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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
LANSING



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DIRECTOR

September 30, 2020

TO: David H. Fox
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FROM: Michigan Department of Natural Resources

SUBJECT: Timing of impoundment of Morrow Lake following gate repairs on Morrow Dam

The Michigan Department of Natural Resources Fisheries Division (DNR) has reviewed potential impacts regarding the timing of impoundment of Morrow Lake once gate repairs are complete. ECRE anticipates that gate repairs will be completed in late December 2020 and proposes to impound Morrow Pond immediately after. Standard DNR guidelines restrict artificial manipulation of water levels from October 15 through April 30 to prevent impacts to hibernating reptiles and amphibians and to alleviate concerns with ice safety and potential ice damage. This would result in a delay in impoundment until May 1, 2021. Delaying impoundment will likely result in additional sediment release especially during spring rain events and subsequent flood water resulting in additional impacts downstream.

As part of our assessment, DNR corresponded with the US Fish and Wildlife Service, DNR Wildlife Threatened and Endangered Species (T&E) coordinator, and Michigan State University experts. Primary species of concern associated with raising water level in winter are Eastern Massasauga Rattlesnake (EMR) and Blanchard's Cricket Frog that are protected by State law and hibernate in burrows just above the water level and are vulnerable to drowning. DNR reviewed the occurrence of T&E species and the FWS has identified upstream and downstream segments of Morrow Lake as tier 2 habitat for EMR. However, no local element occurrences have been identified for EMR or Blanchard's Cricket Frog. Communications with DNR T&E and FWS determined the potential for EMR presence in the exposed bottomland of Morrow Pond are low resulting in low risk to EMR populations. DNR also evaluated risk for other amphibian and reptile populations. Most species known to inhabit this area hibernate in the bottom sediments of the lake. Raising water level does not pose a large threat to these species. The 2019 fall and winter drawdown of Morrow Lake likely resulted in greater impacts to mussels, herpetological, and amphibian populations. Given this information,

it is DNR's assessment that impoundment of Morrow Pond should be allowed as soon as repairs are complete to minimize further lasting environmental impacts to Morrow Lake and the Kalamazoo River. The following conditions should be applied to impoundment:

- Impoundment should occur as soon as gate repairs are complete,
- The refill rate should not exceed 6 inches per day, and
- Flows in the Kalamazoo River should not fall below the 95% low flow exceedance reported for the refill month as stated in EGLE's 2020 estimate.

DNR will continue to coordinate with ECRE, EGLE, EPA, and others involved in this natural resource issue. DNR is committed to limiting resource impacts and evaluating impacts that have occurred to facilitate remediation and recovery of Morrow Lake and the Kalamazoo River. We provide this letter to facilitate planning and permitting associated with repairs and impoundment plans on Morrow Dam.

Sincerely,

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