FishPass Monthly Update



Dear partners and stakeholders:

On behalf of the FishPass team, I am pleased to provide an update from the first quarter of the year. Please distribute the update as you see fit.

Engineering Design / Construction:

- While on-site work remains on hold pending results of the ongoing legal process, the prime contractor, Spence Brothers Construction, has continued to prepare and submit contract submittals for review by the U.S. Army Corps of Engineers (USACE) and AECOM (Designer of Record).
- All court filings for the ongoing litigation (Grand Traverse Circuit Court Case No. 20-35540-AW) have been submitted to the Michigan Court of Appeals.
- A motion to file an amicus curiae, "friend of the court", brief on behalf of the Michigan Municipal League and in support of the City of Traverse City and Great Lakes Fishery Commission was granted on 28 January 2022.

Research:

- The FishPass Advisory Board met in February 2022 to discuss research coordination, commissioning research plans for day 1, and progress updates from ongoing research activities.
- The FishPass Advisory Board has recommended funding of four supplementary research projects which are slated to begin in 2022. Supplementary research projects are intended to identify novel and innovative research that supports needs essential to FishPass objectives. Approved projects include:

Assessment of susceptibility to VHSV-IVB in juvenile white suckers (Catostomus commersonii) via controlled laboratory experimental challenges.

PIs: Loch, T. (Michigan State University); Whelan, G. (MIDNR)

<u>Objective(s)</u>: Assess the susceptibility to VHSV-IVb in juvenile white suckers via controlled laboratory experimental challenges

Instantaneous river-wide hydrodynamic measurements at fine scales for use in fish movement study at FishPass.

<u>PIs:</u> Scweitzer, S & Cowen, E. (Cornell University); Goodwin, R.A. (USACE); Zielinski, D. (GLFC)

<u>Objective(s)</u>: Pilot test of using high resolution infrared cameras to measure water velocity at the water surface in real-time.

Automated spillway surveillance for risk assessment at FishPass.

PIs: Eickholt, J. (Central Michigan University); Zielinski, D (GLFC)

Objective(s): (1) Determine the initial jumping speed and angle for leaping steelhead at a fish weir to further validate robustness of FishPass barrier design to block leaping fishes; and (2) develop a computer program to streamline the collection and analysis of fish leaping video to monitor for unintended fish passage at FishPass.

Model for fish movement past migration barriers: an overview of current methods and future directions.

<u>PIs:</u> Silva, A.T. & Bærum, K. (Norwegian Institute for Nature Research); Goodwin, R.A. (USACE); Kerr, J. (University of Guelph); Zielinski, D. (GLFC)

<u>Objective(s)</u>: Collect and compile the breadth of available knowledge on different alternative methods to model fish movement in the vicinity and passing migratory barriers to help support future model development and implementation at FishPass.

Assessment:

• March 2022 – The GLFC is excited to continue its internship program with Northwestern Michigan College (NMC) in an effort to provide work-based educational opportunities for young environmental professionals in the region. The GLFC has recently hired Cherrie McSawby and Falechia Barry to serve as the new FishPass interns. Cherrie and Falechia are both finishing their first year of the Freshwater Studies program at NMC and will assist staff in support of FishPass assessment activities during spring 2022.

Outreach:

- 24 February 2022 Dr. Zielinski (GLFC) presented on FishPass during the quarterly webinar hosted by the Joint Committee on Fisheries Engineering and Science comprised of members of the American Fisheries Society Bioengineering Section (AFS-BES) and the American Society of Civil Engineers Environmental and Water Resources Institute (ASCE-EWRI). These webinars provide opportunities for engineers and biologists to share relevant knowledge, learn from one another, and collaborate on projects related to fish passage. The presentation slides are available here.
- 14 March 2022 Dr. Zielinski (GLFC) virtually presented an overview of the FishPass project to the Grand Traverse Humanists.
- Spring 2022 Dr. Zielinski (GLFC) authored an invited article entitled "The Science Behind Selective Fish Passage" in the spring edition of Michigan Trout. The article can be viewed on pages 10-12 here.

Upcoming:

• Spring 2022 – As part of ongoing FishPass assessment work, project partners will be installing and maintaining two fish traps at the Michigan Dept. of Natural Resources' Boardman weir in spring (4 April – 30 May) 2022. These traps will be used to capture, mark, and recapture large numbers of longnose sucker (*Catostomus catostomus*) and white sucker (*Catostomus commersonii*) during their annual spring migration. Project results will allow FishPass researchers to estimate the migratory run size of each species. The area of the river within 100 ft. of the weir will be closed to angling as is a safety requirement when in operation for salmon harvest in fall.

In the News:

- Rupture, recovery: Boardman-Ottaway River's future flows from past (Record Eagle, 20 March 2022): https://www.record-eagle.com/news/rupture-recovery-boardman-ottaway-rivers-future-flows-from-past/article-28ab9ee2-9f09-11ec-87f7-df8d62b87c27.html
- Damned If We Do, Damned If We Don't (Interlochen Public Radio, 18 March 2022): https://www.interlochenpublicradio.org/podcast/points-north/2022-03-18/unnatural-selection-ep-6-damned-if-we-do-damned-if-we-dont
- How Will Building Height, FishPass Lawsuits Affect TC In 2022? (The Ticker, 27 December 2021): https://www.traverseticker.com/news/how-will-building-height-fishpass-lawsuits-affect-tc-in-2022/



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