

2023 Lake Wyola Dam Water Release Observations

- Performance Standards: .5 cfs during summer months or ~3.35 cfs at sluiceway Watershed is 6.7 square miles
- Standard Release: 2.2-2.5 cfs at the sluiceway gate per Dam Keeper communications. Dam Keeper reports that keeping a 1/2 inch opening at the gate results in 2 cfs of flow.

Streamstats Observations

Range of 24-hour Flow at West Branch of Swift River (cfs)

Sluiceway Release Observations by Conservation Commission

On all observed dates, water was releasing over the spillway, except for 7/24 and 7/25:

6/23/23: sluice way appears less than .5 cfs; very small amount of water in sluice way

7/5/23: sluice way appears less than .5 cfs, gauge was +1 above neutral, very small amount of water in sluice way

7/10/23: sluice way appears less than .5 cfs

7/13/23: sluice way appears more than .5 cfs, Dam Keeper reported gate was partially open

7/14/23: more than .5 cfs, gauge was +1 above neutral

7/16/23: more than .5 cfs; Dam Keeper reported that gate was fully open; gauge was +11 above neutral

7/22/23: more than .5 cfs; gauge was +.4 above neutral

7/24/23: more than .5 cfs; gauge was -6 below neutral, no spillway release (note 10 inch drop in 48 hours)

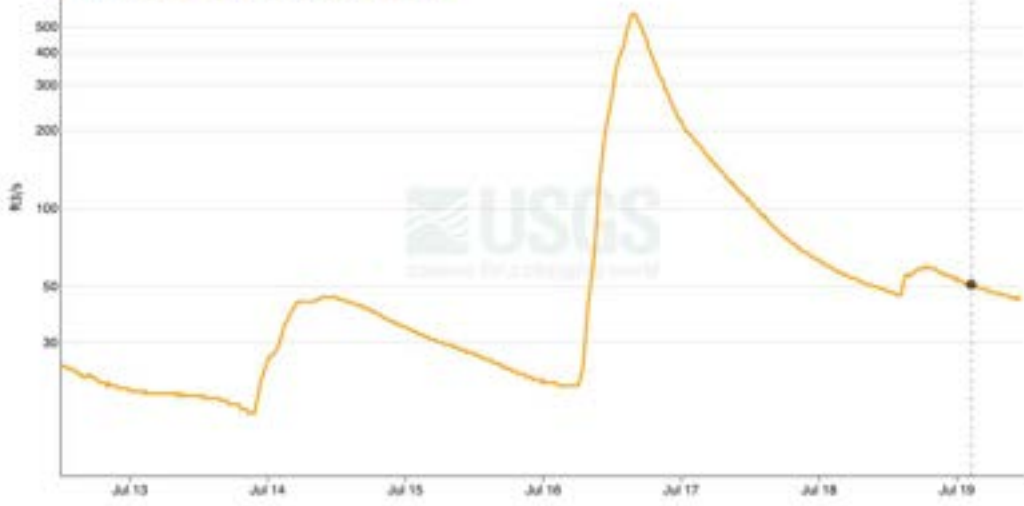
7/25/23: more than .5 cfs; gauge was -5 below neutral; no spillway release

West Branch Swift River Near Shutesbury, MA - 01174565

July 12, 2023 - July 19, 2023

Streamflow, ft³/s

50.8 ft³/s - Jul 19, 2023 01:30:00 AM EDT



Last week

7 days 30 days 1 year

West Branch Swift River Near Shutesbury, MA - 01174565

June 19, 2023 - July 19, 2023

Streamflow, ft³/s

43.5 ft³/s - Jul 19, 2023 12:00:00 PM EDT



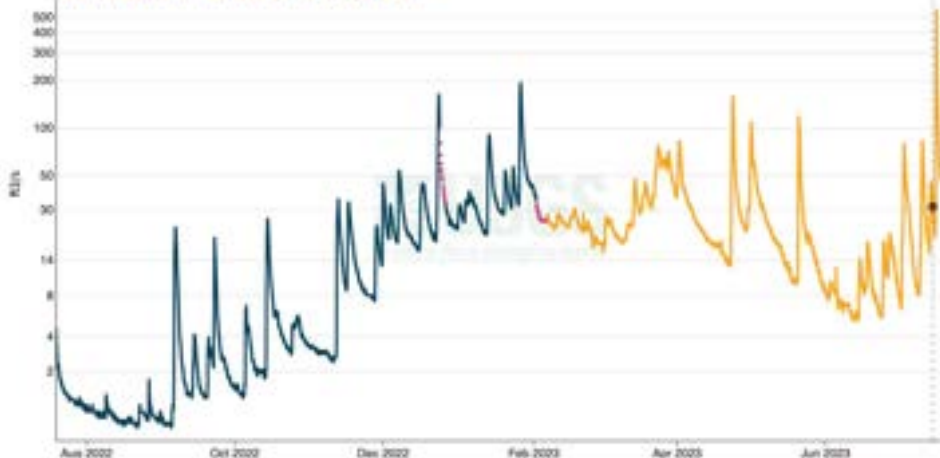
Last 30 days

01174565

July 19, 2022 - July 19, 2023

Streamflow, ft³/s

31.6 ft³/s - Jul 15, 2023 03:45:00 AM EDT



Last year

6/23/23



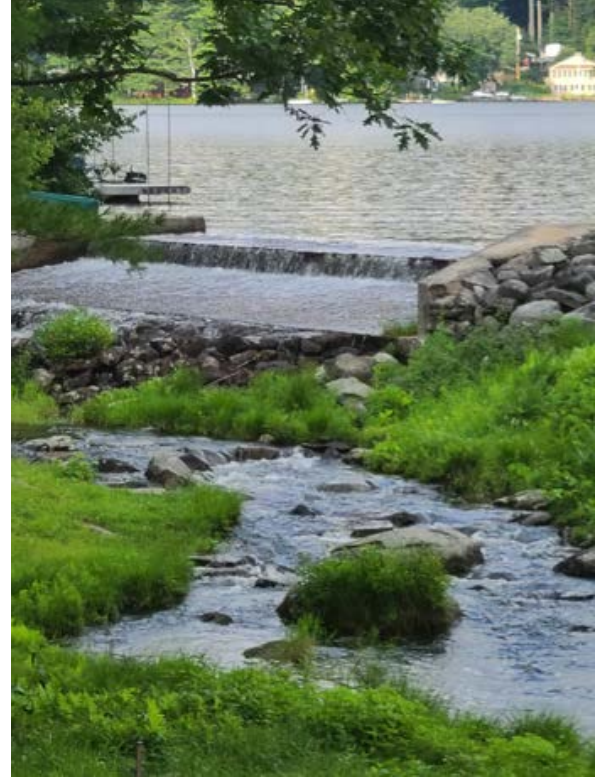
Wednesday, July 5, 2023



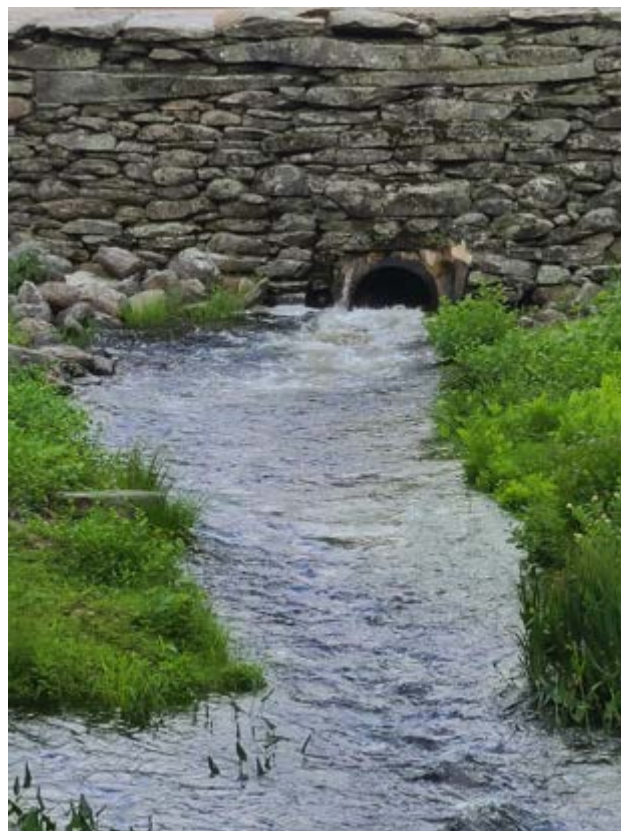
Monday, July 10, 2023



7/13/23



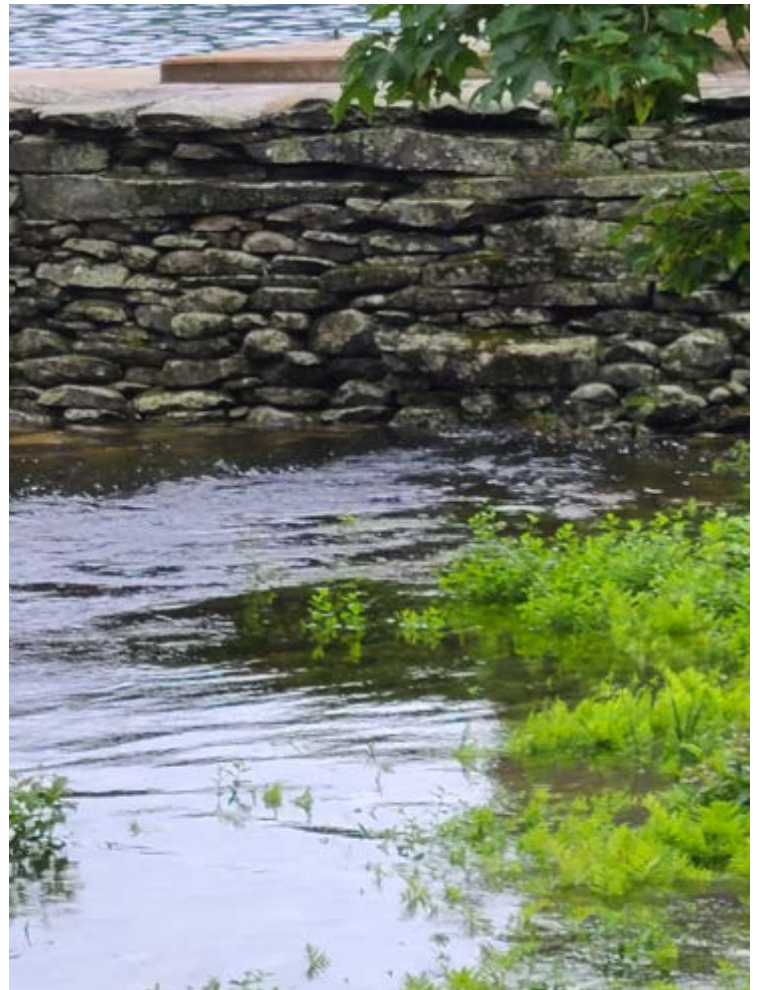
Friday, July 14, 2023



Sunday, July 16

Impromptu site visit at Lake Wyola Dam. Shutesbury Dam Keeper, Howard Kinder, and Mark Rivers were present. Dam Keeper informed the SCC Chair that, in response to recent storm events, he was releasing the maximum amount of water from the dam (i.e., he had opened the sluiceway gate to its fully open position) in order to lower the lake to a standard summer condition of 1-2 inches above the spillway neutral level.

Lakeview Culvert Gauge for Lake Wyola level indicated that the lake was 11 inches above the neutral position at the spillway.



7/24/23

Site Visit with M. DeFant and
M. David.



7/25/23



site visit with Ms. DeFant and Ms. David.

Met with Donna West, LWA President.

Also met with Culvert Replacement project proponents (see attached visit summary)



7/25/23 Erosion Controls

Silt socks were buried in several places.

Silt fences were falling down in several places.

Debris piles had no erosion controls.



Permission for Site Visit given by: N/A

(Owner, applicant, other)

Date permission given: N/A Permission received by: _____

**Shutesbury Conservation Commission
Site Visit Summary**

Observation Date: 7/13/23 (with other observations) **Time:** 2:30 pm

Project Address/Location: Sawmill River Culvert on Locks Pond Road

Applicant(s): Town of Shutesbury

DEP/Permit File#: 286-0279

Type of Project: culvert replacement

Attended:

Commissioners: M. DeFant, M. David

Applicant(s)/Owner/Representative: Becky Torres, Scott Mercier and William Tallman (MAS)

Abutters/Others (require landowner's permission): Howard Kinder-dam keeper John Kinder

Purpose of Visit: (check all apply)

- | | |
|---|--|
| <input type="checkbox"/> Building Permit Application | <input type="checkbox"/> Verify erosion controls |
| <input type="checkbox"/> To assess whether RDA or NOI is required | <input type="checkbox"/> Emergency Certificate |
| <input type="checkbox"/> As part of RDA meeting | <input type="checkbox"/> Monitor Order of Conditions |
| <input type="checkbox"/> As part of NOI hearing | <input type="checkbox"/> Request to amend Order of Conditions |
| <input type="checkbox"/> Verify staked boundaries | <input type="checkbox"/> Request for Certificate of Compliance |
| <input checked="" type="checkbox"/> Pre-construction site visit | <input type="checkbox"/> Work done without permit |

Other (describe): _____

Type of Resource Areas/Buffer Zones: (list)

Reviewed silt sock installation and recommended additional erosion controls to be constructed to protect the stream during initial phase of tree removals on the west side of the road; contractor will keep a supply of materials on site for a trenched silt fence if necessary; approved tree removals; contractor agrees to avoid stump removal when possible; discussed contingencies for high flow conditions as dam is currently releasing over the spillway; dam keeper confirmed he has adjusted the gate settings on the sluiceway to allow for more flow due to high lake levels. The lake level is being lowered at present to normalize water levels, but no further drawdown is anticipated for the construction period.

Recommendations:

Commission expressed concerns about the capacity of the dewatering system to manage more than 20 cfs of flow; the current and recent watershed flows have been in excess of 20 cfs periodically due to frequent extreme weather; contractor has access to a high-capacity pump but it is not mobilized to the site; Commission asked contractor and Town to make arrangements to have mobilize and implement the pump in advance of any predicted extreme precipitation in advance of the storm; contractor advises they can mobilize it within 12 hours; contractor will inform the Commission Chair by phone of any unforeseen problems or flooding issues. 7/16/23: follow up visit; erosion controls were under water; emailed contractor.

Prepared by: Miriam DeFant, Commission Chair

Name

Title

Note: Consider relevant aspects or features such as natural or piped drainage or obvious pollution, topography, alternative locations, existing vegetation, signs of wildlife, vernal pools, rare species habitat, proximity to water bodies or drainage areas, landmarks, recent or historical disturbances, adjacent land use. Very information presented, identify problems and potential solutions.

N/A Contractor Notified on 7/24/23

Permission for Site Visit given by: _____

(Owner, applicant, other)

Date permission given: _____ Permission received by: _____

Shutesbury Conservation Commission

Site Visit Summary

Observation Date: 7/25/23 **Time:** 10:00 AM

Project Address/Location: Lake Wyola Dam and Culvert Replacement Work Site

Applicant(s): Town of Shutesbury

DEP/Permit File#: 286-0279

Type of Project: culvert replacement

Attended:

Commissioners: M. DeFant, M. David

Applicant(s)/Owner/Representative: Becky Torres, Scott Mercier, William Tallman (MAS Building and Bridge)

Abutters/Others (require landowner's permission): _____

Purpose of Visit: (check all apply)

- Building Permit Application
- To assess whether RDA or NOI is required
- As part of RDA meeting
- As part of NOI hearing
- Verify staked boundaries
- Pre-construction site visit
- Verify erosion controls
- Emergency Certificate
- Monitor Order of Conditions
- Request to amend Order of Conditions
- Request for Certificate of Compliance
- Work done without permit

Other (describe): _____

Type of Resource Areas/Buffer Zones: (list)

Erosion controls were found to be damaged; unconsolidated piles of demolition debris had no tarp and was not protected by erosion controls (there was a downgradient pathway that circumvented the erosion controls).

Dam was observed appearing to be fully open and releasing maximum discharge. Water gauge showed that water levels at the Lakeview Road Culvert Gauge was -5" below neutral. Observation on 7/24/23 showed the level to be -6" below neutral.

Commissioner DeFant observed gauge on 7/22/24 at 5 pm to be +4" above neutral (no photo available). Water level dropped at least 10 inches in 48 hours. Commissioners discuss concerns. Mr. Mercier and Ms. Torres said they did not

Recommendations:

know anything about the drawdown. Instructed Mr. Mercier that erosion controls must be repaired and inspected daily.

Commissioners DeFant and David met with Donna West, 59 Shore Drive, President of LWA on 7/25/23 by the Lakeview Culvert. She reported that the LWA email contained information she obtained from a conversation with Howard Kinder, the Shutesbury Dam Keeper, who reported to her that he had been ordered to lower the lake for the Culvert Replacement Project.

Prepared by: M. DeFant Commissioner
Name Title

See attachment.

Note: Consider relevant aspects or features such as natural or piped drainage or obvious pollution, topography, alternative locations, existing vegetation, signs of wildlife, vernal pools, rare species habitat, proximity to water bodies or drainage areas, landmarks, recent or historical disturbances, adjacent land use. Very information presented, identify problems and potential solutions.

Site visit Preamble: Pursuant to the MA Open Meeting Law, the Commission performs site visits only for the purposes of observing conditions, collecting information, and providing guidance to applicants. Decisions, approvals, and denials can be made only by the Commission at a properly advertised public meeting or hearing. Site visit discussions with Commissioners should be kept to a minimum and should in no way be construed to result in final decisions of any kind.