Appendix E

The unabridged content and text of the angler comments, less personal descriptive information, have been directly inserted from their email into the Angler Comment Section for response purposes, except for Angler Comment 21 which was a handwritten letter that was transcribed verbatim.

1. Angler Comments Emailed on 11 March 2007: "A few of us at just4thought.com (a fishing forum for nepa) have been noticing the depletion of weed growth in the Lehigh River and we are proposing an effort to manage this situation. We would like to know where to start with this project and if you could have a biologist get in touch with one of us or even register with <u>www.just4thought.com</u> and go to the Lehigh River section to educate us or even help out with the effort would be greatly appreciated. Any help would be great because none of us are educated in this field and we want to make this river what it once was."

Response: Habitat issues will be addressed during the initial plan phase, and through subsequent plans as well. Your suggestions have been forwarded to our Division of Habitat Management for evaluation and consideration.

2. Anger Comments Emailed on 13 March 2007: "I was wondering if there is any thing on the books for improving the fishing around the Rt. 33 boat launch of the Lehigh River."

Response: Yes there is, but not in the immediate future. As stated in the plan, we will be monitoring the fishery during the initial phase of the plan. This monitoring will form the basis for any future course of action with regards to stocking and regulation changes in Sections 6 - 9. The Route 33 boat launch is located in Section 9.

3. Angler/Business Owner Comments Emailed on 9 April 2007: "I own A.A. Outfitters Fly Shop in Blakeslee, Pa. Many (if not all) of my Customers feel it would be a great idea to have an area of Special Regs on the Lehigh River near/below FE Walter Dam. Most, if not all, of my patrons practice catch and release and they (including myself) would like to see a Catch and Release, Trophy Trout, Delayed Harvest, section in a area of the river. My experience shows that a special regs area may result in larger and more fish to this area. The Lackawanna River is a prime example of the success of a Special Regs area. It would be great if the Lehigh had an area like the Lackawanna has. With many miles of fishable water, I cannot see why we cannot have a mile or a few miles of special regs on the Lehigh. It would be great to see the Lehigh attracting fishermen from all-over to fish the "Trophy Section" of the Lehigh! The Lehigh could become more of a "DESTINATION FISHERY" like the Delaware, if we could do more to promote more/bigger fish. Note the popularity and success of the Delaware – with big, wild fish! This special regs area would help sell licenses, help the economy and promote the Fish Commissions commitment to BETTER FISHING in the state of Pa. I can not attend the meeting...."

Response: Your comments are noted, with regards to a special regulation area and water temperature issues please see our response to Angler Comments 2, 9, and 13.

4. Angler Comments Emailed 13 April 2007: "Fisherpersons like me who have heart problems can't fish the pool at the base of the dam for we can not walk the distance to fish it so for us it is a waste of fish and fishing place we love to fish when there is a road to it that is closed. W would like to see it open. Also boat launching to fish the dam we need a place to do it which can be done by putting one on the white haven road. Also would like to see walleyes put into the dam."

Response: This concern is being addressed in Section 5.51a. The ACOE along with DCNR State Parks, the PFBC, and interested private parties were working on establishing a multi-level boat launch on the Bear Creek arm. However this pursuit is currently on hold due to a lack of local government support. All agencies continue interest in addressing this issue.

5. Angler Comments Emailed 14 April 2007: "A little background: I fish appx. 250 days a year...After reading the draft, I am very disappointed that the plan reads" Catch & Release regs of any form is not warranted at this time". I thought for a split second that possible this time, this would be a concerned effort and Pa. will finally get it right...Your statement that 50% of bait fisherman release fish back into the water (I have not seen this) is a little enhanced I believe.... A good case of tailwater fisheries are the Norfolk and white rivers in Arkansas...Someone should study what they did in the past and see what can happen if things are done right...Access on those Rivers are also restricted but are very successful and bring millions of dollars into the region...On these rivers there are Fly fishing, catch & release only sections...But only appx. 1 to 1 1/2 mile long and very successful... Example: The Norfolk river is appx. 7 miles long and flows into the White River...There are 3 access areas on the 7 miles and one of them is for the handicapped...If you want to get to more areas hire a guide and float it...But there are Fish in the river and big fish abound...If there ever is Special regs instituted than a 800 # is necessary for releases since most people will be traveling quite a distance ... I was excited about what was going to happen, just as excited when Shad were being stocked in the Northampton area years ago...But I feel like this project will go by the wayside like ventures before this...... MY ADVICE IS; PLEASE DO IT RIGHT THIS TIME...Talking to people (Fishermen & Women) prior to reading the Draft is the same response I got from everyone I talked to was " Are you kidding they'll screw it up like they do everything else" I (After reading the Draft) I now join this group...Thanks"

Response: Reasoning for not implementing a special regulation was addressed under Sections 5.12c-ii (pages 43-44) and 5.3 (pages 57-56). While anglers compare the upper Lehigh River below FE Walter Dam to the Upper Delaware River, Arkansas Rivers, and the Madison River, they fail to realize that these rivers are much different from the Lehigh. Current operation of Francis E. Walter Reservoir primarily for flood control purposes, along with the bathymetry of the lake bed (funnel shaped), bottom withdrawal, and whitewater releases combine to quickly deplete the limited amount of cool water available. Thus the impetus for the agencies to work together for continued refinement of the Experimental Release Plan to optimize the limited cool water reserve. This is addressed in Section 5.41a (pages 59-60).

6. Angler Comments Emailed on 15 April 2007: "I lived in the LV for the last 20 years and still frequent the Lehigh River. I would like to see N. Pike included in management plans. Population, size structure, spawning areas and success rates, and their seasonal movements

Response: Northern pike are not being considered for stocking or intensive management at this time. The PFBC will focus on maintaining a purebred muskellunge fishery in Section 9; 5.14c (pages 55-56). While we have not caught or heard of any northern pike being caught in the Lehigh River, their presence is possible via the fishways, since they do occasionally occur in the both the Delaware River and in tributaries to the Delaware River in New Jersey.

7. Angler Comments Emailed on 16 April 2007: "Hello, I fish the Lehigh from the Francis Walter in feed to around the North Hampton Dam (Community PARK) all year round. I have been talking to numerous anglers during the past few years and it seems the majority of the anglers would prefer the limit in the River (Part or the whole thing) to be changed to 3 fish with a 15In Limit. Most anglers that do eat the fish would prefer 3 bigger fish than 5 smaller ones. Also, the anglers that do catch and release on the River would definitely prefer to catch 3 nice fish to numerous small ones. Also, Is there any plan to put a boat launch in for the Francis E Walter Dam when its flooded? Thanks For allowing the input! We can make the river better together."

Response: This recommendation to reduce the creel limit and increase the size limit for trout is not being considered at this time. If the PFBC deems such a move is warranted in the future, angler input will be sought. With regards to access at F.E. Walter, see item 1 above.

8. Angler Comments Emailed on 16 April 2007: I fish the Lehigh River from Allentown to Easton 2 time a week on average. I have caught brown, rainbow and brook trout to 23" especially near creek mouths. I have also caught musky and lots of other species in this area. I would like to see larger walleye stocked in this area and no musky as there are already plenty of musky, and pickerel. Best Regards"

Response: Yes, trout are present at creek mouths seeking the colder water, and at the base of the dams seeking the well-oxygenated water. The current walleye and muskellunge programs will remain in place during the evaluation period of the plan, see Section 5.14c, pages 55-56). Any changes in stocking will be based on the findings of the biological surveys compared to the program goals.

9. Angler Comments Emailed on 16 April 2007: "I love the fact that this is going to be worked to become a better trout fishery. I think the fingerlings will do great. I really feel that this early stage of the game is a great time to implement the total C&R regulations that are seen on the Clarion and little Juniata Trophy sections - this would solidify this fishery even more. There certainly can't be opposition to this?? Please consider this comment. There are plenty of put and take water in this section of the state - why not make this special?"

Response: Fingerling trout stockings will be evaluated in both Sections 6 and 7 to determine their contribution to the fishery per Sections 5.12c-i (pages 42-43) and 5.13c-i (pages 49-50).

Catch and release regulations are addressed in Sections 5.12c-ii (pages 43-44) and 5.3 (pages 57-56).

10. Angler Comments Emailed on 16 April 2007: "Management of the Lehigh River is rooted in the management of FEW Dam. Realizing the Dam is a Flood Control Dam, its capacity is \sim 2.5 hurricane Agnes events. Barring any similar events, there is no need for immediate pool correction or radical fluctuations of river levels from an environmental and safety position. Rapid fluctuations disturb riverbed and effect nesting waterfowl, turtles, frogs, salamanders etc and other wildlife along shores. Rapidly raising water levels is a safety concern for all users. There are many HQCWF entering the Lehigh. Why cant the Lehigh be a self sustaining fishery in section 6? The summary states the river is underutilized. I agree however the PGC stocking plan and FEW Release policy are contributing to lack of use. Many people follow the stocking truck. With the reduction of stocked fish into the river over the years fishing use has dropped commensurately. The quality of fishing has also dramatically declined on section 6 due to scheduled releases and storm event releases causing radical fluctuations. Fisherman use the river minimally in these situations. FEW can still function as flood control without trying to correct pool level as rapidly as possible. A more consistent flow would be conducive to fishing and rafting as well as ecologically more friendly to river flora and fauna. I believe the Lehigh has the potential to generate alot of recreational \$\$\$ in the area. Hunting, camping, fishing, rafting and other outdoor sport industries would be attracted. Present FEW policy of rapid and inconsistent fluctuations cause environmental damage, lack of and/or intermittent use, and heightened safety concerns. Businesses and prospective businesses do not like this uncertainty. A consistent flow from FEW would encourage increased use and business opportunity."

Response: It's true that the management of the Upper Lehigh River is greatly affected by management of Francis E. Walter Dam (FEW). This is why all agencies are working hard on how to best utilize the cool water available given the dam's current operational restraints (flood control as a primary purpose with bottom release). In the best of years, the cool water releases from FEW can influence temperature for about 7 miles downstream of the dam to near the Tannery Bridge. Studies to date have not found substantial adverse impacts in relations to those releases (Sections 3.2 p. 14 and 4.8 p. 22 referencing the study of Jirka, 1990 and Young (2002) in the plan. You've asked why the Lehigh River can't be a selfsustaining fishery? Despite the vast numbers of trout the PFBC has stocked into this area of the river and its tributaries for over forty years, and the fact that wild trout streams also flow into this section, suggests some factor is limiting reproduction. The current information demonstrates that temperature is the likely candidate. Even in the upper waters of the Lehigh River (Sections 3 and 4) summertime water temperatures exceed thermal tolerances of trout (Section 4.81a). While the Francis E. Walter Dam does form a large pool, the reservoir cannot store cold water for long periods because it lacks selective withdrawal capabilities (currently, all releases are from the bottom). In general, any cool water is usually depleted by mid-June. Additionally, residence time of water behind the Dam is low, with the entire pool being flushed usually within 3 days. Thus, the retention of any cool water is not possible during the warm summer months.

11. Angler Comments Emailed on 16 April 2007: "I've been fishing the river for over 30 yrs-it's been getting better every year--your reports on no walleye and muskies in lower section are totally WRONG just the season of 2006 I've caught at least 20-30 walleye and 46 muskies --dozens of trout-two stripers--4 shad--7 channel cats-and a 40 " pike--we need to increase plant growth and other cover--maybe wing dams—sincerely" "Mr. Arnold, the sections I fish would be sections 8-9°--I fish the river at least once a week all year-my 1st musky encounter was above the Northampton falls 1978-most now are caught below Hamilton falls down to the Delaware-I find walleye in both sections along with trout--this time of year they are in the base of the falls both Hamilton and the chain dam--i used to talk with Mr. Long who was with the fish comm. for over 50 yrs-he is missed after his passing two yrs ago--feel free to e-mail me anytime"

Response: As indicated in Section 5.13a-ii (pages 47-48) and 5.14a (pages 52-54) the findings in 2006 were from only a preliminary survey. Both walleye and muskellunge have been found in prior surveys in Section 9.

12. Angler Comments Emailed on 17 April 2007: "In my opinion the waterflow coming from the F.E. Walter Dam must be controled for trout to survive. If the Lehigh River is ever going to be as good as the Delaware River the waterflow must be managed for the survival of the trout. Once this happens in my opinion the River needs to be stocked heavier. It has the potential to hold a stable wild trout population like the Delaware but needs more trout in more places. Face it stocking places like Frances Slocum State Park sell licenses but those trout are most likely going to get caught out, or just won't survive. The Lehigh River Stocking Association has the right idea. They stock from around Jim Thorpe to below Palmerton (I think...). They stock thousands of fish their. I am a member. I have fished their many times and caught my limit many times (Caught and Released). If the PFBC stocked these areas the fish would thrive and may begin to hold a wild fish population. I am an avid fly fisherman but do not think the river needs any special regulation areas. Not everyone flyfishes but everyone pays \$31 for a license so everyone should get to fish the same areas."

Response: As noted previously, the Lehigh River can, to a certain extent, support a "wild" trout population, but we feel water temperature in the mainstem is a limiting factor. Additionally, the term "wild" may include holdover stocked catchable trout, successful stocked fingerling trout recruitment, and natural reproduction. In 2006, the PFBC conducted a creel survey in Section 6 of the Lehigh River from Opening Day of trout season until August 30th. During the entire survey period, a total of seven "wild" and 257 hatchery trout were observed in field creel checks during the course of the survey, suggesting that hatchery stocking predominantly supports the trout fishery in Section 6. Additionally, in the fall of 2006, the PFBC conducted a pilot survey of game fish abundance from Francis E. Walter Dam downstream to the Chain Dam. A total of 18 wild brown trout, 51 hatchery brown trout, and eight hatchery rainbow trout were captured (Tables 11-14, 17). No wild brook trout were collected. Most of the wild trout were collected in the USGS gaging station pool downstream of Francis E. Walter Dam and the Glen Onoko pool. The low numbers of wild trout collected further downstream relative to the quantity of collected hatchery trout, suggests trout termed "wild", as stated above, do occur in the lower reaches of the Lehigh River but they are not as prevalent as those of stocked origin. We know that the LSRA is stocking fish annually, but there could be several other contributing factors to the presence of trout within this reach of the Lehigh River: 1) the PFBC has been stocking trout for many years in the upper reaches of the Lehigh River. These fish can and do move downstream; 2) trout, whether of wild or hatchery origin, enter the mainstem of the Lehigh River from a large number of tributaries; and 3) several other organizations have also been stocking trout in the mainstem and tributary waters of the Lehigh River in similar locales as LSRA. As for your comment concerning a special regulation area, we agree, as is stated in the plan.

13. Angler Comments Emailed on 18 April 2007: "Questionable access to Lehigh R. just downstream of the FE Walter spillway on the east side, but upstream from the gaging station. There are newly placed posters restricting access. We have fished that area for over a decade and now see posters. I thought it was part of the Lehigh Gorge St. Pk. lands or US Army COE. No good maps exist to clarify. I would appreciate clarification at your earliest convenience."

Response: We've discussed this matter with the Corps of Engineers and staff just visited the area you asked about. There are no posters restricting access. There are (or at least were) some posters saying "Danger" to warn about the steep banks. If you are aware of other information, please let us know, but our information is that there are no restrictions to access in the area you mention.

14. Angler Comments Emailed on 19 April 2007: "I have begun to spend some time flyfishing the Lehigh River over the past two seasons. Most of my outings have been in the stretch between the Tannery and Black Creek. I have had increasingly good results, as I find it takes some time to become familiar with larger waters such as the Lehigh. I have enjoyed my best success during hatches of sulfur and march brown mayflies. As a regular of the Evening Hatch Fly Shop, I signed the petition for establishment of a special regs area. It was my hope that establishment of such a program, combined with the proper cold water releases from Francis Walter, could eventually result in that stretch of river establishing itself as a self sustaining trout fishery, not requiring further stocking efforts. I believe I have read that rivers managed as self sustaining have increased trout populations compared to times when they were stocked. I did review a good portion of the Management Plan, and it sounds like natural reproduction is not abundant at this time. Can the release schedule be adjusted to create more consistently cooler water? Would that help the trout's reproductive capacity? You are certainly aware that we flyfishers hope for the establishment of a tailwater fishery comparable to the upper Delaware, and the famous rivers of the western US. One note on catch and release. You mention the frequency of bait fisherman practicing catch and release. What is the survival rate of released fish caught on bait vs. fly? How about barbless hooks? It is important that this be taken into consideration when analyzing the data. I believe we have an opportunity here to create a highly regarded trout fishery, one with few rivals for a river this size in the eastern US. The Lehigh's reputation is certainly on the rise, as is apparent through streamside discussions I have had with other anglers, both here and elsewhere. I am very happy to see the state taking the initiative with this management plan. Are there ways in which interested anglers such as myself can contribute? Thanks for your efforts"

Response: The request for a special regulation area was addressed in Sections 5.12c-ii (pages 43-44) and 5.3 (pages 57-56). Studies generally have shown that mortality associated with bait angling are higher than mortality associated with artificial lures. This is generally about twice the mortality, although this varies. In two special regulation areas in central Pennsylvania (Penns Creek and Spring Creek) where all tackle types are permitted, the trout populations have increased in recent years. Most anglers are practicing catch and release on the Lehigh River and are hopefully careful when releasing their catch in light of this. With

the proper techniques employed, i.e. caution when removing the hook or cutting the line and leaving the hook in when the fish is too deeply hooked, can greatly reduce mortality associated with bait angling. The PFBC discusses the safe handling of one's catch in its Summary Regulation booklet given to each angler at when a license is purchased and its is also available on our website www.fish.state.pa.us.

- 15. Angler Comments Emailed on 19 April 2007: "I think it is great news that the Lehigh River below the Francis Walter Dam is going to get the attention from the Pa Boat and Fish Commission that it needs. This is one of the largest and remote rivers in the area and gives a true wilderness Big water fishing experience at many locations below the Francis Walter Dam. My ideas are listed below.
 - 1. Have cold ater releases from the dam as necessary to sustain a temperature that is favorable to the survival of trout.
 - 2. Perform an electro shocking of the river at different locations to collect initial data as to the number of trout actually in the river to this point in time. Also his will indicate the status of the 18,000 fingerlings stocked each year. Are they surviving? Are they growing? DO NOT HAVE A FLY FISHING ONLY AREA! My reason is that it may close a section of the river that many non-fly fisherman enjoy fishing below the Dam. I and my son personally are catch and release fisherman. Also the price of a fishing license has increased to the point that it would not be fair. Catch and release area would be an alternative idea.
 - 3. Continue to stock large numbers of fingerlings and eliminate predatory fish such as muskie, walleye.
 - 4. Fall stocking of trout directly below the FEW DAM.
 - 5. As in other streams. Electroshock the river every year to collect data on the trout.
 - 6. Do everything possible to make the lehigh like many other successful dam controlled rivers into a top notch trout stream that will bring anglers from all over. Finally I will end by saying that this river was never managed to it's full potential and should be. My son and I participated in the survey for 2006 and joined the LSRA supporting trout fishing on the Lehigh. Any Questions please call.
 Sincerely,"

Response: Your ideas are right in line with the plan, with the exception to the elimination of stocking predatory species such as muskellunge and walleye. Your recommendation for the fall stocking of trout is noted.

16. Angler Comments Emailed on 20 April 2007: "Your headed in the right direction here!!!!!!!!! I am an avid fisherman of about 45 years. The improvements to the Lehigh River will rival the Delaware river system. This I believe is the right direction to create a better fishing experience than the " put and take " fishery. If there is anything I can do to help please contact me. I have fished from the FEWD to mud run for 40 yrs."

Response: Thanks for your input, and the vote of confidence.

17. Other Agency Comments Emailed on 23 April 2007: "1) Before installing "low-flow channel deflectors", you may want to conduct freshwater mussel surveys of these areas. There are historic records of several species of mussels in the Lehigh Basin, including the endangered dwarf wedgemussel Alasmidonta heterodon. A. heterodon typically inhabit

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shallow slow moving waters, particularly associated with side channels of deposit islands in areas of low stream gradient. Studies should focus on areas that still have populations of tessellated and shield darters. You may want to couple the mussel surveys with the proposaed study on cold water seeps, inasmuch as recently discovered A. heterodon populations in the mainstem Delaware and Flat Brook, NJ seem to be strongly associated with cold groundwater inputs. 2) The fish passage portion of this plan seems to be strongly focused on shad. It would be really nice to put some effort into increased eel passage as well." Leetown Science Center Northern Appalachian Research Laboratory; 176 Straight Run Road Wellsboro, PA 16901.

Response: We'll take these issues into consideration as the plan progresses. Fishways are more focused on American shad as they are the most sensitive species with regard to passage. American eels do not need the fishways for passage, although they do use them.

18. Angler Comments Emailed on 24 April 2007: "First, I would like to thank the PFBC for their continued support of the Lehigh River. The draft plan appears to cover the entire river and all users. The information from the continued studies should help in the future with management of the river. I would like to see the PFBC reconsider implementing a special regulation area on the upper Lehigh below the dam. Perhaps, a smaller area than what was originally considered, so as to not upset any anglers not intersested in special regs. Catch and release ALO would allow more trout to be recycled and allow for more holdovers. Overall though, I think it is a good plan."

Response: Thanks for your positive feedback on the plan. The notion of a smaller area for special regulations was considered during the review process, but the high use of bait by anglers throughout Section 6 and the fact that bait anglers practice a high degree of catch and release, lead to the decision not to implement any special regulation at that time.

19. Angler Comments Emailed on 25 April 2007: "The creation of a tailwater fishery on the Lehigh River, below Francis E Walters Dam, will become an economically invaluable resource to Northeastern Pennsylvania. This is a rare opportunity."

Response: It is also our goal, along with that of the ACOE and DCNR State Parks, and other interested parties as well. This concerted effort is a driving force behind the continued development of the Experimental Release Plan, and additional studies to better utilize the cool water releases.

20. Angler Comments Emailed on 26 April 2007: Comments: "I applaud and favor 99% of the plan. 3 items to be modified are: 1. Implement a Catch and Release section from FE Walter tailrace down to turnpike. Do not miss out on great opportunity this area has to be a nationally renowned tailrace fishery. Not only would it be good for the fishery but would also be good for the local economy as a national draw. It was stated normal regulations are adequate since catch and release is already a common practice. What you missed is that there is a difference between special regulations versus voluntary catch & release. I fish many different streams and encounter many anglers on open water who claim to be C&R. Yet, 100% of the time, the special reg sections on these streams have trout a plenty in June while open waters are almost void. How can this be? The answer is partially that in special regs anglers feel like stakeholders and take special care to ensure fish are released to survive. On

open water, anglers often release fish but those fish often do not survive cause they are not handled with care. I have seen anglers on open water release trout that have been on a stringer, out of water for 1 minute, deep hooked, etc and those fish have no chance. In summary, there is a different psychology involved when area is posted as special regs versus simply having anglers claim to release fish. There are gobs of anecdotal evidence that a short stretch of C&R will make it a superb fishery and 10x better than if not special regs. 2. Corollary to above is need better public education on how to handle and release fish. I dont have a solution but just know it goes beyond a little blurb in booklet saying remove hook quick, get in water quick, etc. Maybe something crazy like a short video with a quiz that angler must watch before they can drive by the gate to get to FE Walter tailwater 3. Smallmouth bass are given scant attention. Consider making a section of lower river be either big-bass or better yet C&R for bass. I think special regs for bass will give a much better fishery and is a lot less expensive than the walleye and muskie stockings which likely will yield very little return. Unlike trout, there is little evidence either way to say if special regs for bass will work but why not try it. Except for Southwestern PA, I dont know of any C&R for bass, so lets start one on Lehigh and see what happens."

Response: Catch and release regulations are discussed in Sections 5.12c-ii, pages 43-44; and 5.3 pages 57-56. Although not specifically mentioned our Lehigh River sampling efforts will include smallmouth bass. Changes in current management, such as changes in regulations, will be addressed if necessary, based on these surveys. Your comments regarding better catch and release information for anglers are noted.

21. Angler Comments Emailed on 27 April 2007: "Comments: Thank you for your very informative Lehigh River Fisheries Management Plan. My comments pertain to the headwaters, upstream from the Francis E. Walters Reservoir. In Section 3.0, you include DEP findings which suggest "that major parameters of concern were the lack of riparian vegetation and sediment deposition." I fish, walk and monitor the upper Lehigh River and have observed that this is a growing problem. Please include an action item to address this in the upper stretch of the Lehigh River. I recommend adding to Section 3.4 "Identify and quantify the riparian vegetation and sediment deposition in the portion from the headwaters to the Francis E. Walters Reservoir." It cannot be noted often enough that keeping optimal conditions in the headwaters is critical to the downstream fisheries. Data on the headwaters to the Francis E. Walters Reservoir is not sufficient to tract trends in the fishery. I recommend adding to Section 4.9 "Sampling of basic water quality parameters within the portion of the Lehigh River from the headwaters to the Francis E. Walters Reservoir should be improved." One small correction: Please note that Lehigh Township, Lackawanna County changed its name legally about 10 years ago to Thornhurst Township. To avoid confusion, it may be best to refer to it as "Thornhurst (formerly Lehigh) Township" in Section 2.1. Thank you for this opportunity to provide comments."

Response: We agree that the protection of habitat is essential for protecting and enhancing fisheries. In regards to the loss of riparian habitat and sedimentation in the mainstem waters above the Francis E. Walter Dam, Section 3.4, Action 3 of the plan, states that we intend to resurvey PADEP's sites including those above the Francis E. Walter Dam. Further actions regarding riverine habitat will be addressed after the resurvey of PADEP's sites. Your observations on the loss of habitat above the Francis E. Walter Dam have been forwarded to our Division of Habitat Management for consideration. As to water quality sampling

upstream of the dam, we are not planning on expanding water quality monitoring above Francis E. Walter Dam beyond the spot checks we do at the time of our biological field sampling. However, routine long term water quality monitoring is typically under the purview of DEP and USGS. We recommend that you contact these agencies regarding these concerns. Thank you for noting the township name change – we will adjust the Plan document.

22 Angler Letter Comments post marked 24 April 2007: "Pa Fish & Boat Comm. After reading about the Lehigh River fisheries plan in the Morning Call on Tues. April 17, 2007 and as senior license holders in Pa, we were happy to hear the pans in the future. We would like to suggest that maybe some fishing piers like the one at Riverside Park in Palmer Township, near Easton across from Canal Park on Lehigh River, we have never seen such a beautiful pier anywhere and would it make the Lehigh a lot more accessible since most of it is heavily treed & brush covered with steep banks and may I also suggest door toilet facilities at such spots. We are seniors & enjoy fishing. Thank you Sincerely, E.T & friends"

Response: Please be advised that fishing access improvement, which may include fishing piers at some locations, has been incorporated into the plan. Although public convenience facilities were not specifically addressed, such facilities may be present at certain areas based on the availability of funding. Also, the PFBC may not be the agency entrusted with the operation and ownership of each access area, as local governments may also operate access areas and the PFBC will most likely be a partner in achieving funding for access development.

23. Delaware River Shad Fishermen's Association Letter Comments received via email on 26 April 2007: Gentlemen, This is our proposal for restoring American Shad within the river systems. We ask you to incorporate the relevent portions in the "Lehigh River Fisheries Management Plan". To much has been said in the past and it is time to act on this plan for the betterment of the Lehigh River and the Am. Shad and for the sportsman of Pennsylvania who supported you with the Fish Passageways and the Restoration Program. We the DRSFA will help and support all your efferts in this goal. We had hoped that the fish passageways was the end result, but as we all know and see-that it was not.. We must stand together and be proud to return this Historical Native fish to the rivers... George Magaro Sr. Pres. DRSFA." (See attached DRSFA proposal below).

Response: Your comments are noted.

DELAWARE RIVER SHAD FISHERMEN'S ASSOCIATION 4110 Shannon Ave. Bethlehem, PA 18020 Email: shadfisherman@aol.com

Suggested Delaware River Basin Shad Restoration Plan:

- 1. Harvest Reductions:
 - a. Delaware Bay Commercial Harvest (2/3 Reduction)
 - b. Recreational Fishing Harvest (1/2 Reduction-3 in possession.)
 - c. Ocean Harvest (100% continuation until self-sustaining population goals are met.)
 - d. Egg-taking From Delaware Shad Spawners supplemented by other sources until selfsustaining population goals are reached.
- 2. American Shad Stamp (\$5.) like the successful Lake Erie Permit and Trout Stamp for funding.
- 3. Lowering striper size limit and increasing possession limit by 50% to reduce predation.
- 4. Consideration of a reduction in Lehigh River walleye and muskellunge stocking.
- 5. Netting, tagging and telemetry shad studies for Fish Passage Evaluation on Lehigh, Schuylkill and Delaware Rivers and their tributaries.
- 6. "Schools in Schools" program to connect young people at all school levels to Shad
- Restoration just like the highly successful Jim Cummins' Potomac River Basin program.
- 7. Immediate establishment of Spawning Shad Goals for self-sustaining populations by 2010:
 - a. Delaware River- 2 Million
 - b. Lehigh River- 350 Thousand-800 Thousand
 - c. Schuylkill River- 350 Thousand-800 Thousand
- 8. Increased shad fry releases for at least a five-year period until 2012:
 - a. Delaware River- 5 Million/yr.
 - b. Lehigh River- 2 Million/yr.
 - c. Schuylkill River- 2 Million/yr.

(Suggested fertilized egg sources: Conowingo, Chesapeake Bay, Columbia, Connecticut, Cooper or Hudson rivers or USF&WS hatcheries.)

- 9. Removal of Lehigh River dams at Easton, Chain (Glendon), Allentown, and Cementon by 2010 and their replacement with pumping stations similar to the one successfully supplying water to the canal from Riegelsville to New Hope,PA.
- 10.Re-allocation of Resources and Re-emphasis to the Delaware River Basin Shad Restoration Plan:
 - a. A. A full-time Fisheries Coordinator-PF&BC to work closely with Delaware River Fish and Wildlife Co-operative.
 - b. Monthly meetings for charting the progress of the most economically and recreationally valuable fishery (Shad and other Anadromous fish) in the Delaware River Basin.(20 Million+citizens and potential fishing license-holders and conservation-minded stakeholders live within 1 1/2 hours of the Delaware River Basin.)
- 11. Haul-seine spawning shad at base of Easton and Chain Dams and "Trap and Transfer" in trucks with circular 3000 gallon tanks with aerators above Allentown and Cementon Dams in the Lehigh river.

We believe strongly that our investment in the suggested Delaware River Basin Shad Restoration Plan will yield the highest return on our resources for the great majority of our citizens and we urge you to implement it as soon as possible.

Board and Members /Delaware River Shad Fishermen's Assoc. Pres. George Magaro Sr



24. Lehigh Coldwater Fishery Alliance Letter Comments received via email 6:39 PM 2 May 2007:

April 30, 2007

Mr. Dave Arnold and Daryl Pierce, PA Fish and Boat Commission, Fisheries Management Area 5, Route 209, PO Box 155, Bushkill, PA 18324

RE: Lehigh River Fisheries Management Plan - Comments

Dear Mr. Arnold and Mr. Pierce:

The Lehigh Coldwater Fishery Alliance (LCFA) would like to thank the PA Fish and Boat Commission (PFBC) for taking such a vested interest in the Lehigh River fishery. The Lehigh River Fisheries Management Plan (Plan) is a step towards improving the resource that many anglers already enjoy. The LCFA recognizes that the PFBC staff put in a tremendous amount of thought, time and effort to produce this Plan.

In recognition of this tremendous effort, the LCFA would like to assist the PFBC in any capacity or arena that may be necessary. The proposed actions will take a team effort from PFBC staff, local angling groups and anglers themselves, to implement the actions discussed in the Plan. In addition, we suggest that the PFBC work with the local fishing guides that participate in the PFBC's guide program. The fishing guides who make a living on the Lehigh River are a wealth of knowledge and would be a great resource of information to improving the Lehigh's fishery.

The LCFA is submitting the following comments that specifically pertain to the Lehigh River's trout fishery:

3.2 FEW Dam to Northampton Dam (RM 76.50-24.00)

Paragraph 1, Page 13 –

"Habitat conditions started to deteriorate in middle section of the Lehigh River" <u>LCFA Question</u>: Can certain stretches be identified and actions proposed to mitigate future deterioration of habitat (i.e. – sediment loading, riparian buffer depletion, etc.)? These areas should be identified through the efforts of the PFBC combined with local groups to establish plans to mitigate problematic areas.

<u>LCFA Comment</u>: This stretch is probably one of the healthier sections with regards to aquatic life. This section of the Lehigh River has good aquatic insect diversity, excellent trout habitat, but yet this section of the Plan only mentions the iron oxide deposition and the whitewater contracted invertebrate study.



3.4 Proposed Actions

Paragraph 2, Page 14 – Describe the occurrence, extent, and duration of coldwater thermal seeps and coldwater tributaries with the mid-lower reaches of the Lehigh River.

<u>LCFA Comment:</u> The LCFA is willing to provide assistance for the PFBC in identifying these coldwater seeps and tributaries. Under current conditions these locations are vital to trout survival during low water and hot air temperatures that are known to occur during July and August.

LCFA has two recommendations that may assist in identification of these areas:

- a. Perform an electro-tagging study on wild trout in the Lehigh River to assist in identifying these thermal refuge areas. This may also allow for identification of spawning tributaries which may be useful in future management of the trout fishery. A similar study was performed on the Upper Delaware by the NYSDEC in 1995 through 2000. This recommendation may also be applicable to discussion in section 4.81a.
- b. Upon identification of the thermal areas, the need to prohibit fishing in these areas should be used to protect the trout from easy harvest. It has been documented that this is a common practice with local Lehigh fisherman. Protection of these areas during times of thermal stress will only create a better fishery.

4.8 Review of Water Quality Monitoring Studies on the Lehigh River

Paragraph 2, Page 19 -

<u>LCFA Comment:</u> Investigate the possibility to upgrade the USGS gauging stations (Lehighton & Walnutport) to provide water temperature and quality data. This would be beneficial in monitoring the Lehigh Rivers water quality.

4.8 Review of Water Quality Monitoring Studies on the Lehigh River

Paragraph 3, Page 20 -

<u>LCFA Comment:</u> This paragraph discusses acidification and anoxic conditions in the reservoir due to inundated vegetation. It also should be noted that these conditions would subside with a more elevated and stable pool that would not allow the vegetation to grow back year after year. Thus the anoxic conditions would lessen over time. Also, equipping the FEW control tower with the ability to discharge water from varying depths will aid in lessening the potential effects of iron oxide precipitation and hydrogen sulfide gas in the Lehigh below the FEW. This is later



discussed in 4.81b but does not specifically address mitigation or the fact that these conditions may lessen as a result of a more stable and higher pool elevation.

4.81c – **ii Water Temperature (Francis E Walter Dam to former relic Palmerton Dam)** Paragraph 2, Page 28 -

<u>LCFA Comment:</u> Not only does this stretch tend to have cooler water temps than the upstream areas near Lehigh Tannery, the water temperatures also tend cool more significantly at night, then upstream of Tannery. This is largely due to the fact that there is less influence from the constant warmer water temperature supplied by Francis E Walter. If temperatures of water being released from FEW can obtain a much lower temperature (i.e. 50 Deg F), and there is adequate volume being released, the potential exists to sustain these water temperatures for a great distance down river from FEW. Sustaining of the water temperatures is a direct result of influence from the coldwater tributaries to the main river. This would result in many miles of water temperatures suitable for trout growth and survival, especially during the summer months.

4.9 Proposed Actions - Page 35

 The LCFA requests even greater involvement by the PFBC staff and its Commissioners to have the Section 22 Planning Assistance to the States study (Coldwater Study) funded. In addition, if the outcome and findings from the Coldwater Study are favorable, we request the PFBC actively pursue and/or lobby the Army Corps and Congressional officials for the operational changes and funding for possible modifications at FEW.

5.11c Proposed Actions – Page 39

1) In addition to the low flow channel deflectors aiding in the reduction of water temperatures in these headwater streams above FEW, this would also assist in replenishing the cool hypolimnetic water in the reservoir. These types of project will only help improve the in lake fishery and down stream fishery from FEW. The LCFA is in full support of these projects and is willing to lend assistance as needed.

5.12 Francis E Walter Dam to Sandy Run – Mgmt Section 6

5.12a Survey and Management History -

Paragraph 3, Page 41–

<u>LCFA Comment:</u> The experimental release plan for FEW was first initiated in 2005 and not in 2004.



Paragraph 3, Page 41 -

Historic water quality data has demonstrated that the benefits of the coldwater release dissipate by the time the releases reach the Tannery Bridge, which is located approximately 7.5 miles downstream of the dam.

<u>LCFA Comment:</u> Based on water temperature data collected in 2006 by the ACOE (see attachments) from locations on the Lehigh River at Tannery and the FEW outflow, it is apparent that temperature at Tannery is proportionate to the water temperature being released from FEW. Based on water temperature data collected between April and end of May, it was observed that the temperatures at Tannery rose approximately 10 deg F, (+ or -) over the course of travel.

For example, if water temperatures from FEW can be sustained at a constant 50 Degrees F, water temperatures that are necessary for trout survival and growth should be maintained throughout this stretch. It is apparent that a greater volume of water released (more than 250 cfs), from FEW will be required to sustain conducive water temperatures at Tannery. Therefore, if a conducive water temperature for trout survival and growth can be accomplished at Tannery; there is the potential to sustain these water temperatures for a greater distance down river from Tannery. This is a direct result of the influence from the numerous coldwater tributaries. These tributaries cause the river to double in flow at Lehighton. Obviously, there will be exceptionally good years (high precipitation) and poor years (low precipitation) where the lower limit of trout conducive water temperatures can be maintained. As such may occur, the addition of coldwater from Beltzville Reservoir may aid in "extending" this lower limit even farther downriver, thus providing many, many miles of "trout friendly" water temperatures in the Lehigh River.

The more water that can be stored in FEW will allow for higher sustained releases during the summer months. This will only benefit the trout fishery even farther down river, as long as those releases don't deplete the hypolimnion in the FEW Reservoir. In addition, higher sustained releases will also improve water quality and dilute the harmful effects of Acid Mine Drainage (AMD) that is common on the west side tributaries.

5.12c - i Fisheries Management Section 6 - Proposed Actions

Paragraph 2, Page 42.

<u>LCFA Comment</u>: The LCFA will be available to lend assistance in selection of the two survey sites. The members of the LCFA are comprised of fisherman and guides that spend many hours on the river. The hours spent fishing and guiding other fisherman has allowed for our members to have an intimate knowledge of the fishery. The LCFA will share this information directly with the PFBC in order to make a better trout fishery.

Paragraph 3, Page 42.



<u>LCFA Comment:</u> The LCFA requests that future management decisions are done to promote and enhance the wild trout fishery on the Lehigh River. Wild trout are the backbone of the Lehigh River and will provide an exceptional angling experience to anglers in PA and surrounding states.

5.12c - ii Fisheries Management Section 6 - Special Regulation Area (Pg 43)

<u>LCFA Comment:</u> The LCFA agrees with the PFBC's decision not to establish any special regulation water on the Lehigh at this time. In addition, we recognize that anglers wishing to fish the Lehigh should be permitted to use their choice of tackle.

However, any type of regulation that limits the harvesting of trout or restricts tackle use should be used to benefit the fishery in order to increase the size distribution and populations of wild trout. As a result of the increased publicity the Lehigh River has been receiving, it is inevitable that pressure will increase on the Lehigh as well. Future management decisions need to take this into consideration. In addition, with increased pressure and the ability to use all types of tackle, one must consider hook mortality rate increases (especially with use of bait) and their effects on trout populations in addition to harvest rates as well.

5.13a Survey and Fisheries Management History

5.13a – i Section 7 *Pages 44 through 46:*

<u>LCFA Comment:</u> Based on surveys conducted over the years extending back to 1972, it appears that the presence of trout is increasing over time. This obviously is a direct result of stockings, clean water and wild trout spawning in tributaries to the river. Granted the catch rate of trout is not alarming, but this is reason to be hopeful and make attempts to enhance the trout fishery on the Lehigh River. It is also interesting that no walleye, muskellunge, or tiger muskellunge were caught or seen during the surveys in this section.

It should also be noted that the survey locations selected in 2006 by the PFBC (Glen Onoko Pool and Bowmanstown Pool) are probably some of the most pressured locations on the Lehigh River. The angling pressure in these locations is mostly due to convenience and accessibility. Selection of future sites should attempt to choose locations that do not receive high amounts of angling pressure or are as easily accessible. As discussed previously, the LCFA would like to assist the PFBC in selection of future surveying locations and aid in any surveys performed.

5.13a - ii Section 8

<u>LCFA Comment</u>: The LCFA suggests that the PFBC may want to investigate this section more closely as it relates to the fisheries management designation. The stretch of river extending from Palmerton relic dam to Walnutport differs greatly in characteristics and habitat than the stretch



from Walnutport to Northampton. As a suggestion, the need to possibly have this stretch classified in two "sub-sections". The habitat in the Palmerton to Walnutport stretch is much more conducive to a trout fishery than below Walnutport were the habitat may be more conducive to a smallmouth bass fishery.

<u>LCFA Comment:</u> It should be noted that the confluence of the Pohopoco Creek with the Lehigh, in Section 7, is currently a large refuge area for trout during the summer months. At this time the coldwater from the Pohopoco Creek is necessary for trout survival during typical to hot/dry summers. The LCFA recommends that during times of thermal stress in this stretch, that fishing be prohibited 100 meters below the confluence with the Lehigh and extend up to the Parryville dam on the Pohopoco Creek itself. By doing so, this will only enhance the Lehigh's trout fishery for future enjoyment by all anglers when temperatures decrease in the Lehigh River and are more suitable for trout survival.

5.13b - ii Proposed Actions

Paragraph 2, Page 49 & 50

<u>LCFA Comment:</u> The LCFA agrees that electro-fishing should be used to determine the length/frequency distribution and proportion of adult hatchery/put and grow (fin clipped) trout, and wild trout at suitable sites. However, neither catch rates nor population estimates are reproducible (not statistically valid) in a body of water as large as the Lehigh. The variance maybe too high and make the values meaningless. Electro-fishing catch rates alone may not be a valid statistic to determine whether the stocking is successful or not. But the identification of a proportion of recaptured fin clipped trout is a good measure of success in addition to the proportion of wild trout identified.

The LCFA agrees that shocking every year at the same place and same time of year is prudent. In addition, the surveys should make all attempts to replicate the same flows as previous years. The assistance from the Army Corps maybe required in this instance.

However, the LCFA deems that it may not be wise to determine the success of the fingerling stocking (or other measures of management) on catch-rate, for the reasons above, as well as angler surveys. Although, the data collected in combination of both electro-surveying and angler catch rate surveys will aide in deciding the effectiveness of the current management of the fishery. All this information should be collated and presented at a workshop in which the angling public is involved and may also provide additional input on future management decisions.



Paragraph 3, Page 50

<u>LCFA Comment</u>: As a result of continued walleye fry stockings since 1984 in section 8 and 2003 in Section 7 (according to Appendix A), the findings from recent electro-shocking and angling surveys identifying very low catch rates, if any. The LCFA requests halting the walleye stockings in management sections 7 and 8, and place these fish in more suitable habitat down river (below Northampton). In addition, members of the LCFA have never seen or caught a walleye in sections 7 or 8 of the Lehigh. The LCFA requests that the PFBC consider managing these sections of the Lehigh with a more trout focus.

Paragraph 5, Page 51

<u>LCFA Comment:</u> The LCFA requests that the PFBC's Habitat Section become a greater proponent for the Section 22 – Coldwater Study, as discussed in previous sections. A sustained release of coldwater from FEW during the months of July and August will vastly improve the trout fishery on the Lehigh. A release of coldwater from the FEW is the most important element to improving habitat on the Lehigh, in regards to the trout fishery.

5.2 Non PFBC Trout Stockings (Page 56 & 57)

LCFA Comment: The PFBC reported the summer of 2006 was "*relatively cool*". After review of meteorological data presented by NOAA, it should be noted that July and August of 2006 were some of the hottest months on record and only slightly above average for precipitation. In addition, the historic flood that occurred in June 2006 was cause for the loss of the hypolimnetic water in the FEW Reservoir and all releases after June 2006 were much higher in temperature, 68 Deg F or more. In our opinion, a relatively "cool" and/or "wet" year would be comparable to the summer of 2004. During 2004, LCFA members and operating fishing guides did not report signs of stressed trout through out the entire summer months in sections 7 and 8. **5.3 Angler Use and Harvest. (Page 57)**

<u>LCFA Comment:</u> As a result of the high usage of bait fishing as compared to the use of artificial lures, the PFBC should consider hook mortality rates on trout by fisherman that use bait in any future management decisions, for reasons discussed previously.

5.31 Proposed Actions (Page 58)

<u>LCFA Comment:</u> The LCFA would like to participate and assist the PFBC in any future angler surveys.

5.41a Proposed Actions *Paragraph 6, Page 60*



LCFA Comment: As discussed previously, the LCFA requests that the PFBC become even more vigilant in the Section 22 Coldwater Study and lobby for any modifications deemed necessary to protect the hypolimnetic water in the FEW Reservoir. The FEW Reservoir was completed in 1961 with out any real consideration to recreation, let alone a trout fishery. It should be noted that a trout fishery was once present in the Lehigh before the logging and coal mining industry virtually destroyed all life in the river. The LCFA requests that the PFBC work with the Army Corps and our Congressional officials to seek any required modifications be executed at the FEW Reservoir.

5.43a Proposed Actions (Page 62)

<u>LCFA Comment</u>: In addition to the great lake fishery in Beltzville, the LCFA deems the Pohopoco Creek tailwater fishery has the ability to support a healthy population of wild trout, albeit a brook trout fishery. The temperature of water discharged from the Beltzville Reservoir, combined with aquatic insect diversity in the Pohopoco Creek, creates the potential to have an exceptional wild trout fishery, if protected and managed as such.

6.5 Proposed Actions (page 69)

- In review of Table 22, if should be noted that the majority of the access locations are very limited in use. To maximize the resource more effectively, strategically placed multi-use (including trailer) access locations should be constructed along the Lehigh River. Fishing the Lehigh River is very effective by the use of drift boats or rafts. Currently there is very limited access for trailers that are required to mobilize the watercraft for fishing the Lehigh. The LCFA suggests the following sites be investigated for potential multi-use (w/ trailer) access locations, some of which may only require limited work, if any:
 - Treichlers Bridge (new construction)
 - Walnutport (upgrade only)
 - Lehigh Gap/Palmerton (new construction)
 - West Bowmans (to be constructed)
 - ➢ Jim Thorpe (access only available to rafting companies or small watercraft)
 - Glen Onoko (upgrade only)
 - Rockport (upgrade & construction)
 - ➢ White Haven (upgrade & construction)
 - ➢ FEW tailrace/base of dam (new construction)
- 2) Any boat ramp constructed in FEW Reservoir should be capable of handling a wide range of lake elevations. The boat ramp should be constructed so that it may not cause a restriction in potentially higher lake elevations that may be established in the future as a result of findings from the Section 22 Coldwater Study. It may be prudent at this time to



suspend any construction scenario until the Coldwater Study is completed and the results maybe reviewed.

The LCFA greatly appreciates the opportunity to submit these comments and participate in the preparation of the Lehigh River Fisheries Management Plan. If the PFBC staff would like to discuss any comments that have been submitted, the LCFA would be glad to attend a meeting with PFBC or have the PFBC attend one of our regular monthly meetings.

The LCFA looks forward to continuing the working relationship with the PFBC and efforts to improve the Lehigh River's wild trout fishery.

Respectfully Submitted,

Vear Julhille

Dean Druckenmiller, President Lehigh Coldwater Fishery Alliance www.thelehighriver.org

cc: Dr. Doug Austen, PFBC Mr. Leroy Young, PFBC Mr. Fred Osifat, PFBC

attachments:

Page 21





Page 22





Response: Your comments are noted, and will be considered as the plan progresses.