

## **Francis E. Walter Reservoir Recreation Operations Plan for 2013**

### **Introduction**

The plan for 2013 will incorporate some changes that were agreed upon by the U. S. Army Corps of Engineers, Pennsylvania Department of Conservation and Natural Resources, and the Pennsylvania Fish and Boat Commission based upon past program performance as well as input received through stakeholders. This year water is again being allocated to ensure white water releases from 1 July through 18 August and fisheries releases from 1 July through 8 September, while relying on seasonal precipitation and additional water accumulations to allow scheduling of releases for later in the season (late August through October). The primary objective of this plan is to obtain a pool level of at least elevation 1365 by 1 July while not exceeding elevation 1370 at any time for recreational purposes.

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

April 13\*-14\*, 20\*-21\*, 27\*-28\*

May 4\*-5\*, 12\*, 19\*

October 11, 14

All dates are dependent on hydrologic conditions and the absence of the need for flood control operations.

\* Release will be set to match inflow with a target release up to 400 cfs.

Planned fishing releases have a target release of 400 cfs. Planned fishing dates are dependent on available storage below 1370 elevation 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. These fishing releases will be like the 12 hr white water releases in order to conserve water. The Corps of Engineers in its sole discretion shall determine the releases necessary to satisfy this objective. Any cancelation will be announced the Wednesday, prior to the planned fishing date.

Planned white water release dates are listed below. All other dates during the recreation season, through October 13th have a planned fisheries augmentation release of at least 50 cfs if sufficient water is available.

May: 11, 18, 25, 26  
June: 8, 9, 22, 23  
July: 6, 7, 20, 21, 27, 28  
August: 3, 4, 10, 11, 17, 18, 24\*, 25\*, 31\*  
September: 1\*  
October 12, 13\*\*

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 enhancement releases of up to 100 cfs through 27 July and up to 50 cfs through 8 September. After those dates additional water must be accumulated during the recreation season to make additional releases possible.

\*\*The 11-14 October release is for both fishing and white water and will only occur if sufficient stored water is available. This is the last added increment for the 2013 recreation plan. Fisheries releases through 13 October will be assured before the 11-14 October release will be considered. The 11-14 October release is intended to release all excess water. The release for Friday, 11 October is a fishing release planned for 400-500 cfs. Saturday release is for white water and is planned to be 1700 cfs, followed by a 1000 cfs release on Sunday 13 October. Monday 14 October will be another fishing release of 400-500 cfs. The actual timing and amount of the releases will be determined by the Corps of Engineers and will depend on the actual amount of water available

Total: 12 fishing releases and 26 white water release dates are planned along with fisheries enhancement releases on all other days during the recreation season. Late season white water, fishing and fisheries enhancement 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 2013 season, the maximum storage level will be elevation 1370. On or before 1 April 2013 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 250 cfs on weekdays and during weekends the outflow will normally be set equal to inflow up to a maximum release rate of 1000 cfs except during the scheduled “fishing release” dates listed above. Setting weekend releases to match inflow during this time period is intended to match the natural conditions at the time and not favor either rafting or fishing. The weekend limit could be lowered to 750 cfs and the weekday limit lowered to 225 cfs if hydrologic conditions were such that reaching the target elevation of 1370 by 11 May 2013 was determined to be in jeopardy. The storage of 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 2013, in time for the first planned white water release to begin on Saturday 11 May 2013 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. Releases will be up to a maximum of 400 cfs for these dates. 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 1370 and therefore if 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 insure 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 1AM until 1 PM.

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 400 cfs. As discussed for the special operations during the initial filling period, sufficient storage below a pool elevation of 1370 needs to exist to accommodate restricted inflows. Releases to create storage for supporting planned fishing dates will not drawdown the pool below 1365 elevation.

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 noted before, 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 Corps of Engineers.

After pool elevation of 1370 is reached, maximum weekday releases for fisheries enhancement for the period from 11 May thru 31 May will be 200 cfs and will be in the 200-250 cfs range in June. Weekend white water recreation releases and fishing releases during this period will be made as long as sufficient water exists above elevation 1365 with a maximum release target of 400 cfs for fishing releases and 800 cfs in May and 750 cfs in June for white water releases. 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 June (1-2, 15-16 and 29-30 June) when either fishing or white water releases are not planned will be 200-250 cfs, 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 level. In July, storage will be utilized for weekday and weekend fisheries enhancement releases of 100 cfs above inflow, up to a total of 300 cfs. On white water recreation weekends, for the 12 hour periods from 1AM until 1 PM on both Saturday and Sunday, releases will be set at

inflow plus 600 cfs up to a maximum of 800 cfs in July and inflow plus 650 cfs up to 850 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 enhancement release. Fisheries enhancement releases will be 100 cfs plus inflow up to 300 cfs through 26 July and 50 cfs thereafter through 8 September. Water storage capacity at elevation 1365 at the end of June is sufficient to make the planned releases for white water weekends through 18 August and fisheries enhancements through 8 September.

### **Plan to utilize any additional storage**

The 2013 plan is similar to previous plans in that both fisheries enhancement and white water releases will utilize available water and rely on additional inflow during the recreation season to make late season releases possible. 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, fishing and fisheries enhancement purposes. Additional weekend white water releases, fishing and fisheries enhancement releases will be added based on how much additional water is accumulated and at what point in the season this water becomes available.

The priority order for added increments is listed below:

1. When additional water is accumulated, add whitewater event on 24 August (650 cfs) and increase fisheries enhancement releases to 100 cfs for period 27 July-2 August. Releases for fisheries enhancement will be the augmentation amount plus inflow up to a maximum of 300 cfs.
2. Add the white water event for 25 August (650 cfs) and increase fisheries enhancement releases to 100 cfs for period 3-9 August.
3. Add whitewater event on 31 August (650 cfs) and increase fisheries enhancement releases to 100 cfs for period 10-16 August.
4. Add whitewater event on 1 September (650 cfs) and increase fisheries enhancement releases to 100 cfs for period 17-23 August.
5. Increase fisheries enhancement releases to 100 cfs for period 24 August-13 September.
6. Increase 24-25 August white water release to 1700 cfs Saturday and 1000 cfs on Sunday.
7. Add fisheries enhancement release of 50 cfs for period 14 September-28 September.
8. Increase 31 August-1 September white water release to 1700 cfs Saturday and 1000 cfs on Sunday.
9. Add fisheries enhancement release of 50 cfs for period 29 September-13 October.

10. Storage in excess of above flow needs may be released over the period from Friday, 11 October through Monday 14 October. The scheduling of this release will allow those interested in both fishing releases and larger white water recreation releases to plan accordingly. The release rate will be based on the amount of water available. Planned release will be 400 cfs on Friday, 11 October, 1700 cfs on Saturday the 12<sup>th</sup>, 1000 cfs on the 13<sup>th</sup> and 400 cfs on Monday the 14<sup>th</sup>. Flow ramping starting on 11 October and ending on the 14<sup>th</sup> will allow both float fishing and white water opportunities during the final drawdown of the reservoir to winter pool level of 1300. Final scheduling and amount of this release will be determined by the Corps and posted by Wednesday, 9 October 2013.

Final release amounts and durations for white water events will be determined and posted on the Corps webpage 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 600 cfs. As additional releases become possible due to accumulation of water, the additional increments of the recreation plan will be announced.

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 750 cfs in June