of the month- will talk about alignment of tidal nontidal fish habitat (March 17-18)
- *Bruce Vogt:* clear from MB that this is a chance to streamline and consolidate- not add new. Not only Fish Habitat was targeted in this.
- *John Young:* Is there any scope to consider linkages between non-tidal and tidal habitats? i.e. how they are coupled? Particularly for diadromous/catadromous species
- *Jim Uphoff:* Large influence of non-tidal on tidal - artificial separation does not make sense. Tidal segment living resource assessment - what are the variables being used to do the habitat assessment? Makes a big difference in what issues you might be tackling- seems vague right now, what are you assessing?
- *Bruce Vogt:* Have not been determined yet
- *Jim UpHoff:* Also no definition on shallow water yet- too vague to move forward
- *Bruce Vogt:* Right now the focus is on the outcome. Management strategies will be developed to provide more detail on how to get there. On LR, charette will help scope that out to decide what variables will be included to do assessment. A lot of gaps.
- *Jim Uphoff:* Reason for not a lot of input- it is extremely vague



- *Gina Hunt*: Lack of specificity is a separate issue. I would just focus on the outcome now - should have more than one metric to meet the outcome. We don't know anything yet until we have the goal/outcome. Make sure everyone is comfortable with the outcome first and then look at outputs. Uncertainty - who can champion things?
 - *Bruce Vogt*: We have been told to be specific and targeted - reason for focus on tidal but we understand the connection to nontidal
 - *Peter Tango*: USGS tool where we can help with the tidal/nontidal linkage. Way to judge response signal while focused on tidal fish and recognizing nontidal. Way to address concerns from people about division of tidal/nontidal - Data is there to support this work.
 - *Bruce Vogt*: what are current conditions- where to maintain conditions that are helpful to fish.
 - *John Young*: Agree with no separation between tidal and nontidal. Couple assessments between tidal and nontidal - farther along on making those tools with producing outputs that are more measurable.
 - *Kelly Maloney (in chat)*: was the focus on tidal a result of workgroup membership/interests - if not, i could see just removing "tidal" from title and adding to the outcome what is meant by shallow waters "streams, rivers, and shorelines". outputs could then be separated by habitat type that will be used to attain the goal?
 - *Peter Tango (in chat)*: Kelly - that is what CESR suggested (to me). I think we need to pick a definition for shallow water so that we can focus beyond it. E.g., Regulatory connections to SAV recovery focus on bay waters 2m or less. If that covers the majority of important habitats, let's adopt it and remove the uncertainty of that question. Adopt definitions, remove uncertainties, and we can focus on the issues to me. :-)
- **Discussion on Forage:**
 - *Bruce Vogt*: how can we assess if there is enough food for predators?
 - *Ed Houde*: some outputs should say something about the status of bay anchovy, polychetes etc. Make numbers (abundance indices) into targets or thresholds that say when a management action would be justified/discussed. Proposal of using a stop light approach - Red, yellow, and green areas over trend line over decades. Turn this into a decision type action. Ways to turn long term trends in abundance into status indices.



- **Bruce Vogt:** forage report - status and trends for a number of species/groups and specific data linking env change to variability in abundance to some of those species. May Fabrizio habitat suitability model. Have not taken those time series and make more decision support. Like the trend for blue crab. Take some key species and show if things are changing with some sort of threshold - once we get to this level we need to do something.
- **Ed Houde:** this could be done by habitat (shallow water, nontidal habitats etc.)
- **Jim Uphoff:** Greenlight approach - we are trying to do that more with habitat surveys and other forage. Issues - no fishery component to respond to. Work being done that can be incorporated. Constituents forming their own facts - this was a way to say this is what the department looks at, evaluated it, what we think. Something that is necessary (not very complicated once set up) - gone through peer review. Work will be made available sometime soon.
- **Bruce Vogt:** CBP can amplify those efforts more broadly.
- **A.K Leight:** These forage assessments will obviously require continued support for monitoring
- **Chris Moore:** Developed a good base with work done - closer to developing indices of abundance to use a traffic light analysis on. Can better inform management
- **Bruce Vogt:** Data/info published or sitting in individual labs - need people to translate data into something more available to the public. Monitoring and updating needed. At some point we need to decide how we do the things we want to do and where does the capacity come from? Forage output, build on what we know and put that into a format that is easier to understand and use. Initially for communication but can refine it and use it towards management (fisheries management, water quality)
- **Allison Colden (in chat):** I've missed a couple of these meetings so I might be behind. Can someone clarify if we've expanded forage fish to forage more broadly (incl. inverts, etc.)?
- **Christina Garvey (in chat):** The plan is for forage to be added under the Fish Habitat Outcome as an output- unsure of the broadness of forage species but I do know we are thinking of focusing on a number of key forage species (like bay anchovy).
- **Bruce Vogt:** Allison, forage will include invertebrates- we are moving away from only forage fish



- **Living Resource Map:**

- *Peter Tango (in chat)*: That sounds wonderful - "shallow water" has lived abstractly in our conversations so a map is a big step
- *A.K Leight*: Hannah and I are also working on understanding how much fish data is collected in these zones. 2m is restrictive and then looking at what monitoring has been done at those 2m is even more so.
- *Bruce Vogt*: Map will start for communication purposes. SAV, shoreline hardening, impervious surfaces, 92 segments, shallow water. Let us know what we need to be more specific on. Will be sending that map out to you all for review.
 - **Action Item:** Christina to send LR map to fish habitat group in next follow up email.