

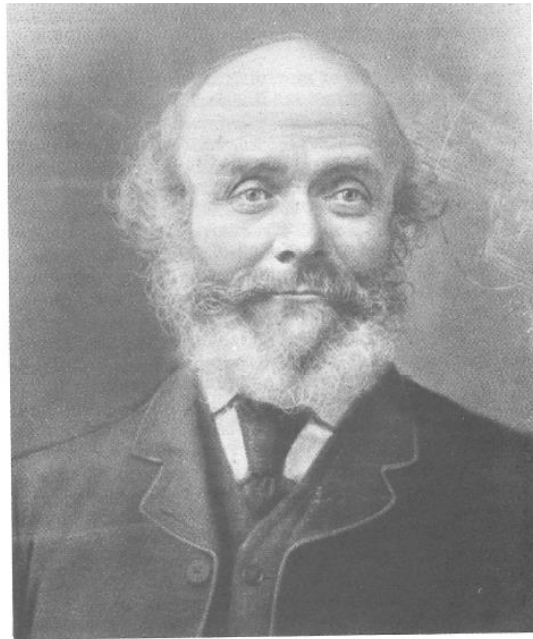
HALIBURTON HIGHLANDS OUTDOORS ASSOCIATION

GOULD'S CREEK BROOK TROUT RESTORATION PROJECT

2018-2019

Recreational Fisheries Conservation Partnership Program:

CA HC 16 HCAA 01637 Final Project Report:



*Thomas Gould
(1838-1910)*



Canada 

Compiled by Rusty Rustenburg VP of Marketing and Education HHOA

Field Report by Dennis McGee: Project Manager Volunteer

Schedule 7: Budget Report and MNRF Permits/Inspections

ACKNOWLEDGEMENTS:

There are not enough thanks to Loraine Geoffrion(DFO), James Boraski(Project Consultant), Jim Blake(U-Links) for the effort to whittle the project down to one year. This was tireless budget rewrites, project activities, condensing, altering, approval process etc. before the project come to fruition and met stipulations of the Dept of Fisheries and Oceans approval.



James Boraski Project Consultant(right) and Karl Weise(left)

Pre Construction data: Adam Challice MNRF Hayden Piper MNRF, James Boraski, Kyle Goforth, Haley Martin, Rachel Heslop, Karl Weise(Trent University/U-Links, Dr. Tom Whillans Trent University

Construction Field Project Team: MNRF team: Adam Challice, Hayden Piper, Krista, Denis McGee, Randy Charter, Kyle Goforth, Rebecca Krawzyck(bARK ecological Services), Haley Martin(Fleming, Leora Berman, Bear Berman(The Land Between), Rachel Heslop(Fleming), Kristyn Begbie, David Armstrong, Larry Hewitt , Cory Harris, Matt Wong, Total Site Services: Pat Casey, Tracey Laframboise, GEOMorphix Paul Villard, Bryce Moulder, Ben Miller, Mike Lawson, Haliburton County; Craig Douglas, Sylvan Cloutier, Dysart et al: Murray Fearey, Andrea Roberts, Rob Camelon, TAG(rail trail); Pamela Marsales, Canada Culvert; Kevin Gilbank, Liz

Photos and Videos/Drone footage: Denis McGee, Kyle Goforth, Bryce Moulder, Ben Miller, Matt Wong, Cory Harris, Aaron McFerran, Leo Dobrynzky

Budgeting: Loraine Geoffrion, Scotty McCaw, James Boraski, Denis McGee, David Armstrong and Kristyn Begbie.

SYNOPSIS:

The Gould's Creek Brook Trout Restoration Project was submitted to the Recreational Fisheries Conservation Partnership Program through the Department of Fisheries and Oceans. Originally it was planned as a 2 year project to restore 1.5 km of stream so the habitat would be returned to a native brook trout fisheries that would support angling(barbless and catch and release) opportunities in the future. The original plan was to remove to on-line ponds to reduce the increased temperature issues. However, working with the best team in

restoration/ watersheds, Paul Villard of GEOmorphix, Cory Harris of Urbantech, Jack Imhof (Trout Unlimited) and Adam Challice(MNRF) it was suggested and decided to construct a bypass channel but leave the two ponds off-line as wetland habitat but it would also assist with flooding issues. The original submitted work permit had to be altered. The amazing assistance from these partners was stellar and there was a delay in resubmitting until a field assessment and proper assessments of where the channel would be located. We had to work with other timing issues that both firms faced.

Initial site visit of Jack Imhof (Trout Unlimited), Adam Challice (MNRF) and Dr Tom Whillans (Trent University) had a first hand view of a beaver dam release and the how the flooding impacted the project area. Site visits by Project Consultant James Boraski in May 2018 also revealed issues to address and actual bank slumping had occurred(see photos)

The professional engineered drawings were submitted for all culverts and the bypass channel. The new design for the artificial upwelling was also decided and the first ever in the world to utilize the new drum filtered hatchery outflow(8 degrees) and constructed wetland to supply the buried perforated piping. Professional staff from Fleming College Gordon Balch and Ryan Hill visited on site to discuss the upgrades to the constructed wetlands and waterflow design.

During this time, the Goulds Creek Team were busy. As Trout Unlimited were on the team, HHOA Goulds Creek Team were trained and certification for the Stream Rehabilitation Course at Guelph University. The “Before” stream(and receiving Barnum Lake) data collection included setting up base photographic stations, water temperature and water level stations. The documentation of the

natural upwellings were recorded by Flir Infrared technology in order to preserve the integrity and to see how much silt loading/lack of spawning substrate had occurred from the culvert issues with the 95 sq/km flood plain breaching the undersized culverts over the years. Previous MNRF records and Brent Woottons report(see in report) indicated brook trout in project area watershed. There are also confirmed statements of catching brook trout in the project area by long time residents . These interviews are in the Goulds Creek Documentary to be released summer 2019. However, the HHOA Goulds Team(with electrofishing certification) had sampled the area and there were no brook trout found(see species list) which allowed timing windows to be less of a concern. The environmental class(in conjunction with Fleming College) from the Trillium Lakeland District School Board: Haliburton Highlands Secondary School did field studies collecting kick samples. They then did an identification seminar to list the samples retrieved. Many hours of GoPro footage, drone footage and still pictures were taken throughout the entire project.

Goals Achieved: The bypass was successfully installed with the artificial upwelling site installed with spawning substrate over top. Pools and riffles were created to assist with the functioning of the site. The area was secured with coir matting and native plantings to stabilize and create shade for the creek. Spring of 2019, Minden was declared a state of emergency with flooding, with three 100 year floods in 5 years. Photos taken of the Goulds Creek project area had handled the flooding as the engineering and geomorphologist had predicted! (Except for one section not worked on that had let go at peak 2019 flows)

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HIGHLANDER PAPER: Haliburton

By Lisa Gervais After living on McKnight Street in Minden for 30 years, Keith Hardy is used to spring flooding. The road that runs between Anson Street and Bobcaygeon Road is closed as the Ministry of

Natural Resources and Forestry has changed conditions on the Gull River to a flood warning, from a flood watch. Yesterday, a state of emergency was declared. Hardy got his tin boat out on Monday in case he couldn't drive because of the rising waters surrounding his property. He also moved items from outside sheds offsite of the property. "It's just very disappointing," an admittedly exhausted Hardy said with a sigh. "But we knew it was going to come." The township called a press conference yesterday. "We encourage residents to take necessary precautions to protect personal safety and property," Mayor Brent Devolin said. "In the event of an emergency call 911." The township said the outflow of water on Horseshoe Lake, through the Gull River, will continue to increase until Friday afternoon. River levels are expected to increase a further 13cm, approaching 2017 water levels.

"Water levels will continue to rise due to snow melt in the upper reaches of the Gull River watershed, and will remain high, as water is being moved down through reservoir lakes upstream of Minden; which are reaching capacity," the township said. Water is flooding low lying areas along McKnight, Invergordon, Prince, Anson, St. Germaine Street, Orde Street, Hospitality Road, Spring Valley Road, Ritchie Falls Road, Mark Twain Road, Salerno Lake Road Bridge, Conway Road and Jacob's Lane. While the Irondale and Burnt Rivers crested over the Easter weekend, the Gull River was placed into warning, from watch, about noon Tuesday. Devolin said the emergency operations centre in Minden had also been convened as of April 23 and is meeting daily. In addition, he said they are continuing with their daily conference calls with the Trent Severn Waterway, Parks Canada, the MNRF, and other jurisdictions within the watershed. "Obviously, we're being diligent," Devolin told the press on Tuesday. He added that people should look for updates on mindenhills.ca Further, he said sand and bags are available at Furnace Falls, the Kinmount roads shed and the lower arena parking lot. The township is also sandbagging for the public. People can call 705-286-1260 ext 211 during business hours and 1-866-856-3427 outside of business hours. Devolin said his message to the public is "just for people to be diligent. Take it to the next level. As you can see by some of our actions with local road closures and staking those roads that are water covered, we're already keeping ahead of the curve." He asked drivers to use caution when accessing local roads to get to their homes and asked people who don't live in those areas to stay away. "Stay out of the water. Don't be playing hot rod. We don't need that kind of activity adding agitation. If you don't live there, stay out."