

Appendix F

Comments on the Draft EIS and TVA Responses

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Introduction

The Draft Nolichucky Flood Remediation Project Draft Environmental Impact Statement (EIS) was distributed in January 2002. Members of the public and interested agencies provided comments on the Draft EIS at a public meeting held on February 21, 2002, or by electronic or commercial mail. The comment period closed on March 29, 2002.

TVA received a total of 89 sets of comments on the Draft EIS, consisting of letters from individuals, letters from agencies, and verbal comments delivered to court reporters at the public meeting. These sets of comments include input from 45 individuals, two federal agencies, and three state agencies. The commenters are listed below starting on page F-2. While most of the commenters provided only one or just a few comments, a few provided many comments. This appendix reprints (starting on page F-6) a number of these comments in their entirety to help convey the nature and scope of comments TVA received.

TVA has reviewed all of the comments, has identified specific issues and opinions about the EIS contained in each of them, and has associated similar issues to produce the following list of 263 separate comments, each of which still identifies its original source. These comments are arranged in 20 sections, generally matching the major subject areas discussed in the EIS. Within each section, the comments are arranged with general issues first, then those in favor of the subject action, then those opposed to it, followed by any alternative ideas. Short comments are usually presented before longer ones, and basic comments are presented before complex ones. TVA has provided a response to every substantive comment, either individually or by clusters of clearly-related comments. Individual comments in these responses are indicated [**in bold**] by name and letter inserts. In some instances, TVA responded to comments by modifying the text portions of the Final EIS.

List of Commenters

Following is a list of individuals and organizations that submitted comments on the Draft EIS. The numbers following each name indicate which of the numbered comments included in this appendix were provided by that individual or organization.

Armstrong, Charlotte: 114

Ashworth, Denise M.: 75

Bales, Barry: 163

Banks, Caleb: 147

Benko, Mark: 56

Berry, Travis: 161

Bird, Robert K.: 36, 54, 60, 89, 103, 140, 146,

Bird, Sammy: 171

Burgner, Dan: 12, 21, 25, 28, 30, 80, 85, 209, 225, 243

Campbell, William Donald: 20, 33, 55, 76, 135, 151, 152, 153, 183, 214, 261

Carter, Nancy: 122

Collins, Johnny: 165, 194, 245

Cotton, Tom: 46, 107, 137, 167, 199, 208, 242

Cox, Mary: 111, 121, 129

Cox, Robert: 88, 105, 120, 133, 134, 226, 227

Crum, E. Grant: 5, 13, 91, 124

Cunningham, Michael: 99

Daniels, Bryan T.: 6, 223, 224

Dority, John: 7, 148

Environmental Protection Agency [EPA], Heinz J. Mueller, Chief, Office of Environmental Assessment, Atlanta : 16, 22, 68, 72, 92, 160, 174, 189, 190, 196, 197, 198, 207, 211, 229, 230, 259, 262, 263 (Listed as U.S. Environmental Protection Agency in EIS text)

Fellers, Michael R.: 178

Fillers, Arvin: 23, 175, 219, 238, 239, 246

Fillers, Arvin and Sheila (e) [e-mail comments]: 1, 8, 24, 31, 220, 240, 241, 247, 248

Gluck, Roger: 150

Greene Co. Fishing and Hunting Club: 58

Harris, Andrew: 42

Hendry, Mary A.: 9, 164, 166, 254

Higgins, Estel: 158, 159

Hill, Donna: 119, 128, 228, 258

Hill, Rae: 117, 118, 127

Holt, Tara: 98

Inscore, Phyllis: 44, 45

James, Landon: 39

Jennings, Tara: 100, 233

Johnson, Ashley: 50, 90, 95, 141

Kite, Coty: 234

Land, Nikki: 43, 232

Laughters, B. F.: 10, 155, 201, 255

Lawrence, Gene: 49, 79, 86, 102, 139, 156, 215

Leffew, Rachel: 65

Leonard, Dorothy: 157

Matern, Samantha: 48, 69, 142, 231

Mills, David: 179

North Carolina Division of Water Quality, J. Todd Kennedy: 188

Norton, Crystal: 38, 218

Park, Holly: 71

Piper, Bill: 3, 47, 63, 67, 74, 87, 101, 136, 257

Reavely, Latasha: 96

Reed, Jack: 169, 250, 253, 256

Renner, Andrew: 57, 113

Ricker, Lynn: 19, 172

Sayler, Gregg: 2, 11, 185, 213, 237, 249

Self, Larry: 52, 62, 64, 104, 143, 170, 176, 200, 202, 205, 206, 212

Stockman, Autumn: 66

Susong, Joseph R. : 26, 29, 37, 61, 77, 93, 106, 138, 168, 187, 203

Taylor, Wayne: 32, 162, 251, 252

Tennessee Clean Water Network [TCWN], Axel C. Ringe, Treasurer: 51, 59, 70, 83, 108, 144, 210

Thomley, Jennings: 73, 173, 177, 180

Tennessee State Historic Preservation Office [Tennessee SHPO], Herbert L. Harper, Executive Director: 259

Tolliver, Matthew: 78, 145

Tennessee Wildlife Resources Agency [TWRA], Dan Sherry, Fish and Wildlife Environmentalist: 204

U.S. Army Corps of Engineers [USACE]: 17, 18, 34, 35, 84, 109, 181

Voiles, Derek: 94, 97

Waddell [The Waddell Farm]: 222

Walters, Jane: 112

Walton, Nicky: 41, 244

Ward, Roger and Teresa: 154, 236

Weckerley, Lillian: 184

Weems, Stanley: 149

Woodby, Terah: 40

Young, Philip : 4, 14, 15, 27, 53, 81, 82, 110, 115, 116, 123, 125, 126, 130, 131, 132, 182, 186, 191, 192, 193, 195, 216, 217, 221, 235

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Extensive Sets of Comments

Transcript of Oral Statement by DAN BURGNER

MR. BURGNER: My name is Dan Burgner, and I have my statement. I'd first like, I believe, to point out, that this -- this project is a flood remediation project. And the focus should stay on just that, flood remediation. Should the focus be placed elsewhere, notably in environmental protection, recreation, wildlife and social engineering, I would object to any schemes that would expand these categories. **Burgner - A**

I can't say that I like any of the four alternatives. If nothing is done, i.e., Alternative A, given that floods regularly exceed the 1255.6 property level, an inverse condemnation of private property is taken place with no compensation. It could be said that no compensation is justified, given that flooding has exceeded the property line almost from the time the dam was raised in 1925. **Burgner - B**

If Alternative B is chosen, I would object to any fee title acquisition. Fee acquisition is totally unnecessary for a flood remediation. Only flooding easements are necessary for flooding remediation. Should TVA choose to require only flooding easement, Alternative B would be more palatable. **Burgner - C**

Alternative C and D are totally out of the question because they would preclude any chance in the future of restarting the hydroelectric facility at Nolichucky Dam. There is no question that this project would be highly profitable [for power production] under open-access market conditions. **Burgner - D**

Finally, any of the alternatives chosen would require expenditures of money. Given that TVA no longer receives non-power appropriations, it will have to come from power revenues, and, in turn, from our light bills. Also, consider that TVA is \$26 billion in debt with no chance of paying it off any time soon. Why should power consumers pay this thing? **Burgner - E**

I would like to suggest that TVA take a more close look at Jones Bridge and examine the construction of the new bridge and the flooding. I notice on the flood profile that the river takes a drop in flood level almost at that exact location. What would be the impact if the built-up road leading to the bridge on the north end were modified to allow more free flow? There was a floodway on the north end of the Jones Bridge that completely covered the road before it was washed out in 1977. The road leading under the new bridge now blocks that floodway. This is not a TVA screw-up; this is a State of Tennessee screw-up, and it's theirs to clean up. **Burgner - F**

There also needs to be a more thorough examination of removing all existing vegetation below the 1255.6 property line. And then more examination should be made of the impact of removing the vegetation on the 100-year flood level and the 500-year flood level.

Additionally, there should be more examination of removing all vegetation, plus, knocking all sand bars, and so-called wetlands, down to the 1240.9 level on these same floodlands. **Burgner - G**

I also object to the varying definitions that I keep getting of the so-called wetland. It seems that everyone has a definition of a wetland, and they constantly change from day to day.

Burgner - H

Should the focus divert elsewhere, most notably the Nolichucky Wildlife Management Area, or the duck pond as I like to call it, I need to point out that this project has been a failure. The objectives for the duck pond, set in 1970, was that 39,000 people a year would visit the place; that there would be a resident -- with emphasis on resident -- Canada Goose population; and resident Wood Duck population of three hundred birds, and one thousand birds, respectively. Also fifteen thousand migratory waterfowl would fly through each year. The duck pond never came close to any of these objectives. **Burgner - I**

I will go along with Alternative B if TVA can do the following: acquire additional flooding easement through property right swaps. Through a swap, a property -- a riparian landowner, whose land goes to the 1255.6 level, could swap additional easements for fee title to the middle of the river. The landowner could then dredge sand, harvest timber, even grow crops should he desire to take the risk. If TVA could trade that way, it would not cost TVA any money. TVA holdings then would be limited to flooding easements. **Burgner - J**

NOLICHUCKY RESERVOIR FLOOD REMEDIATION PROJECT

To: TVA

Attention: John Jenkinson

To address the Draft - comments on the Environmental Impact Statement are herein summarized for reconsideration of future sensible benefits for mankind.

Since 1972, the failure of TVA to pursue the update, remodel, improvement of the Nolichucky Dam and reservoir in lieu of doing nothing except having wildlife management and environmental education. These thirty years has not earned any monetary benefit for TVA or any economic usefulness for citizens of East Tennessee. **Campbell - A**

TVA should obtain rights or easements to lands which would be flooded. People who own lands which have the potential to be flooded, could still own these lands. Land dikes or levies could protect historical places. **Campbell - B**

The asset, which TVA has, along with East Tennessee, is Free Falling Water, which is being ignored for the purpose of electrical generating. Flood control is only one responsibility, and it is limited only to the degree which Mother Nature allows. **Campbell - C**

The alternatives A) do nothing; D) tear out the dam, each is certainly an alternative but surely a tragedy and a mistaken concept. **Campbell - D**

To correct past neglect and wrong thinking, and in order to move forward in the future, the projected direction is herein contained:

1st A project of considerable scope is to cut a huge spillway to the Southeast of the present dam to a depth below the outflow of the structure.

2nd Design a lock and gates similar to the one at Lake Guntersville Dam on the Tennessee River. Any new construction should be as high as the previous full reservoir.

3rd Rebuild the generators now in place if they need to be or replace them with new ones. {It is stated that only one generator needs repair out of four generators}.

4th If the penstocks cannot be restored, design and build new ones.

5th Remove most of all the sediment of the reservoir with regular earthmoving equipment, high lifts, bulldozers, track hoes, pans, etc. This can be accomplished because the channel of the original course will be as it was one hundred years ago. This will be a more economical way of removing silt and sediment than using pumps to do this. The dirt, sediment, silt, sand, and rock should be taken to an off-site location. The sand and rock could be sold to a local sand and rock company for processing. The other materials could be hauled by Greene County or private trucks free and used for widening shoulders of roads, which currently are almost too narrow to travel. Other uses of these materials might be to cover outcroppings of rock, to improve pastureland and crop land, and to use as backfill of building sites. A small fee could be charged to cover fuel cost of loading trucks.

The generating of electric power, a source of free fall water, should be the primary concern of TVA, along with the concern of flooding. The flooding of the Nolichucky River will be minimized to the lesser extent of the 500-year elevation with the building of the new spillway (estimated to be 150 fl. wide). **Campbell - E**

Future thought, TVA should [build] Bar Dams of 10 to 20 feet elevation with a gated spillway and generating capacity down and up stream of the Nolichucky Dam, staying within the river channel all the way to North Carolina. Generation would be small at each of these dams; however, 20 dams together would be beneficial. With modern technology, all generating could be monitored and controlled by one person. Such an endeavor is certainly a better option than Wind Power in this part of the country. To appease those who enjoy the sport of rafting, controlled release policy could be established as is done on other rivers, thereby benefiting tourism. **Campbell - F**

As for the environmental impact, the Davy Crockett Lake and Reservoir will be as the research draft surmises and concludes. The reduction of wetlands (man made over the last 100 years) will be reduced or mostly eliminated but, in time, the shores will replenish as Mother Nature does her magic. Wells, which were affected, should return when project is finished. **Campbell - G**

Consideration also should be given to the building of a two-lane scenic road on either side of the river reservoir with boat access ramps encouraging fishing, tourism, camping, etc. **Campbell - H**

Conclusion:

We as citizens also own these lands and you have the authority to control those lands. We as citizens and "we the people" need to utilize modern technology to cultivate this resource [free fall water]. Do not let this valuable resource be neglected as it has been for the past thirty years. **Campbell - I**

Sincerely,

William Donald Campbell

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

March 22, 2002

Mr. John Jenkinson
Tennessee Valley Authority
P.O. Box 1589
Norris, TN 37828

SUBJ: EPA Review of TVA DEIS for "Nolichucky Reservoir Flood Remediation Project;" TVA Nolichucky Reservoir near Greenville, Greene County, TN; CEQ No. 020052

Dear Mr. Jenkinson:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Tennessee Valley Authority (TVA) Draft Environmental Impact Statement (DEIS) in accordance with EPA's responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The proposed action is to address the flooding of non-federal lands in the Nolichucky Reservoir floodplain due to extensive reservoir sedimentation.

The reservoir sedimentation is due to former upstream mining activities initiated in the 1870s, as well as from other sources. Nolichucky Reservoir currently occupies only 10% of the reservoir volume since 19,000 acre-feet (a-f) or 30.6 million cubic yards (mcy) of sediments have accumulated in the forebay and other portions of the reservoir. We understand from TVA that sedimentation from upstream sources continues at this time.

TVA currently has landrights (easements, ownership and reservoir bottom) to some 1,778 acres of land within the 100- and 500-year floodplain surrounding the Nolichucky Reservoir. In contrast, 997 acres are privately owned within the floodplain. As a TVA reservoir, periodic flooding of these private lands and their structures can have liability consequences.

Alternatives

The present TVA EIS proposes to remove or reduce the dam to lower the reservoir pool and reduce the risk of floodplain flooding, or to purchase the private lands within the surrounding floodplain to reduce the liability of flooding. We offer the following comments on the subject Nolichucky Reservoir DEIS for TVA consideration in the Final EIS (FEIS):

In addition to the No-Action Alternative (A), the DEIS presents three action alternatives. These are to *Acquire Landrights* (Alternative B), to *Lower Nolichucky Dam* (C), and to *Remove Nolichucky Dam* (D). Of these, Alternatives C and D would effectively reduce the risk of flooding through removing or lowering Nolichucky Dam, respectively, while B would reduce the liability of flooding through the purchase of 100-year and 500-year floodplains. Due to the consequential lowering of the reservoir pool, Alternatives C and D would drain, expose and desiccate approximately 310 acres of wetlands currently associated with the reservoir as well as expose existing reservoir banks to erosion, increase downstream

sedimentation, and significantly lower the water table. In contrast, Alternative B would not drain these wetlands; however, it would continue to expose existing cultural resources within the floodplain to the risk of flooding, although such structures would be selectively flood-proofed.

Preferred Alternative

TVA did not select a preferred alternative in the DEIS. EPA suggests that a preferred alternative be selected at the DEIS stage so that the public can better focus its comments on that alternative during the early portions of the NEPA process (DEIS rather than FEIS). We agree, however, that TVA should not make a final decision on its preferred alternative until public comments on the FEIS have been received and reviewed. **EPA - A**

EPA Preference

Based on the alternatives presented in the DEIS, EPA prefers Alternative B since, in contrast to C and D, Alternative B would not lower the reservoir pool level and expose considerable wetland acreage. With the removal of the reservoir hydrology, these fringe wetlands would be lost. **EPA - B** Moreover, it is our understanding from the DEIS that these wetlands are quality wetlands that are unique to the region and are interrelated with the sediment accretion over time. We note that page 90 states that:

*The variety and expanse of wetlands in Nolichucky Reservoir and on the surrounding floodplain are quite uncommon in other parts of east Tennessee. No other reservoir or river floodplain in east Tennessee has the specific combination of water regime, vegetation community, surrounding habitat, overall wetland area, and absence of disturbance that exists around Nolichucky Reservoir. **EPA - C***

In addition, Alternative B would involve the purchase of flood prone areas that are currently periodically flooding, as well as additional floodplains up to and including the current 500-year floodplain. These current non-federal areas would thereby become public property. This in turn would create beneficial wildlife areas that would be added to the existing wildlife management area managed by the Tennessee Wildlife Resources Agency (TWRA), which should somewhat improve the overall water quality of the reservoir by limiting shoreline development and providing a natural area buffer zone. We assume TVA's shoreline development policy consistent with its recent *Shoreline Development* EIS would be applied. **EPA - D**

Limitations

Despite its environmental benefits, it should be noted that Alternative B would only mitigate the liability associated with flooding events as opposed to mitigating the risk of flooding itself. Alternative B does not propose to physically alter the dam, change the pool level, dredge the accumulated sediment in the reservoir, or increase flood volume. Accordingly, all the current structures and cultural resources would continue to be periodically flooded (although they would be selectively flood-proofed), river sediments would continue to accumulate (from existing upstream sediment sources and movement of existing bedload sediments in the river system), and river flows would continue to carry a substantial

suspended sediment load. **EPA - E** Under Alternative B (and A), the reservoir volume would presumably continue to be reduced as more sediment accretes (unless a bedload equilibrium has already been reached within the reservoir), resulting in the continued prospective acquisition of additional floodplains in order to again reduce the flooding liability. The value of the reservoir in terms of its use classification, recreation, fisheries and water quality would all continue to diminish. **EPA - F**

Reservoir Dredging

We note that other alternatives were considered but rejected and not carried forward in the DEIS. EPA requests that TVA further consider the alternative to dredge the reservoir in order to recover volume and restore better use of the reservoir. **EPA - G** There are several positive and negative issues to consider:

* Reservoir Volume - Removing reservoir sediments would restore a measure of reservoir volume and thereby reduce/resolve the floodplain flooding issue and reduce/prevent the need for floodplain acquisitions. **EPA - H**

* Reservoir Value - Sediment removal would restore the use designation of the Nolichucky mainstem where sections are considered to only be partially supporting designated uses due to sedimentation. Moreover, other aspects of the reservoir would be enhanced with additional volume such as fisheries and recreational values (given that the reservoir currently only occupies 10% of its original volume). **EPA - I**

* *Sediment Quality* - If significant sediment contaminants exist, suction dredge removal of such contaminants could be beneficial to prevent their possible resuspension or bioaccumulation in the food chain. Page 57 indicates that 73 industrial and 47 domestic discharges presently exist within the watershed (despite National Pollutant Discharge Elimination System (NPDES) permitting controls, a cumulative effect in the sediment can be assumed) and pages 70-71 indicate that radionuclides, PCBs, pesticides and metals (including mercury and cadmium) were sampled or historically exist. It was noted that seventeen metals were present above the detection limits but below "levels of concern." Unless it is verified that these contaminants are indeed at acceptable levels (the FEIS should further specify and substantiate) or are safely capped by clean sediment or are not available to the food chain and subject to natural resuspension, efficient sediment removal would be beneficial to the environment. **EPA - J**

* Sediment Removal - If sediment removal cannot be efficiently accomplished with a suction dredge, additional suspended sediments would result downstream. Such additional turbidity could adversely impact downstream resources by silting in habitat (e.g., wetlands) or impacting sediment-sensitive aquatic resources (e.g., mussels and other molluscs) and disrupting aquatic resource reproduction (e.g., demersal fish eggs), as well as resuspending any contaminants. Such siltation may also occur even if a suction dredge is used. The FEIS should discuss this. **EPA - K**

* Economics - We agree with the TVA assessment (pp. 34-35) that sediment removal would be a continuing operation. This is due to the continuance of suspended sediment flows from upstream activities and the downstream movement of sediment bedload. Periodic dredging would be expensive; however, periodic acquisition of

floodplain lands to adjust for the additional reservoir sedimentation would also be an expense. Dredged sediment, if verified as being uncontaminated, may be marketable and a source of monies that could help offset the cost of dredging. **EPA - L** The FEIS should be more specific as to the nature and degree of continued upstream activities that generate sedimentation (mining, agriculture, point source, non-point source, etc.) .
EPA - M

Reduced Sedimentation

Although perhaps not within the scope of this EIS, inclusion of a discussion in the FEIS on ways to minimize upstream sediment sources would be beneficial. How long is mining expected to continue? Are non-point source BMPs being implemented at mine sites and in the agricultural areas? While the DEIS indicates that even if sediment sources would be controlled, the existing sediment bedload would continue to move downstream, such controls would still be environmentally meaningful in the long term. **EPA - N**

If reservoir dredging alternative is further analyzed and implemented, control of upstream sediment sources would also have an economic benefit by reducing the amount of dredging needed. Such controls should also include private land acquisition within the reservoir floodplain (similar to B) or other shoreline management of the reservoir as a water quality buffer to minimize non-point source runoff into the reservoir. **EPA - O**

Fisheries

The removal of dams can often benefit certain species such as fish and molluscs by restoring flows and eliminating impediments to migration patterns. While fisheries are addressed (pg. 81), no species are disclosed. Although we understand from discussion with TVA that the Nolichucky River does not have anadromous fish species that would particularly benefit from the removal of Nolichucky Dam (Alt. D), the FEIS should verify and address the issue of the presence of any commercially or ecologically significant anadromous/catadromous species. Conversely, the decommissioning of the dam can be expected to damage downstream aquatics due to the significant sediment burden that would be released even if reservoir dredging preceded decommissioning. **EPA - P**

Cultural Resources

EPA will defer to the State of Tennessee SHPO regarding project effects on cultural resources. However, we note that current flood events can inundate cultural resources in the floodplain and that such areas may need flood-proofing or other mitigation requested by the SHPO. In addition, any dredging of reservoir sediments should consider the reported possibility of unearthing additional cultural resources. If finds are discovered, guidance from the SHPO should be obtained before work in the area is continued or appropriate measures taken. **EPA - Q**

Environmental Justice (EJ)

Based on page 128, reservoir shorelands do not seem to be disproportionately populated in terms of minority or low-income groups (although the percentage of the low-income population in Greene County is slightly higher than for the State of Tennessee). This section would be improved if information would be added regarding potential TVA land acquisition of the some 1,000 acres of private lands under Alternative B. Specifically, are these landowners willing sellers and does TVA have eminent domain authority? **EPA - R**

Hydropower

Nolichucky Dam has not been used for hydropower for many years. Although presumably unlikely due to physical changes in the dam and sedimentation of the reservoir, does TVA foresee use of the dam as a small source of renewable hydropower? The FEIS should discuss this. **EPA - S**

EPA DEIS Rating

Since no preferred alternative was identified in the DEIS, EPA has rated all presented alternatives separately. Environmentally, we rate C and D as "EO-2" (i.e., EPA has Environmental Objections and request additional information in the FEIS), and A and B as "EC-2" (i.e., EPA as Environmental Concerns and request additional information in the FEIS). Specifically, our objections to C and D focus on the loss of the 310 acres of wetlands and the likely greater sedimentation downstream due to lowered pool levels, while our concerns with A and B focus on the continued losses in waterway use classification and reservoir value. Overall, we rate this DEIS as EO-2, since no preferred alternative was selected and conceivably one of the alternatives rated EO-2 could be selected by TVA in the FEIS.

Summary

Considerable sedimentation has occurred over the years in Nolichucky Reservoir resulting in reduced reservoir value and flooding liability. Such accumulation is continuing. EPA is concerned that the lowering (C) or removal (D) of the dam would result in loss of high quality reservoir fringe wetlands, erosion of exposed reservoir banks, increased sedimentation downstream, and significant lowering of the water table. Selection of A or B would not physically change the dam or pool level or restore flood volume, but B would reduce flooding liability through the acquisition of the 500-year floodplain. Environmentally, such acquisition would place some 1,000 acres of private lands into the public domain as managed wildlife habitat and a natural water quality buffer for the reservoir. This approach, however, would not resolve the continuing sedimentation issue and may require additional land acquisition in the future. Of these alternatives, EPA favors B but is concerned that the sedimentation, reservoir value and flooding issues would not be resolved. Therefore, further consideration of reservoir dredging should be considered in the FEIS in an effort to restore flood volume, reservoir value and mainstem use classification - if dredging can be accomplished environmentally regarding sediment quality, resuspension, and downstream effects. Additional information on upstream sediment sources and their potential control should also be disclosed.

Final Nolichucky Flood Remediation EIS

We were pleased to review the DEIS. Should you have questions regarding our comments, feel free to contact Chris Hoberg of my staff at 404/562-9619.

Sincerely,

Heinz J. Mueller, Chief
Office of Environmental Assessment
Environmental Accountability Division

Greetings John,

Just a few lines to put in a good opinion on your Nolichucky EIS project. I live very near TVA Tract no. NOR-21. I really have a lot of good neighbors and friends who live nearby along the river. Occasional high water is really not so big of an issue to most of us who have lived nearby for a long time. Its usually here today gone tomorrow. **Fillers(e) - A** I'm very fortunate to have fished and enjoyed the river for forty years. I'm forty six years of age. My best memories of the river are days I have shared with five generations of my family members there. My grandfather, dad, myself, son, and grandsons have enjoyed many days there. I thank TVA for the privilege to enjoy boating and fishing and hunting on public land and water. **Fillers(e) - B** The recent flood of August 4, 2001 totally ruined a great amount of public use areas in the nearby mountains. I regret this happened but no one can change that nor can anyone blame TVA ok. **Fillers(e) - A** The fact is a lot of good people use and enjoy Davy Crocket Reservoir for fishing and boating. **Fillers(e) - B** If the dam happens to be altered or removed, in all likelihood, it would remove also the opportunity for a lot of families to enjoy quality time together fishing, boating, enjoying this quiet little known area we use with our rather small watercraft typical to be used there. **Fillers(e) - C** Anymore, it seems to get harder each year to find a little spare time to take our little ones out for some fishing and resting together. **Fillers(e) - B**

I just completed reading my copy of the 215 page EIS Nolichucky draft. I found it to be interesting reading. **Fillers(e) - D** any of the options would please a number of people, I guess. Please consider that option C or D would be a lost opportunity for many people to enjoy this excellent waterway that the jet ski's and bass tournaments haven't found yet. **Fillers(e) - C** After forty years of fishing, I've found it to be good therapy for anyone five to ninety-five. **Fillers(e) - A** Rather than spend maybe \$150 million to destroy something so many have enjoyed for so long, can we not somehow, take that which we already have and make it improved for our citizens of tomorrow that are growing up today. The TVA is probably not going to build many, if any more dams and reservoirs. I realize this as well as does anyone who watches the battles TVA must endure each time a new dam project is given thought. **Fillers(e) - E** I have watched each year on Nolichucky WMA more variety of wildlife moving in. Please help, we need [for] this area [to] still be the same great Nolichucky long after we're all gone. It's good for our families; its good for all the geese, ducks, deer, turkeys, raccoons, owls, blue herons, otters, muskrats; there's so much to enjoy if you just take time. **Fillers(e) - F** thanks.

oh well, John, Please excuse my error of not including my name with the e-mail comments. My mistake, ok? I own and operate a small business just five minutes drive from Birds bridge boat ramp or Kinser Park boat ramp. Last spring and summer, we served more than seven hundred fishermen who use the Davy Crocket Reservoir. Sometimes it already gets somewhat crowded there. Reducing the size of the area of water could make things uneasy if crowded in near the dam. **Fillers(e) - G** Please include all who use and enjoy this area in your environment decision making; we are all stewards of that environment. **Fillers(e) - H** Our support is with TVA and the TWRA here at Sunnyside Outdoors. We encourage all who shop here to support these agencies also. When people lose interest in our waterways, we all lose. **Fillers(e) - I** thanks so much, Arvin and Sheila Fillers

Transcript of Oral Statement by LARRY SELF

MR. SELF: My name is Larry Self. Anyway, after reviewing the proposals that the T.V.A. are recommending for the Nolichucky Dam -- I have looked over the report extensively, and also came to the other meeting that they had, the public meeting that they held, and come to the conclusion of the four proposals that they have presented that, probably, the best interest for the area, in my opinion, would be the option number two. And that is, I believe, if I'm correct, option number two is where they would -- the purchase of more land -- more land easements. Of the four options, I think that would be best. **Self - A**

Reasons being, number one [Alternative A] states that they would do nothing. I don't think that you can do just nothing. I think there is a problem that needs to be dealt with. There is a lot of sedimentation and a lot of silt above the dam that is causing a problem. **Self - B**

Number two [Alternative B], where they would buy more land easements, it would take away the potential for public flooding. So that would help in that area. **Self - C**

Number three [Alternative C], where, I believe, they want to take down the top portion of the dam. I don't think that's a viable answer because of some of the sediment that's going to go downstream and cause problems down there. **Self - D**

Number four [Alternative D], tearing down the dam entirely is definitely not an option because of the cost. I believe it's \$150 million dollars that's been tagged to that. That is not an option, because, in my opinion, the sediment -- even if they were able to dredge some of the sediment above the dam prior to taking it down -- the sediment that would be released downstream would be detrimental to a natural resource -- or several natural resources. **Self - E** Those being, number one on my list, would be the smallmouth bass population. The smallmouth bass population on the Nolichucky, particularly downstream, is one of the best in the country. It's been written about extensively in outdoor magazines. I am an outdoor writer, and I have written about the Nolichucky in several articles, both state and regionally.

It's known, like I said, not only in East Tennessee in this region as one of the best smallmouth bass fisheries, but it is one of the premier smallmouth bass fisheries in the country. **Self - F** And if the dam were to be torn down, and the sediment released, or even just with the top portion of the dam being destroyed, the sediment released downstream would cause a problem in that it would fill-in the smallmouth bass habitat. That being, the shoals and the structures downstream. And not only would that mess up the habitat, but it would also be loss to some of the aquatic life, and that, in regards to the aquatic life, I'm talking about the food sources that the smallmouth bass and other fish downstream depend on, and those are hellgramites and crawfish. If they don't have the habitat to grow and mature, then the fish that do remain or do survive, would not be able to prosper because the food would be gone. **Self - G**

And T.V.A. has told me that, you know, we're looking at possibly ten years of a decrease or, basically, destroying the fishery itself for at least ten years before we would be able to see it come back to what it -- even close to what it is. And that's only a guess. They're not even sure. It could be even twenty years before we see the fishing come back to what it is currently. **Self - H**

And, to be honest with you, I have two small children and both of them fish with me. And my son has just gotten to the age where he likes to bass fish. And ten years is not, you know, that's a time period that I'm not willing to give up that we won't be able to fish the Nolichucky River the way that we intend on now. And that's ten years I don't want to give up out of my life. I don't want to give up ten years of fishing with him on the Nolichucky or even, possibly, twenty years. So there's a lot at stake with tearing down the dam, or -- or taking down a portion of the dam. **Self - H**

Not only are there good smallmouth bass populations below the dam, but there are also still a viable population of muskies or muskellunge, as they're known as; there are populations of crappie downstream that are still caught; there's Kentucky bass, maybe even a few largemouth bass still exist. **Self - I**

The destruction of the dam would lead to, also, the destruction of the natural resource that exists now. So, to back up and to say, that of the four options, number two is probably the most popular with me, but I'm not sure that that's the answer either.

Possibly, a fifth option would be to recommend dredging above the dam that -- remove a good portion of the sediment. And that could be done by TVA, I think. They could contract people to come in, or allow other companies to dredge even further and remove the sediment, at least, from the main channel, to allow access upstream without having any detrimental effects downstream, and would improve the situation above the streams. It would improve the flooding, as well as the fishing that once existed above the dam. **Self - J**

Also, another concern would be the loss of wetlands. Over three hundred wetlands would be lost if the dam were taken away or changed in any way. And the wetlands above the dam may not be important to a lot of people.

I know that the Davy Crockett Lake is filled in with a lot of sediment, but it's still home to a lot of ducks in the springtime, particularly Wood Ducks like to nest there. It's basically a major nesting ground, or has been in the past, for the Wood Duck population in this part of east Tennessee. It's been used in the past by the Tennessee Wildlife Resource Agency as a banding area, also as a feeding area that they fed the ducks. And if we lose those wetlands, then we lose that opportunity to help the Wood Duck population there. So that's another concern that I have with changing or altering the dam in any way. **Self - K**

And, plus, I think the cost associated with -- I think I mentioned \$ 150 million dollars that they're talking about. The cost associated with that seems like, to me, if we looked at the other option or an additional option of just removing the sediment or contracting to have it removed -- might not make a -- TVA may not make money off of that project, but at least they might be able to counter-balance some of the expense if they were to sell the sediment that's taken from the reservoir above the dam. **Self - L**

Anyway, of the four options I'm for number two. And of those options, I'd rather have another one. So I guess I got everything I wanted to say.

I want to express my ideas and comments and make my "vote" concerning the EIS prepared by TVA.

I own property along the reservoir (tract 146:28:05). I have read most of the EIS and I believe the best solution is Alternative A. **Susong - A** If Alternative A is not the preferred solution by the majority of people or by TVA, Alternative B is the next best solution. **Susong - B** The effects of alternatives C and D are not in the best interest of the people or the river. **Susong - C**

The problem of silt is not TVA's problem simply because they own the dam and most of the land surrounding reservoir. The silt is from upstream abandoned mining sites and the dam is providing a solution to a problem. The dam was left in place to stop the silt from flowing on downstream to the next power producing lake (Douglas Lake) on the river. The result is we have a shallow lake with wetlands making a great environmental classroom and limited fishing/hunting opportunities. **Susong - D**

Alternative A is the solution I prefer [; however,] I would like to see more dredging operations to remove the silt and sand. I would like to see Mr. Tom Bewley receive expanded permits to allow him to remove as much silt and sand as he can. If someone else wants to set up an operation, please permit them to assist in the removal of the silt. This is the most cost effective solution. **Susong - E**

It is my understanding [that] TVA has been sued and paid damages to farmers for loss of crops during a flood. The court should not hold TVA liable due to a river flooding. I own property along this river. I know the stream will cover my land when the river floods. People who own riverfront property should except flooding with the ownership of the land. Our courts are wrong to allow damages from TVA to anyone due to an act of God (a flood) . **Susong - F**

If any action has to be taken, I would support Alternative B (acquire land) . **Susong - B** I do not want to sell my land [but] I would be willing to sign flood rights to TVA. I know some land owners will not be willing to sign flood rights to TVA or sell outright to TVA. **Susong - G** It is my understanding TVA is selling TVA land around some of its reservoirs. This solution goes against what is happening in other areas concerning TVA's property. **Susong - H**

Alternative C and D I cannot support. The river below the dam would never return to its current state. The Nolichucky River below the dam is one of the nation's best smallmouth fisheries. It would be destroyed. **Susong - I** These two alternatives [C and D] are also too expensive to support. The cost of future lawsuits cannot compare to the cost to remove the silt and the dam. If TVA paid all the farmers for the value of a lost crop due to a flood, the cost cannot compare to removing the dam and silt. The value of the buildings in the 500[-year] floodplain cannot compare to these figures used to remove the dam and silt. **Susong - J**

I prefer alternate A. **Susong - A** Alternate B is my next preference. **Susong - B** I cannot support alternate C or D. These two solutions are not in the best interest of the river or the people who use the river. **Susong - C**

Thank you for listening to my comments. Joseph R. Susong

March 25, 2002

John Jenkinson
Tennessee Valley Authority
P.O. Box 1589
Norris, Tennessee 37828

Re: Nolichucky Reservoir Flood Remediation Project, Draft EIS

Mr. Jenkinson:

I have received and reviewed the Nolichucky Reservoir Flood Remediation Project Draft Environmental Impact Statement that was distributed in early February 2002. I appreciate TVA's efforts to obtain public comment on this project. The document is generally thorough and well researched and TVA should be commended for initiating the EIS process. **Young - A** I believe it is wise for TVA to use the 500-year floodplain for planning, given the limited flow data on record (generally less than 100 years), and the uncertainties of climate change and possible increases in precipitation accompanying it. **Young - B** The purpose of this letter is to provide questions and comments on the draft EIS. I would first like to make general comments, and then provide feedback on each of the alternatives.

The project costs for each of the alternatives (Table 3, p. 36) should be revised. In particular, a zero cost for Alternative A (No Action) is not reasonable. Flooding of private land results in limitations on land use as well as damage to structures, some of which are of historical importance. Although these costs may not be borne by TVA, they should not be externalized; instead, they should be incorporated into a more holistic cost accounting of the project. In addition, as noted on page 161, TVA is aware of its potential liability from costs incurred by flooding damages. While these costs would be difficult to estimate, a general estimate would better reflect reality than the current estimated cost of "none." **Young - C** Second, the cost estimates do not seem to take into account the continuing costs of inspection, maintenance, and repair of the dam. Repairs were made to the dam in 1964, 1972-73, and 1995 (p. 94-95), but the expense of these repairs is not listed. These costs would obviously continue to be borne by Alternatives A, B, and C, but would result in cost savings if Alternative D is chosen. Since the dam is nearing 100 years in age, the EIS would benefit from more information on the structural integrity of the dam, as well as cost estimates for inspection and maintenance. Because the dam has been repaired three times in the last 37 years, assessments of future repairs and their costs should be made, if possible. **Young - D**

The EIS should do a better job of assessing groundwater quality in the area. Reservoirs are known to be nutrient sinks as well as sediment sinks. Agricultural inputs from upstream, as well as permeable soils in the reservoir area, indicate the possibility of high nitrate levels in groundwater. On page 133, it is noted that around 100 structures are located within a half-mile of the reservoir that may be supplied by groundwater. This uncertainty should be resolved, either by field work or possibly by retrieving data from local or state agencies. If groundwater were impaired by the reservoir, this fact would weigh against the selection of Alternatives A and B, and in favor of Alternatives C and D. However, the lowering of groundwater levels entailed by Alternatives C and D could affect groundwater availability to local residents. Clearly, more information is needed. **Young - E**

Although it may not have bearing on the selection of alternatives, I would like to comment on the suspended sediment data presented on pages 61-65. First, there are many techniques that can be used to collect this data. The method of collection often affects the resulting data, and should always be stated when suspended sediment data are presented. **Young - F** Second, it seems unlikely that a consistent [suspended sediment] data collection method was used over a 64-year period (1934-1998) and between two agencies. False trends have resulted from changes in data collection techniques on the Colorado River. **Young - G** Third, I suspect that much of the [suspended sediment] sampling took place at an equal-interval frequency (e.g., once a day, or once a month). Certainly, this cannot be changed for historical data. Today, equal-interval sampling, unless it is very frequent, is generally viewed as insufficient for sampling a highly variable process in which a vast majority of the sediment may be transported only a few days out of the year. Therefore, the numbers presented may underestimate the suspended sediment concentration. **Young - H**

I find the significance of the wetlands in and surrounding the reservoir to be questionable. On page 86, the absence of wetland soils is noted for part of the wetland area. The dominance of sand-sized particles in the reservoir (p. 136) also seems to call this into question. No endangered species are noted, and few animals other than waterfowl are listed as utilizing this habitat. Waterfowl can easily relocate to other reservoirs or ponds in the area. The lowest diversity of aquatic life is found in the reservoir (p. 146). Additionally, the wetlands seem to be in danger of imminent takeover by an exotic plant, the purple loosestrife (p. 91). The sustainability of these wetlands seems limited, given the continuing deposition of sediment into the reservoir area. On page 137, the document notes that areas of standing water will very likely be filled in the coming decades. **Young - I** Assessing the significance of these wetlands raises larger questions concerning habitats that are created by human actions. The draft EIS clearly states on many occasions that the wetlands are the result of sedimentation and high groundwater levels caused by the dam. How “natural” are these wetlands? Because others like them are rare in east Tennessee, should they be considered unique, or an aberration? **Young - J**

For ease of interpretation, I would like to suggest that the sediment core sample numbers in Table 10 (p. 70) be better associated with the river mile where each sample was taken. I can only assume that samples 1-5 match the order of the river miles given near the bottom of page 69. It would be clearer if the river miles were listed in the table as well. **Young - K**

Alternative A (No Action)

I do not find Alternative A to be a reasonable option. There is clearly the potential for flooding and damage to private land and structures if no action is taken. The future financial liability to TVA from this alternative may well be far greater than the estimated project cost listed in Table 3. Furthermore, selection of this alternative would not have a positive effect on TVA’s image; given TVA’s recognition of the problem and the extensive work that has gone into this draft EIS. **Young - L**

Alternative B (Acquire Landrights)

I do not find Alternative B appealing, for several reasons. The financial arrangements of the easements are not clear, such as whether this will be a one-time purchase that will remain with the land title, and whether these lands will remain on tax rolls. The purchase of land by the government is often perceived in a negative light in today's political climate. **Young - M** The issue of unwilling sellers is not addressed. The EIS should clearly state whether TVA would or would not use condemnation to obtain land in the floodplain. If so, TVA risks community opposition and a poor media image. If not, unwilling sellers will still have legal recourse against TVA in the event of a damaging flood. **Young - N**

Alternative C (Lower Nolichucky Dam)

My primary concern regarding Alternative C is the stability of the dam structure following lowering. It would seem that removing a 40-foot tall by 15-foot wide portion of the dam would have ramifications for the structural integrity of the dam. I realize that Alternatives C and D were not developed as thoroughly in this draft EIS, but dam stability would need to be addressed should a supplemental EIS be developed for this alternative. **Young - O** Although there are no guarantees, I believe that stabilization of exposed sediment can be carried out successfully, especially during times that typically see little precipitation. **Young - P**

Alternative D (Remove Nolichucky Dam)

The draft EIS notes that Alternative D would be best for recreation (p. 183) and result in the highest scenic attractiveness (p. 184). It is obvious that the dam is currently a barrier to migratory fish (p. B9), and that the restoration of 100 miles of free-flowing river could have ecologically emergent effects. Improved fisheries have been found in the flowing portion of the river (p. B12), and could also be expected in the restored river channel. **Young - Q** I concur with the suggestion that the dam could be lowered in stages (p. 151), and that the last stage of removal could be delayed to reduce the effect of sediment released downstream. The control of this sediment is a serious problem, although I believe that it can be managed. **Young - R** Following restoration [under Alternative D], the river channel will probably be quick to establish channel and sediment equilibrium. Most aquatic life should be able to avoid short-term increases in the sediment load. However, the sediment load may eliminate two species of mussel (p. 172). **Young - S** It has come to my attention that one of these species was placed below the dam in recent years. The possibility of relocating these species prior to dam removal should be evaluated. **Young - T**

I support Alternative D as the best long-term solution to flooding in Nolichucky Reservoir. I believe that the selection of Alternative A, B, or C would only be a temporary solution. In the absence of hydropower, flood control, water supply, and other benefits usually associated with reservoirs, the reasons for allowing this dam to remain are few. **Young - U** The flow of water over the dam crest will continue to destabilize the dam, and result in continued maintenance and repair costs. **Young - V** I believe that removal of the dam would result in an improved public relations image for TVA and positive press coverage. **Young - W** It should be viewed as an opportunity for TVA to assert its stewardship of natural resources and use its environmental expertise to return this area to its natural condition. **Young - X** Alternative D may actually save TVA money in the long run, particularly if another alternative were to be selected and then it was later found that removal was necessary.

Young - Y Ultimately, I feel that removal of this dam will be necessary at some point in the future. It seems prudent to address this problem now, in the most comprehensive and fiscally responsible way. Furthermore, Alternative D saves costs associated with dam inspection, maintenance, and repair. Given the age of the dam and its frequent need for repair, these costs could be considerable. I urge you to prepare a supplemental EIS, as mentioned in the abstract, with Alternative D as the favored alternative. **Young - Z** Thank you again for this opportunity to comment.

Sincerely,

Philip Young

A General and EIS Process (Comments 1 – 18)

1. *I just completed reading my copy of the 215 page EIS Nolichucky draft. I found it to be interesting reading. **Fillers(e) – D***
2. *First, please allow me to compliment TVA on their method in addressing this issue. The Draft EIS is well organized, simple to understand, and complete in its attempt to convey relevant points. **Sayler - A***
3. *The information in the TVA EIS regarding the Nolichucky River Dam is very informative. Having read it from beginning to end, I have found myself flooded (no pun intended) with loads of information that each person reading it will find useful in their own way. **Piper - A***
4. *I appreciate TVA's efforts to obtain public comment on this project. The document is generally thorough and well researched and TVA should be commended for initiating the EIS process. **Young – A***
5. *I have read the January 2002 Environmental Impact Statement. I met with TVA representatives on February 21, 2002. Your staff is professional and should be commended. **Crum - A***
6. *We appreciate the level of attention the Tennessee Valley Authority has gone through to keep our family and business informed of the flood study program. Laurie Pearl and Roger Milstead have done an excellent job working with our company needs. **Daniels – A***

Response to Comments 1 – 6: Comments noted. TVA strives to make its environmental documents and review processes useful and understandable.

7. *First of all, I would like to thank you and all the TVA people for giving us the opportunity to express our opinions on this Nolichucky Reservoir project. **Dority – A***
8. *Please include all who use and enjoy this area in your environment decision making; we are all stewards of that environment. **Fillers(e) – H***
9. *It seems to me you should not have to be told how to and what to do. **Hendry – D***

Response to Comments 7 – 9: Comments noted. Consistent with the National Environmental Policy Act and because we are a public agency, public input into decisions potentially affecting the environment is important to TVA.

10. *I was sorry that I could not attend any of the meetings due to other obligations, and I am sure that many others had the same problem. A printed, vote your choice, cutout in the local newspaper might have worked better along with the meetings. **Laughters – D***

Response to Comment 10: Comment noted. TVA continues to examine ways to

encourage more people to review and comment on documents like this EIS. While “vote your choice” expressions of opinion can be informative, understanding why people “vote” the way they do on alternative courses of action is more important and valuable to TVA.

11. *Secondly, please accept my sympathies regarding your attempt to sort through the various comments you have received and find a common solution for the concerns of hundreds of individual property owners. Saylor – B*

Response to Comment 11: The number, variety, and range of topics covered in public comments are extremely useful indications of the issues TVA needs to consider as we decide which of several possible alternatives should be adopted.

12. *I'd first like to point out, that this project is a flood remediation project. And the focus should stay on just that, flood remediation. Should the focus be placed elsewhere, notably in environmental protection, recreation, wildlife and social engineering, I would object to any schemes that would expand these categories. Burgner – A*

Response to Comment 12: Comment noted. Federal law, however, requires that we evaluate the potential effects of the various ways to address the flooding on people and various aspects of their environment.

13. *Costs should not be the deciding factor. Crum – C*

Response to Comment 13: Making a choice among several alternatives typically includes consideration of the purpose for a proposed action, anticipated costs, potential impacts, the public’s views and concerns, and other factors that vary with the situation. Sufficiently high costs can make otherwise feasible alternatives unreasonable.

14. *The project costs for each of the alternatives (Table 3, p. 36) should be revised. In particular, a zero cost for Alternative A (No Action) is not reasonable. Flooding of private land results in limitations on land use as well as damage to structures, some of which are of historical importance. Although these costs may not be borne by TVA, they should not be externalized; instead, they should be incorporated into a more holistic cost accounting of the project. In addition, as noted on page 161, TVA is aware of its potential liability from costs incurred by flooding damages. While these costs would be difficult to estimate, a general estimate would better reflect reality than the current estimated cost of “none”. Young – C*

Response to Comment 14: Comments noted. As indicated in the description of Alternative A, adoption of that alternative “would not involve any construction costs.” The cost figures presented for the other alternatives also are limited to the potential direct TVA expenses associated with completing each project. Non-TVA “costs” associated with each alternative are not quantified but are described as likely adverse effects of those alternatives.

15. *Second, the cost estimates do not seem to take into account the continuing costs of inspection, maintenance, and repair of the dam. Repairs were made to the dam in 1964, 1972-73, and 1995 (p. 94-95), but the expense of these repairs is not listed. These costs would obviously continue to be borne by Alternatives A, B, and C, but*

would result in cost savings if Alternative D is chosen. Since the dam is nearing 100 years in age, the EIS would benefit from more information on the structural integrity of the dam, as well as cost estimates for inspection and maintenance. Because the dam has been repaired three times in the last 37 years, assessments of future repairs and their costs should be made, if possible. **Young - D**

Response to Comment 15: Routine dam safety inspections are typical maintenance activities associated with dams and, as such, were not included in the cost figures associated with any of the alternatives. These costs vary over time but average less than \$ 10,000 per year. The Project Modification part of Section 1.2 and the Dam Safety part of Section 3.7 describe the modifications that have been made over the years to keep Nolichucky Dam up to date with *The Federal Guidelines for Dam Safety*. As indicated in Section 3.7, "At present, Nolichucky Dam meets federal safety guidelines."

16. *TVA did not select a preferred alternative in the DEIS. EPA suggests that a preferred alternative be selected at the DEIS stage so that the public can better focus its comments on that alternative during the early portions of the NEPA process (DEIS rather than FEIS). We agree, however, that TVA should not make a final decision on its preferred alternative until public comments on the FEIS have been received and reviewed.* **EPA – A**

Response to Comment 16: Comment noted. TVA's experience in recent years indicates that many members of the public believe the identification of a preferred alternative in a Draft EIS stifles thoughtful review and discussion about all of the possible choices. When TVA has a preferred alternative at the DEIS stage; however, we do identify it at that point and solicit comments with that focus.

17. *The 4th paragraph on Page 12 of the DEIS gives the impression that Section 404 of the Clean Water Act applies exclusively to wetlands. In actuality, Section 404 applies to discharge of dredged or fill material into "Waters of the United States" of which most wetlands are a subset.* **USACE – E**
18. *[T]he Tennessee Aquatic Resource Alteration Permit serves as State Water Quality Certification pursuant to Section 401 of the Clean Water Act for Section 404 activities in state waters -- not just streams.* **USACE – F**

Response to Comments 17 and 18: Comments noted. The wording in the affected paragraphs has been revised to describe accurately the purposes of these permitting processes.

B Other General Topics (Comments 19 – 35)

19. *. . . and then start the generators and turn power again. The dam has been idle too long. It still needs to turn electricity.* **Ricker - B**

20. *The asset, which TVA has, along with East Tennessee, is Free Falling Water, which is being ignored for the purpose of electrical generating. Flood control is only one responsibility, and it is limited only to the degree which Mother Nature allows.*
Campbell - C

21. *Alternative C and D are totally out of the question because they would preclude any chance in the future of restarting the hydroelectric facility at Nolichucky Dam. There is no question that this project would be highly profitable [for power production] under open-access market conditions.* **Burgner - D**

22. *Nolichucky Dam has not been used for hydropower for many years. Although presumably unlikely due to physical changes in the dam and sedimentation of the reservoir, does TVA foresee use of the dam as a small source of renewable hydropower? The FEIS should discuss this.* **EPA - S**

Response to Comments 19 – 22: As described in Section 1.2, the power production facilities in Nolichucky Dam were effectively retired in 1972 when the penstocks and sluiceways were plugged with concrete. An additional sentence has been added to this section indicating that TVA believes it would cost more to generate power at Nolichucky Dam than that power would be worth in the present market.

23. *We need our Davy Crockett Lake and Nolichucky Dam here in Greene County. I know TVA will probably never build any new dams due to cost and environmental groups that fight such projects. I live near the river and enjoy the use of it for recreation.*
Fillers - A

24. *Rather than spend maybe \$150 million to destroy something so many have enjoyed for so long, can we not, somehow, take that which we already have and make it improved for our citizens of tomorrow that are growing up today. The TVA is probably not going to build many, if any, more dams and reservoirs. I realize this as well as does anyone who watches the battles TVA must endure each time a new dam project is given thought.* **Fillers(e) - E**

Response to Comments 23 – 24: Especially after all of the interactions with the public during the introduction and review of the Draft EIS, TVA is very much aware of the value local residents give to Nolichucky Reservoir. Comments like these help us focus on the most important issues.

25. *I can't say that I like any of the four alternatives. If nothing is done, i.e., Alternative A, given that floods regularly exceed the 1255.6 property level, an inverse condemnation of private property is taking place with no compensation. It could be said that no compensation is justified, given that flooding has exceeded the property line almost from the time the dam was raised in 1925.* **Burgner - B**

26. *It is my understanding [that] TVA has been sued and paid damages to farmers for loss of crops during a flood. The court should not hold TVA liable due to a river flooding. I own property along this river. I know the stream will cover my land when the river floods. People who own riverfront property should expect flooding with the ownership of the land. Our courts are wrong to allow damages from TVA to anyone due to an act of God (a flood).* **Susong - F**

Response to Comments 25 – 26: Comments noted.

27. *The flow of water over the dam crest will continue to destabilize the dam, and result in continued maintenance and repair costs. Young - V*

Response to Comment 27: Nolichucky Dam was designed and built to allow water to flow over the spillway. Additional concrete was placed on the downstream side of the dam in 1973 to help ensure its stability and safety. The dam also is inspected periodically to ensure that it is maintained according to *The Federal Guidelines for Dam Safety*.

28. *[A]ny of the alternatives chosen would require expenditures of money. Given that TVA no longer receives non-power appropriations, it will have to come from power revenues, and, in turn, from our light bills. Also, consider that TVA is \$26 billion in debt with no chance of paying it off any time soon. Why should power consumers pay this thing? Burgner - E*

Response to Comment 28: When Congress ceased appropriating money for TVA's natural resource management activities, it directed TVA to continue to fund essential stewardship activities with power revenues. The alternative chosen by TVA would be implemented in a way to minimize to the extent possible the impact on TVA's power consumers.

29. *These two alternatives [C and D] are also too expensive to support. The cost of future lawsuits cannot compare to the cost to remove the silt and the dam. If TVA paid all the farmers for the value of a lost crop due to a flood, the cost cannot compare to removing the dam and silt. The value of the buildings in the 500[-year] floodplain cannot compare to these figures used to remove the dam and silt. Susong - J*

Response to Comment 29: Comment noted.

30. *I would like to suggest that TVA take a more close look at Jones Bridge and examine the construction of the new bridge and the flooding. I notice on the flood profile that the river takes a drop in flood level almost at that exact location. What would be the impact if the built-up road leading to the bridge on the north end were modified to allow more free flow? There was a floodway on the north end of the Jones Bridge that completely covered the road before it was washed out in 1977. The road leading under the new bridge now blocks that floodway. This is not a TVA screw-up; this is a State of Tennessee screw-up, and it's theirs to clean up. Burgner - F*

Response to Comment 30: A TVA review of the flood profile computations indicates that lowering the approach road to Jones Bridge would allow more flow over the road and reduce flow velocities in the vicinity of the bridge; however, that change would have very little impact on upstream flood elevations. Upstream from the bridge, the observed 1901 and computed present day 100-year floods had similar elevation increases at a given location. Modifying this approach road would not fix the potential flooding problems around Nolichucky Reservoir.

31. *Our support is with TVA and the TWRA here at Sunnyside Outdoors. We encourage all who shop here to support these agencies also. When people lose interest in our waterways, we all lose. Fillers(e) - I*

Response to Comments 31: Comment noted.

32. *It is deplorable that TVA would allow the reservoir to get into the shape it is in today. Taylor - B*

Response to Comment 32: Comment noted. As described in Section 1.2, the siltation problem in Nolichucky Reservoir has been developing since the dam was built in 1913, before TVA acquired the project. TVA addressed power-related aspects of this problem in 1972; we are attempting to address the flooding aspects now. Upstream remediation activities have substantially reduced the amount of sediment coming into the reservoir but more than normal amounts of material continues to move down the river during high flows.

33. *Consideration also should be given to the building of a two-lane scenic road on either side of the river reservoir with boat access ramps encouraging fishing, tourism, camping, etc. Campbell - I*

Response to Comment 33: Comment noted; however, this idea does not appear to be closely related to resolving potential flooding problems on nonfederal land around Nolichucky Reservoir.

34. *From a regulatory perspective, neither Alternative A nor B would require a Department of the Army (DA) Permit pursuant to Section 404 of the Clean Water Act. However, Alternatives C and D could require DA approval if the site-specific plans to be developed involve placement of dredged or fill material below ordinary high water. Should you pursue site-specific plans for either or both of these alternatives, we will advise whether a DA permit is required as part of the coordination for the supplement to the EIS. USACE - A*

35. *We would be pleased to discuss how we might cooperate with TVA on solutions to ecosystem degradation problems in the Nolichucky River Basin. USACE -D*

Response to Comments 34 – 35: Comments noted. TVA appreciates the interest the U.S. Army Corps of Engineers (USACE) has shown in this project and will coordinate with USACE staff on any future actions as appropriate.

C Alternative A – No Action (Comments 36 – 55)

36. *My first thought is that you do nothing. Bird, Robert K. - A*

37. *I own property along the reservoir (tract 146:28:05). I have read most of the EIS and I believe the best solution is Alternative A. Susong - A*

Response to Comments 36 – 37: Comments noted.

38. *I have read over all the four options, and my opinion would be to go with Alternative A (No Action). . . . I think you should leave the dam alone because the dam has been there a long time. Why would you want to take it out now?* **Norton - A**
39. *In option A, I have seen that there will be no change in the present conditions, communities, or long term trends in aquatic life, and I think it will be good in the years to come. With option A, I see that there would be no change in flood elevations or potential to flood non-federal land and property in the Nolichucky Dam area. Terrestrial life would not change in present communities or long-term trend.* **James - A**
40. *I have read all of them, and personally I prefer option A. . . . It doesn't cost, and it doesn't affect anything. I think it is fine the way it is. It makes sense to me not to change something that doesn't need to be changed. . . . I've recently seen the dam and I do not see a problem with the way it is now. I don't have a problem with change, but the money involved in the other options just seems very expensive. I just do not see the point in spending so much money.* **Woodby - A**
41. *The reason I think you should [choose] option A, is because the wildlife is really pretty and needs a habitat to live in.* **Walton - A**
42. *I think TVA should use Alternative A (No Action), because if you start using Alternative C, it would be a disaster to the land and the wildlife around it. I think Alternative A would be best because I recently took a canoeing trip to the Nolichucky Reservoir. We saw many different types of wildlife, which could be destroyed if you use any of the other alternatives.* **Harris - A**
43. *I believe that alternative A (No Action) is the best for the economy and the people that live in the area. . . . With alternative A, there will not be any change. If you used any other alternative the wildlife that live off the wetlands in that area would not have a place to get water. There are also fish that live in the water. Where are they going to go?* **Land - A**
44. *[O]ur opinion on all the selections [is] that they do nothing, leave it just like it is. We knew what we bought [when] we were buying it. We don't have any trouble with the river. Our trouble is the groundwater, if anything. We have some groundwater trouble. And the first house we bought out there has been there since early '50s or '40s, and it's never been a problem. And we just say do nothing.* **Inscore - A**
45. *Well, we say do nothing, or tear the dam down, but I think doing nothing is the best.* **Inscore - B**

Response to Comments 38 – 45: Comments noted.

46. *Option A is acceptable to me, but since we just can't seem to leave things alone, I doubt that will be seriously considered.* **Cotton - D**

Response to Comment 46: TVA is interested in all opinions about what to do to address the potential flooding problems. Each alternative has been given serious consideration. As noted in this Final EIS, TVA has identified Alternative A as its preferred alternative.

- 47. *Option A is not viable.* **Piper - F**
- 48. *If you do nothing, the condition will just become a bigger problem.* **Matern - B**
- 49. *Option A: Really no option because of future liabilities and lawsuits.* **Lawrence - A**
- 50. *If we go with option A, the sediment will get really bad and then we won't be able to do anything but let it build up.* **Johnson - B**
- 51. *The "no action" alternative is unacceptable as it continues to put 1000 acres of private land at risk of flood damage.* **TCWN - F**
- 52. *Number one [Alternative A] states that they would do nothing. I don't think that you can do just nothing. I think there is a problem that needs to be dealt with. There is a lot of sedimentation and a lot of silt above the dam that is causing a problem.* **Self - B**
- 53. *I do not find Alternative A to be a reasonable option. There is clearly the potential for flooding and damage to private land and structures if no action is taken. The future financial liability to TVA from this alternative may well be far greater than the estimated project cost listed in Table 3. Furthermore, selection of this alternative would not have a positive effect on TVA's image; given TVA's recognition of the problem and the extensive work that has gone into this draft EIS.* **Young - L**

Response to Comments 47 – 53: Comments noted. NEPA procedures specifically require the evaluation of the No Action Alternative, in part to indicate what could happen if nothing were done to address the problem.

- 54. *Finally, Options A and B are too costly and, probably, wasteful in the long-term.* **Bird, Robert K. - E**
- 55. *The alternatives A) do nothing; D) tear out the dam, each is certainly an alternative but surely a tragedy and a mistaken concept.* **Campbell - D**

Response to Comments 54 – 55: Comments noted.

D Alternative B – Acquire Landrights (Comments 56 – 93)

- 56. *Alternative B (Acquire Landrights)* **Benko, Mark - A**
- 57. *Would be very receptive to Option #2.* **Renner - A**

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58. *We support alternative B (Acquire Landrights) Greene Co. Fishing and Hunting Club - A*
59. *Tennessee Clean Water Network recommends the Tennessee Valley Authority adopt alternative B - acquire the affected land or landrights. TCWN – A*
60. *My second thought is Option B. Bird, Robert K. - B*
61. *If Alternative A is not the preferred solution by the majority of people or by TVA, Alternative B is the next best solution. Susong - B*

Response to Comments 56 – 61: Comments noted.

62. *Number two [Alternative B], where they would buy more land easements, it would take away the potential for public flooding. So that would help in that area. Self - C*
63. *Option B is good. Continued dredging will help to make it even better as it will help to protect the downstream from siltation and flooding. Piper - G*
64. *I have looked over the report extensively, and also came to the public meeting that they held, and come to the conclusion of the four proposals that they have presented that, probably, the best interest for the area, in my opinion, would be option number two -- the purchase of more land -- more land easements. Of the four options, I think that would be best. Self - A*
65. *I think TVA should use alternative B. I have heard of the evacuation of people from their homes due to flooding, and some have even lost their homes. I think something should be done about this. . . . A floodplain area would help to minimize the potential of flooding effects. Leffew - A*
66. *I believe that TVA should choose alternative B. My reason for choosing B is because [Nolichucky Reservoir] is a great learning opportunity for students and we would hate to see it removed. . . . Therefore, I choose alternative B, because it does need to have acquired landrights to stop flooding. Stockman - A*
67. *I find myself with much the same opinion as I had years ago: Option B is the only viable alternative that immediately addresses the issues, satisfies the larger population, preserves the environment, is the easiest, and costs the least. Piper - B*
68. *Based on the alternatives presented in the DEIS, EPA prefers Alternative B since, in contrast to C and D, Alternative B would not lower the reservoir pool level and expose considerable wetland acreage. With the removal of the reservoir hydrology, these fringe wetlands would be lost. EPA - B*
69. *I think the best alternative is B, acquiring the landrights. First, it would only take three years, and the sooner the better. The local water quality would improve. There could also be some possible benefits for the endangered species. Matern - A*

Response to Comments 62 – 69: Comments noted.

70. *Purchasing fee title or acquiring flood easements on the affected floodplain land would compensate landowners for any negative impacts due to 100-year or 500-year flood events, and would additionally protect the land from inappropriate development or other damaging activities incompatible with its current uses, i.e., as a wildlife management area. TCWN - D*
71. *I have read over the four alternatives, and in my opinion alternative B should be used. . . . If you just address the flooding areas, it would not affect the wildlife in the area or the recreational activities that take place there. Using this alternative and buying landrights would be better for the wildlife environment. If you used alternative B, in some areas you would have control of what the land is used for. Park - A*
72. *In addition, Alternative B would involve the purchase of flood prone areas that are currently periodically flooding, as well as additional floodplains up to and including the current 500-year floodplain. These current non-federal areas would thereby become public property. This in turn would create beneficial wildlife areas that would be added to the existing wildlife management area managed by the Tennessee Wildlife Resources Agency (TWRA), which should somewhat improve the overall water quality of the reservoir by limiting shoreline development and providing a natural area buffer zone. We assume TVA's shoreline development policy consistent with its recent Shoreline Development EIS would be applied. EPA - D*

Response to Comments 70 – 72: As noted in Section 2.6 and these comments, adoption of Alternative B would bring more of the land around Nolichucky Reservoir into federal ownership or under some federal control. Acquisition of fee title would provide TVA more control over uses of the property and would make it possible to implement some of these ideas. Acquisition of flowage easement rights would provide TVA less control and the underlying landowner would still be able to continue to use the property in ways that did not conflict with TVA's right to flood the property.

73. *We feel that we have an opportunity, since we have TVA here, we can't afford to let you people get away until something is accomplished; and if you feel you have to, as far as legal rights are concerned, buy up to the 100-year or the 500-year floodplain, please do so. Thomley – D*
74. *Option B is also the only viable alternative to those (such as myself) who actually have a residence affected by the flood waters. It gives those in my situation immediate relief to the problem. Piper - C*

Response to Comments 73 – 74: Comments noted.

75. *Of the four alternatives, I would prefer Alternative B, but in the real world, I do not see TVA having enough money to buy 1000 acres. One way around this would be for TVA to acquire easements. Ashworth - A*
76. *TVA should obtain rights or easements to lands which would be flooded. People who own lands which have the potential to be flooded could still own these lands. Land dikes or levies could protect historical places. Campbell - B*

77. *I do not want to sell my land [but] I would be willing to sign flood rights to TVA. I know some land owners will not be willing to sign flood rights to TVA or sell outright to TVA.* **Susong - G**
78. *I think TVA should leave the Nolichucky Dam alone, and get permission to flood a little square of land from someone's property so that they would not have to worry about flooding personal property. . . . In addition to the reasons given above there would be no habitats destroyed. We also would still be able to go canoeing as part of the Cedar Creek program to learn more about the habitats that live there. This is why I think you should just buy up flood easement papers.* **Tolliver - A**

Response to Comments 75 – 78: These comments identify some of the positive effects of acquiring easements instead of fee title to the affected land.

79. *Option B: 1. Purchase in fee, then make the land public. As the 500-year [flood elevation] line would be 10 feet from our back door and the middle of my farm would be public land, I would strongly object.* **Lawrence - B**
80. *If Alternative B is chosen, I would object to any fee title acquisition. Fee acquisition is totally unnecessary for flood remediation. Only flooding easements are necessary for flooding remediation. Should TVA choose to require only flooding easement, Alternative B would be more palatable.* **Burgner - C**

Response to Comments 79 – 80: As indicated in the description of Alternative B in EIS Section 2.6, if this alternative were adopted TVA would decide on a case-by-case basis whether to acquire fee title or a flowage easement on each affected tract. That decision would be based on a tract-specific evaluation of the potential flooding effects and take into account the desires of the property owner.

81. *I do not find Alternative B appealing, for several reasons. The financial arrangements of the easements are not clear, such as whether this will be a one-time purchase that will remain with the land title, and whether these lands will remain on tax rolls. The purchase of land by the government is often perceived in a negative light in today's political climate.* **Young - M**

Response to Comment 81: If TVA acquired a flowage easement over part of a tract of land, the land would continue to be owned by that individual, and we would expect the property to remain on the tax rolls, but this would depend on the specific property tax structure and laws. The one-time payment would give TVA the legal right to overflow and flood the area on an intermittent and temporary basis.

82. *The issue of unwilling sellers is not addressed. The EIS should clearly state whether TVA would or would not use condemnation to obtain land in the floodplain. If so, TVA risks community opposition and a poor media image. If not, unwilling sellers will still have legal recourse against TVA in the event of a damaging flood.* **Young - N**

Response to Comment 82: Regardless of the situation, TVA relies on condemnation only as a last resort. If acquisition of additional property rights is part of the alternative chosen by TVA, we anticipate there will be no need to condemn property, depending on the property rights sought.

83. *We further recommend the TVA explore the possibilities of partnering with the Tennessee Wildlife Resources Agency in acquiring the affected land or landrights to mitigate the estimated project costs. TCWN - B*

Response to Comments 83: If this alternative is adopted, TVA will discuss this possibility with TWRA.

84. *We also suggest that you consider modifications to Alternatives B and C, to make them, respectively, more acceptable to affected landowners and beneficial to the ecosystem. Alternative B could incorporate measures similar to those of the nonstructural program being implemented for our Section 202 Flood Damage Reduction Projects in Eastern Kentucky. In addition to the alternative's proposed acquisition of fee title (floodplain evacuation) or flood easement, structures located in the floodplain that would receive significant structural or content damages from a specified flood event could be raised or flood-proofed, with the overall program being comprised of the most cost effective combination of these measures. Participation in the program could be voluntary to the landowners, with non-participants forfeiting all future claims for flood damages. USACE - B*

Response to Comment 84: Alternative B has elements similar to the ones identified in this comment (e.g., flood proofing), but the others are interesting and TVA would consider implementing Alternative B with those elements in mind if Alternative B is chosen. Under Alternative C, there would be no need to acquire additional landrights.

85. *I will go along with Alternative B if TVA can do the following: acquire additional flooding easement through property right swaps. Through a swap, a property -- a riparian landowner, whose land goes to the 1255.6 level -- could swap additional easements for fee title to the middle of the river. The landowner could then dredge sand, harvest timber, even grow crops should he desire to take the risk. If TVA could trade that way, it would not cost TVA any money. TVA holdings then would be limited to flooding easements. Burgner - J*

Response to Comment 85: Comment noted; however, the TVA Act limits how TVA can transfer or make available property under its control. Prior to the conveyance of any property, TVA must make a determination that the property is surplus and is not needed for project purposes. Swapping property in the way suggested in this comment would appear to be inconsistent with such a finding.

86. *Option B: 2. Buy flood easements. As TVA's studies have pointed out, the dam is causing flooding. Therefore, damages and loss of property value have resulted. Land owners should be compensated. Lawrence - C*

Response to Comment 86: Comment noted.

87. *I am concerned; however, that those with a residence affected by the flooding [should] receive priority treatment over those who have only open land. Piper - D*

Response to Comment 87: Comment noted. If this alternative is adopted, TVA will consider prioritizing acquisitions based on potential flood risk as the implementation plan is developed.

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88. *Alternative B and Alternative A are not acceptable, although Alternative B is preferable to Alternative A in that there is some monetary compensation for flooding damage and loss caused or exacerbated by previous actions of TVA.* **Cox, Robert - C**

Response to Comment 88: Comment noted.

89. *Finally, Options A and B are too costly and, probably, wasteful in the long-term.* **Bird, Robert K. - E**
90. *If we go with option B, it will be buying land that won't be useful to us anyway. We will be wasting money. Would you want people to take your home and [not] even use it?* **Johnson - C**

Response to Comments 89 – 90: Comments noted. The intent of each alternative is not to waste any money but to resolve the potential flooding problems. TVA is attempting to identify the best and most economical solution to address the need here.

91. *It is my opinion "B" does not solve the problem. It does provide short-term resolution but is a bandage. The question is: How can TVA eliminate the problem which it purchased from Tennessee Eastern Electric? "B" may be a cheap option but it leaves the problem for our children or grandchildren to solve. . . . The dam has caused a financial loss to the property owners due to no fault of their own, while also creating wetlands and a mussel species. Compensation will not reward the property owners for such creation.* **Crum - B**
92. *Despite its environmental benefits, it should be noted that Alternative B would only mitigate the liability associated with flooding events as opposed to mitigating the risk of flooding itself. Alternative B does not propose to physically alter the dam, change the pool level, dredge the accumulated sediment in the reservoir, or increase flood volume. Accordingly, all the current structures and cultural resources would continue to be periodically flooded (although they would be selectively flood-proofed), river sediments would continue to accumulate (from existing upstream sediment sources and movement of existing bedload sediments in the river system), and river flows would continue to carry a substantial suspended sediment load.* **EPA - E**

Response to Comments 91 – 92: Comments noted.

93. *It is my understanding TVA is selling TVA land around some of its reservoirs. This solution goes against what is happening in other areas concerning TVA's property.* **Susong - H**

Response to Comment 93: Throughout its existence, TVA has continued to acquire title or easement rights over property deemed necessary for specific activities. When property is no longer required for ongoing activities or programs, or is requested for alternative uses, TVA can sell or transfer property rights following pertinent reviews and relevant policies. Nothing about acquiring additional land or easement rights around Nolichucky Reservoir would be inconsistent with the TVA Act and established TVA land policies.

E Alternative C – Lower Nolichucky Dam (Comments 94 – 110)

94. *I believe that it would be in my community's best interest to follow through with alternative C in which TVA would lower the spillway enough so that the Nolichucky Dam would not affect private land. Voiles - A*
95. *I think we should go with option C. If we go with option C and lower the Nolichucky Dam, it will stop the flooding and will remove the sediment. It will also have fewer consequences. I think option C is going to be best. Johnson - A*
96. *I choose Alternative C, to lower the Nolichucky Dam. I think that by lowering the water, the wildlife will not have to move to a different area. Also, I think it would not affect private land and property. Not only that, I think that it would reduce floods. I think that you could use the sediments in landfills and cover up the trash that we have in the U.S. Reavely - A*
97. *Flooding is a major problem in this region. Everyone would like to do something about that. This plan takes care of 1800 acres in fee and flood easements. This may seem like nothing compared to the cost and time that is going to have to be put into this project. I believe that the long-term effect [of Alternative C] would be much greater than any cost. Voiles – B*

Response to Comments 94 – 97: Comments noted.

98. *I think you should go with plan C, lowering the dam. It will let some of the sediment go over the dam. It would also make the water level above the dam rise [= be deeper?]. Holt - A*
99. *I think that you should go with alternative C to lower the dam forty feet because the water would be a lot deeper and there would be more fish at one time. People would be able to catch more fish at one time. Cunningham - A*
100. *I believe that we should pick option C to get rid of the problem. I think if we lowered the dam, it would solve the problem faster and more sufficiently. . . . I believe that if we lowered the dam, it would let some or, hopefully, most of the silt go over it and the water level would increase. When we went canoeing on the river, we kept hitting the silt because there was so much silt and hardly any water. Jennings - A*

Response to Comments 98 – 100: These comments assume, incorrectly, that there would be more open water upstream from Nolichucky Dam after Alternative C had been completed. In fact, the remaining reservoir probably would have very similar water depths to what occurs there now. An additional sentence has been inserted in the description of this alternative to clarify what the reservoir would look like if Alternative C were adopted.

101. *Option C takes too long and will have the tendency to pass the problems downstream. Piper - H*
102. *Options C and D: Unrealistic and too expensive. You would be moving the mess somewhere else. Lawrence - D*

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103. *I believe Options C and D would cause too much disturbance to both those elements above and below the dam. Bird, Robert K. - D*
104. *Number three [Alternative C], where they want to take down the top portion of the dam. I don't think that's a viable answer because of some of the sediment that's going to go downstream and cause problems down there. Self - D*

Response to Comments 101 – 104: The evaluation of this alternative included in the EIS indicates that some increased sedimentation downstream from the dam could occur especially during the construction period; however, sediment control measures are expected to result in only insignificant effects on aquatic life. If this alternative were adopted, erosion prevention and sedimentation control would be important parts of a more detailed supplemental evaluation.

105. *Alternative C might be a marginally acceptable solution, but doesn't afford the region the advantages that I believe Alternative D does. Cox, Robert – B*
106. *The effects of alternatives C and D are not in the best interest of the . . . river or the people who use the river. Susong - C*

Response to Comments 105 – 106: Comments noted.

107. *Option C would only work if there was immediate and substantial removal of the sand. If you were simply to lower the spillway height, the sand would simply wash downstream and, in addition to wiping out one of the best smallmouth bass fishing streams in the nation, the flooding problem would simply be moved downstream. I don't think the folks around Douglas Lake, Knoxville, Ft. Loudoun Lake, and the Tennessee River would appreciate that. Cotton - F*

Response to Comment 107: As indicated in EIS Section 2.7, some sand would be removed from the reservoir under this alternative. Also as indicated in the EIS, Nolichucky Dam does not have any effect on flooding other than in the immediate area. Flooding potential along the downstream part of the river would not change in any way if this alternative were adopted.

108. *Although TCWN is generally in favor of policies and activities that work to preserve or restore natural stream flows and habitats, in this case removing the dam or lowering the spillway would cause significant to severe damage to the wetland resources currently in place, while not replacing them with riparian resources of equal value. Additionally, the sediment removal and land filling required to reconfigure the riparian topography would cause inevitable water quality impacts downstream and land impacts on the area covered by the removed sediments. TCWN - E*

Response to Comment 108: This comment identifies the most severe forms of these impacts potentially associated with this alternative. If Alternative C were adopted, a more-detailed evaluation of the site-specific effects would include further examination of ways to avoid or minimize potential adverse effects.

109. *We also suggest that you consider modifications to Alternatives B and C, to make them, respectively, more acceptable to affected landowners and beneficial to the*

ecosystem. . . . In August of 1998, the Nashville District completed an Analysis for Ecosystem Restoration, Flood Control and Other Related Water Resources Problems and Needs in the Nolichucky River Basin under authority of Section 905(b) of the Water Resources Development Act of 1986. Incorporating measures formulated during that study into your Alternative C would mitigate for the induced loss of 310 acres of high quality wetlands, as well as provide substantial ecosystem benefits.

USACE – C

Response to Comment 109: During the preparation of the EIS, TVA reviewed the USACE 1998 Analysis. If this alternative were adopted, TVA would revisit that document to identify useful concepts and, in particular, ways to implement the project in cooperation with the USACE. These measures could include restoring aquatic habitat throughout the reservoir by deepening the existing channel, stabilizing and creating aquatic habitat in channel bends and oxbows, creating wetlands, and dredge a deep pool above the dam to provide fish habitat and serve as a sediment trap.

- 110.** *My primary concern regarding Alternative C is the stability of the dam structure following lowering. It would seem that removing a 40-foot tall by 15-foot wide portion of the dam would have ramifications for the structural integrity of the dam. I realize that Alternatives C and D were not developed as thoroughly in this draft EIS, but dam stability would need to be addressed should a supplemental EIS be developed for this alternative.* **Young - O**

Response to Comment 110: If Alternative C were adopted, the subsequent planning work would include stability analysis of the dam at appropriate times during the lowering process, and this would be addressed in a supplemental review. During and after the construction work, the stability of the dam would be monitored and inspected consistent with *The Federal Guidelines for Dam Safety*.

F Alternative D – Remove Nolichucky Dam (Comments 111 – 144)

- 111.** *Nolichucky Dam no longer provides benefits intended by TVA and should be removed.* **Cox, Mary - C**
- 112.** *I am for the Option D, for removing the Nolichucky Dam and cleaning the silt out.* **Walters - A**
- 113.** *If not Option #2, then Option #4, completely remove dam.* **Renner - B**
- 114.** *I like the last plan. Plan D. The one that takes the most money. You know, I just think [Plan D] would solve more than the others. That's all I've got to say.* **Armstrong – A**

Response to Comments 111 – 114: Comments noted.

- 115.** *I believe that removal of the dam would result in an improved public relations image for TVA and positive press coverage.* **Young - W**

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116. *It [removing the dam] should be viewed as an opportunity for TVA to assert its stewardship of natural resources and use its environmental expertise to return this area to its natural condition.* **Young - X**
117. *I enjoy canoeing further up the river where the current is faster, and removal of the dam would be a boon to sporting activities in the area. The economic benefits from these activities could be of great assistance to the area.* **Hill, Rae - B**
118. *I would like to see Alternative D, the removal of Nolichucky Dam, implemented as soon as feasible. I believe this would allow the area around the Nolichucky river at the mouth of Camp Creek to return to a more natural and pristine state.* **Hill, Rae - A**
119. *As a concerned citizen and environmental proponent, I would like to see the historical value of the structural antiquities on property in the region and the Cherokee Indian Burial Ground site along the Nolichucky River saved, so I respectfully submit my request for dam removal.* **Hill, Donna - D**
120. *As a very seriously affected land and property owner in the 100 year floodplain and a farmer who is very concerned about the environment in the region, let me say that the best solution to the problem is Alternative D, the removal of Nolichucky Dam and accumulated sedimentary deposits.* **Cox, Robert - A**
121. *My opinion is that Alternative D, the removal of Nolichucky Dam, is the best solution to the terrible flooding problem created by the Nolichucky Dam under the auspices of TVA. I am co-owner of Tract Number 124:32.00 and have been, and continue to be, adversely affected by the property being located in the floodplain created by the Nolichucky Dam.* **Cox, Mary - A**
122. *Well, my vote would be for Alternative D, remove the Nolichucky dam, and let the river go free; just let it flow like it used to flow. Open that river up, and let it go, because the sand is choking it to death right now. It's pitiful. My property goes back to the river, and we can't even put a boat in to go down the river. You have to push the boat, and then you mar up in the sand. So I'd like to see it opened up and let in flow free.*
Carter - A

Response to Comments 115 – 122: As addressed in the various sections of the EIS, removal of the dam would have a number of adverse effects, including the release of large amounts of sediment miles below the dam site. Thus, while some resources and stakeholders would benefit from this approach, others would be impacted and perhaps in significant ways.

123. *Alternative D may actually save TVA money in the long run, particularly if another alternative were to be selected and then it was later found that removal was necessary.* **Young - Y**
124. *I respectfully submit that "D" be instituted to permanently solve the problem and restore the environment to the condition it would have been prior to the dam. It is unlikely the time to restore the environment would be [any] longer than the period that "B" would take to be outdated.* **Crum - D**
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- 125.** *I support Alternative D as the best long-term solution to flooding in Nolichucky Reservoir. I believe that the selection of Alternative A, B, or C would only be a temporary solution. In the absence of hydropower, flood control, water supply, and other benefits usually associated with reservoirs, the reasons for allowing this dam to remain are few.* **Young – U**

Response to Comments 123 – 125: Comments noted. See response to Comments 115 - 122. The environmental status quo with the dam in place has important resource values. Some of these, such as wetland values, would be significantly compromised or lost in trade for the environmental values associated with allowing restoration of the original stream with removal of the dam. The varying viewpoints of those commenting on the Draft EIS and the alternatives suggest that there is no public consensus on which of these values should be viewed as the most important.

- 126.** *Ultimately, I feel that removal of this dam will be necessary at some point in the future. It seems prudent to address this problem now, in the most comprehensive and fiscally responsible way. Furthermore, Alternative D saves costs associated with dam inspection, maintenance, and repair. Given the age of the dam and its frequent need for repair, these costs could be considerable. I urge you to prepare a supplemental EIS, as mentioned in the abstract, with Alternative D as the favored alternative.* **Young – Z**

Response to Comment 126: Comment noted. As described in Section 3.7, Nolichucky Dam meets present federal dam safety guidelines and is included in the TVA periodic dam monitoring program. Also, as described in Section 2.6, removal of the dam is not required to address the potential flooding impacts. The cost of the periodic monitoring of this dam (presently less than \$10,000 per year) is several orders of magnitude lower than the cost of removing it.

- 127.** *Flooding is a great concern to people living in and around the floodplain. I have assisted my family in the very unpleasant task of evacuating their homes during the 1977 flood. There is no reason to allow this to happen again since the problem may be easily remedied simply by removing the Nolichucky Dam. This seems to be a very reasonable and fair thing to do given the conclusions reached in the Environmental Impact Statement.* **Hill, Rae - C**
- 128.** *I feel that my parents, Robert and Mary Cox, and their property have been damaged enough by the efforts that have been made to save the Nolichucky Dam. It is in their best interest, as well as to all of the good neighbors in the community, to have the dam removed before they and others suffer more loss to property and environment. They deserve the equal and fair treatment provided to all the people of this great country by the Constitution to not have the safety and security of their home breached by flooding caused by the Nolichucky Dam which is the responsibility of TVA.* **Hill, Donna - C**
- 129.** *Property in what is now the 100-year floodplain has been in my husband's family for over 100 years. Camp Creek has been used by my father-in-law to generate electricity prior to the advent of publicly available electricity. Camp Creek has been used by myself and my family for swimming, fishing, and other recreational activities. These uses, as well as other uses, of Camp Creek were possible because of the ability to locate our homes in close proximity to the stream without worry about flooding prior to the flood of 1977. Now that the floodplain has been created by Nolichucky Dam, and*

flooding has forced us to move, my family is no longer able to use and enjoy our property as before. Since TVA now owns and has control of the problem of Nolichucky Dam, TVA should solve the problem by removing the Nolichucky Dam. Cox, Mary – B

Response to Comments 127 – 129: Comments noted. The purpose of this review is to weigh the merits of alternative ways of responding to the flooding problems identified in these comments.

- 130.** *The draft EIS notes that Alternative D would be best for recreation (p. 183) and result in the highest scenic attractiveness (p. 184). It is obvious that the dam is currently a barrier to migratory fish (p. B9), and that the restoration of 100 miles of free-flowing river could have ecologically emergent effects. Improved fisheries have been found in the flowing portion of the river (p. B12), and could also be expected in the restored river channel. Young - Q*
- 131.** *I concur with the suggestion that the dam could be lowered in stages (p. 151), and that the last stage of removal could be delayed to reduce the effect of sediment released downstream. The control of this sediment is a serious problem, although I believe that it can be managed. Young - R*
- 132.** *Following restoration [under Alternative D], the river channel will probably be quick to establish channel and sediment equilibrium. Most aquatic life should be able to avoid short-term increases in the sediment load. However, the sediment load may eliminate two species of mussel (p. 172). Young – S*

Response to Comments 130 – 132: Comments noted. See responses to comment Nos. 115-122 and 123-125. Over the long-term, recreational benefits could be greater under Alternative D than the other alternatives. However, this would be achieved by exposing aquatic species to increased sediment loading, especially in the near term.

- 133.** *Fish and other water life which flourished in Camp Creek prior to the flood of 1977 seem to have disappeared. Springs located near Camp Creek on my property have filled in and ceased to run freely and produce pure water as before. Alternative D is the only solution which will restore the springwater activity and allow the kinds of fish and other water life which formerly lived in Camp Creek and the Nolichucky River to return and flourish. Cox, Robert – F*

Response to Comment 133: Upstream parts of Camp Creek and other streams in the area are probably more affected by activities in their own watersheds than what is occurring along the Nolichucky River. The modification or removal of Nolichucky Dam and Reservoir is unlikely to solve water-related problems caused by local changes in other parts of the river basin.

- 134.** *Upon the advice of TVA, in 1977, I submitted a petition to TVA with 200 names for the Nolichucky Dam to be removed to prevent flooding. This request was entirely ignored and there was no action or response from TVA in this matter until 1999. Had more prompt action been taken, the environmental impact and cost of the project would have been much less than that projected in the Impact Statement. The additional \$8.6 million dollars spent on Nolichucky Dam modifications including permanently closing*

the water inlets for power generation was a very ill-advised expenditure. Alternative D is the only solution which prevents more of these kinds of tax waste in the future. **Cox, Robert – G**

Response to Comment 134: Comment noted.

135. *The alternatives A) do nothing; D) tear out the dam, each is certainly an alternative but surely a tragedy and a mistaken concept.* **Campbell - D**
136. *Option D is worse than C, with the same tendencies and problems.* **Piper - I**
137. *Option D - same as [Alternative C], only the results would be worse, and more immediate. This one strikes me as the worst alternative.* **Cotton – G**

Response to Comments 135 – 137: Comments noted.

138. *The effects of alternatives C and D are not in the best interest of the . . . river or the people who use the river.* **Susong - C**
139. *Options C and D: Unrealistic and too expensive. You would be moving the mess somewhere else.* **Lawrence - D**
140. *I believe Options C and D would cause too much disturbance to both those elements above and below the dam.* **Bird, Robert K. - D**
141. *If we go with option D, people wouldn't come to the Nolichucky Dam because they can't go canoeing anymore.* **Johnson - D**
142. *If you use plan D, the removing of the dam, this will affect the canoeing done with Cedar Creek Learning Center. Canoeing is one of the main highlights at Cedar Creek and I'm sure they would appreciate it if they kept the privilege of canoeing on the Nolichucky River. If you use plan D, they will lose that privilege because the water will be too shallow.* **Matern – D**
143. *Number four [Alternative D], tearing down the dam entirely is definitely not an option because of the cost. I believe it's \$150 million dollars that's been tagged to that. That is not an option, because, in my opinion, the sediment -- even if they were able to dredge some of the sediment above the dam prior to taking it down -- the sediment that would be released downstream would be detrimental to a natural resource -- or several natural resources.* **Self - E**
144. *Although TCWN is generally in favor of policies and activities that work to preserve or restore natural stream flows and habitats, in this case removing the dam or lowering the spillway would cause significant to severe damage to the wetland resources currently in place, while not replacing them with riparian resources of equal value. Additionally, the sediment removal and land filling required to reconfigure the riparian topography would cause inevitable water quality impacts downstream and land impacts on the area covered by the removed sediments.* **TCWN – E**

Response to Comments 138 – 144: Comments noted. These comments are consistent with the results of analyses done for this EIS and suggest the kind of tradeoffs that exist among the alternatives.

G Other Alternatives (Comments 145 – 180)

145. *I do not like the other choices you gave us because they have too many side affects.* **Tolliver - B**

146. *My third thought is perhaps a combination of A and B.* **Bird, Robert K. – C**

Response to Comments 145 – 146: Comments noted.

147. *I have thought of the options we have been given, and my own thoughts. I propose we, instead of dropping it down a lot, just bring it down a few feet. This way you would be equal on both sides.* **Banks - A**

148. *My personal opinion would be a modified Alternative C. I would like to see the reservoir dredged out and some ongoing maintenance dredging by TVA or a private contractor to ensure that it does not refill again and would have some use for flood control. I would also like to see the spillway lowered by 10 feet. This would improve the velocity of water flow above the dam, but would not have such a drastic effect on the wetlands and aquatic life below the dam.* **Dority – B**

149. *In regard to the flood project, I feel the best and simplest way to solve the problem would be to lower the spillway or construct a bypass channel. This would lower the lake level enough to clean or dredge the lake bed. It can be hauled out in pans or trucks. It can be sold to someone for sand or top soil. Or some of the top soil could be hauled back to replace some washed away during the flood of August 4, 2001. When completed, the spillway [could be] closed or the channel refilled to the old level.* **Weems - A**

Response to Comments 147 – 149: These ideas are variations of the concepts TVA considered during the development of Alternative C (See Sections 2.2 and 2.7), and elements of these suggestions are found in the alternatives evaluated for this EIS. The impacts that are potentially associated with these alternative variations are captured by the alternatives evaluated in detail in the EIS.

150. *My wife has mentioned a fifth possible solution, PLAN E: Turn the area back into a power producing facility.* **Gluck – A**

Response to Comment 150: This suggested use of the dam does not have any close relationship to the purpose of this EIS—to address the potential for flooding on private land and property. It is outside of the scope of this EIS. However, TVA has examined the potential for restarting hydroelectric production at Nolichucky Dam in the past and has determined that the cost would exceed the potential return.

151. *TVA, we as citizens also own these lands and you have the authority to control those lands. We as citizens and "we the people" need to utilize modern technology to cultivate this resource [free fall water]. Do not let this valuable resource be neglected as it has been for the past thirty years.* **Campbell – J**

Response to Comment 151: Comment noted. As noted in Section 1.2, TVA addressed the use of Nolichucky Dam and Reservoir in the 1972 EIS. As a result of

that evaluation, TVA developed and, with the help of TWRA, has continued to use the reservoir for wildlife management and environmental education. Many people who watch wildlife, hunt, fish, and use the facilities at Cedar Creek Learning Center do not believe this resource has been “neglected” for the past thirty years.

- 152.** *To correct past neglect and wrong thinking, and in order to move forward in the future, the projected direction is herein contained:*

1st A project of considerable scope is to cut a huge spillway to the Southeast of the present dam to a depth below the outflow of the structure.

2nd Design a lock and gates similar to the one at Lake Guntersville Dam on the Tennessee River. Any new construction should be as high as the previous full reservoir.

3rd Rebuild the generators now in place if they need to be or replace them with new ones. {It is stated that only one generator needs repair out of four generators}.

4th If the penstocks cannot be restored, design and build new ones.

*5th Remove most of all the sediment of the reservoir with regular earthmoving equipment, high lifts, bulldozers, track hoes, pans, etc. This can be accomplished because the channel of the original course will be as it was one hundred years ago. This will be a more economical way of removing silt and sediment than using pumps to do this. The dirt, sediment, silt, sand, and rock should be taken to an off-site location. The sand and rock could be sold to a local sand and rock company for processing. The other materials could hauled by Greene County or private trucks free and used for widening shoulders of roads, which currently are almost too narrow to travel. Other uses of these materials might be to cover outcroppings of rock, to improve pastureland and crop land, and to use as backfill of building sites. A small fee could be charged to cover fuel cost of loading trucks. The generating of electric power, a source of free fall water, should be the primary concern of TVA, along with the concern of flooding. The flooding of the Nolichucky River will be minimized to the lesser extent of the 500-year elevation with the building of the new spillway (estimated to be 150 fl. wide). **Campbell – E***

Response to Comment 152: See response to Comments 19 – 22 and EIS Section 1.2. With regard to flood remediation, these ideas are not substantially different from the activities described under Alternatives C and D in the Draft EIS, but would go well beyond the flood remediation purpose of this review with costs likely much greater than the cost estimate for Alternative D.

- 153.** *Future thought, TVA should [build] bar dams of 10 to 20 feet elevation with a gated spillway and generating capacity down and up stream of the Nolichucky Dam, staying within the river channel all the way to North Carolina. Generation would be small at each of these dams; however, 20 dams together would be beneficial. With modern technology, all generating could be monitored and controlled by one person. Such an endeavor is certainly a better option than Wind Power in this part of the country. To appease those who enjoy the sport of rafting, controlled release policy could be established as is done on other rivers, thereby benefiting tourism. **Campbell – F***

Response to Comment 153: Although interesting and innovative, this concept would not have any effect on the purpose of this EIS—remediation of potential flooding impacts on private land around Nolichucky Reservoir.

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154. *I also feel that the dam should remain as is and maybe some dredging done to deepen the lake.* **Ward – B**
155. *Davy Crockett Lake should be dredged as far upstream as possible, but only during low water flow.* **Laughters – B**
156. *Although it would take decades, seek out companies willing to dredge and sell the sand would be the least harmful and less costly method of dealing with the sand.* **Lawrence – F**
157. *I feel like that the combination of Plan B and C would be the best to go with. I am a landowner, and I -- That would, you know, be effective. But I think a combination of those two.* **Leonard – A**
158. *I believe in leaving the dam where it is, like it is, and let private companies, if they would, and was interested, to remove the silt and stuff that is filling up the dam, because it has taken so many years to fill it up.* **Higgins – A**
159. *And looking at the . . . shortage in the water and the rain in the past few years, I would like to see it [TVA] leave it [the reservoir] for a while, try removing sediment, and get it out, and see what would take place, see how fast it would refill.* **Higgins – B**
160. *We note that other alternatives were considered but rejected and not carried forward in the DEIS. EPA requests that TVA further consider the alternative to dredge the reservoir in order to recover volume and restore better use of the reservoir.* **EPA – G**
161. *I think you should dredge the dam. You could [separate] the silt [from the] sand and sell it to get some money back for the dredging. It would increase the area of the reservoir. You might help flooded areas and not mess with the dam and not accidentally drain Davy Crockett Reservoir.* **Berry – A**
162. *I would recommend that TVA acquire the affected land or landrights wherever possible, dredge the lake back to its original banks and depth, and modify the dam so that it can be operated as a flood control dam. This should enable the lake to be restored to its pristine condition that I recall as a young boy in the 1940's and 1950's when it had the reputation of being the best smallmouth bass and crappie fishery in the Nation.* **Taylor – A**
163. *I would implore you to leave the dam intact and undertake the dredging operations that are needed to deal with the sediment problem. This would insure the protection of the invaluable waterfowl habitat provided by the dam in the waters behind it, as well as keeping the sediment from destroying the world class smallmouth bass fishing to be found in the tailwaters of the Nolichucky River. East Tennessee has precious few wetland acres and we can ill afford to lose any of them. Likewise, the river below the dam provides untold amounts of recreation for the people of East Tennessee.* **Bales – A**

Response to Comments 154 – 163: As indicated in EIS Section 2.8, dredging alone would not eliminate all of the potential flooding effects on private land and property, although this would partially address flooding effects depending on the amount of

dredging. These and other similar comments helped identify the fact that the description for Alternative A did not include the dredging that already is occurring in Nolichucky Reservoir. That description has been corrected in the Final EIS. Under Alternative A (and the other alternatives), TVA would continue to accept and approve as appropriate requests to mine sediment from the river. Care, however, has to be taken in approving dredging both as to location and method because of the potential for impacts to sensitive resources such as wetlands.

- 164.** *I live on the riverbank and across from me is a large sandbar. There have been three deaths at this place. Could have been four, but people managed to get this person back in the boat. The only way you can stop this is to let Mr. Bewley dredge the sand out.* **Hendry – A**
- 165.** *My suggestion is that two things need to happen: first acquire landrights as in alternative B but, along with that, continue pumping the sand out. If that man [Bewley] has found a use for the sand then help him get it out of there. God did not put that sand there; man did, so we should do what we can to preserve the wetlands the dam has created.* **Collins – C**
- 166.** *The only solution is to let Mr. Bewley's Nolichucky Sand Company dredge and clean the river. I have five reasons for you to think about: no place for wild parties, better boat and fishing recreations, it won't cost TVA a penny, help keep sand out of Cherokee Lake and the wetland, so as to preserve them, help with the flooding in the lower part of Nolichucky watershed for flood control. A clean river carries more water.* **Hendry – C**
- 167.** *Option B would seem to be reasonable alternative; however, I personally feel that there should be ongoing dredging to remove as much of the sand/silt as possible. That would increase the impoundment capacity to hold flood waters and allow for gradual release downstream - pretty much like it was intended in the beginning. I believe Nolichucky Sand Co. /Tom Bewley would be interested in doing this under the "right" arrangement.* **Cotton – E**
- 168.** *Alternative A is the solution I prefer [; however,] I would like to see more dredging operations to remove the silt and sand. I would like to see Mr. Tom Bewley receive expanded permits to allow him to remove as much silt and sand as he can. If someone else wants to set up an operation, please permit them to assist in the removal of the silt. This is the most cost effective solution.* **Susong – E**
- 169.** *After reviewing the alternatives and attending one public meeting, I feel that a variation of Alternative B - Acquiring landrights, is the most logical choice of action. In addition to acquiring landrights, I recommend that private dredging of the reservoir be continued, increased, and even subsidized by buying the sand for the large and small road projects in the county and region. An increased dredging effort would improve of flood control and facilitate more recreational use by deepening the channel and reservoir.* **Reed – A**
- 170.** *Possibly, a fifth option would be to recommend dredging above the dam -- remove a good portion of the sediment. And that could be done by TVA, I think. They could contract people to come in, or allow other companies to dredge even further and remove the sediment, at least, from the main channel to allow access upstream*

without having any detrimental effects downstream, and would improve the situation above the streams. It would improve the flooding, as well as the fishing that once existed above the dam. Self – J

- 171.** *I'd like to see [TVA] just dredge the sand out and leave the dam alone, so we can have a good lake to fish in, and good place to hunt. And a lot of families just come out and enjoy it, go boat riding and stuff. Right now you can't hardly get up and down the river unless you know it. I believe if you just dredge it out, it'd be a lot better off instead of tearing the dam part of the way down, all the way, or whatever. . . . I believe that would solve a lot of the problems, because what little dredging that he's [Mr Bewley's] done, the water level has went down about four feet from where it used to be. So that's telling me that if you take the sand out, the water's got to go down to fill it back up where the sand's out. Bird, Sammy – A*
- 172.** *I was thinking about the dam out here, to get the sand and silt out of it. They have a natural force coming down, the water, which will bring the sand and silt down, and just separate it below the dam, and then let private enterprise sell the sand, the dirt, whatever they might have. And, to me, it wouldn't take that many years to clean it up. And as far as Mr. Bewley up the river, he can still continue his operation and it wouldn't affect him. In fact, they might even want to use him to market the sand, and the silt below the dam through private enterprise, and it would be cost effective that way. But we have a God-given gift of water and pressure coming down. It looks to me like it could be cleaned up easy that way without a lot of machines and expense. Ricker - A*

Response to Comments 164 – 172: See the response to Comment Nos. 154-163. These comments identify the role private enterprise could play in removing additional sediment from Nolichucky Reservoir. This possibility is addressed in the description of Alternative A, Section 2.4, in the Final EIS.

- 173.** *I would like to propose that [TVA] take a look at the Corps of Engineers to work a mile or so, or whatever they feel is feasible or economical to them, then have some people like Nolichucky Sand, Vulcan Materials, or whomever it may be, dredge the sand out because our county makes fifteen cents a ton off each ton. We're a poor county, of course, and this is very important to us. Plus, the beautification of the river which would handle and do that for us. Thomley – A*

Response to Comment 173: See responses to Comment Nos. 154-163 and 164-172. According to Nolichucky Sand Company, they paid \$21,000 to the county in 2001 associated with sales of 140,000 tons of sand.

- 174.** *If [a] reservoir dredging alternative is further analyzed and implemented, control of upstream sediment sources would also have an economic benefit by reducing the amount of dredging needed. Such controls should also include private land acquisition within the reservoir floodplain (similar to B) or other shoreline management of the reservoir as a water quality buffer to minimize non-point source runoff into the reservoir. EPA – O*

Response to Comment 174: Information available to TVA indicates that much of the sediment continuing to move down the Nolichucky River was discharged from headwater mica and feldspar mines many years ago. Some of that material remains in the riverbed and only moves during high-flow events. Under a license agreement from

TVA, TWRA presently operates a large amount of the land around Nolichucky Reservoir as a Wildlife Management Area. This area serves as a water quality buffer with regard to local nonpoint source runoff.

- 175.** *\$150 million is a lot of money to spend destroying what so many people enjoy for rest and recreation. Can we not make better that which we already have to enjoy? Something destroyed is a loss for everyone. Improvements will bring more use and more income to area businesses than the value of all land on the river. Fillers – C*
- 176.** *And, plus, I think the cost associated with -- I think I mentioned \$ 150 million dollars that they're talking about. The cost associated with that seems like, to me, if we looked at the other options or an additional option of just removing the sediment or contracting to have it removed might not make TVA money off of that project, but at least they might be able to counter-balance some of the expense if they were to sell the sediment that's taken from the reservoir above the dam. Self – L*

Response to Comments 175 – 176: The projected financial cost and benefits of each alternative, along with the potential environmental and community impacts, have to be considered when deciding which alternative to adopt. This includes considering the potential royalties that TVA could receive and severance taxes that the county could receive from increased dredging of sediment from the river.

- 177.** *I'm a landowner on the river and, if you could see the river how it was at least three years ago, you can see the remarkable change that has already happened in this short period of time. And if they would take the sand out, I think that they need to offer the people that are doing this a long enough permit that will give them ample time that they feel they can secure and buy the large equipment which is necessary to keep working four or five years or whatever. And then TVA [would not have to] be concerned about what will happen to the sand, because this would be a marketing-type of situation which the people that process the sand, or dredge the sand, would have to sell themselves. Thomley – C*

Response to Comment 177: The present TVA permit for removing sand from Nolichucky Reservoir does not have any set time limit. When additional sediment removal permits are issued, those permits would likely contain requirements at least as stringent as the one now in force.

- 178.** *Many people use and enjoy boating, fishing, hunting, picnicking, and camping on the Nolichucky River, and especially, in the reservoir above the dam. In Greene County during flash floods in August of 2001, we lost a lot of our recreational opportunities when Horse Creek, Paint Creek, and other areas sustained severe damage. We would not like to see our access and opportunity to use the river for fishing and other activities be lost also by removing the dam. I think that removing the sand and silt may be costly, but in the long run it would benefit the life and quality of the river. Many people in Greene County use the river for boating and leisure activity because it is close to their homes and doesn't require a \$25,000 boat to have fun. I own jon boats and bass boats but a lot of people have only small boats which would not be safe on lakes or bigger bodies of water. I know any action taken will not please everyone, but I ask you to consider improving our river; don't destroy it. Many generations before myself have enjoyed the river. Please make it enjoyable for future generations to come. Fellers – A*

Response to Comment 178: Comment noted. With respect to removing the accumulated sediment, see the responses to Comment Nos. 154-172.

179. *I am opposed to any dredging of any part of the Davy Crockett Lake. I feel this issue would not be best handled by any dredging. I also feel it would be detrimental to the fisheries and spawning that occur from the dam all the way to Douglas Lake. This dredging of the sand would benefit only the companies that would be involved in it and would hurt what I think is one of the great natural resources in East Tennessee. Mills – A*

Response to Comment 179: Comment noted. Every activity associated with one or more of the alternatives would have some beneficial and some adverse effects. As other commenters have pointed out, local government would benefit through increased taxes paid by the dredging companies.

180. *I'd like to also make a comment or recommendation that [TVA] offer timber people the opportunity to cut the timber from the reservoir that used to be there, and then allow the people that are dredging the sand to work within that area to remove that sand to give us back what we used to have, because we in Greene County feel like we have a river that runs through it, which that is very important to us. Thomley – B*

Response to Comment 180: If the decision were made to remove sediment from the reservoir, some trees probably would be cut in specific areas. The number of trees to be cut would depend on the purpose of the project and the immediate needs around the construction site(s). Those decisions would be made and described in subsequent reviews of the site-specific activities associated with those projects.

H Climate, Geology, and Soils (Comment 181)

181. *Section 4.2 in the Environmental Consequences chapter should mention formation of [or the potential impacts on?] hydric soils, either as the reservoir continues to fill with sediment or as water levels are lowered. USACE – G*

Response to Comment 181: The discussions about soils presented in both sections 3.2 and 4.2 focus on the upland areas, generally above the reservoir pool level. Hydric soils are discussed in the wetlands sections, Sections 3.6 and 4.6.

I Groundwater (Comments 182 and 183)

182. *The EIS should do a better job of assessing groundwater quality in the area. Reservoirs are known to be nutrient sinks as well as sediment sinks. Agricultural inputs from upstream, as well as permeable soils in the reservoir area, indicate the possibility of high nitrate levels in groundwater. On page 133, it is noted that around 100 structures are located within a half-mile of the reservoir that may be supplied by*

groundwater. This uncertainty should be resolved, either by field work or possibly by retrieving data from local or state agencies. If groundwater were impaired by the reservoir, this fact would weigh against the selection of Alternatives A and B, and in favor of Alternatives C and D. However, the lowering of groundwater levels entailed by Alternatives C and D could affect groundwater availability to local residents. Clearly, more information is needed. Young - E

Response to Comment 182: We agree that agricultural and residential activities in the area might produce adverse impacts to groundwater such as high nitrate levels and recognize that this is a common problem across the Tennessee Valley. TVA maintains programs to monitor the health and environment of watersheds throughout the Tennessee Valley and implements water quality improvements in many areas. However, our agency must rely on other state and federal agencies for monitoring and protecting groundwater quality across the valley. Presently, there is no evidence to suggest that adoption of Alternative A or B would impair local groundwater quality.

During development of the EIS, TVA attempted to locate existing groundwater supplies in the area using well records maintained by the Tennessee Department of Environment and Conservation (TDEC), interviews with and maps from local utilities, and local reconnaissance. Unfortunately, TDEC records do not include older wells and local agencies do not maintain well records. As indicated in the Final EIS, if a dam lowering or removal alternative (Alternative C or D) were adopted, TVA staff would work with local agencies to better identify existing wells that could be adversely affected by the lower groundwater levels and/or adverse impacts on groundwater quality. We anticipate that this would probably involve house-by-house surveys. Depending on the situation at each active well site, owners would be assisted in maintaining their water supply by modifying the existing well to ensure its continued use; installing a new, deeper well; or by assisting in obtaining a connection to an existing public water distribution system. These actions would help ensure that adoption of dam lowering or removal alternatives would not have significant effects on groundwater resources and their use.

- 183.** *Wells which were affected should return when [the reservoir dredging] project is finished. Campbell – H*

Response to Comment 183: We agree that potential changes in groundwater quality associated with reservoir dredging would most likely be temporary. However, for alternatives associated with lowering or removing the dam (Alternatives C and D), there is a potential for long-term reductions in groundwater levels at wells located close to the downstream part of the reservoir. The mitigation measures identified in the Final EIS would help ensure that adoption of dam lowering or removal alternatives would not have significant effects on groundwater resources and their use. Specifically, TVA staff would work with local agencies to identify existing wells that might be adversely affected by lower groundwater levels and/or adverse impacts on groundwater quality. Depending on the situation at each active well site, owners would be assisted in maintaining their water supply by modifying the existing well to ensure its continued use; installing a new, deeper well; or by assisting in obtaining a connection to an existing public water distribution system.

J Surface Water and Sedimentation (Comments 184 – 198)

184. *Please don't do anything to dry up any part of the Nolichucky River.* **Weckerley - A**

185. *Reservoir elimination will also create a huge problem for the golf course, as we will need to relocate pump stations and/or explore well drilling for irrigation water sources.* **Sayler – D**

Response to Comments 184 -- 185: Comments noted. There would be costs and impacts associated with modifying or removing the dam. The possible extent of these impacts and what could be done to avoid or mitigate them cannot be fully addressed until detailed project and construction plans are developed for Alternative C or D. Prior to implementing either of those alternatives, TVA intends to supplement this environmental review.

186. *For ease of interpretation, I would like to suggest that the sediment core sample numbers in Table 10 (p. 70) be better associated with the river mile where each sample was taken. I can only assume that samples 1-5 match the order of the river miles given near the bottom of page 69. It would be clearer if the river miles were listed in the table as well.* **Young – K**

Response to Comment 186: Actually, the five samples evaluated in Table 10 were composites of similar-appearing sediments from various cores and depths. Both the text and the heading for this table have been modified to describe more accurately the composite nature of these samples. See Table 11, Chemical Analyses Results From Segments of Sediment Core Samples Collected at Various Sites in Nolichucky Reservoir During 2000, for sample analysis results by sample site.

187. *The problem of silt is not TVA's problem simply because they own the dam and most of the land surrounding reservoir. The silt is from upstream abandoned mining sites and the dam is providing a solution to a problem. The dam was left in place to stop the silt from flowing on downstream to the next power producing lake (Douglas Lake) on the river. The result is we have a shallow lake with wetlands making a great environmental classroom and limited fishing/hunting opportunities.* **Susong – D**

Response to Comment 187: Comment noted; however, the sediment that has accumulated in the reservoir has raised potential flood levels in the area. That is the problem TVA is addressing in this EIS.

188. *[All] Land contained within the 500-year flood boundary of the reservoir appears to be inside Tennessee's borders. While the four alternatives being evaluated do not appear to have a large influence on land or waters within North Carolina, the EIS should more clearly define the spatial extent of the indirect effects with attention to state and county boundaries. For example, lowering the lake level may have upstream effects (e.g., head cuts in the contributing tributaries) and an estimate of the spatial extent of those effects is desirable.* **North Carolina Division of Water Quality – A**

Response to Comment 188: This comment correctly concludes that the direct influence of the potential flooding is entirely within Tennessee. North Carolina counties were addressed in the EIS because they have been identified as a source of

the sediment in the reservoir. All of the sediment-related effects of modifying or removing the dam under Alternative C or D would occur in Tennessee. Upstream from the reservoir, bedrock exposed in the river and creek channels would prevent more than very local head cutting as sediment was removed or redistributed.

- 189.** *The FEIS should be more specific as to the nature and degree of continued upstream activities that generate sedimentation (mining, agriculture, point source, non-point source, etc.).* **EPA – M**
- 190.** *Although perhaps not within the scope of this EIS, inclusion of a discussion in the FEIS on ways to minimize upstream sediment sources would be beneficial. How long is mining expected to continue? Are non-point source BMPs being implemented at mine sites and in the agricultural areas? While the DEIS indicates that even if sediment sources would be controlled, the existing sediment bedload would continue to move downstream, such controls would still be environmentally meaningful in the long term.* **EPA – N**

Response to Comments 189 - 190: As described in EIS Section 1.2, mining in the upstream part of this watershed is projected to continue in the future and those mine sites now use appropriate sediment-control best management practices. While additional information about other upstream activities and their contribution to sediment levels in the river perhaps would be interesting, the volume of sediment already in the river so dominates the problem being addressed by TVA that any such additional information would have little value. As described in EIS Section 3.4, past mining activity and the sediment still in storage in the banks and bed of the river are the overwhelming sources of bed load sediment still coming into the reservoir. The sedimentation fieldwork reported in EIS Section 3.4 helped to confirm the constituents of the existing sediment and the significance of past activities compared to ongoing activities.

- 191.** *Although it may not have bearing on the selection of alternatives, I would like to comment on the suspended sediment data presented on pages 61-65. First, there are many techniques that can be used to collect this data. The method of collection often affects the resulting data, and should always be stated when suspended sediment data are presented.* **Young - F**
- 192.** *Second, it seems unlikely that a consistent [suspended sediment] data collection method was used over a 64-year period (1934-1998) and between two agencies. False trends have resulted from changes in data collection techniques on the Colorado River.* **Young - G**
- 193.** *Third, I suspect that much of the [suspended sediment] sampling took place at an equal-interval frequency (e.g., once a day, or once a month). Certainly, this cannot be changed for historical data. Today, equal-interval sampling, unless it is very frequent, is generally viewed as insufficient for sampling a highly variable process in which a vast majority of the sediment may be transported only a few days out of the year. Therefore, the numbers presented may underestimate the suspended sediment concentration.* **Young – H**

Response to Comment 191 – 193: It is always a challenge to present enough information for the professional, while keeping the text interesting and useful to

nontechnical readers. As indicated in the source documents, the TVA data in the two large-scale studies in the 1930s and 1960s were collected using consistent methods, including depth-integrating samplers with values averaged over the river cross section; while the other data, presumably, were grab samples.

The TVA results from the 1930s and 1960s was the most extensive dataset considered in the EIS, with 233 cross-section-average values of suspended sediment concentration generated during the period from 1935-1937 and 298 values during the period from 1963-1965, all at the Embreeville station. These samples were taken at all stages of flow, with many sampling events tracking changes in suspended sediment concentrations during changes of flow. While no equipment code is supplied with the STORET data, it is likely that the TDEC samples were taken as surface grab samples, with one sample characterizing the entire cross section.

While comparisons between these data can be unreliable, TVA technical staff decided that the TDEC data provided enough samples (52 samples in the 1964-1966 period, 119 samples in the 1972-1983 period, and 34 samples between 1984 and 1994) representing a wide enough range in discharges to indicate that the 1960s data were reasonably consistent and to provide a *qualitative* comparison, over time, with the TVA data. The difference in sampling methods may be the reason the Nolichucky River Mile 98.5 line from the 1960s is slightly lower than the line representing the earlier TVA samples. TVA's best judgment is that the direction of the trend is demonstrated by these data; however, the magnitude of the trend cannot be established with any certainty.

- 194.** *I am a waterfowl hunter and fisherman, mostly a duck hunter. I have hunted the area above the dam for 25 years and have watched the river bed fill in with sand over these years. The sand shifts and changes around with each hard rain. The only real change I have seen lately is when Bewley began pumping the sand out. This pumping or dredging is really helping as far as my motor propeller is concerned.* **Collins – A**

Response to Comment 194: Removing sediment from the reservoir would restore more open water and slow the filling of existing wetlands by sediment, and therefore be beneficial to several species of waterfowl. Sediment removal by itself, however, would not resolve all of the flooding issues on non-federal land.

- 195.** *Although there are no guarantees, I believe that stabilization of exposed sediment can be carried out successfully, especially during times that typically see little precipitation.* **Young – P**

Response to Comment 195: TVA also believes that sediment can be stabilized as it is exposed during parts of Alternatives C and D if the slope of the remaining deposits are not so steep that slides or slumps occur.

- 196.** *Reservoir Value - Sediment removal would restore the use designation of the Nolichucky mainstem where sections are considered to only be partially supporting designated uses due to sedimentation. Moreover, other aspects of the reservoir would be enhanced with additional [reservoir] volume, such as fisheries and recreational values (given that the reservoir currently only occupies 10% of its original volume).* **EPA – I**

Response to Comment 196: Comment noted.

- 197.** *Sediment Quality - If significant sediment contaminants exist, suction dredge removal of such contaminants could be beneficial to prevent their possible resuspension or bioaccumulation in the food chain. Page 57 indicates that 73 industrial and 47 domestic discharges presently exist within the watershed (despite National Pollutant Discharge Elimination System (NPDES) permitting controls, a cumulative effect in the sediment can be assumed) and pages 70-71 indicate that radionuclides, PCBs, pesticides and metals (including mercury and cadmium) were sampled or historically exist. It was noted that seventeen metals were present above the detection limits but below "levels of concern." Unless it is verified that these contaminants are indeed at acceptable levels (the FEIS should further specify and substantiate) or are safely capped by clean sediment or are not available to the food chain and subject to natural resuspension, efficient sediment removal would be beneficial to the environment. EPA – J*

Response to Comment 197: From the beginning of this project, TVA has understood that if significant sediment contamination existed in the reservoir, the costs and risks associated with removing, dewatering, and transporting that material would have to be balanced against the benefits and risks associated with leaving it in place. As described in Section 3.4 of the Final EIS, all of the 17 metals encountered in the Nolichucky sediment samples are known to occur in rock formations that outcrop in the watershed. Of the metals for which EPA has identified threshold and probable effects concentrations (TEC and PEC levels, respectively), only one (lead) was ever found to be higher in the sediment samples than the TEC value, and the 15-sample average for lead was lower than the TEC value. The analysis data appear to be sufficient to indicate that the sediment in Nolichucky Reservoir does not contain levels of metals, pesticides, radionuclides, polychlorinated biphenyls, or volatile and semivolatile organics that could cause adverse biological effects.

- 198.** *Sediment Removal - If sediment removal cannot be efficiently accomplished with a suction dredge, additional suspended sediments would result downstream. Such additional turbidity could adversely impact downstream resources by silting in habitat (e.g., wetlands) or impacting sediment-sensitive aquatic resources (e.g., mussels and other molluscs) and disrupting aquatic resource reproduction (e.g., demersal fish eggs), as well as resuspending any contaminants. Such siltation may also occur even if a suction dredge is used. The FEIS should discuss this. EPA – K*

Response to Comment 198: At this time, we cannot foresee a situation in which sediment removal would be done that would not rely on suction dredging, and information about that method indicates that suction dredging would allow sediment removal with a minimum risk of downstream turbidity impacts. Under TVA's preferred alternative, Alternative A, no action, TVA would not initiate a project that would require sediment removal. TVA would continue to approve, as appropriate, requests by others to mine the accumulated sand and sediment, but part of the review TVA undertakes before approving such requests is consideration of potential turbidity impacts.

K Aquatic Life (Comments 199 – 208)

199. *In case anyone is interested, this area has the best largemouth bass fishing in upper East Tennessee. In fact, I have fished Florida, California, Texas, Missouri, Mississippi, South Carolina and Arkansas, and, when I have a choice, I head for the boat ramp at Kinser Park. Cotton - B*
200. *The smallmouth bass population on the Nolichucky, particularly downstream, is one of the best in the country. It's been written about extensively in outdoor magazines. I am an outdoor writer, and I have written about the Nolichucky in several articles, both state and regionally. It's known, like I said, not only in East Tennessee in this region as one of the best smallmouth bass fisheries, but it is one of the premier smallmouth bass fisheries in the country. Self - F*
201. *I have fished every TVA reservoir from Watts Bar to Holston and I am afraid that my grandkids will never know what pristine waters and good fishing are like. I realize that large industries, farms, cities and population growth have destroyed our waterways, but anything that we can do to correct our mistakes and not make more mistakes, must be tried in order to save what we have left. The Nolichucky Dam should be left as is. Any lowering of it would destroy the river below to the intersection of the French Broad and Douglas Lake. We had a good crappie fishery in Davy Crockett Lake until the silt from the mica mines in North Carolina filled the lake. Now we have a natural smallmouth fishery from the dam to Lowland Dam. Why would anyone want to destroy everything? Laughters - A*
202. *Not only are there good smallmouth bass populations below the dam, but there are also still a viable population of muskies or muskellunge, as they're known as; there are populations of crappie downstream that are still caught; there's Kentucky bass, maybe even a few largemouth bass still exist. Self - I*

Response to Comments 199 — 202: Comments noted. TVA collected a number of important sportfish species during the aquatic biological sampling for the EIS, which are listed in Appendix B, Table B5. Fish community samples were rated good or better, except the sample from within Nolichucky Reservoir, which was only poor/fair. TVA recognizes the high quality of the existing Nolichucky River fishery in Appendix B, its improvement over the last several decades, and concurs with TWRA that the Nolichucky River supports one of east Tennessee's better warm water fisheries. A sentence has been added to Section 3.11 to highlight the recreational quality of this fishery.

203. *Alternative C and D I cannot support. The river below the dam would never return to its current state. The Nolichucky River below the dam is one of the nation's best smallmouth fisheries. It would be destroyed. Susong - I*
204. *Our primary concern lies with the potential of more extreme action alternatives to negatively affect the excellent aquatic life community below the dam. Although there are interesting and attractive features associated with restoration of the river within the existing reservoir, it is our position that risks to downstream aquatic life could be too high, especially with complete removal of the dam (Alternative D). We therefore recommend Alternate B (Acquire Landrights), A (No Action), and C (Lower Nolichucky*

Dam), in descending order of preference. We recommend that Alternative D not be undertaken. TWRA - A

- 205.** *And if the dam were to be torn down, and the sediment released, or even just with the top portion of the dam being destroyed, the sediment released downstream would cause a problem in that it would fill in the smallmouth bass habitat, the shoals and the structures downstream. And not only would that mess up the habitat, but it would also be loss to some of the aquatic life, . . . the food sources that the smallmouth bass and other fish downstream depend on, and those are hellgrammites and crawfish. If they don't have the habitat to grow and mature, then the fish that do remain or do survive, would not be able to prosper because the food would be gone. Self – G*
- 206.** *And TVA has told me that we're looking at possibly ten years of a decrease or, basically, destroying the fishery itself for at least ten years before we would be able to see it come back to what it -- even close to what it is. And that's only a guess. They're not even sure. It could be even twenty years before we see the fishing come back to what it is currently. And, to be honest with you, I have two small children and both of them fish with me. And my son has just gotten to the age where he likes to bass fish. . . . I don't want to give up ten years of fishing with him on the Nolichucky or even, possibly, twenty years. So there's a lot at stake with tearing down the dam, or -- or taking down a portion of the dam. Self – H*

Response to Comments 203 — 206: Comments noted. The EIS describes, as accurately as possible, the potential impacts associated with each of the alternatives within the constraints of considering these alternatives as early as possible in the decisionmaking process. This is done to help the public understand what could happen and to help TVA managers make informed decisions about how to resolve the identified problems. While the present concept of Alternative D is more likely to result in significant and long-term adverse effects on aquatic life (particularly bottom-dwelling organisms) than Alternative C, if either of these alternatives were adopted, the subsequent detailed planning and site-specific reviews would include careful study of ways to avoid, mitigate, and shorten the duration of those effects.

- 207.** *The removal of dams can often benefit certain species such as fish and molluscs by restoring flows and eliminating impediments to migration patterns. While fisheries are addressed (pg. 81), no species are disclosed. Although we understand from discussion with TVA that the Nolichucky River does not have anadromous fish species that would particularly benefit from the removal of Nolichucky Dam (Alt. D), the FEIS should verify and address the issue of the presence of any commercially or ecologically significant anadromous/catadromous species. Conversely, the decommissioning of the dam can be expected to damage downstream aquatics due to the significant sediment burden that would be released even if reservoir dredging preceded decommissioning. EPA – P*

Response to Comment 207: As described in Section 3.5, TVA has summarized the available data on fishes in this part of the Nolichucky River and has collected additional data to bring this part of the assessment up to date. EIS Appendix B includes all of the species-level data, including extensive lists of fish species that have been encountered in the watershed. The Nolichucky River is far removed from any coastline (over 1,700 river miles and 10 major hydroelectric dams away) and no anadromous/catadromous fish species are issues in this project. Several

commercially or ecologically significant freshwater fish species that migrate considerable distances are present in the study area, and they are also addressed in Appendix B. Those migratory species could be expected to expand their ranges if the dam were removed, although many of them already are represented by populations that occur upstream from Nolichucky Dam.

- 208.** *TWRA does need to put a catch & release rule on these waters [Nolichucky Reservoir].* **Cotton – C**

Response to Comment 208: Comment noted. This comment will be provided to the TWRA for their consideration.

L Wetlands (Comments 209 – 217)

- 209.** *I also object to the varying definitions that I keep getting of the so-called wetlands. It seems that everyone has a definition of a wetland, and they constantly change from day to day.* **Burgner – H**

Response to Comment 209: Wetland definitions can be confusing because some are regulation based and some are ecologically based. All wetland definitions, however, share the same three attributes—water (wetland hydrology), plants adapted to lots of water (hydrophytic vegetation), and wetland (hydric) soils. The USACE regulatory definition is: “Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that, under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions.” All three of the attributes must be present under normal conditions for an area to meet the USACE wetland definition. The overwhelming majority of wetlands identified in the Nolichucky EIS meet the USACE definition.

The U.S. Fish and Wildlife Service (USFWS) uses a broader, more ecologically based definition that includes areas that may have one, two, or all three, wetland attributes. A few of the temporarily flooded, palustrine wetlands identified in the EIS may actually lack wetland soils, but would still meet the USFWS definition. These particular wetlands occur on relatively small areas outside of the 100-year floodplain along tributary streams. All of the other wetlands indicated on the USFWS National Wetland Inventory map and identified during field surveys contain all three attributes.

- 210.** *Since the Nolichucky Dam was built in 1913, the reservoir pool area has been largely filled in by sediments washed in from mineral extraction activities upstream. Over the years, a significant wetland ecosystem has developed on the floodplain created by the Dam's retention of sediments. We believe this wetland has sufficient value, in terms of plant and animal species supported, water quality enhancement, and recreational potential, to justify its preservation and maintenance by TVA.* **TCWN - C**
- 211.** *Moreover, it is our understanding from the DEIS that these wetlands are quality wetlands that are unique to the region and are interrelated with the sediment accretion over time. We note that page 90 states that: The variety and expanse of wetlands in*

Nolichucky Reservoir and on the surrounding floodplain are quite uncommon in other parts of east Tennessee. No other reservoir or river floodplain in east Tennessee has the specific combination of water regime, vegetation community, surrounding habitat, overall wetland area, and absence of disturbance. that exists around Nolichucky Reservoir. EPA - C

Response to Comments 210 -- 211: Comments noted. The importance of these wetlands is one of the reasons for preferring Alternative A over Alternatives C and D.

- 212.** *Also, another concern would be the loss of wetlands. Over three hundred [acres of] wetlands would be lost if the dam were taken away or changed in any way. And the wetlands above the dam may not be important to a lot of people. I know that the Davy Crockett Lake is filled in with a lot of sediment, but it's still home to a lot of ducks in the springtime, particularly Wood Ducks like to nest there. It's basically a major nesting ground, or has been in the past, for the Wood Duck population in this part of east Tennessee. It's been used in the past by the Tennessee Wildlife Resource Agency as a banding area, also as a feeding area that they fed the ducks. And if we lose those wetlands, then we lose that opportunity to help the Wood Duck population there. So that's another concern that I have with changing or altering the dam in any way. Self – K*

Response to Comment 212: As described in EIS Sections 4.6 and 4.8, the wetlands associated with the Nolichucky Reservoir perform a range of functions, including providing wildlife habitat. The wetlands provide habitat for wood ducks, dabbling ducks such as mallards and teal, great blue herons, green herons, and other water birds. While some of these species also use nearby ponds and reservoirs, suitable nesting habitat may be inadequate or nonexistent adjacent to those waters. The Nolichucky wetlands also serve as habitats for many species that cannot migrate to other habitats or for which there may be no nearby habitat. These include migrant and nesting songbirds, amphibians and reptiles, moles, river otters, wading birds, mink, raccoons, and other small mammals.

- 213.** *Additionally, [under Alternative C or D] mitigation of the wetland issue will be a daunting task. Sayler – E*

Response to Comment 213: EIS Section 4.6 describes both the scope and the complexity of the measures that would have to be met to mitigate the loss of the wetlands around Nolichucky Reservoir if either Alternative C or D were adopted.

- 214.** *As for the environmental impact, the Davy Crockett Lake and Reservoir will be as the research draft surmises and concludes. The reduction of wetlands (man made over the last 100 years) will be reduced or mostly eliminated but, in time, the shores will replenish as Mother Nature does her magic. Campbell – G*

Response to Comment 214: Under Alternative C or D, the area of wetlands around Nolichucky Reservoir would be greatly reduced. The type and acreage of wetlands that would develop naturally around the modified area can be predicted only in general terms. If either of these alternatives were selected, a detailed wetland mitigation plan would be prepared and implemented to restore or replace the wetland acreage and functions that would be lost.

- 215.** *Also, it seems unreasonable to consider this artificial environment as a “wetland”. If left alone, the impoundment behind the dam will soon be a beach with a river channel. These so called wetlands are doomed to siltation and should not be taken into account in decision-making. Lawrence - E*
- 216.** *Assessing the significance of these wetlands raises larger questions concerning habitats that are created by human actions. The draft EIS clearly states on many occasions that the wetlands are the result of sedimentation and high groundwater levels caused by the dam. How “natural” are these wetlands? Because others like them are rare in east Tennessee, should they be considered unique, or an aberration? Young – J*
- 217.** *I find the significance of the wetlands in and surrounding the reservoir to be questionable. On page 86, the absence of wetland soils is noted for part of the wetland area. The dominance of sand-sized particles in the reservoir (p. 136) also seems to call this into question. No endangered species are noted, and few animals other than waterfowl are listed as utilizing this habitat. Waterfowl can easily relocate to other reservoirs or ponds in the area. The lowest diversity of aquatic life is found in the reservoir (p. 146). Additionally, the wetlands seem to be in danger of imminent takeover by an exotic plant, the purple loosestrife (p. 91). The sustainability of these wetlands seems limited, given the continuing deposition of sediment into the reservoir area. On page 137, the document notes that areas of standing water will very likely be filled in the coming decades. Young – I*

Response to Comments 215 – 217: Even where human actions may have caused wetlands to form, those wetlands can be subject to regulatory jurisdiction and Executive Order 11990 protection, so long as they meet the pertinent definitions. In the case of the wetlands around Nolichucky Reservoir, while human actions created the favorable initial conditions, those wetland systems developed over many years as results of natural ecological processes. From that perspective, they clearly are natural wetlands and meet the regulatory requirements.

Purple loosestrife now occurs in highest densities in the island and sandbar wetlands close to Nolichucky Dam, and on tree stumps and stationary logs around the reservoir shoreline. So far, many of the floodplain forest, emergent, and scrub-shrub wetlands either have not been colonized or support only small populations. However, purple loosestrife is an aggressive species and is eventually quite likely to increase and spread, posing a threat to wetland species. Because this would take time to occur, the area would benefit from these wetlands for some substantial period.

M Floodplains and Flood Risk (Comments 218 – 223)

- 218.** *I know people have been complaining about their land flooding but why do they want to do something about it now? I live beside Lick Creek and my yard floods every time it rains. But I don't want nothing to happen to the creek; it has been there longer than we have. Norton - B*

219. *Nobody can blame the river or TVA for what damage that rain may bring. Weather is a part of everyone's life, a part we will never control. People choose the land they own and buy it. If they choose and buy, then that which comes next, a flood, tornado, or whatever, is [just] Nature having its own way.* **Fillers - B**

220. *I really have a lot of good neighbors and friends who live nearby along the river. Occasional high water is really not so big of an issue to most of us who have lived nearby for a long time. It's usually here today gone tomorrow. . . . The recent flood of August 4, 2001 totally ruined a great amount of public use areas in the nearby mountains. I regret this happened but no one can change that nor can anyone blame TVA.* **Fillers(e) - A**

Response to Comments 218 - 220: Comments noted.

221. *I believe it is wise for TVA to use the 500-year floodplain for planning, given the limited flow data on record (generally less than 100 years), and the uncertainties of climate change and possible increases in precipitation accompanying it.* **Young - B**

Response to Comment 221: Comment noted.

222. *We request that our property be taken out of the flood study. We do not want to sell the property or sell an easement to Tennessee Valley Authority. Studies show that the effects of the dam upon our property are minimal at best. The acquiring of property is a costly venture for TVA and we do not see any reason why TVA should acquire our property, especially when TVA's own studies show that the dam or any sedimentation from the dam's existence has not affected our property.* **Waddell - A**

223. *As we discussed at the public hearings with them, the TVA Nolichucky Dam and any silt that has accumulated around the dam realistically does not affect our property. According to the flood studies that TVA produced and has been kind enough to allow us to reference in this letter, the study shows that our sand company operation, which lies within the floodplain, is not affected by any flooding produced by the dam. Our equipment, steel concrete structures, and levy system upon our property accepts the floodwaters and traps the sand which we use as our company's product. If you notice upon a topographical map we are surrounded on the other side of the river from our property by a 100-foot vertical rock face. This allows the floodwaters during heavy amounts of rain to push upon our property thus enacting our levy system to trap sand. Our property is located 62 miles above the mouth of the river. The dam is located 46 miles above the mouth of the river. Your study shows that the flood level stages from 1938 to 2002 intersect at 57 miles above the mouth of the river. Therefore, our present location has seen no effects of the dam from 1938 to present.* **Daniels - B**

224. *We have at no time sought flood insurance on any equipment or structures within the floodplain. Our floodplain has been zoned industrial use for over sixty-two years. We have built our company and structures around accepting floodwaters. This sand quarry has been a backbone in our family's income for all this time. We request that our property be taken out of the flood study. We do not want to sell the property or sell an easement to Tennessee Valley Authority. Your study shows, and as we have agreed upon, that the affects of the dam upon our property is minimal at best. The acquiring of property is a costly venture for TVA and we do not see any reason why TVA should acquire our property, especially when TVA's own studies show that the*

dam or any sedimentation from the dam's existence has had no affected our property.

Daniels – C

Response to Comments 222 - 224: All property within the present 500-year floodplain from Nolichucky Dam upstream to near River Mile 62 was included in the EIS evaluation. If Alternative B were adopted, TVA would determine which land would be acquired in fee and which land would be covered by a flowage easement. The existing landowner's desires would be taken into account when TVA considered the best way of purchasing any additional landrights.

- 225.** *There also needs to be a more thorough examination of removing all existing vegetation below the 1255.6 property line. And then more examination should be made of the impact of removing the vegetation on the 100-year flood level and the 500-year flood level. Additionally, there should be more examination of removing all vegetation, plus, knocking all sand bars, and so-called wetlands, down to the 1240.9 level on these same floodlands.* **Burgner – G**

Response to Comment 225: TVA believes that removing vegetation would not significantly lower flood elevations around Nolichucky Reservoir and would not reduce the potential adverse flood effects on private land and property in the area. Beyond that, removing vegetation could have substantial adverse effects on several beneficial uses of the reservoir and the river corridor downstream from Nolichucky Dam.

- 226.** *The water level of the flood of 1977 was 12 feet higher on my property than the water level of the flood of 1901, as evidenced by a mark my grandfather made in a limestone rock on my property. The flood of 1901 was contained in the channel of Camp Creek and caused no property damage.* **Cox, Robert - E**
- 227.** *I own and make a living from Tract Number 124:32.00 as well as other land very nearby. In 1977, my home, barns, tool and farm implement storage facilities and dairy were located on Tract 124:32.00 and adjoining land. This property was very significantly damaged by the flood of 1977. My personal monetary loss was in excess of \$50,000.00 (1977 dollars) as a result of this one flood. TVA claimed no liability even though Representative Quillen advised me that TVA was responsible for the severity of the flood damage and that TVA was the agency to provide remedy for the monetary losses.* **Cox, Robert - D**
- 228.** *The flood of 1977 was in the home of Robert and Mary Cox three feet deep. Everything my parents owned was carried out of the house and placed on farm wagons. The wagons were moved to local barn breezeways until the water subsided. The water damaged appliances that could not be moved to safety quickly enough. My father only had a few minutes notice that the water was truly going to enter his house as he was moving his farm equipment to the safety of higher ground. The water was quickly rising and he had to abort the farm equipment recovery and move to try and save his home and the property inside. The Camp Creek Volunteer fire department came later in their pumper truck to hose out the structure. Carpeting, wall paper, and lower kitchen cabinets were damaged. Linoleum was loosened and carpeting turned moldy and had to be replaced. When my parents moved back into the recently flooded house, my mother told us children, "We'll not move back into it again." They started work on a new house on much higher ground about three miles from the banks of Camp Creek on other land which my father owns.* **Hill, Donna – A**

Response to Comments 226 - 228: TVA regrets the flood damages that your family incurred as a result of the 1977 flood. Although the 1901 and 1977 floods were both large, the 1977 flood probably was higher on this property because Nolichucky Dam had been built in 1913 and a significant amount of sediment had accumulated in Nolichucky Reservoir. TVA is evaluating alternatives in this EIS specifically to address flooding problems such as this.

- 229.** *Reservoir Volume - Removing reservoir sediments would restore a measure of reservoir volume and thereby reduce/resolve the floodplain flooding issue and reduce/prevent the need for floodplain acquisitions.* **EPA – H**

Response to Comment 229: As stated in EIS Section 2.8: "... even if all 19,000 acre-feet of the sediment were removed from the reservoir pool, the 500-year flood elevation upstream from Nolichucky Dam (at its present elevation of 1,240.9 feet) would still affect some private land over which TVA does not have flowage easements." . . . "Removing the existing sediment would not resolve all of the flooding on nonfederal land but could be the start of a long-term, continuing maintenance commitment. TVA concluded that such a dredging program was not a standalone solution to the flooding effects on nonfederal land and property around Nolichucky Reservoir." We agree, however, that any removal of the accumulated sediment at least conceptually would have some beneficial effect on the flooding problem. It is, in part, for this reason that TVA expects to continue to approve appropriate requests to mine the accumulated sediment.

- 230.** *Under Alternative B (and A), the reservoir volume would presumably continue to be reduced as more sediment accretes (unless a bedload equilibrium has already been reached within the reservoir), resulting in the continued prospective acquisition of additional floodplains in order to, again, reduce the flooding liability. The value of the reservoir in terms of its use classification, recreation, fisheries and water quality would all continue to diminish.* **EPA – F**

Response to Comment 230: Based on the sediment surveys performed in Nolichucky Reservoir since 1938 and the sediment transport calculations performed by TVA recently, the volume of sediment in the reservoir probably has reached a near-equilibrium state. If this is the case, only relatively minor additional sediment accumulations are expected to occur in the reservoir, and upstream flood elevations are not expected to go much higher.

- 231.** *If you use plan C, the lowering of the dam, there will be much flooding.* **Matern - C**

- 232.** *Also, if alternative C or D was adopted, it would flood the Nolichucky River not just in the Nolichucky dam area, but on downstream, also. Many farmers use the Nolichucky River to irrigate their crops, which is on the Nolichucky River side. This would flood a lot of farmland on the Nolichucky River.* **Land - B**

- 233.** *I do not support the idea of removing the dam completely because of the flooding problems it would cause. If we removed the dam completely, all of the water would flow onto other people's property and I'm sure they wouldn't appreciate water from a dam flowing through their yard. It would also cause major flooding problems elsewhere.* **Jennings – A**

Response to Comments 231 - 233: As stated in EIS Section 4.7, “Lowering the elevation of the spillway in Nolichucky Dam would not lead to any detectable change in flood elevations downstream along the Nolichucky River. As described in Section 1.2, Nolichucky Dam was built as a single-purpose power production project, without any flood storage or flood protection benefit.” The pool level behind Nolichucky Dam is not lowered to provide any flood storage, and all of the water coming into the reservoir during floods flows over the dam and on downstream. During a flood, the same amount of water would flow through the downstream part of the Nolichucky River regardless of whether Nolichucky Dam was left as it is, was lowered in some way, or was removed.

N Terrestrial Life (Comment 234)

- 234.** *Now some people say that TVA has plans to remove the dam. If you remove the dam, you will destroy the reservoir. Think of all of the animals that you will kill or even put to extinction. So I ask in favor of all the animals "please don't destroy the reservoir."*
Kite – A

Response to Comment 234: Comment noted. As part of this environmental review, TVA considered the potential impacts of each alternative on wildlife and their habitats. As discussed in Section 4.8, each alternative would result impacts to local wildlife populations. TVA has considered a wide variety of mitigation measures to reduce the amount of direct and long-term impacts on wildlife. As also discussed in Section 4.8, most impacts to wildlife would be very localized and temporary. Regardless of the alternative chosen, local habitats and wildlife populations would stabilize over time and their eventual composition may be different from their present composition.

O Endangered and Threatened Species (Comment 235)

- 235.** *It has come to my attention that one of these [mussel] species was placed below the dam in recent years. The possibility of relocating these species prior to dam removal should be evaluated.* **Young – T**

Response to Comment 235: As described in EIS Section 3.9, TVA transplanted the birdwing pearlymussel into the Nolichucky River in 1982, and in 1995, a small number of individuals of this species was found at the transplant site indicating that some of the transplanted animals had reproduced successfully. Information presented in Section 4.9 indicates that captive culture methods might be used to perpetuate unique genetic stocks present in the Nolichucky River until they could be returned to suitable habitats no longer affected by dam removal activities. If either Alternative C or D were adopted, this subject would be addressed further as part of the subsequent environmental review when project specific information is available.

P Land Use (Comments 236 and 237)

236. *I feel that the TVA should purchase additional land around the lake and some below the dam. I feel that they should also assure access to the public for recreational activities. Land development along the river and lake are slowly taking up more land and limiting access to the public. . . . Additional access and public fishing areas below the dam would also be beneficial for the public. Ward – A*

Response to Comment 236: Acquisition of fee title or flowage easement landrights around Nolichucky Reservoir is a major component of Alternative B; however, the focus of that alternative and all of the others is resolving potential flooding effects on nonfederal land and property. Public acquisition of land around and downstream from Nolichucky Reservoir for other reasons is beyond the scope of this EIS.

237. *I think that one avenue of compensation not addressed by the Draft EIS is the possibility of swapping landrights. There is land currently under Federal control adjacent to my property that I would entertain trading flood easements for the right to use this land for golf course development. This trading of rights would eliminate the need for monetary compensation and allow TVA to reduce its out of pocket expenses. I do not feel that my situation is unique. In reviewing the land ownership panels of Appendix A, there appears to be Federal controlled land adjacent to many property owners. Would these property owners (many that are not wanting to sell rights or property at any price) not be receptive to the availability of additional land on which to farm, hunt, or enjoy in some other manner? It is my opinion that this option could reduce the already lowest cost method (other than doing nothing) of addressing this Issue. Saylor – F*

Response to Comment 237: At present, all of the federal land around Nolichucky Reservoir is being used for wildlife management and/or environmental education—the designated uses of the Nolichucky Project since 1973. Even if TVA were to acquire additional land adjacent to this reservoir as described in Alternative B, that land is proposed to be used for wildlife management, environmental education, and/or public recreation.

Q Visual Character, Recreation, and Managed Areas (Comments 238 – 254)

238. *All of us who enjoy this area do not complain to TVA. Keep up the good work TVA. The people who use this area thank you and support you. Our recreation is in your hands. Fillers - F*

239. *I use and am thankful to TVA for the benefit of public land and water use given to me. Please consider those of us who use Davy Crockett Reservoir. There are only so many ball fields in Greene County. Many of our children use this are for quality time with their parents and friends. Fillers - D*

Response to Comments 238 – 239: Comments noted.

240. *I have watched each year on Nolichucky WMA more variety of wildlife moving in. Please help, we need [for] this area [to] still be the same great Nolichucky long after we're all gone. It's good for our families; its good for all the geese, ducks, deer, turkeys, raccoons, owls, blue herons, otters, muskrats; there's so much to enjoy if you just take time. Fillers(e) - F*
241. *I'm very fortunate to have fished and enjoyed the river for forty years. . . . My best memories of the river are days I have shared with five generations of my family members there. My grandfather, dad, myself, son, and grandsons have enjoyed many days there. I thank TVA for the privilege to enjoy boating and fishing and hunting on public land and water. . . . The fact is a lot of good people use and enjoy Davy Crockett Reservoir for fishing and boating. . . . Anymore, it seems to get harder each year to find a little spare time to take our little ones out for some fishing and resting together. . . . After forty years of fishing, I've found it to be good therapy for anyone five to ninety-five. Fillers(e) - B*

Response to Comments 240 – 241: Wildlife management, environmental education, and public recreation are the present purposes of Nolichucky Reservoir. Thank you for indicating that those purposes are being met.

242. *My interest in [the Nolichucky Project] is fairly narrow as I am not a landowner, nor subject to any realistic flood hazard. I have fished this section above the dam up to the next bridge for many years (starting in 1975), and have noticed a substantial reduction in normal water depths. This has created problems getting even a small boat into some of the coves off the river and, in some cases, these coves have become completely inaccessible. Cotton – A*
243. *Should the focus divert elsewhere, most notably the Nolichucky Wildlife Management Area, or The Duck Pond as I like to call it, I need to point out that this project has been a failure. The objectives for the duck pond, set in 1970, was that 39,000 people a year would visit the place; that there would be a resident -- with emphasis on resident -- Canada goose population; and resident wood duck population of three hundred birds, and one thousand birds, respectively. Also 15,000 migratory waterfowl would fly through each year. The duck pond never came close to any of these objectives. Burgner – I*

Response to Comments 242 -- 243: Comments noted. Habitat changes in the area since the early 1970s have reduced some initially projected uses by both people and wildlife.

244. *Another reason you should leave the reservoir alone is so that in the future other 8th graders can go canoeing in the reservoir. Walton - B*
245. *Please do not tear the dam out or lower it. I would like for my son and my grandson to be able to hunt ducks where I have for so long. Collins - B*

- 246.** *It makes me sad to think TVA would consider taking from our children the opportunity to fish, boat, or just watch the various wildlife in this area, things they will never see first hand in a classroom. Fillers - E*
- 247.** *I own and operate a small business just five minutes drive from Birds Bridge boat ramp or Kinser Park boat ramp. Last spring and summer, we served more than seven hundred fishermen who use the Davy Crockett Reservoir. Sometimes it already gets somewhat crowded there. Reducing the size of the area of water could make things uneasy if crowded in near the dam. Fillers(e) - G*
- 248.** *Please consider that option C or D would be a lost opportunity for many people to enjoy this excellent waterway that the jet skis and bass tournaments haven't found yet. . . . If the dam happens to be altered or removed, in all likelihood it would remove also the opportunity for a lot of families to enjoy quality time together fishing, boating, enjoying this quiet little known area we use with our rather small watercraft typical to be used there. Fillers(e) – C*

Response to Comments 244 – 248: Nolichucky Reservoir is a relatively small, unique water body that is used in different ways by a variety of people. Those uses and the possible use changes that could occur under each of the alternatives are described in the EIS.

- 249.** *I am greatly troubled at the thoughts of lowering or removal of the dam and subsequent reduction or elimination of the reservoir. In addition to the obvious loss of the lake on the land I intend to develop, many existing homes will lose views of a lake they never dreamed would be eliminated. Sayler – C*

Response to Comment 249: Making a choice among several alternatives includes consideration of associated environmental issues, such as potential visual impacts. Lowering or removing the dam would restore part or all of a natural visual setting in the river valley that would, after the construction period, improve visual quality in many locations. Lowering or removing the dam also would have adverse effects to the visual setting of some homes along the present reservoir. All of these potential visual effects are described in EIS Section 4.11.

- 250.** *The waterfall created by the old dam is an attraction in itself. Many people go in search of waterfalls for the aesthetic beauty, cool mist and spray. We have our own waterfall to enjoy, develop, and promote to others. Reed - C*
- 251.** *This area could be a great tourist attraction if the shoreline of the lake could be opened up to the public for their access and recreation use. A fee could be charged similar to that for National Parks and other National Recreation areas. Taylor - C*
- 252.** *Now there is an Idea; maybe it [Nolichucky Reservoir] could be made into a National Recreation Area. Taylor – D*
- 253.** *I also feel very strongly that the area around and especially below the dam should be developed as a recreational area, picnic area, and access for all who may use the river. . . . The Nolichucky Dam is a part of Greene County; it's history, culture, and life. It was an important resource for our forefathers and if done right, can be a recreational attraction and resource for us now, and years to come. Reed - B*

Response to Comments 250 – 253: As suggested, Nolichucky Reservoir and the surrounding area could be developed for more intensive recreation use. That type of development also could have adverse effects on some present uses by people and wildlife. As described in Section 1.1, this EIS is focused on addressing the potential flooding impacts on nonfederal land and property.

- 254.** *I've had to call the Sheriff's Department because of noisy parties still going on at three or four in the morning because I could not sleep. Women come with their toddler and sunbathe and do not watch after them. They could get in the river. Campers leave such a mess that, when the river gets up, it takes the mess, including human feces down river.* **Hendry – B**

Response to Comment 254: Comment noted. The TVA Police (1/800/824-3861) and the TVA Cherokee/Douglas Watershed Team (423/587-5600) also might be able to help.

R Cultural Resources (Comments 255 – 260)

- 255.** *The Nolichucky Dam is a historical part of this county and should remain as is.* **Laughters - C**

- 256.** *The old powerhouse also has a lot of potential for historic and even leased business space value.* **Reed – D**

Response to Comments 255 – 256: Nolichucky Dam and Powerhouse are eligible for listing on the National Register of Historic Places. As such, TVA is obligated to consider and has considered alternatives that would preserve these structures (e.g., TVA's preferred alternative, no action). The potential impacts of the flood remediation alternatives on this structure are described in the EIS.

- 257.** *I like the idea of trying to preserve historic homes. I love the fact that our home is an antebellum home. It is very special to me and to those living in the area. I am encouraged that TVA is considering relocating or floodproofing it after they purchase it from me.* **Piper – E**

Response to Comment 257: Depending upon which alternative was adopted, TVA would consult with the State Historic Preservation Officer (SHPO) concerning all involved properties eligible for, or listed on, the National Register of Historic Places. The range of available options is fairly broad, including appropriate documentation prior to demolition. These aspects of the alternatives are described in EIS Section 4.12.

- 258.** *[After the 1977 flood] structural damage to all out buildings, including the old Hughes Tavern, Inn, and Stage Coach Stop, built in the 1780's, was soon noticeable as floors began to buckle. The East Tennessee Historical Society and members of the Hughes family showed great interest in moving this structure. Hughes Tavern is Greene County's oldest log tavern and inn. Plans were to move it to Knoxville and enclose the*

structure in the new large building, as a part of the living history museum there. Tragically, the corner seals have been so greatly damaged by the high water that the building may be useless now and saving it may be only a dream. Only a small percentage of the upper logs are undamaged by water and could be used, according to professionals of the Historical Society and Dr. Lawson of the University of Tennessee. The water was in the old tavern three feet also. Hill, Donna – B

Response to Comment 258: The log tavern and inn described in this comment seems to be a significant historic resource. Considerable advances have been made recently with regard to preserving badly deteriorated logs and wood structures. The owners of this structure might want to explore this subject again with the East Tennessee Historical Society, other professional historians, and restoration architects. If the owners desire, the TVA Cultural Resources architect would be willing to examine this structure and offer some opinions.

- 259.** *Considering available information, and in accordance with the Draft Environmental Impact Statement, we concur that the project as currently proposed may adversely affect properties that are eligible for listing in the National Register of Historic Places. You should now begin immediate consultation with our office. Tennessee SHPO – A*

EPA will defer to the State of Tennessee SHPO regarding project effects on cultural resources. However, we note that current flood events can inundate cultural resources in the floodplain and that such areas may need flood-proofing or other mitigation requested by the SHPO. In addition, any dredging of reservoir sediments should consider the reported possibility of unearthing additional cultural resources. If finds are discovered, guidance from the SHPO should be obtained before work in the area is continued or appropriate measures taken. EPA – Q

Response to Comments 259 - 260: After identifying the No Action Alternative as TVA's preferred alternative (see EIS Section 4.12), TVA further consulted with the SHPO. Because no funding or licensing (i.e., no change) would be involved under this alternative, by letter dated April 28, 2005, the SHPO concurred with TVA's finding that there would be no "undertaking," and therefore, there would be no further Section 106 obligations. As indicated in Section 4.7, under Alternatives A, B, and C, TVA would continue to maintain the historic Nolichucky Dam and powerhouse and comply with federal Dam Safety requirements. Under Alternative D, following appropriate consultation, the dam and powerhouse would be removed. All existing permits to dredge sand from the reservoir bottom have been determined to have no effect on historic properties and were approved after consultation with the SHPO. Any future requests to dredge reservoir sediments would be evaluated on a case-by-case basis in consultation with the SHPO as appropriate.

S Socioeconomics (Comments 261 and 262)

- 261.** *Since 1972, the failure of TVA to pursue the update, remodel, improvement of the Nolichucky Dam and reservoir in lieu of doing nothing except having wildlife management and environmental education. These thirty years has not earned any*

monetary benefit for TVA or any economic usefulness for citizens of East Tennessee.
Campbell – A

Response to Comment 261: Wildlife management, public recreation, and environmental education at Nolichucky Reservoir have contributed to the local quality of life and have brought many visitors to the area, all of which have resulted in positive economic impacts for Greene County. Promoting the protection of natural resources and enhancing local economies are both TVA goals.

- 262.** *Economics - We agree with the TVA assessment (pp. 34-35) that sediment removal would be a continuing operation. This is due to the continuance of suspended sediment flows from upstream activities and the downstream movement of sediment bedload. Periodic dredging would be expensive; however, periodic acquisition of floodplain lands to adjust for the additional reservoir sedimentation would also be an expense. Dredged sediment, if verified as being uncontaminated, may be marketable and a source of monies that could help offset the cost of dredging.* **EPA – L**

Response to Comment 262: As described in the response to Comment 230, Nolichucky Reservoir is now virtually full of sediment, and flood elevations around the reservoir are not expected to increase much more regardless of which alternative would be adopted. Also, as mentioned in EIS Section 1.7 and discussed in many comments, TVA already has issued a permit for the commercial removal of sand from Nolichucky Reservoir at one location. The sand in the reservoir is a marketable commodity; however, the size of the potential market and the extraction and transportation costs would limit the amount of material that would be removed each year. Given these uncertainties, the extent to which marketing the dredged sediment could offset the production costs is uncertain.

T Environmental Justice (Comment 263)

- 263.** *Based on page 128, reservoir shorelands do not seem to be disproportionately populated in terms of minority or low-income groups (although the percentage of the low-income population in Greene County is slightly higher than for the State of Tennessee). This section would be improved if information would be added regarding potential TVA land acquisition of the some 1,000 acres of private lands under Alternative B. Specifically, are these landowners willing sellers and does TVA have eminent domain authority?* **EPA – R**

Response to Comment 263: TVA does have eminent domain authority; however, TVA prefers to reach agreement with property owners whenever feasible (see discussion of TVA's approach to land purchases in EIS Section 2.5). At present, TVA's knowledge about the willingness of property owners to sell is based largely on public comments during the review of the Draft EIS. Some owners expressed willingness to sell their property or to sell a flowage easement, while others were opposed to any sale of their rights to the property.