

[Clean Water, Land, and
Legacy logo]

UPDATE OF S.E. MN STREAM SITES

MARK W JOHNSON, LSOHC
EXECUTIVE DIRECTOR

Lessard-Sams Outdoor Heritage Council

Thursday, August 1, 2019, Site visits

- Reason for site visits
 - To revisit OHF funded trout stream repaired restoration/enhancement project sites
 - To view status of site repairs
 - To check on site repair conditions after recent severe excessive rain events and associated high water.

Trout Stream locations

[Image of state of Minnesota with arrow pointing to SE corner of state]

[Image of Trout Unlimited (Hiawatha Chapter) partnership sign displayed at Cold Spring Brook, Zumbro Falls, MN]

Gavin Brook – high water flows evident

- [Six slides in succession each with a different image of different areas of Gavin Brook showing evidence of high water flows. Some high flow is evidenced by grass matting within the stream's floodplain extending up to 100 ft beyond the streambed and up to several feet above the normal water level. Other evidence shows deposits of wood debris high up into the floodplain and along adjacent roadways.]

High water stream damage – Not OHF

- [Four slides in succession, each with a different image of different stretches of various SE MN streams showing evidence of high water flows and severe to extreme damage to stream habitat. Damage includes severe erosion of banks, toppled trees, woody debris. These stretches of stream are stretches that previously have had no OHF project sites and no habitat improvement work done with OHF monies.]

SE MN Trout Stream Tour, April 18, 2019

[Two slides in succession with photos from April 2019, each depicting different angles, of the same bend of Rush Creek. The bend has extremely severe erosion with banks of exposed, eroding soil from 5 to 20 feet in height above the stream. This section of stream had not previously had any habitat improvement work done to it and the erosion was indicative of damage caused to streams by the extreme high water occurrences in SE MN.]

Rush Creek – After OHF enhancement

- Rush Creek – damage repaired by DNR with OHF
- [three successive slides showing the same severely eroded bend as shown in the previous two slides. These three slides show the bend from various angles after OHF monies were used by DNR crews to repair the erosion by excavating and reducing the high eroding bank, narrowing the stream bed, and applying large limestone rock to the toe, or foot, of the bank along the outer edge of the bend. Photos from Aug 1, 2019, show the stream is narrower, deeper, clearer, fishable, and with no apparent erosion despite recent additional high water flows.]

SE MN Trout Stream Tour, April 18, 2019

- April 18, 2019 – Rush Creek (OHF project site)
[two successive slides from April, 2019, each showing a different image of moderately severe stream erosion to OHF habitat enhancement site work finished late fall, 2018.]

Rush Creek – After OHF enhancement

□ Rush Creek – damage repaired by TU

[two successive slides with photos from Aug 1, 2019 each with a different view of the same bend in Rush Creek shown in the previous two slides. Both slides show the stream erosion has been repaired and appears stable despite the lack of vegetative cover due to the work just recently being done.]

[one slide showing an image from Aug 1, 2019, looking downstream from the repaired bend showing a backhoe excavator accomplishing another repair to a slightly eroded bend within the original OHF project site.]

SE MN Trout Stream Tour, April 18, 2019

- April 18, 2019 – Rush Creek (OHF project site)
[two successive slides from April 2019 showing a stretch of Rush Creek downstream from that shown in the previous slides. Photos indicate stream habitat improvements accomplished in late fall, 2018, that appear intact.]

Rush Creek – After OHF enhancement

[two successive slides from Aug 1, 2019, showing the same downstream stretch of Rush Creek as shown in the previous two slides. Photos indicate stream habitat improvements accomplished in late fall, 2018, still appearing intact with vegetation growing and two fishermen in the stream.]

SE MN Trout Stream Tour, April 18, 2019

□ April 18, 2019 – Pine Creek (OHF project site)

[Four consecutive slides, two from April 18, 2019 two from August 1, 2019. Two slides show different angles of a bend and stretch in Pine Creek where instream habitat enhancement work was accomplished in the past and appears in good shape despite extreme high water occurrences. Two successive slides show comparative images of the same section of stream on August 1 with little indication of any erosion despite additional spring/summer 2019 extreme high water occurrences.]

Take-away thoughts

Bad news:

Mother Nature continues to provide severe challenges

Incredible stream damage

- Several heavy rain occurrences
- Resulting extreme flows
- Land use changes in valleys & above
 - Pattern tiling
 - Reduced contour farming
 - Reduced livestock & grazing

Good news:

- Projects needing repair have been or are being repaired
- Other OHF projects viewed appear generally good shape