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Subject: Husky Fire - Surface Water Summary

Date: Friday, May 11, 2018 1:04:26 PM

Attachments: Husky Fire Response - Surface Water.docx

Hello Everyone – Attached is a summary of the surface water related response to the Husky fire on 4/26 to help share the efforts that have been on-going. We are receiving a lot of questions and it would very be helpful to share the summary points more broadly with the public to help improve understanding and efforts to date. Please let us know if you have any questions and thank you for your consideration to share these more broadly. I have been designated as the contact with our St. Louis River partners, if leadership could please confirm I can reference these summary points that would be great. Thanks so much for the great team effort by all those who have contributed! Have a great weekend!

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

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Husky Fire Response – Newton Creek Surface Water (5/11/2018)

Prepared by Cherie Hagen (OGW) with input from Craig Roesler (WR), Madeline Roberts and Joe Graham (OGW) and John Sager (RR)

Summary Points:

- Surface Water Sampling Plan: GHD prepared a Surface Water Sampling and Analysis Plan (4/30/2018) for Husky in consultation with WDNR staff. Husky contractor began collecting daily Newton Creek water samples on 4/27/18 until 4/30/2018 and then sampling occurred every other day. PFAS sampling did not begin until 4/29/2018 until the appropriate method and protocol was identified. Husky is providing the Department with a table of preliminary sample results periodically. No water sampling is being conducted in Hog Island Inlet or the estuary by Husky contractors. We are aware that the Lake Superior National Estuary Research Reserve and others sampled at the mouth of Newton Creek, as well as other locations in the St. Louis River estuary.
- Firefighting Foam: Initial observations after the fire showed significant firefighting foam visible on the surface of Newton Creek. Husky contractors brought in vacuum trucks to remove foam behind the booms. Residual foam is still present on the creek as of 5/10/2018, this may or may not be firefighting foam. Water sample results verify the presence of firefighting compounds in Newton Creek. WDNR has not received enough results to document a decline in the firefighting foam compounds.
- ▶ Petroleum Compounds: Water sample results show petroleum related compounds (total petroleum hydrocarbons) reached Newton Creek. The concentrations of these compounds were highest the first two days following the fire and have declined to levels comparable to those found in 2016 and 2017. No free oil or asphalt product was observed in Newton Creek. Some asphalt reached the Stinson Avenue ditch and minimal sheening was observed at the upper portion of the 21st Street impoundment.
- ➤ Oil Booms Installed: Before the fire was out, Husky contractors installed 6 oil booms on Newton Creek and at the mouth to help contain any materials from being released to the St. Louis River Estuary. Husky contractors monitor the booms several times a day and maintain as needed. DNR staff on-site have provided oversight of the boom monitoring, notifying contractors of any issues.
- Firefighting Water Recovery: Husky also closed off the Stinson Avenue Ditch weir after the fire was out on 4/26 to capture firefighting water and pump it to containment facilities for future treatment before being released to Newton Creek. DNR Wastewater Program is working with Husky to identify appropriate treatment and limits as part of their WPDES permit.
- ➤ **Biota Monitoring:** Several site inspections of Newton Creek were conducted by DNR Water Resources and Office of Great Waters staff the first two weeks following the fire. Fish surveys were conducted 4 days after the fire and 2 weeks after fire. In both fish surveys the total number of fish captured and the number of species observed were less than previous DNR fish surveys. Macroinvertebrates observations indicated at least moderate levels of survival. Macroinvertebrate samples were collected and sent to LSRI for analysis, we are awaiting results. The following sections provides a brief summary of the 5 site inspections to date.

Summary of Site Investigations by Water Resources & Office of Great Waters Staff:

- ➤ 4/27/18 Initial site investigation of Newton Creek by Craig Roesler with John Sager. Significant firefighting foam was observed behind the booms and blowing in the air. No oil or asphalt spills were observed in the creek.
- ➤ 4/30/18 Newton Creek fish surveys and macroinvertebrate observations conducted by Craig Roesler and Matt Steiger. In general, the number of fish and species observed were less than previous surveys.

 Macroinvertebrates observations indicated at least moderate levels of survival.
- > 5/2/18 Newton Creek macroinvertebrates collected by Craig Roesler. Samples sent to LSRI for analysis, awaiting results.
- > 5/7/18 Inspection of Hog Island Inlet conducted by Craig Roesler and Joe Graham. Very minor petroleum sheen and noticeable odor were found in sediment grabs which is consistent with 2016 and earlier observations. During the inspection no petroleum sheen, odor, or asphalt were observed in surface waters of the inlet or within the vegetation around its periphery. Of note, was a dead sturgeon, and black flecks within surface of sediments.
- > 5/10/18 Second Newton Creek fish survey conducted by Craig Roesler and Cherie Hagen. The number of fish were similar to those found on 5/2/18 and the number of species observed declined. A fish survey of Faxon Creek, the reference stream, was also conducted. Initial observations indicated the number of fish captured may be less than what was captured in previous DNR surveys, but analysis with historical data is still needed to verify. Seasonal variations may have an effect on the fish survey results.