Notes on Spring Cr & Brillion Sewage Treatment Plant, Calumet Co., Kristi Minahan, 10-2018

We are currently working on a rule revision to NR 104 in which we are proposing to delete LAL/LFF status of waterbodies that no longer have an individually permitted discharger. The waters that are deleted from 104 will revert to having a Designated Use based on their modeled Natural Community, like other waters in the state that have not yet received an NC verification in order to put them into a specific DU.

We are proposing to delete the NR 104 listings in Table 5, number 7:

7. Tributary-Spring Creek (Brillion)

Channel from Brillion STP to Spring Creek

Effluent Ditch

LAL

Spring Creek upstream from Brillion Marsh

Continuous

LFF

This was a confusing case so I am documenting our findings after investigating the file and speaking with permits staff (Dick Sachs, Dave Gerdman, Diane Figiel).

- A. **Original location of STP.** The original location for the Brillion STP was in town (shown in hand drawn map from 1975 in this folder), between Glenview Ave & Co. Hwy. PP (formerly STH 114). It discharged to a wastewater effluent channel (LAL) that then entered Spring Creek (LFF, WBIC 76900). In 1981, a new STP was built in the location below.
- B. Discharge location of new STP & duplicate stream names. The new STP facility built in 1981 was located between a stream to the north (WBIC 77100, here called "north stream" for purposes of explanation) and a stream to the south (WBIC 77000, here called "south stream").
 - a. Although the STP is located closer to south stream, the discharge from the STP flows via pipe to north stream, WBIC 76900. There is no longer an effluent channel since the discharge is via pipe. (An additional point of confusion is that in the 1977 hand drawn map the proposed facility location looks like it's closer to the north stream, but the final location was closer to the south stream. However the hand-drawn map did indicate discharge to the north stream, which is correct.)
 - b. The discharge location was complicated by the fact that the north & south stream have duplicate names...
 - i. The north stream originates at Grass Lake and flows west to join Spring Creek (WBIC 76900). North stream is called "Unnamed" on the Surface Water Data Viewer; however, in GoogleMaps and in some of the documents in the file folder it is called "Black Creek" (documents in file using "Black Creek" include the 2003 "File Memo" from Michael Reif, and 1999 memo from Jeff Haack).
 - ii. The south stream is called "Black Creek" on the Surface Water Data Viewer. Therefore when the files said it discharged to Black Creek it was easy to think they were referring to the south stream, but that is not the case. Though it is unclear on the 24K Hydrography map layer which direction this intermittent creek flows and what it connects with, on the Natural Community map layer it appears that this south stream joins the north stream to the west and then flows to Spring Cr.
- C. Remove effluent ditch LAL. Because there is no longer an effluent ditch (there is no discharge at old effluent ditch location; effluent travels via pipe from new location), it is appropriate to remove the effluent ditch LAL listing in 104.
- D. Remove Spring Creek's LFF classification. Because Brillion STP is no longer discharging to Spring Creek on the segment previously classified as LFF, it is appropriate to remove the LFF classification from that segment.
 - a. Note that there was also a former company called Brillion Ironworks that used to have an individual WPDES permit farther north from the old Brillion STP location, but the ironworks

