Lake Shenandoah Dam Replacement FAQs

How will the lake change with the dam replacement?

The new water level will be four feet lower than its original height. That lowered height is approximately where the water level is now (October 2024). Due to the relocation of the dam, the lake will be approximately 10 acres smaller than its original footprint (37 acres down to 27 acres).

How long will the project take?

After construction begins, DWR anticipates the project will take approximately 18 months to complete. The goal is to have construction underway by early summer 2025.

Why can the dam height not impact a structure during an extreme flood event?

There are several code and regulation sections that require sound engineering practices and prevent DWR from causing damage to others (e.g., Code of Virginia <u>§§10.1-613.4</u> and <u>62.1-105</u>; <u>4VAC50-20-300B</u>.) The DWR is also required to abide by Virginia's dam safety <u>laws</u> and <u>regulations</u>, administered by the Virginia Department of Conservation and Recreation's Division of Dam Safety and Floodplain Management (DCR).

Why can't the dam be constructed in a way that allows the water level to remain at its historic height and then be lowered when a major rain event is predicted?

Virginia's dam safety <u>laws</u> and <u>regulations</u> limit the Department's ability to lower water levels quickly. The DWR is only allowed to drop water levels 6 inches in a 24-hour period. As such, a substantial lowering of the water level would require much more lead time than current weather forecasting provides and would also compromise the recreational fishery of the lake.

Why is the dam being built so far away from the current dam?

Virginia's dam safety <u>laws</u> and <u>regulations</u> require the DWR to reduce the flow impact and ensure that the water discharge returns to the original stream channel. The new elongated spillway allows for the reduction of flow related to the <u>probable maximum</u> <u>precipitation</u> and to be able to direct the discharge back into the existing stream channel in a controlled manner. When exploring options, the DWR determined that the most feasible approach was to move the dam to create the space needed for a functional dam that complies with DCR regulations with the least impact to neighbors and public safety. While it would not be impossible to build a new dam that meets those criteria in the footprint of the old dam, it was not cost effective, due to the amount of concrete and structures that would be needed to control the volume of water that would pass through it during a storm event.

What will happen to the fish when the lake is drained?

The DWR's fish biologists will conduct multiple fish "salvages" using their electrofishing boat. The plan is to start that work during the winter of 2024 to remove musky. During the spring of 2025, that work will continue, targeting musky, channel catfish, and largemouth

bass. The fish that are removed will be repurposed in other waters within the Lake Shenandoah watershed.

Will the lake be restocked after the new dam is finished?

Yes, the DWR will begin by stocking bluegill sunfish and redear sunfish once the lake is full enough to support a healthy fish population. Once the sunfish spawn, predators like largemouth bass, channel catfish, and musky will be stocked. The hope is to create a fishery very similar to the one that is currently in the lake. This will require some patience as the fishery recovers. However, by starting from scratch, there is a good opportunity to create a more balanced fishery, especially if the DWR is successful in eliminating undesirable species such as common carp, yellow bullhead catfish, green sunfish, and black crappie. Fish should reach "catchable" size within 2-3 years.

How will the aquatic vegetation be managed?

DWR biologists will continue to use an herbicide on an annual or biannual cycle to manage the lily pads, parrot feather, and other undesirable aquatic vegetation.

Will the DWR dredge the lake to make it deeper?

No; unfortunately dredging is outside of the current budget at this time. However, the DWR will continue to investigate options and funding sources for dredging.

When will the lake/DWR property be closed to the public?

To ensure the safety of the public during the construction and renovation process, specific areas of the DWR property at Lake Shenandoah will be closed to the public. To inform the public of areas closed to general access, the DWR will post on-site signage and communicate closings on its various digital platforms. At this time, the DWR anticipates that the closed area will primarily be the trail on the west side of the lake from the parking area to the dam. The lake itself will be closed to fishing and boating during the dewatering period. These activities will resume once the water level returns to full pool.