

Joshua Ball

From: Gulotty, Elle (DNR) <GulottyE@michigan.gov>
Sent: Monday, February 27, 2023 8:59 AM
To: Joshua Ball; Bridges, Douglas (EGLE); Scott Hicks; jimghoistbasin@gmail.com
Cc: Virgil E. Schlorke; Matthew Annala; GenerationAdmin
Subject: RE: Dead River License Request for Planned Deviation - Dead River Storage Basin Drawdown

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Hi Josh,

If the majority of snowmelt occurs prior to April, would UPPCO revise its target to hold onto more water at Hoist?

For clarity, can you also share a table of targets being proposed and without changes through September?

Please let me know if you see any errors in the data reporting website, from what I saw over the last couple weeks it looks like Hoist has been around 1337 running around 110-150 cfs: <https://www.uppco.com/hydro-water-levels/>

Thank you,
Elle

Joshua Ball

From: Joshua Ball
Sent: Monday, February 27, 2023 10:34 AM
To: Elle Gulotty; Bridges, Douglas (EGLE); Scott Hicks; jimghoistbasin@gmail.com
Cc: Virgil E. Schlorke; Matthew Annala; GenerationAdmin; Joshua Ball
Subject: RE: Dead River License Request for Planned Deviation - Dead River Storage Basin Drawdown

Elle,

UPPCO will operate the Dead River Storage basin to best achieve the start of month targets for the upcoming and future months. If during the drawdown timeframe in March a significant decrease in the snowpack occurs, we will adjust outflows to ensure summer elevations (May-August) are achieved. Once spring melts start, UPPCO targets the May/June-September elevation over the April. As discussed in the past, spring flows are one of the few opportunities to add water volume to the Hoist storage basin and not being able to capture the flow has significant impacts to water quality and recreation opportunities for the remainder of the year.

Below is a table showing the requested changes (in red) to the Dead River License Article 402 elevation requirements as part of this planned deviation:

Month	Start of Month Target FEET (NGVD)	Minimum Elevation FEET (NGVD)
January	1339	1337.5
February	1337.5	1337
March	1337.5	1334.5*
April	1335*	1334.5*
May	1340	1339
June	1341	1339
July	1341	1339.5
August	1341	1339.5
September	1341	1339.5
October	1341	1339.5
November	1341	1339.5
December	1339	1338.5

The website values for elevation and flow have been accurate (the only challenges we have been having are in the 4/12 hour average calculations). Over the past 3 weeks, the Hoist storage basin was averaging right around the target elevation of 1337.5' with outflows in the 105 cfs range. The recent warm up over the previous 10 days and the 30+ inches of snow the end of last week caused a slight uptick to the 1337.8' range, and we adjust outflows to the 150 cfs range to bring the elevation back down to the 1337.5' target.

Please let me know if you need any more information.

Thanks,

Joshua Ball

From: Gulotty, Elle (DNR) <GulottyE@michigan.gov>
Sent: Thursday, March 02, 2023 9:56 AM
To: Joshua Ball; Bridges, Douglas (EGLE); Scott Hicks; jimghoistbasin@gmail.com
Cc: Virgil E. Schlorke; Matthew Annala; GenerationAdmin
Subject: RE: Dead River License Request for Planned Deviation - Dead River Storage Basin Drawdown

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Hi Josh,

MDNR does not object to UPPCO's proposal to manage spring melt at Hoist.

Communication with downstream projects and local riparians will continue to be critical.

Please reach out as circumstances progress and if trends change.

Thank you,

Elle

Joshua Ball

From: Bridges, Douglas (EGLE) <BridgesD3@michigan.gov>
Sent: Thursday, March 02, 2023 10:44 AM
To: Joshua Ball; Elle Gulotty; Scott Hicks; jimghoistbasin@gmail.com
Cc: Virgil E. Schlorke; Matthew Annala; GenerationAdmin; Kohlhepp, Gary (EGLE)
Subject: RE: Dead River License Request for Planned Deviation - Dead River Storage Basin Drawdown

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Josh,

EGLE will not object to this proposed temporary planned deviation for 2023. I think there is value in seeing how this planned deviation impacts water quality throughout the year. I have not seen any evidence supporting the statement about "...significant impacts to water quality..." for the early capture period.

For the previous request regarding the proposed Certification amendment language, if you have the capacity, I would like to see some analysis completed on historic water quality data. Primarily, I would like to see how Silver Lake Storage Basin affects water quality with licensed elevations, current elevations, and prior to rebuilding the dam. Compliance with water quality standards can be reported as a percentage of valid samples taken for each project.

Attempting to analyze the data from the older PDFs is proving to be a challenge, as they seem to be scanned images with poor quality. It seems the only feasible option for data extraction is optical character recognition (OCR). There are some software options for OCR, however, it is not perfect and can take some time to calibrate to each document. This is not my wheelhouse, so I will not pursue it any further. If you are able to complete this analysis, it would be a helpful argument in support of the proposed Certification language.

Please reach out if you have any questions.

Best,

Doug Bridges (he/him/his)
Environmental Engineer
Water Resources Division
Department of Environment, Great Lakes, and Energy
517-245-3079 | BridgesD3@michigan.gov
Follow Us | Michigan.gov/EGLE

Joshua Ball

From: Joshua Ball
Sent: Thursday, March 02, 2023 11:34 AM
To: Scott Hicks
Subject: RE: Dead River License Request for Planned Deviation - Dead River Storage Basin Drawdown

Scott,

Hoping you have had a chance to review the requested planned deviation to allow for a drawdown of the Hoist reservoir to offset the anticipated spring flows.

If possible, please comment no later than Friday March 3rd so we can get notifications out to prepare for the flow changes Monday morning.

Any questions please let me know.

Thanks,



energy efficiency



Josh Ball
Generation Supervisor

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Joshua Ball

From: Hicks, Scott <scott_hicks@fws.gov>
Sent: Monday, March 06, 2023 8:52 AM
To: Joshua Ball
Subject: Re: [EXTERNAL] RE: Dead River License Request for Planned Deviation - Dead River Storage Basin Drawdown

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Hi Josh, If the MDNR is okay with this proposal then we are as well.

Thanks for the call.

Scott

U.S. Fish and Wildlife Service
Michigan Ecological Services Field Office
2651 Coolidge Road, Suite 101
East Lansing, Michigan 48823

Phone: 517-351-6274

Joshua Ball

From: James Grundstrom <jgrundstrom@foxmotors.com>
Sent: Monday, March 13, 2023 1:08 PM
To: Joshua Ball; BridgesD3@michigan.gov; scott-hicks@fws.gov; Virgil E. Schlorke; Matthew Annala; GenerationAdmin
Cc: James Grundstrom; James Grundstrom
Subject: Planned Deviation thoughts for the Spring of 2023 on the Hoist Storage Basin
Attachments: 447 nbd 2.jpg; 447 NBD 1.jpg

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Good afternoon to you all, from snowy Marquette County and the Hoist Storage Basin as seen from North Basin Drive.

Having travelled last week south to Indianapolis for a conference, I was surprised to see that south of Escanaba Michigan there is no snow, and looking at google earth photos the lower peninsula of Michigan is just about the same with little or no snow. The two pictures in the attachments are of my home on North Basin Drive taken this morning, and clearly we have a very different situation surrounding the Hoist Storage Basin. Although the pictures are eye catching, we have 4 to 5 feet on my roof, and the surrounding landscape has 4 feet plus standing on it too. May I also point out the layering of the snow pack. Although recently the snow has been like Utah Powder, the under layer approximately two feet deep is extremely dense and very hard. Snow water equivalent numbers in this snow pack are presumably very high.

I have read and shared with our Board the communications recently sent out regarding the possible plans for this spring regarding the elevation of the Hoist. Clearly there are a lot of variables that can and will impact the amount of water in both the HSB and Silver Lake. Knowing that spilling at either location is not ideal, and also knowing that the potential is very great for massive amounts of spring melting snow, we believe that more aggressive lower elevations now could be a wonderful preparatory maneuver.

Josh wrote to all of us regarding a possible lower number now or soon to drive for in hopes of managing the most unusual amount of snow we find currently. Having more storage ability now or soon we believe would be very proactive given the local conditions. If the predictions come true, for this coming weekend, and the atmospheric river makes it way into the Midwest, Marquette County could expect another two feet plus if the experts thoughts come to pass.

One final thought revolves around the elevation chart that Josh shared. We note that April month, Start of Month Target is 1340. As much as we are concerned about too much moisture this spring, it has been shown that 1341 would make April consistent with the remaining spring / summer month targets. It is all but impossible to make water as has been proven as recently as a few years ago. We believe that 1341 is a consistent elevation number that works well for all the residents around the Basin.

Thank you for the opportunity to share our thoughts,

Jim Grundstrom
President