

## **Francis E. Walter Reservoir Recreation Operations Plan for 2024**

Note: This year's 2024 recreation plan has no changes from the prior year. 2023 included a minor change to the "Planned Fishing Releases", the first three weekends in March were moved to three consecutive weekends in September following Labor Day. This will stay the same in 2024. Please note at the conclusion of the ongoing feasibility study, we will host a public meeting for additional comment. The below plan will remain in effect until that time.

### **Introduction**

The plan for 2024 will incorporate no new changes and will be consistent with the 2023 recreation plan that was agreed upon by the U.S. Army Corps of Engineers, Pennsylvania Department of Conservation and Natural Resources, and the Pennsylvania Fish and Boat Commission in October 2022. Based upon past program performance as well as input received through stakeholders, no changes were deemed necessary at this time. Water is again being allocated to ensure white water releases from 1 July through Sunday 18 August and fisheries releases from 1 July through Friday 6 September, while relying on seasonal precipitation and additional water accumulations to allow scheduling of releases for later in the season (late August through mid-October).

### **Primary Objective**

The primary objective of this plan is to maintain a pool level of at least elevation 1365 by 1 July while not exceeding elevation 1370 at any time for recreational purposes. The gaging station road will be open for public travel 1 March through Columbus Day weather permitting.

### **Fishing Releases**

Total planned fishing releases (22)

Planned dates (16) for fishing releases (target 400cfs\*) are:

\*March: 23, 24, 30, 31

\*April: 6, 7, 13, 14, 20, 21, 27, 28

\*May: 4, 5, 12, 19

\* Release will be set to match inflow with a target release up to 400cfs. Inflow will not be augmented by use of storage to satisfy the 400cfs target.

Planned dates (6) for fishing releases (target 350cfs\*\*) are:

\*\*September: 7, 8, 14, 15, 21, 22

\*\* With the pool at 1365 on 1 July, storage is sufficient to support the planned white-water recreation releases through 18 August and Fisheries augmentation releases of up to 100cfs through Friday 12 July and up to 50cfs through Friday 6 September. After those dates additional water must be accumulated during the recreation season to make the 6 additional 350cfs fishing releases possible. These releases will be made from 1 AM Saturday until 1PM Sunday for a continuous 36-hour period. If these fishing releases are cancelled due to high flows, they may be rescheduled at a later date at the Corps discretion.

During the period of March thru May, planned fishing releases have a target release of inflow up to a maximum of 400cfs. These planned fishing dates are dependent on available storage below elevation 1370 and forecasted hydrological conditions. Since they are primarily scheduled for the period when reservoir storage is being increased, in an attempt to reach but not exceed elevation 1370, it may be necessary to release water in advance and/or after these dates in order to restrict flows to this range. If the pool elevation is 1370 and inflow is greater than 1,000cfs the Wednesday prior to a scheduled fishing release, said release will be cancelled. These releases, before the official start of recreation season (11 May), will be for the entire weekend (Friday afternoon until Monday morning). The U.S. Army Corps of Engineers in its sole discretion shall determine the releases necessary to satisfy this objective, taking into consideration potential impacts on attaining the target pool elevation of 1370 by midnight May 10th. Any cancellation will be announced the Wednesday prior to the planned fishing date.

### **White Water Releases**

Planned white water release dates (24) are listed below. All other dates during the recreation season, until the weekend of September 28-29 have a planned fisheries augmentation release of at least 50cfs if sufficient water is available.

May: 11, 18, 25, 26

June: 8, 9, 22, 23

July: 13, 14, 20, 21, 27, 28

August: 3, 4, 10, 11, 17, 18, 24\*, 25\*, 31\*

September: 1\*

October: as provided by end of year releases starting Friday 11 October.

May and June releases are dependent on hydrologic conditions being sufficient to supply enough water for the release and maintain a pool elevation above 1365. Pool will not be lowered below 1365 in the May-June period for recreational purposes.

\* With the pool at 1365 on 1 July, storage is sufficient to support the planned white-water recreation releases through 18 August and Fisheries augmentation releases of up to 100cfs through Friday 12 July and up to 50cfs through Friday 6 September. After those dates additional water must be accumulated during the recreation season to make additional releases possible.

\*\*The 11-12 October release is intended to provide a means of releasing any excess water that may have accumulated during the recreation season and shall not exceed a pool elevation of 1350. This is the last added increment for the 2024 recreation plan. Fisheries releases through the season will be accommodated before the final (11-12 October) release will be considered. This release is intended to release all excess water. Releases for the final weekend will be determined by the Corps of Engineers and are intended to make best available use of remaining water while making gate changes at 12-hour intervals (1 AM and 1 PM) at a continually decreasing rate to avoid any undesirable flow fluctuations. Depending on the volume of water available, releases will start on Friday, 11 October (4000cfs max.) and Saturday, 12 October (2500cfs max). Once started, releases will be reduced at 12-hour intervals by approximately 25% until such time as the pool is returned to elevation 1300 and releases are set to match inflow. The actual timing and amount of the releases will be determined by the Corps of Engineers and announced by Wednesday 9 October. It will be up to the Corps discretion to modify the timing of this release to best utilize the storage available. Ramping of the start and tail end of release will be utilized to mimic a natural storm event.

### **Summary of Operations**

Total: 22 fishing releases and 24 white water release dates (excluding any releases made during final event on 11-12 October): 4 of which are dependent on additional water accumulation during the recreation season. Along with the 22 fishing release dates, 6 of which are dependent upon additional water accumulated during the recreation season. Fisheries augmentation releases are planned on all other days during the recreation season. All late season releases are dependent upon additional water becoming available during the year.

Details of planned operations are presented below.

### **Initial Filling: Start to 10 May**

For the 2024 season, the maximum storage level will remain at elevation 1370. On or before 1 April, storage will be initiated at F. E. Walter Dam. The exact date that storage is initiated will be determined by the Corps of Engineers based on basin hydrologic conditions at the time and projected meteorological forecasts. Storage could start earlier if

precipitation raises the pool above elevation 1300. During this period outflows will be limited to 250cfs on weekdays and inflow will be passed on weekends. The fishing weekend release (target of 400cfs) could be eliminated, and the weekday limit lowered to 225cfs if hydrologic conditions were such that reaching the target elevation of 1370 by midnight 10 May was determined to be in jeopardy. The storage of any excess inflows will continue until the pool reaches the elevation of 1370. Once pool level reaches 1370, outflow will match inflow. The pool elevation of 1370 is expected to be reached no later than midnight Friday 10 May, in time for the first planned white-water release to begin on Saturday 11 May at 1 AM. If for any reason the target pool elevation of 1370 is not reached in time for the first white water release, the agencies will reconvene to determine the appropriate course of action.

Special operations will prevail for the first four weekends of trout season as planned fishing release dates listed above (same as other fishing release weekends). Releases will be up to a maximum of 400cfs for these dates. Note: Beginning in 2023, the trout opener occurs annually on the first Saturday in April statewide. Commercial boating from White Haven to Rockport will continue to be restricted by DCNR for the first two weekends of trout season.

The maximum allowable pool is elevation 1370 and therefore if the pool exceeds 1370, the planned flow restrictions will not be accommodated. Immediately prior to these weekends, the situation will be evaluated by the Corps and based on current hydrologic conditions; water may be released immediately prior to these dates to help ensure the pool does not exceed the limit of 1370. The Corps will announce on the Corps webpage the Wednesday prior to these weekends if planned releases need to be cancelled.

Pool elevations above elevation 1370 at any time are considered undesirable encroachments into flood control storage and will normally be evacuated as quickly as possible in accordance with the Corps' F.E. Walter Reservoir Water Control Manual. The Corps of Engineers will be solely responsible for making regulation decisions. As in previous years, flood control objectives take priority and if necessary, any of the water stored above elevation 1300 could be released if deemed necessary by the U.S. Army Corps of Engineers.

### **11 May- 30 June**

White water weekend events are planned to start on 11 May (Saturday only). As in previous years, all planned releases will be made for 12-hour periods from 1 AM until 1 PM.

During this period, two fishing release dates are planned on 12 May and 19 May, each only a single day. Releases will be set to match inflow up to a maximum release of 400cfs. As discussed for the operations during the initial filling period, sufficient storage below a pool elevation of 1370 needs to exist to accommodate restricted outflows. Releases to create storage space for supporting planned fishing dates will not draw down the pool below elevation 1365.

A five-foot pool elevation restriction will be enacted for this period. The pool elevation will be maintained between elevations 1365 and 1370 from 11 May through 30 June. The 5-foot pool limit is intended to help conserve cooler water for later in the season, and to help in-lake fish spawning. As previously noted, a pool level above elevation 1370 is an undesirable encroachment into flood control storage which will normally be evacuated as quickly as possible at the sole discretion of the Corps of Engineers.

Target weekday fisheries augmentation will be 200cfs in May, and 200-250cfs in June, but will be adjusted as needed due to hydrologic conditions in an effort to maintain a pool elevation between 1365 and 1370. Weekend white water recreation releases and fishing releases during this period will be made as long as sufficient water exists above elevation 1365, with fishing releases set to match inflow (with a maximum release target of 400cfs) and 800cfs in May and 750cfs in June for white water releases. If at any time the pool is projected to exceed 1370 during a planned white-water weekend, adjustments in release rates (greater than stated target maximum) will be made at the sole discretion of the Corps of Engineers and appropriate announcements of changes will be made. Tables 1 and 2 provide priorities for determining the length and magnitude of white-water recreation releases to be made in May and June if stored water is not sufficient to make full releases for the planned 12-hour periods. Releases on weekends in this time period, (1-2, and 15-16 June) when neither fishing nor white water releases are planned will be 200-250cfs, which is the same as weekday fisheries releases. If the pool is at elevation 1365, releases will be set equal to inflow to maintain the 1365 elevation until 1 July. On Wednesday before scheduled releases, the situation will be evaluated to determine if sufficient water remains above elevation 1365 to maintain the fisheries releases and the remaining June white water releases (8-9 and 22-23 June). If it is determined that sufficient water does not remain, adjustments in operations for the remainder of June will be made to best utilize available water. Any cancellations or modifications of release plans will be posted on the Corps webpage.

### **Actions Starting 1 July**

Starting in July there will no longer be any specific flow targets or restrictions on pool level fluctuations, other than the 1370 maximum allowable pool elevation. In July, storage will be utilized for weekday and weekend fisheries augmentation releases of 100cfs above inflow, up to a total of 300cfs. On white water recreation weekends, for the 12-hour periods from 1 AM until 1 PM on both Saturday and Sunday, releases will be set at inflow plus 600cfs up to a maximum of 800cfs in July, and inflow plus 650cfs up to 850cfs for white water events through 18 August. For the other 12-hour periods of the white-water weekends, the release will revert to the fisheries augmentation release. Fisheries augmentation releases will be 100cfs plus inflow up to 300cfs through 12 July and 50cfs thereafter through 6 September. At the end of June with the pool at elevation 1365, there is sufficient water available to make the planned releases for white water weekends through 18 August and fisheries augmentations through 6 September.

## **Plan to Utilize any Additional Storage**

The 2024 plan is similar to previous plans in that both fisheries augmentation and white-water releases utilize available water and rely on additional inflow during the recreation season to make late season releases possible. See increments below. If at any time precipitation occurs to allow sufficient additional water to accumulate; planned recreational releases will be scheduled and announced. Incremental volumes of accumulated water have been allocated equitably among the white water releases, recreational fishing releases, and fisheries augmentation purposes. Additional weekend white water releases, fishing and fisheries augmentation releases will be added based on how much additional water is accumulated and at what point in the season this water becomes available. If at any time the pool is projected to exceed 1370 during a planned white-water weekend, adjustments in release rates (greater than stated target maximum) will be made at the sole discretion of the Corps of Engineers and appropriate announcements of changes will be made.

The priority order for added augmentation increments is listed below.

1. When additional water is accumulated, add whitewater event on 24 August (650cfs) and increase fisheries augmentation releases to 100cfs for period 13-19 July.
2. Add the white-water event for 25 August (650cfs) and increase fisheries augmentation releases to 100cfs for period 20-26 July.
3. Add fishing release on 7-8 September, 250cfs plus inflow 350cfs max.
4. Add whitewater event on 31 August (650cfs) and increase fisheries augmentation releases to 100cfs for period 27 July - 2 August.
5. Add whitewater event on 1 September (650cfs) and increase fisheries augmentation releases to 100cfs for period 3-9 August.
6. Increase fisheries augmentation releases to 100cfs for period 10 August - 6 September.
7. Add fishing release on 14-15 September, 250cfs plus inflow 350cfs max.
- 8a. Increase 24-25 August white water total release to 1200cfs Saturday and 850 on Sunday.
- 8b. Increase 24-25 August white water total release to 1700cfs Saturday and 1000cfs on Sunday.
9. Add fisheries augmentation release of 50cfs for period 7-13 September.
10. Add fishing release on 21-22 September, 250cfs plus inflow 350cfs max.
- 11a. Increase 31 August - 1 September white water total release to 1200cfs Saturday and 850cfs on Sunday.
- 11b. Increase 31 August - 1 September white water total release to 1700cfs Saturday and 1000cfs on Sunday.
12. Add fisheries augmentation release of 50cfs for period 14-27 September.
13. Storage in excess of above flow needs may be released over the period from Thursday (ramping day), 10 October through Monday, 14 October. This release will allow those interested in larger white water recreation releases to plan

accordingly. The release rate will be based on the amount of water available. Depending on the volume of water available, maximum releases will start on either Friday, 11 October (4000cfs max.) or Saturday, 12 October (2500cfs max). Once started, releases will be reduced at 12-hour intervals by approximately 25% until such time as the pool is returned to elevation 1300 and releases are set to match inflow. Final scheduling and amount of this release will be determined by the Corps and posted by Wednesday, 9 October.

Final release amounts and durations for white water events will be determined and posted on the Corps webpage and Facebook pages the Wednesday prior to the event. If sufficient water is available, each scheduled white-water event will be held at the full amount before subsequent planned white-water events will be scheduled. Additional whitewater releases will not be scheduled unless water stored is sufficient to allow at least a 12-hour release of 600cfs. As additional releases become possible due to accumulation of water, the additional increments of the recreation plan will be announced. Due to the fact that timing of the white water and fisheries portions of increments 1-5 are significantly offset, if water is not available for the entire increment, that increment will be cancelled, and excess water will be retained for subsequent increments. For increments 6 through 13, if sufficient water is not available for the entire increment, adjustments will be made by reducing the magnitude of white-water releases or number of days fisheries releases will be made. Any additional adjustments deemed necessary will be made through interagency coordination and announced as necessary. Following this procedure may mean that incremental releases become scheduled or modified with little advance notice.

**Table 1: May Release Rate Priority**

Saturday		Sunday		Volume Required (DSF)
Rate (CFS)	Duration (HRS)	Rate (CFS)	Duration (HRS)	
600	12			300
650	12			325
700	12			350
700	12	500	6	475
750	12	550	6	512.5
800	12	600	6	550
800	12	700	6	575
800	12	600	12	700
800	12	700	12	750
800	12	800	12	800

Maximum release 800cfs in May

**Table 2: June Release Rate Priority**

Saturday		Sunday		Volume Required (DSF)
Rate (CFS)	Duration (HRS)	Rate (CFS)	Duration (HRS)	
600	12			300
650	12			325
700	12			350
700	12	500	6	475
750	12	550	6	512.5
750	12	600	6	525
750	12	700	6	550
750	12	750	6	562.5
750	12	750	12	750

Maximum release 750cfs in June

**Table 3: Future Release Schedule**

To be determined at agency stakeholder meeting after conclusion of the current feasibility study.

**2025 Proposed Schedule:**

Fishing Releases		White Water Releases	
<b>March</b>	22, 23, 29, 30	<b>May</b>	10, 17, 24, 25
<b>April</b>	5, 6, 12, 13, 19, 20, 26, 27	<b>June</b>	7, 8, 21, 22
<b>May</b>	3, 4, 11, 18	<b>July</b>	12, 13, 19, 20, 26, 27
<b>September</b>	6, 7, 13, 14, 20, 21	<b>August</b>	2, 3, 9, 10, 16, 17, 23, 24, 30, 31
		<b>October</b>	10, 11