

APPENDIX B

**F.E. Walter Reservoir 2008 Operation Plan
Public Notice CENAP-PL-E-08-02**



**US Army Corps
of Engineers**

Philadelphia District

Public Notice

Public Notice No.
CENAP-PL-E-08-02

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In Reply Refer to: Environmental Resources Branch

NOTICE IS HEREBY GIVEN, that the Philadelphia District, U.S. Army Corps of Engineers in cooperation with the Pennsylvania Fish and Boat Commission, Pennsylvania Department of Conservation and Natural Resources and the Delaware River Basin Commission is conducting a temporary operations plan at F.E. Walter Reservoir in 2008. The Francis E. Walter Reservoir, originally known as Bear Creek Reservoir, is located near the convergence of Bear Creek and the Lehigh River in Luzerne and Carbon Counties in northeastern Pennsylvania (Figure 1). It is a man-made impoundment created by the U.S. Army Corps of Engineers in 1961 by damming the Lehigh River at the confluence with Bear Creek. The 3,000-foot long, 234-foot high earth-fill dam creates an 80-acre pool at the conservation pool 1,300-foot National Geodetic Vertical Datum (N.G.V.D.) elevation and controls a drainage area of 288 square miles. The reservoir is approximately 86 miles north of Philadelphia, 20 miles southeast of Wilkes-Barre, 39 miles south of Scranton and 45 miles north of Allentown. The project area is part of the Pocono Mountain complex.

F.E. Walter, in addition to aiding in flood control along the Lehigh River, is operated for recreation and historically used to store water for drought emergencies at the request of the Delaware River Basin Commission. The project was originally authorized as a single purpose flood control project with recreation being added later. The F.E. Walter Reservoir was authorized in House Document No. 587, 79th Congress, 2nd Session for Lehigh River flood control protection. The reservoir project was later authorized for recreation as part of Public Law 100-676, Section 6, dated November 17, 1988.

F.E. Walter Reservoir plays a vital role in providing flood control and recreation in the Lehigh River watershed. In the recent past, public interest has grown in regard to modifying operations at F.E. Walter Reservoir to benefit in-lake and downstream recreation meanwhile maintaining flood control capabilities, and protection of the environment. Operation of the reservoir during flood storage events inundates a project access road that crosses the upstream side of the dam. This access road is used by dam personnel for operation and maintenance of the dam and related project features. Historically, pool level operations at F.E. Walter Reservoir have been tailored, in part, to re-open this access road as soon as feasibly possible following a flood storage event. The construction of a new access road across the top of the dam has provided for more flexibility in pool level operations. As a result, opportunities to further evaluate and study the public recreational alternatives associated with the reservoir emerged in 2005.



FIGURE 1. F.E. Walter Reservoir and Lehigh River watershed.

An F.E. Walter Reservoir Flow Management Working Group was created with the intent to develop a temporary operations plan that increases the recreational and environmental potential of the reservoir and Lehigh River without negatively impacting the projects designated purposes. Members of the working group include the U.S. Army Corps of Engineers, Pennsylvania Fish and Boat Commission, Delaware River Basin Commission, Pennsylvania Department of Conservation and Natural Resources and other stakeholders. Following the coordination and evaluation of the 2005, 2006, and 2007 temporary operation plans results with the focus on the operational, environmental, and recreational data collected and evaluated during each of the plans, a 2008 modified operational plan has been developed.

The plan for 2008 will be substantially different from that of 2007. While the 2007 plan was able to satisfy many of the water needs, modifications are being made to improve likelihood of recreational releases in the May-June timeframe while holding the 5 foot pool fluctuation limit. Water is being allocated to insure July and August white water recreational releases while relying on seasonal precipitation and additional water accumulations to allow scheduling of the planned September events. Water is also being reserved to insure the ability to make the augmentation releases for fisheries throughout the entire recreation season. Other small modifications as well as changes to October operations are also planned. Planned white water release dates are listed below:

May: 10th, 24th, 25th (no release on Mothers Day, 11 May)

June: 7th, 8th, 21st, 22nd

July: 5th, 6th, 19th, 20th

August: 2nd, 3rd, 16th, 17th, 30th, 31st

September: 13th, 14th, 27th, 28th

(The September dates are planned but will only be scheduled if precipitation and additional water accumulation occurs during the recreation season.)

October: 10th, 11th, 12th

(The October dates will only occur if sufficient water remains. Release dates of 11 and 12 October take precedence over 10 October.)

Total: 24 white water release dates planned, 7 of which are dependent upon additional water storage.

Except for the dates listed above, daily augmentation releases of up to 50 cfs for fisheries enhancement will be made throughout the recreation season.

For the 2008 season, the maximum storage level will be increased to elevation 1370, five feet higher than in 2007. On or before 1 April 2008 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. 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. 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 level of 1370 by 10 May 2008 was determined to be in jeopardy. Special operations will prevail for the first two weekends of trout season (April 12-13 and April 19-20). Releases will be restricted to 400 cfs for these two weekends. This restriction is consistent with DCNR restrictions placed on commercial boaters in the upper reaches of the Lehigh River from White Haven to Rockport. The storage of excess inflows will continue until the pool reaches the elevation of 1370. Once pool level reaches 1370, outflow will match inflow until the start of the recreation season (10 May). The pool elevation of 1370 is expected to be reached no later than Friday 9 May 2008, in time for the first planned white water release to begin on Saturday 10 May 2008.

Pool elevations above elevation 1370 at any time are generally 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. If weather forecasts are favorable, the encroachment into flood control storage may be retained for brief periods to support planned recreational opportunities. The Corps of Engineers will be solely responsible for making this determination. As in previous years, flood control objectives take priority and if necessary any of the storage above elevation 1300 could be released if deemed necessary by the U.S Army Corps of Engineers.

May-June

White water weekend events are planned for every other weekend starting on May 10th. No white water release is planned for Mother's Day, May 11th. As in previous years, the planned releases will be made for 12 hour periods from 1AM until 1 PM on Saturday then from 1 AM until 1 PM on Sunday provided sufficient water is available.

The pool elevation will be maintained between elevations 1365 and 1370 from 10 May through 30 June. This is raised 5 feet over last year's level in an attempt to help improve likelihood of making all planned releases in May and June. Raising the pool by 5 feet adds a total of 1403 DSF of storage and increases the storage volume within the 5 foot pool limitation by 60 DSF. 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. After pool elevation of 1370 is reached, weekday augmentation releases for fisheries enhancement during May will be 200 cfs and will be in the 200-250 cfs range in June. Weekend white water recreation releases during this period will be made as long as sufficient storage exists above elevation 1365 with a release target of 800 cfs in May and 750 cfs in June. 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 storage is not sufficient to make full releases for the 12 hour periods planned. Releases for fisheries enhancement on weekends when white water releases are not planned will be set to match inflow up to a maximum of 400 cfs during this period. If storage is not available above elevation 1365, releases will be set equal to inflow to maintain the 1365 elevation until 1 July. If necessary, cancellations or modifications of white water release plans will be announced (posted on Corps webpage) on the afternoon of the Wednesday before the white water recreation weekend.

The raising of the pool by 5 feet to 1370, elimination of the white water recreation release for May 11th, reduction in weekend recreation release rates, and reduction of weekday release rates are all aimed at preserving storage levels to allow accomplishment of all purposes of the plan while limiting the pool to elevations between 1370 and 1365 during this time period.

Table 1. May Release Rate Priority (Maximum release 800cfs in May)

Saturday		Sunday		Volume Required (DSF)
Rate (CFS)	Duration (DSF)	Rate (CFS)	Duration (HRS)	
600	12			300
650	12			325
700	12			350
700	12	500	6	425
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

Table 2. June Release Rate Priority (Maximum release 750 cfs in June)

Saturday		Sunday		Volume Required (DSF)
Rate (CFS)	Duration (DSF)	Rate (CFS)	Duration (HRS)	
600	12			300
650	12			325
700	12			350
700	12	500	6	425
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

July- August

Starting in July, there will no longer be any specific flow targets or limits on pool levels. For this time period, sufficient storage will be reserved to insure weekday and non-recreational weekend fisheries enhancement releases of 50 cfs above inflow, up to a total of 250 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 750 cfs up to a maximum of 1000 cfs and held on each of the planned weekends as long as storage permits. For the other 12 hour periods of the weekend, the release will revert to the fisheries enhancement augmentation release of 50 cfs above inflow up to 250 cfs. Storage capacity at elevation 1365 at the end of June is sufficient to make the planned white water weekend releases through August 30-31 as well as the releases for fisheries enhancement.

September

As in the July-August timeframe, in September storage sufficient to provide for a fisheries enhancement release of 50 cfs above inflow (up to 250 cfs) will be reserved to insure that the augmentation can be made during the entire month. On the other hand, white water recreation releases planned for September require additional precipitation and water accumulation during the recreation season to allow those to occur. This is a significant change from the 2007 plan. The plan for 2008 recognizes that white water recreation weekend releases in the July-August timeframe are more important than the September releases and the fact that additional precipitation is likely to allow at least some of the September events to be added while still preserving storage to accomplish the weekday fisheries enhancement augmentation of 50 cfs regardless of hydrologic circumstances through September. If at any time precipitation occurs to allow sufficient additional water to accumulate; planned white water recreation releases will be scheduled. Accumulated water will be allocated and utilized for the next upcoming planned white water weekend release. Release priorities for these September events are listed in Table 3. Final release amounts and durations will be determined and posted on the Corps webpage the Wednesday prior to the weekend. If sufficient water is available, each scheduled white water event will be held for both Saturday and Sunday at the full amount of 750 cfs plus inflow (maximum release of 1000 cfs) before subsequent planned white water events will be scheduled. If storage is not sufficient to allow at least a one day (12 hour) release of 600 cfs, the white water release for the weekend will be cancelled. As additional planned events become possible due to accumulation of water, releases will be scheduled and announced no later than the Wednesday before the planned white water release date. **Following this procedure may mean that events are cancelled, scheduled or modified with little advance notice.**

Table 3. September Release Rate Priority (Maximum release rate will be set at inflow plus 750 cfs up to 1000 cfs)

Saturday		Sunday		Volume Required (DSF)
Rate (CFS)	Duration (DSF)	Rate (CFS)	Duration (HRS)	
600	12			300
650	12			325
700	12			350
700	12	500	6	425
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
900	12	900	12	900
1000	12	1000	12	1000

October

At the end of the recreation season, if sufficient water still remains above elevation 1300, the planned white water releases for 11-12 October will be scheduled. Releases for that weekend will be for the usual 12 hour period and range between 750 and 1200 cfs. Weekday releases in October leading up to the final event will not be less than 144 cfs. Target releases for the remaining weekends in October (4, 5, 18, 19, 25 and 26 October) will range between 350-400 cfs.

If more than sufficient water remains for what is needed to accomplish the above, a final weekday release will be scheduled for Friday, 10 October 2008. This release is the last increment of the 2008 recreation plan and is primarily intended to return the pool to its normal elevation of 1300. The scheduling of 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. Release will be set at a maximum of 4000 cfs. Final scheduling and amount of this release will be determined and posted on Wednesday, 8 October 2008.

Due to operational difficulties experienced in 2007 with the existing bypass system, it will not be available for use this year. All releases will be made from the flood control gates. It is expected that the bypass valves will be replaced after the conclusion of this year's recreation season and will be available for use in 2009.

A Draft Environmental Assessment was prepared in accordance with National Environmental Policy Act (NEPA) regulations. This EA assesses conditions at the project site and evaluates the potential impacts of the 2008 temporary operational plan on existing resources in the immediate and surrounding areas to include: physical, chemical, and biological characteristics of the aquatic and terrestrial ecosystem; endangered and threatened species; hazardous and toxic materials; aesthetics and recreation; cultural resources; and the general needs and welfare of the

public. The U.S. Army Corps of Engineers and its partners will continue to pursue additional studies and data collection efforts to evaluate the 2008 plan and to refine potential future plan modifications. Funding for the development of a water quality model for the Lehigh River system which includes F.E. Walter and Beltzville Reservoirs has been secured through the Water Resources Development Act Section 22 Planning Assistance to the States program. A temperature and flow model is currently being developed.

A range of pool level and minimum low flow alternatives were evaluated based on potential negative and positive impacts on flood control, recreation and the environment in general. The alternatives are essentially modifications of the 2005, 2006, and 2007 plans taking into account the results and lessons learned from those efforts. Historic flow and operational records, in-lake and river water quality data, expected recreational use, public input, and known environmental resources in the project area were evaluated against the alternatives. An operational plan, described previously, was selected as the most likely to meet recreational, downstream water quality and flow, and flood control objectives. This plan is expected to benefit in-lake and downstream recreation meanwhile protecting and potentially enhancing the natural environment. Coordination between project partners and the public will continue through and after the plan period. Data collected during the plan will be used by the Corps and its partners to evaluate the degree of success in meeting the objectives of the plan and for identification of any environmental impacts not previously expected. All practicable means to avoid or minimize adverse environmental effects have been incorporated into the selected plan.

The 2008 plan was presented to the public at a public information workshop on 31 January 2008 at the Mountain Laurel Resort located in White Haven, Pennsylvania. In addition, the results of the 2007 plan were presented to interested stakeholders at a public meeting on 25 October 2007 at the Ramada Inn located in White Haven, Pennsylvania. These forums allow attendees to directly question project partners and comment on the proposed plan. In addition, the public is afforded the opportunity to comment on past, present, and future plans by submitting written comments directly to the Philadelphia District Corps Office or by providing comments via the project website at www.nap.usace.army.mil/Projects/FEWalter/index.htm.

The Draft Environmental Assessment has shown that the proposed activity is not likely to jeopardize the continued existence of any species or the critical habitat of any fish, wildlife or plant, which is designated as endangered or threatened pursuant to Section 7 of the Endangered Species Act, as amended.

Work in waters of the United States, including wetlands, must be in compliance with Section 404 of the Clean Water Act. No work will be performed within the waters of the United States. Therefore, a review of impacts associated with the potential discharge of fill material has not been performed as per Section 404 (b)(1) of the Clean Water Act. The requirements of Executive Order 11990, Protection of Wetlands, are therefore met.

The Commonwealth of Pennsylvania requires a 401 State water quality certification for any work, which may affect water or waterways in the state. This project entails an operational management change at F.E. Walter Reservoir and does not require any physical instream or riparian work. As a result, a water quality certificate from the Commonwealth is not required.

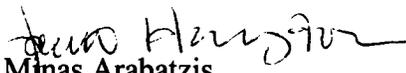
In accordance with guidelines established under Section 106 of the National Historic Preservation Act of 1966, as amended, the Pennsylvania Historical and Museum Commission determined that the proposed plan would have no effect on archaeological sites or historic structures.

The decision whether to accomplish the work proposed in this public notice is based on an evaluation of the probable impact of the proposed work on the public interest. The decision will reflect the national concern for the protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonable foreseeable detriments. All factors, which may be relevant to the proposal, will be considered. Among those are conservation, aesthetics, fish and wildlife, general environmental concerns, economics, historic values, navigation, energy needs, recreation, safety, water quality, food production, and in general, the needs and welfare of the people.

The public and all agencies are invited to comment on this proposal. Copies of the Draft Environmental Assessment are available upon request by calling (215) 656-6561. The public notice, Draft 2008 Temporary Operations Plan Environmental Assessment, and Final 2005 and 2006 Temporary Operations Plan Environmental Assessments are available for review on the project web site at www.nap.usace.army.mil/Projects/FEWalter/index.htm.

Any person may request, in writing, to the District Engineer, within the comment period specified in this notice (**31 January through 03 March**) that a public hearing be held to consider this proposal. Requests for a public hearing shall state, in detail, the reasons for holding a public hearing.

All comments on the work described in this public notice and/or in the Draft Environmental Assessment should be directed to Mr. Minas Arabatzis, Chief, Planning Division, ATTN: Environmental Resources Branch, U.S. Army Corps of Engineers, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390 by **03 March 2008**.

bow 
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