G.L.F.T. Final Report

SYNOPSIS

Project Title: Carlton Creek Culvert Removal

Grantee Organization: Oceana County Road Commission

Project Team: Sandy Griffin, Accounting Manager - OCRC

Lisa Dutcher, Project Coordinator for the OCRC

Jeff Balkema, South Foreman – OCRC

Bob Krenn – Krenn Timber Bridge; Wheeler Lumber

Holly Vickers, DEQ - Water Resources Division

Brian Bury, DNR - Natural Rivers Program Administrator Holly Mulherin, Engineer – Nordlund and Associates Josh Adams, Ken Adams Excavating (Contractor)

Contact Person: Lisa Dutcher, Project Coordinator

(231) 873-4226; (231) 720-4598 mobile

Idutcher@oceanacrc.ora

Grant Amount: \$85,000

Time Frame: 7/30/12 - 8/31/13

Focus Area: EHSFP Habitat Protection and Restoration

Project Summary:

Carlton Creek is a high-quality trout stream and included in the DNR's Natural Rivers Program. The failing, perched 4' culvert at Arthur Road blocked passage of native and migratory fish and wildlife. Arthur Road is a high speed, primary county road; the collapsing culvert had begun to crater the asphalt, posing a threat to motorists. It was the goal of the Team to replace the failing culvert with a bottomless structure.

Context:

During a road/stream inventory assessment in 2011, it was noted that two (2) structures on Carlton Creek were in critical need of replacement. Stakeholders on earlier culvert replacement projects in the County worked to provide a

portion of the funds needed to remove the culvert downstream on Carlton at Winston Road. It was further determined that replacing both failing structures in the same season would allow for more rapid healing of this sub-watershed within the White River basin. The final intent is to restore the stream to its native condition, assisting fish and wildlife to repopulate the waterway, thereby improving recreational opportunities in the system.

Goals:

Replace culvert with a bottomless structure
Restore fish and wildlife passage within waterway
Increase angling opportunities
Promote restoration of streambed and banks
Provide increased safety to motoring public
Reduce flood damage to private property

Results:

The 4'culvert was replaced with a 14' timber structure. The stream and road banks were restored and seeded. There is guardrail and new pavement here that allows for safer travel by motorists and bicyclists.

Background/Overview

- The intent of this project was to restore the ability of native and migratory fish and wildlife to pass freely up and down Carlton Creek. In order for this to happen, the culvert would need to be replaced with a structure having no bottom.
- 2. The new 14' span timber structure built on Arthur Road at Carlton Creek was a fairly typical construction project. There was some difficulty as the low-bid contractor had not built a timber bridge; a learning curve issue. Another minor setback was that underground springs were unearthed during excavation for the timber piling that in turn flooded the construction limits. The original expectations were met and actually exceeded.

Outcomes

3. The initial activity of erosion control from beginning to end throughout the life of the Project and beyond was a key focus. Minimizing the impact of removing the culvert, thereby disturbing former stream bottom land, was of great concern. As the creek flows through wood and wetlands in this area, the soil borings proved there was mucky peat

that would need to be controlled as the stream returned to its original bed. Installing a turbidity curtain prior to the start of the project assisted greatly in this regard. Within five minutes of the removal of the second, downstream section, the scour hole began to fill in. More noticeable and extreme, within a half hour of the inlet section being removed, gravel beds upstream became exposed. In the days following, salmonids were seen swimming up through the plunge pool and moving north toward Carlton's headwater. It was very encouraging to witness tag-along trout, previously unable to propel themselves up and in to a waterfall, swimming freely upstream under the new structure. With the successful completion of the Winston Road culvert replacement project downstream just weeks before this crossing was finished, fish passage up from and down to the White River is far easier.

- 4. We needed to inform and educate nearby property owners, residents and motorists why they were being inconvenienced and what the long terms benefits would be. As it turned out, property owners living adjacent to the crossing expressed appreciation that their land would be no longer be flooded during extreme weather events. The construction site was visited daily by on-lookers, bystanders and fishermen, excited to see an 'old-time' bridge being built. Guardrail and new paving was completed, providing more safety for vehicular traffic travelling at high speed on the road. Feedback received has been entirely positive, and Township officials are very grateful the project was completed this year.
- 5. Working relationships with the DEQ and DNR were further strengthened. Personnel from U.S. Forest Service, U.S. Fish & Wildlife, White River Watershed Partnership, Michigan Steelheaders and Trout Unlimited are very pleased the Project was completed in such a timely manner. Based on the success of this project, it is hoped the OCRC will be given consideration to again partner with GLFT on upcoming barrier-removal and sedimentation control efforts.
- 6. No formal evaluation of this Project will be done unless required by GLFT.
- 7. From a project management viewpoint, this was a win-win for both the Road Commission and the environment: fish and wildlife can pass freely under Arthur Road while the motoring public will no longer contend with a collapsing road bed due to a failed culvert. Another unanticipated benefit may be a reduction in vehicle/deer crashes in this area.

Related Efforts

- 8. We were hopeful of other grantors partnering, but this became a standalone project between GLFT and OCRC. It is part of a comprehensive, organized effort by a number of stakeholders to fund culvert removal and sedimentation control projects in the White River watershed. There will be at least two (2) more crossings replaced in 2013 as a result of many stakeholders working toward the same goal.
- There is still the potential of the DNR funding the culvert replacement at the Rail Trail downstream on Carlton Creek, though the OCRC has not been contacted recently.

Communication/Dissemination

10. A ribbon-cutting ceremony was held by the White River Watershed Partnership on October 25th, celebrating the crossings replaced in Oceana County this year. Oceana Herald Journal newspaper articles are attached as part of this final report. Other regional papers and organizations are requesting information. Word of this year's accomplishments by OCRC is spreading throughout the County Road Association of Michigan (CRAM). It is possible the OCRC may garner several "Crammies" for BMPs at CRAM's annual convention in March.

Due to this year's success, the Road Commission plans to continue actively budgeting to replace and repair problem crossings in 2013, something which has not been done in prior years. Four (4) culvert removal, three (3) sedimentation control, and two (2) bridge repair projects are being planned for fiscally, with aid from other Stakeholders.



7.3.12 View of Perched Current and waterfall from S.c. and downstream - Carlton Creek



10.1.12 East Abutment and heavy rip. rap complete; piling to be driven today @ west (right)



10.1.12 Culvert view from S.W. Side of Scour hole on Carlton Creek @ Arthur Road



10.3.12 Carlton Creek - S. Section of culvert in Process of being lifted out of stream flow



10.3.12 Downstream (outlet) Section of culvert removed



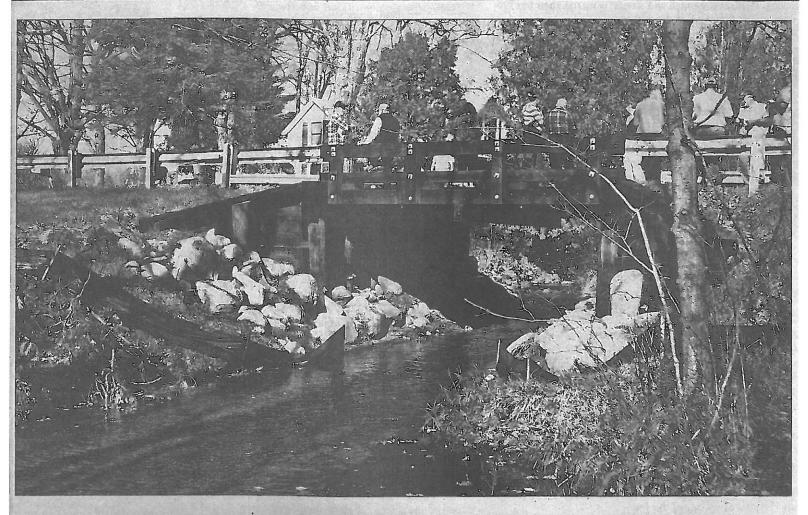
10.3.12 Carton Creek Culvert Section to S. removed: n. Section Drivi to removal

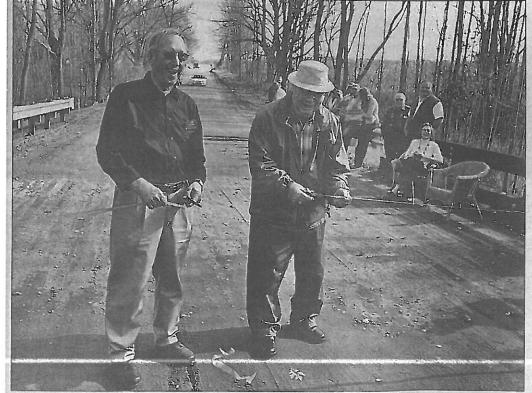


10.3.12 North (inlet) Section removed: Creek flowing clean. clear



10.24.12 View of new timber structure from s.e.; note grass has vooted nicely in straw mosal





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Ceremony celebrates culvert replacements

Oceana County Road Commission Board Chairman Russ Eilers and Ferry resident Bruce Dutcher, left, cut the ceremonious ribbon, celebrating the completion of eight new stream crossings in Oceana County Oct. 25. Along with state Senator Goeff Hansen, the celebration on 148th Avenue just north of Pierce Road was attended by US Fish and Wildlife, US Forest Service, White River Watershed Partnership, county road and township officials as well as members of the public. Over the past two years, steel culverts have been replaced with timber bridges at Pierce Road at Cobmoosa Creek; Baseline Road at Cobmoosa Creek; Filmore Road at Cobmoosa Creek and Arthur Road at Carlton Creek. Aluminum box culverts were installed at 148th Avenue at Osborn Creek and Johnson Road at Osborn Creek. A concrete box culvert was installed at Winston Road at Carlton Creek and another timber bridge is scheduled to be installed at 148th Avenue at Cobmoosa Creek in 2013. Bruce Dutcher was recognized for his actions in getting the efforts started, and his daughter, Lisa Dutcher, was instrumental in securing grants from various agencies to pay for the projects. The grants totalled \$572,964. The crossing at Pierce Road was named the Bruce Dutcher Bridge.

11-4-2012



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inued early Tuesday afternoon to battle a hay fire inside a Valley View Pork barn on 204th Avenue southeast of Walkerville. Walkerville Area Fire Administrator Jerry shed at approximately 3:30 a.m. He was not able at press time late Tuesday morning to determine the fire's cause. Departments responding to the scene included er, Ferry, Hesperia, Carr, Lilley and Fremont. The Michigan State Police and Oceana Emergency Medical Services also were on scene.

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from Page 1a

e've come up nario we possiyers said. vnship Trustee wanted a clarijust how much d be excluded. 0 percent limi-

dates

from Page 1a veys are expected to be taken Nov. 13-15. GMB Architects would be paid for their research only if the bond request is approved by

tation allowed by law applies to individual townships or county wide. Myers said it's county wide and that with 16 townships, the road commission could prohibit ORV use along roadways in five of

A ribbon-cutting ceremony to celebrate the completion of six problem road stream crossings is set for next Thursday, Oct. 25.

The 12:30 p.m. ribbon cutting ceremony will take place at the Pierce Road crossing at Cobmoosa Creek just east of 148th Avenue in Ferry Township. It will be followed with a light buffet luncheon at the Ferry Township Community Center. Following the luncheon, there will be tours of four of the stream crossings for interested individu-

During the last two years, the crossings have been replaced with either timber or aluminum bridge structures on Cobmoosa (Osborn) Creek in Ferry and Elbridge townships. In addition, two more road/stream crossings were replaced this year on Carlton Creek in Grant Township. All streams are tributaries of the White River.

The final crossing on Cobmoosa will be replaced in 2013, leaving just two more river

crossings on the North Branch of the White River which still need replacement and funding. Several agencies and individuals have been involved in the process.

Reservations are not required, but those wanting to attend are asked to contact Lisa Dutcher at the Oceana County Road Commission at 873-4226 to assist with planning. People also can e-mail her at lisa_dutcher@hotmail.com.

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