

DATE: 2-21-2023 FILE REF:

TO: Mike Polkinghorn, Limits Calculator

FROM: Kristi Minahan, Water quality standards; Diane Figiel, Limits Calculation Coordinator,
Arthur Ryzak, Compliance Engineer; Jon Kleist, Stream Biologist

SUBJECT: DOC-Flambeau receiving water: wetland adjacent to Hackett Creek (WBIC 2231400),
Sawyer Co.

Overview of issue

Staff were asked to discuss the status of the wetland receiving effluent from the Wisconsin DOC-Flambeau Correctional Center. The discharge is seasonal via an effluent pipe to a wooded wetland, which then travels approximately 1 mile to Hackett Creek, which is a Class 1 trout stream and ERW. From review of previous memos and emails since 1976, there are contradictory statements about whether the wetland becomes channelized at some point and whether the discharge is likely to reach Hackett Creek.

This wetland is currently listed in ch. NR 104, Wis. Adm. Code, as LAL, but under a different facility name. The facility is shown as “Flambeau State Camp” and the LAL listing is for the “drainage from the Flambeau State Camp Lagoon to Hackett Creek.”

The most recent biologist’s memo available, from Craig Roesler in 2003, states that the wetland near the effluent pipe is braided/diffuse, and after ~100 yards it becomes channelized and remains so for the rest of the 1.0 mile distance to Hackett Creek. He states that this reach has substrate that is primarily gravel/cobble/rubble, averages about 3 ft wide with an average depth of about 4 in. He found a few minnows and a limited macroinvertebrate community, but because his visit was in November he advised another site visit during baseflow conditions and during an effluent discharge period to do a fish survey. Arthur Ryzak did a compliance inspection visit in 2022 and took photos (attached) of the discharge path through the wetland. A channel with flowing water appears to be evident.

There was no biologist visit to the site or fish survey prior to the 2022 permit reissuance, but we recommend that a site visit and fish survey be done prior to the 2027 reissuance to determine whether the wetland is still channelized and should be reclassified in NR 104 or should retain LAL status. Permit limits in the 2022 reissuance continue to be based on the codified LAL use, but with phosphorus monitoring added in Hackett Creek to determine whether downstream protection limits are needed for phosphorus.

(Map/photos next pages)

Site overview map



CORRESPONDENCE/MEMORANDUM

State of Wisconsin

Photos

Photos from May 5, 2022 Compliance Inspection Visit (WDNR Wastewater Compliance Engineer – Arthur Ryzak)

Photo 1: Fill and draw white effluent pipe shown on right of photo discharges (not at time of photo) into wetland shown in foreground.



Photo 2: Path of effluent flow (foreground) joins with flow from pipe circled in red, which is not effluent flow, but may be from some type of surrounding GW/SW collection flow.



Photo 3: Closeup of the circled pipe shown in Photo 2 (not WWTF effluent). Water exiting pipe appears crystal clear.



Photo 4: Combined flows heading off through wooded wetland towards Hackett Creek tributary

