

Land use around Becky Creek is a mix of forest and Agriculture.

Becky Creek Project - Craig Roesler, WDNR Biologist

Becky Creek is a small coldwater brook trout stream located in Rusk County north of the Village of Bruce. Becky Creek's headwaters are in the Blue Hills and its mouth is at the Chippewa River. The lower 1.6 miles of the creek was placed on Wisconsin's impaired waters (303d) list due to water temperature limitations. This stream segment was placed on the list based on the judgment of a former DNR fish manager for Rusk County, who felt the entire stream length had the potential to be a Class 1 coldwater trout stream. The lower segment is currently identified as supporting a warmwater fish community, is considered an exceptional resource water, and has been identified as a cool (cold transition) headwater stream in the state's Natural Community Streams Model from 2009.

A portion of this lower segment had been heavily pastured for many years and also had a barnyard runoff problem in the past. The barnyard runoff problem was corrected several years ago, and a new landowner is no longer pasturing the streambanks. An assessment of lower Becky Creek was initiated in 2009 to determine if its placement on the 303d list is appropriate and to evaluate its potential for restoration. Drought and beaver dams caused lower Becky Creek to go dry in 2009, so the assessment was continued in 2010.

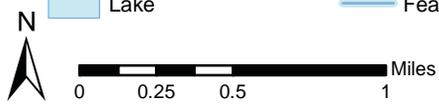


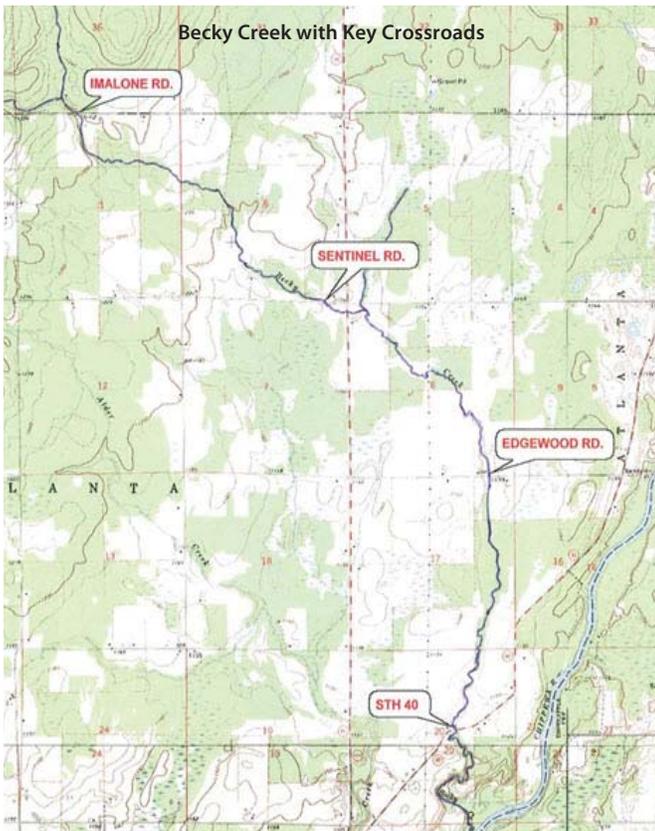
Becky Creek Downstream Site, East Channel, 2009

Water Division Targeting Monitoring Project

Becky Creek (Rusk County) Assessment

- Monitoring Stations
- Dam
- Boat Access
- Lake
- City/Town
- County
- Public Land
- Featured River
- Other River
- Interstate Highway
- US Highway
- State Highway
- County Highway
- Local Road





Upstream Site, Becky Creek. Stream narrowing, woody debris and snags provide excellent habitat for aquatic life.

See Becky Creek - "Online"
Read more about this project - "Online"

Project Summary and Conclusions:

Project results indicate that the lower segment of Becky Creek (1.6 miles) should be removed from the 303d list of impaired waters and placed on the "watch" list. A portion of this water was placed on the impaired waters list based on the potential for the stream to be coldwater and support trout. This study was designed to gather field data to determine the potential of the stream.

The study found that the lack of coldwater in the segment identified as "impaired" is actually due primarily to hydrologic conditions rather than land use practices. In 2009, groundwater discharge to the creek was restricted to the headwaters area in the Blue Hills, upstream of Imalone Road. The creek was rapidly losing water to the ground downstream of there and was completely dry before reaching the STH 40 crossing. Substantial discharge of cold groundwater to a stream is needed to maintain coldwater conditions for trout. *Additional observations of groundwater discharge to the creek should be made in the future during years of more normal precipitation. This would help verify that inadequate groundwater discharge to maintain cold water is a chronic condition.*

Fish surveys since 1967 have not found trout present in the lower segment of Becky Creek. This suggests that even in periods of normal precipitation, groundwater discharge is inadequate to produce coldwater conditions there. The current DNR fish manager for Rusk County made the following comments in his 2010 survey report for lower Becky Creek – "The absence of trout in repeated surveys, our observations of instream habitat characteristic of warmwater fish communities, and this station's proximity to the Chippewa River suggest that the current Class I trout water designation may not be appropriate or attainable in the segment downstream of hwy. 40." The fish manager recommended reviewing the current class I trout designation and its presence on CWA 303d listing of impaired waters.

Post-Pasture Land Use Recovery

The formerly pastured area in the creek segment currently listed as impaired is showing signs of natural recovery. Streambanks were quickly revegetated with grasses and herbs once cattle pasturing stopped. Young woody vegetation began to appear and will provide significant shading in several years. Some channel narrowing and point bar expansion were observed between 2009 and 2010.

Some of the very wide pools and steeply banked areas in the formerly pastured area will probably take much longer to improve. This stream section's potential to only support a warmwater forage fish community does not justify making expenditures to artificially improve the stream channel. Natural scouring and deposition processes should eventually produce channel improvements. The remainder of the impaired creek segment is located downstream of highway 40. This section of the creek should probably be classified as supporting a warmwater sport fish community. The report recommends removing Becky Creek from the list of impaired waters based on its natural potential to support a warmwater fishery.