

Francis E Walter Flow Management Plan Comments

Based on review of the 2008 Flow Plan, this year's Plan is a regression from the three previous Flow Plans. The 2008 Flow Plan does not provide a "better balance" for whitewater and angling nor does it provide as much protection and enhancement of the aquatic ecosystem of the Lehigh River as in previous years. The number and duration of whitewater releases results in decreased amount of cold water for the tailwater trout fishery. The number and duration of white water releases must be reduced to that in previous years in order to provide for an equitable balance between recreational enhancement and improvement of the aquatic resource. We request that the 2008 plan and future plans provide more water for protection of the coldwater ecosystem and down river recreation.

Resource & Fishery Improvement Comments & Concerns

1) 50 cfs for fisheries augmentation for a river system the size of the Lehigh is insufficient for the aquatic ecosystem and natural resource of the river. Minimum releases of 300 cfs are necessary to provide the minimum protection of the tailwater ecosystem.

2) The 2008 Rule Curve does not require the Corps to release more than 50 cfs above inflow based on pool elevation after July 1st. A rule curve with augmentation values based on pool elevation should be used to ration the water stored in FEW in order to eliminate the potential release of high temperature water into the river. Releasing water greater than 68 Deg F is harmful to trout survival. Rationing the water will also allow conservation of the coldwater pool for a greater period of time and greatly improve the survival of both wild, put and grow, and adult hatchery trout that provide important recreation downstream of the reservoir.

3) The dependence on precipitation for September whitewater releases and use of water storage for all of the July and August whitewater releases, will deplete the coldwater pool more rapidly and create only minimal (50cfs) releases for fisheries augmentation. A rule curve should be used after July 1st as in previous years (i.e. 2007)

4) In dry years, if the pool is drawn down during the months of July and August as planned, release water could rise as high as 80 Deg F causing thermal stress and death of coldwater fish species (i.e. – trout) and coldwater macro invertebrates in the river. The release of water above 68 degrees must be avoided, if possible, to protect the juvenile brown trout, wild brown and brook trout and the food source of these fish downstream of the reservoir.

5) Releases of 200 cfs in May and 200-250 cfs in June, is insufficient to support the developing coldwater fishery. As stated earlier, a minimum release of 300 cfs is needed all summer to protect and enhance this recovering aquatic resource.

6) Erratic releases of water during October must be minimized or avoided for the same reasons given above. In order to provide the best conditions for the aquatic ecosystem during draw down of the pool, releases should be done in as steady and consistent manner as possible.

Angling Opportunity Comments& Concerns

1. Elimination of the May 11th whitewater release will provide favorable water level conditions for angling. However, the response of fish (i.e. trout) as a result of the quick unnatural reduction in water level will cause the fish to become unaccustomed to their surroundings and as a result may not feed for a period of time. In most cases, until the fish become acquainted with the immediate river conditions and water levels, will fish resume feeding. The complete

elimination of the whitewater releases for this weekend would provide better angling conditions overall and simultaneously further conserve the coldwater pool.

2. The cut-back of releases to 400 cfs on the weekends of April 12-13, and April 19-20 should provide favorable water levels for angling at this time of season

3. The 50 cfs minimum augmentation is insufficient to sustain the trout now living in the river and for fishing opportunities for anglers through out the spring and summer recreational season. Higher augmentation levels or a minimum of 300 cfs is necessary.

4. The October release schedule for the weekends of 4-5, 18-19 and 25-26, may provide favorable angling conditions depending on the amount of precipitation prior to that period. However, a quick increase or reduction in the release on these designated weekends may cause fish to become disoriented and not provide a quality angling experience. A more consistent release of water over this time period would create a desirable condition for both fish and angler.

In summary, the 2008 Flow Plan presented on January 31, 2008, does not provide sufficient enhancement to the aquatic resources of the Lehigh River. The allocated water storage for prioritized whitewater releases and the reduction in minimum target releases during nonwhitewater days will undoubtedly degrade the Lehigh's tailwater fishery and the downriver ecosystem. The lack of binding documentation requiring the Army Corps of Engineers to release more water (greater than 50 cfs) into the downstream Lehigh River for fisheries augmentation jeopardizes the tailwater fishery, the coldwater ecosystem and the attendant developing, economically important recreational fishery.

U. S. Army Corps of Engineers – Francis E. Walter 2008 Flow Plan Comments/Suggestions

In response to the Target White Water Release Schedule for 2008 from the Francis E. Walter Dam, Rivers Outdoor Adventures (ROA) offers the following comments:

1. The 2008 Flow Plan daily augmentation releases of up to 50 cfs for fisheries enhancement do not provide adequate protection of the downstream fishery and aquatic resource. Rivers Outdoor Adventures supports a minimum "Conservation Release" of 250-300 cfs at all times, especially during the months of June through September when the river is most affected by elevated ambient air temperatures.
2. In an effort to showcase the fishing and overall scenic experience of the Upper and Lower Lehigh River Gorge (White Haven to Glen Onoko), Rivers Outdoor Adventures (ROA) is planning to schedule drift raft fishing adventures during the prime Spring and Fall months of 2008. In order to successfully drift raft fish the Upper and Lower Lehigh River Gorge Area, a flow of approximately 400-800 cfs is preferred. In an effort to conserve the coldwater pool at FEW, which we view to be the most important goal of the 2008 Flow Plan, we respectfully request the following comments/suggestions be considered, contingent on a minimum inflow of 400cfs, for the following dates:

* On Tuesdays and Thursdays, from Tuesday May 06, 2008 to Thursday June 26, 2008, and from Tuesday September 09, 2008 to Thursday October 23, 2008, we request a release of 400 cfs (minimum) – 800 cfs (maximum) using the bypass gates (if operable) to fullest extent with

supplemental flow as necessary from the flood gates to enable drift raft fishing adventures from White Haven to Rockport and from Rockport to Glen Onoko. Release water in a timely manner from FEW to provide a flow rate of 400 cfs (minimum) from 8 am. to 8 pm from White Haven to Glen Onoko.

The following examples assume that FEW is at the target elevation (1370' in 2008) and that the maximum flow from the bypass gates (when operable; located at 1297') is 340cfs:

1. Tuesday May 15, 2008 - lake elevation is 1370' (assume this to be target pool) and there is 800 cfs coming in to FEW. My understanding of the 2008 flow plan is that 800 cfs would be released from FEW, 340 cfs from the bypass gates (if operable) and 460cfs from the flood gates. We would be asking for a reduction to 500 cfs; 340cfs from the bypass gates and 160cfs from the flood gates. In this example, we would actually be conserving cold water to the tune of 300cfs (160 from the bottom vs. 460 from the bottom).
2. Tuesday May 15, 2008 - lake elevation is 1370 (assume this to be target pool) and there is 300 cfs coming in to FEW (unlikely but possible for mid May or June). My understanding of the 2008 flow plan is that 300 cfs would be released from FEW (match inflow to outflow), 300 cfs from the bypass gates (again if operable) and nothing from the flood gates. In an effort to conserve the coldwater pool, we understand that our target scheduled release of 400 – 800 cfs would be reduced to 300cfs.

In summary, the main objective of the comments/suggestions provided herein by Rivers Outdoor Adventures is conservation and protection of the aquatic resource of the Lehigh River. In conjunction with this objective, Rivers Outdoor Adventures is also trying to operate a viable commercial driftboat fishing operation on the Lehigh River. In order to operate a sustainable fishing operation; we are requesting the U. S. Army Corps of Engineers to create a “Target Fishing Release Schedule for 2008”, similar to the “Target White Water Release Schedule for 2008”, that would provide a tentative schedule (again similar to, but not in conflict with the white water community), and allow us to better advertise our services.

Rivers Outdoor Adventures would like to thank the Wildlands Conservancy, specifically Chris Kocher, for the opportunity to have a voice in the ongoing flow plan objectives. We are simply asking the Army Corps of Engineers to manage the outflow of FEW, to allow us to highlight the fishing and scenic beauty of the Upper and Lower Lehigh River Gorge, during inflow rates to FEW of 400 cfs or more. We believe this can be accomplished in conjunction with the whitewater release schedule proposed for 2008.

Army Corps of Engineers- 2008 F.E. Walter Flow Management Plan Response

The Western Pocono Chapter of Trout Unlimited is based in the community of Jim Thorpe, Pa. on the banks of the Lehigh River.

The Lehigh is our home river. We regard it as a precious resource and are deeply committed to its protection. It is in this spirit that we offer for your consideration a few observations regarding the Army Corps of Engineers' 2008 flow management plan for the F.E. Walter Dam. Our River's well being and its capacity to provide a congenial environment for its Trout and diverse benthic community rely heavily on the release practices of the upstream Walter Dam.

Since 2005 the Walter Dam has been operated in a manner that has given rise to much optimism about the River's future as a remarkable cold water fishery. However, while more liberal than ever in terms of the Whitewater releases, several provisions of this year's plan appear regressive in the area of fisheries protection.

In the 2007 plan, the rule curve included storage conditions as a key factor in determining the volume of fisheries enhancement releases.

This year's plan appears not to contain a rule curve for this purpose.

The undesirable effect of this revision is the limitation of fishery releases to a fixed - and frequently inadequate - volume, irrespective of storage conditions. Particularly objectionable is capping fishery releases at 50 cfs over inflow during the high thermal stress months of July, August and September against a lopsided 750cfs above inflow for recreational releases in July and August, and, depending on storage levels, September.

It is our position that (1) storage conditions should continue to be factored into determining fisheries release volumes and (2) that the aquatic resource should not have to solely bear the brunt of adverse conditions.

Austerity should be equally shared by all uses.

The plan indicates that during the storage build-up period from

1 April to 10 May weekday outflows will be limited to a reasonable 250 cfs while weekend releases will approximate inflow up to 1000 cfs.

This scheme will impact on recreational opportunities by adding unplanned whitewater boating opportunities above and beyond the expansive 21 to 24 event schedule. The downside, from the fisherman's viewpoint, is that two weekend fishing opportunities will be limited by high water conditions during what many regard as the peak of the trout season.

We appreciate that the first two weekends of trout season will see more reasonable flows. That the weekend releases will be limited to 750 cfs should achievement of the 1370' target be threatened is also noted and appreciated.

Also of concern is the proposed decrease in the volume of fisheries enhancement releases for the month of May from last year's 250 cfs to 200 cfs. We can only assume that the resultant savings will be invested in insuring planned recreational releases. We disagree with this strategy. Should we experience a warm, dry May, chiseling away 50cfs from the normal releases could harm the fishery. Based on discussions with fishery professionals and personal observation we regard a 300cfs release as optimum in terms of resource protection.

On the positive side, the restoration of the bypass system will be a welcome development. Assuming a discharge capacity of 300 cfs the system might save almost 200 million gallons of cold water in a whitewater weekend - a substantial benefit for the fishery.

We are also encouraged by the funding for the Recreational Enhancement Study trusting that the eventual outcome will be restructuring of the Dam's release works to permit a flexible release capacity that will better serve the needs of all recreational users while improving downstream water quality.

The fact that ecosystem considerations are on the table and open to discussion at all is, in itself, cause for hope about the well-being of the Lehigh River. We trust this dialogue will continue and will result in an ever improving cold water environment.

Thank you for the opportunity to make these comments. We hope they will be given some consideration in the planning process for future operations.

To whom it may concern,

I am writing to express my support for more Lehigh River releases and/or bigger releases. I am a whitewater kayaker and I paddle on the Lehigh River at least 5 times a year. I really enjoy paddling on the river, so much so, that I travel 3 hours one way to do so. By coming to the area, I also support local businesses, as I always eat at the local restaurants.

More releases would only help to bring more money to the local economy. With a shortage of rivers in the Northeast which have a guaranteed flow necessary to kayak, the Lehigh River is an important river and all consideration should be given to increasing the number of releases. I hope a balance can be reached between the desires of those that kayak and those that fish.

Any increase in the number of releases would greatly be appreciated.

All,

I would like to provide the following comment on the Lehigh River 2008 Flow Plan:

- * The raising of the pool is a positive, but I am concerned that too high a proportion of the cold water will be released for whitewater events in May and June, leaving little cold water for the critical summer period for trout.
- * The non-operational bypass system will not help matters with conservation of cold water.
- * 400 cfs for April weekends is a positive, as often in the past anglers have made trips to the Lehigh only to get blown out by higher levels.
- * As the Flow Plans evolve in the future, will there be an emphasis placed on the Eastern Brook Trout Joint Venture. As the Lehigh becomes colder and cleaner it would make sense to help reconnect the Lehigh to its quality brook trout tributaries.

In conclusion, I would like to see more cold water conserved for use during hot periods, possibly using temperature targets to control the releases.

Gentlemen,

I feel that Lehigh River is truly one of the greatest natural resources in this part of the country. A trip through the gorge would certainly justify this opinion. I fail to understand why it causes a continual battle between various organizations in regards to it's management. With the increased pool levels at the Francis Walter Dam I understood that the Army Corp would be able to maintain guaranteed minimum flows to protect the invaluable trout fishery that the river contains and also satisfy the needs of the white water rafters and other interested parties. From what i am led to believe, the 2008 plan is severely lacking in the areas of conservation releases and rationing. Guaranteeing front loaded releases in July and August without regard to maintaining enough cold water for a potentially dry Autumn could prove disastrous to the fishery. The river has come so far and so much money has been spent to clean it up over the past few decades, it would be a shame to lose focus at this time.

Dear Sirs,

I am writing to express my concern regarding the 2008 Flow Plan governing releases from the Francis E. Walters reservoir. The plan has a number of key flaws that will have negative effects on the health and aquatic resources of the Lehigh River.

The areas of concern are;

- the '08 Plan reduces the minimum target for non-whitewater releases, 200 cfs in May and 200-250 in June vs a minimum of 250 cfs all the time in last year's plan.
- the white water releases are front loaded. This schedule will likely deplete the coldwater pool more rapidly vs. rationing the coldwater depending on the quantity of rainfall. In 2007 whitewater releases after

July 1 were augmented based on pool elevation. In this way the amount of water used for whitewater and conservation releases was based on the pool level; a far more flexible and robust strategy.
- although the Corps increased the pool height by 5 feet in this year's Plan, it appears that none of this extra water (approx. 1 billion additional gallons) is being used for conservation releases to increase the volume of water in the river during the summer months to protect the aquatic ecosystem.

I am requesting your attention and assistance in addressing these shortcomings.

To Whom It May Concern:

Although I only fish the Lehigh River a few times a year, it is obvious to me, and to many other fishermen and women that this is a resource that needs to be carefully guarded.

I recently had the opportunity to see the results of the work a collaboration of agencies and The Wildlands Conservancy has accomplished to continue making progress on the water quality of this river. It is impressive to see what can be accomplished to clean up the messes our forefathers left us, and now is the time to step up to the many issues of water conservation by paying attention to the needs of the fish and people interested in them.

While most recognize the need to offer significant white water experience on the Lehigh by releasing water above comfortable wading, I would hope that there could be a better balance between this recreational experience and the overall impact high water has on the biology of the Lehigh and the fishing experience.

Perhaps you could take another look at what appears to be a better compromise offered by the other groups, fewer high releases, and a later start in the year for the releases, as well as maintaining enough flow so there isn't a severe impact in the summer months by overly hot water.

Thank you for your consideration,

As frequent user of the Lehigh River as a recreational resource I agree entirely with the assessment of the flow release schedule as outlined by Trout Unlimited. As a member of the Little Lehigh Chapter, it causes me great concern when I see what could be potentially damaging practices put into practice by those that have the regulatory power of our cold water resources. I urge you to strongly consider changing the flow plan to better represent the needs of this great cold water fishery. Similar issues have plagued the Upper Delaware River in recent years and it is only now being rectified. Let's all work together to be proactive in the solutions for the Lehigh. Below, I have supplied the Trout Unlimited concerns with the current plan.

Recently, the Army Corps, DCNR and PFBC unveiled the 2008 Flow Plan for the upcoming recreational season. LCFA officers attended a meeting on January 31st that discussed this years Plan details. We have reviewed the Plan and made comparisons to previous years Plans. In our conclusion, we feel the 2008 Plan has many flaws that will not bode well for the health of the Lehigh River and the aquatic resource.

The following are 5 major problems we have with the 2008 Plan.

1) The 08 Plan reduces the minimum target non-whitewater releases. 08 calls for minimum of 200 cfs in May and 200-250 cfs in June. 07 called for a minimum of 250 all the time.

2) The White Water releases are "front loaded". By that I mean they will use the water during July/Aug and if we don't get rain, than the Sept releases are canceled. So basically, they are going to use all the storage in July/Aug and not ration or save water for later in season. If we don't get sufficient rain, all the river will get for non-whitewater releases is 50 cfs above inflow during those months. A 50 cfs release above inflow is poor for a river this size. This release set up will likely deplete the coldwater/coolwater pool or what remains of it, more rapidly. Rationing the water saves the cold/cool water. Once you use up

the coldwater, you don't get it back until winter time. In 2007, the whitewater releases after July 1 were "augmented" based on pool elevation. So depending on the pool level, this determined the amount of water to be used for whitewater and "conservation or fishery" releases (non-whitewater)

3) Front loading the releases for July/Aug, and if we don't get rain, may cause super heated surface water (80F) to possibly enter the river system and cause further stress to the trout.

4) There is no rule curve this year that will augment releases based on pool elevation. The volume of water for "Conservation" releases will be under the Corps discretion. There is nothing binding the Corps to release more water when the pool is higher and the water is available.

5) The Corps increased the pool by 5 ft this year. There is to be almost 7 billion gallons of water in the pool this year versus just under 6 bill last year. It appears that none of this extra water is being used for "conservation" releases to increase the volume of water in the river during the summer months to protect the aquatic resource.

Thank you for your time and consideration with this critical matter.

To whom it may concern,

I have a few concerns with the 08 schedule for Francis E Walter Dam, they are as follows:

1st- The 08 Plan reduces the minimum target non-whitewater releases. 2008 calls for minimum of 200 cfs in May and 200-250 cfs in June. 2007 called for a minimum of 250 all the time. This is going to stress the fishery more during the period the water is needed.

2nd - the White Water releases are "front loaded". By that I mean they will use the water during July/Aug and if we don't get rain, than the Sept releases are canceled. So basically, they are going to use all the storage in July/Aug and not ration or save water for later in season. If we don't get sufficient rain, all the river will get for non-whitewater releases is 50 cfs above inflow during those months. A 50 cfs above inflow is pi\$\$ poor for a river this size. This set up will likely deplete the coldwater/coolwater pool or what remains of it, more rapidly. Rationing the water saves the cold/cool water. Once you use up the coldwater, you don't get it back until winter time.

Last year the releases after July 1 were "augmented" based on pool elevation. So depending on where the pool level was determined the amount of water to be used for whitewater and "conservation or fishery" releases (non-whitewater)

3rd - by front loading the releases for July/Aug and if we don't get rain, this could cause super heated surface water (80F?) to possibly enter the river system and causing further stress to the trout.

4th - There is no rule curve this year that will augment releases based on pool elevation. The volume of water for "Conservation" releases will be under the Corps discretion. I don't like the sounds of that at all. There is nothing binding the Corps to release more water when the pool is higher and the water is available.

5th - The Corps increased the pool by 5 ft this year. There is to be almost 7 billion gallons of water in the pool this year vs just under 6 billion last year. None of this extra water is being used for "conservation" releases to increase the volume of water in the river during the summer months to protect the aquatic resource. Rather, it appears, to be going to the whitewater releases.

Those are my TOP 5 issues with this years plan. I feel it's a step in the wrong direction over the past 3 years of Flow Plans. They should just call this years plan the "White Water Release Plan".

If I remember correctly this was to help both the whitewater rafters and also the fishery. I believe you are heading down a path to devastate the fishery at the expense of the fish. Remember the fish need oxygen in the summer more than any other time and you are moving to remove more of it with decreased minimal flows to augment more water for rafting.