

PRINCETON DAM OCTOBER, NOVEMBER, DECEMBER 2023 UPDATES

From: Monday, Uriah - DNR
Sent: Friday, October 27, 2023
Subject: Anticipated November Princeton Dam Gate Settings

Heading into November marks the beginning of the winter gate setting season. Next week DNR staff will make a gate adjustment – either one or two, gates will be opened, and then levels will be monitored. An additional adjustment will be made the following week as warranted.

The operation plan indicates 3 gates open from November to March, unless levels would get out of certain low or high level boundaries. Flows in the river have increased somewhat recently, but may not be sufficient enough to keep 3 gates open without dropping levels to below 7.3. So for the near term, it may be that only two gates ultimately are opened. We will have to see what transpires after the initial move. I will update you all again around mid -November.

From: Monday, Uriah - DNR
Sent: Friday, November 10, 2023
Subject: Mid-November Update: Princeton Dam Gate Settings

As indicated in my email on 10/27, DNR staff visited the Princeton Dam on Wednesday, November 1. At that time, the staff gage level read 8.38 so two gates were opened. On Monday, November 6, DNR staff checked the staff gage and it read 7.75; on that date the flow measured by USGS was 748 CFS.

Currently the flow is approximately 700 CFS, and is likely to subside somewhat in the coming week as little precipitation is in the forecast. Opening a third gate would likely lower the gage reading to below 7.3, so DNR will refrain from any additional openings at this time.

I will be monitoring the flow gage, and will let you know if anything changes. I will give you another update around Thanksgiving that will discuss the anticipated forecast for December.

From: Monday, Uriah - DNR
Sent: Friday, November 24, 2023
Subject: End November/Begin December Update: Princeton Dam Gate Settings

DNR staff had been monitoring flows at the USGS gage from late last week to earlier this week, in order to track flow recession in the river system. On Friday 11/17, the average flow for Friday 11/17 measured by USGS was 585 CFS and on Monday 11/20 it was 545 CFS. These flows start to approach the 7.3 staff gage level with two gates open.

DNR staff visited the Princeton Dam on Tuesday, November 21 to verify levels. At that time, the staff gage level read 7.3. With the expected diminishment of flows due to continuing and

forecasted lack of precipitation, levels would likely drop below 7.3 if both gates remained open. Therefore, we are in the process of closing one gate and intending to leave only a single gate open. One gate was partially closed (in order to not suddenly significant diminish downstream flow) on Wednesday 11/22, and it will be closed completely early in the week of 11/27.

It is likely that the one-gate-open setting will be maintained until we get liquid precipitation; lower temperatures and the freezing of lake and ground are likely to diminish flows as well. I will be monitoring the flow gage, and will let you know if anything changes. I plan on reporting to you again in 2 weeks, on December 7.

From: Monday, Uriah - DNR

Sent: Monday, December 11, 2023

Subject: Mid-December Update: Princeton Dam Gate Settings

As previously reported, the setting at Princeton Dam was modified from 2 gates open to 1 gate open right around Thanksgiving, due to levels near to 7.3. Since then, DNR staff have been monitoring flows at the USGS gage. Over the last week and a half, flows have risen gradually but steadily from 514 CFS on 12/1 to 593 CFS on 12/10, likely due to intermittent precipitation (approx. 1/3rd of an inch in the week after Thanksgiving, and a similar amount last week) and warm temps.

DNR staff visited the Princeton Dam on Thursday, December 7, to verify levels. At that time, the staff gage level read 7.79, with one gate open and a flow of 578 CFS.

Looking to the week ahead it appears that we will be getting drier and colder weather, and we may see diminished flow rates. Being mindful that we witnessed a level of 7.3 with flows at 545 CFS and two gates open in mid-November, it appears that if flows diminish much from where we are today, opening a second gate would put levels at or below 7.3.

Therefore, at this time, we will keep a single gate open and monitor how flows react this week. I plan on reporting again to you early in the week of the 18th.

From: Monday, Uriah - DNR

Sent: Friday, December 22, 2023

Subject: Christmas/New Year's Update: Princeton Dam Gate Settings

DNR staff visited the Princeton Dam on Thursday, December 21, to verify levels. At that time, the staff gage level read approximately 7.8, with one gate open and a flow of 556 CFS. Over the 14 days, flows have basically held steady.

Looking to the week ahead it appears that we will be getting some precipitation around Christmas Day, with totals perhaps up to an inch of rain. This will increase flow rates to some degree. Rather than attempting to make a prediction, I will monitor flows once the rain event

passes, and then make recommendation as to gate setting after getting a better idea of the effect of the precipitation.

If gate adjustments are warranted, it will be done as soon as can be managed; however, most staff are off for the holiday week and adjustments may need to wait until after the new year.

I plan on reporting again to you just after Christmas.