

Coldwater Resources Steering Committee Meeting Jay's Sporting Goods, Gaylord, 10/02/19

Attended: Dave Borgeson Sr., Jim Bos, Bryan Burroughs, Bryan Darland, Ray Danders, Ian FitzGerald, Terry Lyons, Steve Mondrella, Dan O'Keefe, Phil Schneeberger, Jan-Michael Hessenauer, Jim Bedford, John Walters, Bernie Campos, Cory Kovacs, Jay Wesley, Seth Herbst, Jason Wicklund, Mark Tonello, Scott Heintzleman, John Walters, Gary Isaman, Dick Buss, Patrick Ertel, Christian LeSage (notes), and Troy Zorn (chair, notes).

Welcome and Intros

- Troy welcomed everyone. Each person introduced themselves, for the ice-breaker, described the highlight of their summer.

Input on a proposed steelhead regulation change for rivers- Wesley

- Jay Wesley provided a presentation discussing the topic. With all stocked steelhead being marked for the next several years, there is the potential for a different harvest regulation for hatchery vs. wild fish. The idea being proposed for the river fishery was to have a daily bag limit of 3 steelhead, only one of which would be wild (unclipped). Additional background steelhead in Michigan, rationale for the regulation proposal, and comments follow.
 - Steelhead were initially stocked in Michigan in the late 1870s, and a number of naturalized populations began to develop.
 - DNR collects eggs from a portion of the steelhead spawning run in the Little Manistee at the Weir to produce around 1.3 million spring yearlings annually.
 - Most steelhead rivers in Michigan are open to fishing all year, with a 3 fish bag and 10-inch minimum size limit (with some streams closed); some streams already have a reduced daily bag limit.
 - The numbers of steelhead caught have been declining over the past few years for unknown reasons, following a pattern similar to that of Chinook salmon.
 - There is potential to look at statewide reduction in bag limit now since all hatchery fish are being marked. The proposed change could lead to slightly more wild adult steelhead in rivers for natural reproduction. However, some previous Michigan studies suggest that habitat for larger juveniles is often more limiting than egg deposition by adults.
 - Wild steelhead are believed to:
 - have higher survival compared with hatchery fish
 - be more adaptive to change
 - have better genetic fitness
 - An article from the journal Science was provided by Dan O'Keefe to support the latter contention, but it raised a number of questions about the study and if/how their results applied to Michigan.
 - Further discussion ensued on the topic (various comments):
 - It was noted that in the Western US it is often unlawful to harvest wild fish given they are all T/E species

- All these fish used in egg takes at the Little Manistee Weir are basically “wild” fish, so the Science article about genetic effects of hatchery spawning practices did not apply to Michigan.
- Comment about limiting the weekend angler or those who fish steelhead only 1-2 times a year with reduced bag limits. Such a reg might discourage anglers, leading them to drop out of the sport.
- The proposal would further complicate regulations (plus Platte R. and Little Manistee R. already limited to 1 steelhead per day)
- Support was expressed for encouraging anglers to voluntarily harvest less wild fish without adding a new regulation.
- Should start to see marked fish in catches as all hatchery steelhead since 2018 were being marked. Some 1-year old spawners and more 2-year old spawners.
- Can reduction of wild bag result in more smolts produced?
- For most streams, DNR has limited survey/creel info about number of smolts produced and doesn't have adult return data.
- Stock recruitment data are lacking
- Biologist Mark Tonello indicated that smolt numbers are fairly consistent among years and rivers are producing as many fish as they have in the past. Zorn confirmed this for a few locations by displaying juvenile rainbow trout trends in a few rivers over the past 20-30 years (Data available in MDNR's Stream Fish Population Trend Viewer).
- Tonello doesn't think reduced number of adults is due to number of smolts being produced (may be another reason like something occurring in GL waters).
- Steelhead spend 2 summers in the streams
- We do have historical scale data that can be used to assess wild vs hatchery stocks?
- Could competition for resources between young fish with all other species be an issue?
- One possible approach would be to educate anglers about reasons for harvesting proportionately fewer wild fish, which could lead to less wild fish being harvested. Need more outreach on this topic.
- Could protecting wild fish lead to less of a future need to stock this strain?
- Not stocking fish could lead to less anglers and more fishing pressure on wild fish population
- Support voiced for more outreach efforts about selective harvest without adding a new regulation.
- Mass marking of all hatchery steelhead is scheduled through 2023, and could potentially be extended, but what might happen beyond 2023 is uncertain. Locking mass marking program into clipping steelhead for this regulation might limit agency's ability to use marking to answer management or research questions for other species in the Great Lakes.
- Protecting more wild spawning adults is not a bad thing to do and may result in better survival

- Values noted about catching fish vs keeping fish plus allowing some fish to be caught multiple times
- Take actions (e.g., habitat improvement) to reduce future hatchery costs that might result in better returns of wild adults.
- Some indicated that if a reduced bag on wild fish is implemented in rivers, then comparable harvest restrictions should apply to GL anglers
- A temperature check of non-MDNR CRSC members revealed that implementing a new regulation to reduce harvest of wild steelhead was fairly evenly split, with one more vote for implementing vs against.
- Many supported educating the public so they can make an informed and voluntary decision about whether to harvest wild (unmarked) steelhead

Issues with DEQ (now EGLE) Permit Process for Trout Stream Habitat Work- Zorn for Ziegler

- Bill Ziegler was unable to attend and asked Troy to present the issue.
 - Troy presented Bill's presentation about this topic
 - Bill indicated that there were several issues with obtaining a permit to perform habitat enhancement on Cooks Run (part of Paint River basin).
 - Most respondents indicated that they did not have issues with obtaining DEQ permits, especially when collaborating with MDNR on project designs and proposals. Close collaboration and good working relationships among non-agency, DNR, and DEQ (EGLE) personnel were identified as key to a smooth permit process.
 - A general discussion ensued. It appears that there have been differences of opinions about the scope of the habitat work and potential inconsistencies.
 - Patrick Ertel provided some background about the Streams Function Pyramid that EGLE staff are being trained on.
 - He indicated that narrowing the stream width greater than 20% results in greater risk to changing the geomorphology of the stream (potentially undesirable), and additional information may be needed for such projects if managers deemed this level of stream narrowing to be necessary.
 - He recommended trying to use a reference section to use as a comparison when trying to perform modern stream restoration efforts
 - Patrick indicated that he is working with Trout Unlimited to increase the knowledge for staff and others on training
 - It can be helpful to work with FD staff on projects (for permitting) so our people are familiar with the project (part of the planning efforts and can advocate for the project)

Connectivity Effects on Resident Trout- Zorn

- Troy provided a presentation on this topic: Managers need to better understand effects of increasing connectivity of Michigan river (e.g., dam removal, improved fish passage) on resident trout populations. An important question for Michigan trout streams is how adding Pacific salmonids (via dam removal or fish passage) to a previously land-locked river system will affect resident trout populations. To add clarity on this (since before-

after studies are lacking), Troy and coauthors compared abundance, growth, and survival of brook trout and brown trout between sets stream reaches that were vs. were not accessible to Great Lakes salmonids. To gain insight on effects of increased connectivity (brown trout access) in landlocked rivers, they compared brook trout abundance, growth, and survival between land-locked stream reaches where brown trout were vs. were not present.

- Summary:

- Streams with Great Lakes access generally had higher abundances of brown trout, especially for older age classes.
- Brown trout survival appeared to be higher in Great Lakes accessible reaches, possibly resulting from immigration of trout from upstream reaches.
- Age-0 brown trout grew more slowly in Great Lakes accessible reaches, but there was little difference in growth for older age classes of brown trout between Great Lakes accessible vs. inaccessible waters.
- The data showed reduced abundance and increased survival of brook trout in Great Lakes accessible reaches, though few effects were statistically significant. Again, movement might influence brook trout survival patterns.
- In landlocked streams, brown trout had negative effects on abundance and survival of some age classes of brook trout.
- Overall salmonid abundance was higher for Great Lakes accessible reaches, with the difference being significant for total numbers of fish, but not total biomass of salmonids. For landlocked streams, total abundance and biomass of trout was higher when brook trout did not co-occur with brown trout, though the differences were not statistically significant.
- In summary, when considering fish passage or dam removal issues on trout streams there are often trade-offs for resident trout populations. Their results provide a general picture of how resident trout populations in the Great Lakes region may likely respond to increased connectivity.

Grooming Streams for Fishability- Borgeson, Sr.

- Dave Borgeson Sr mentioned how in previous decades Fisheries Division has spent considerable funds on adding expensive structures to trout streams, often with limited success.
 - Given it's too expensive to do most of that work today he recommends that more grooming of trout streams should occur to benefit angling. Grooming involves trimming back alders and other brush to increase casting, as occurs on Spring Brook in southwestern Michigan.
 - Jay Wesley, Lake Michigan Basin Coordinator, indicated that activities involving pruning are taking place along stream reaches where there is limited access
 - It was noted that property owners would need to agree with allowing this activity on their lands and having Fisheries Division provide a "blanket" blessing of these activities could be problematic since they can't control what private individuals do on another private individual's property.

- Issue of some instances where dams are being repaired or fixed via federal grants and funding could be used to prune areas along the ponds for fishing access
- As long as no heavy equipment is used it is likely that most people would be supportive of grooming on their property.
- Patrick Ertel noted that there is a process for doing this on Natural Rivers, and it would require a permit (note fishing is protected and valued so permitting would allow it).
- Someone mentioned that it would be nice if there was a way (e.g., online bulletin board?) to inform people of opportunities to help on some of these projects. It might lead to greater participation on some important projects.

Trout Management Benchmarks for Michigan- Zorn

- Troy provided a brief presentation of how standardized survey data from over 400 stream reaches that is being compiled for use by the Stream Evaluator Tool is useful for developing benchmarks specific to stream type and region in Michigan. They demonstrated this by calculating benchmark values for a number of situations: habitat conditions for cold streams having different channel gradients; densities of brook trout and brown trout by size group in different regions and/or fisheries management units; resident trout density by region; brook trout or brown trout mean length-at-age by region; and comparisons of resident trout density between cold streams having or not having Great Lakes access (Pacific salmonids). These benchmarks provide managers and interested parties a quantitative understanding of what is typical for different types of Michigan streams, leading to development of more realistic management expectations for individual streams. Region- and water-specific trout population attributes can also provide data for modeling potential trout fishing regulations, leading to more realistic prediction of their effects on trout.

Round Tables and Adjourn

- Everyone provided a brief update on notable items of interest for the region or constituents they represented. Suggestions for future meeting topics were received and the meeting was adjourned.