

## Comments Received by the U.S. Army Corps of Engineers Regarding Proposed Duck River Project

	Comments	Source	Responses
1	<p>“The Eastern Shawnee Tribe of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction.”</p>	<p>Letter from Jo Ann Beckham, Administrative Assistant of the Eastern Shawnee Tribe of Oklahoma, July 19, 2005</p>	<p><b>Applicant Response:</b> Applicant is also unaware of any documentation directly linking Indian Religious Sites to the proposed construction.</p> <p><b>Corps Response:</b> The University of Alabama, Office of Archaeological Services (OAS) has prepared “Research Design Archaeological Mitigation of Sites 1Cu221 and 1Cu224: Two Rockshelters Located in the Proposed Duck River Impoundment, Cullman County, Alabama.” The Phase I and Phase II surveys did not locate any items relating to Indian Religious Sites.</p>
2	<p>“...if any human skeletal remains and/or any objects under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.”</p>	<p>Letter from Jo Ann Beckham, Administrative Assistant of the Eastern Shawnee Tribe of Oklahoma, July 19, 2005</p>	<p><b>Applicant Response:</b> Applicant will fully comply with all NAGPRA obligations.</p> <p><b>Corps Response:</b> Should a permit be issued, a standard condition on all Department of the Army permits reads: If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recover effort or if the site is eligible for listing in the <u>National Register of Historic Places</u>.</p>
3	<p>[the proposed project will] “improve the water quality”</p>	<p>Letter from James S. M. French of Dunn Investment Company, July 7, 2005</p>	<p><b>Applicant Response:</b> Applicant agrees. The spillway design provides for increased oxygen content in the water. The use of five different withdrawal points will also improve water quality. The Duck River reservoir project will improve flow during historically low flow summer months.</p> <p><b>Corps Response:</b> The purpose of the project is for a water supply reservoir. The Supplemental EA, Section 4.3, addresses water quality: 1) Population Growth: The bulk of the new water supply would be necessary to support the growth already projected for the region. Because the project is a water supply reservoir, buffers reservoir buffers and use restrictions (same as Lake Catoma) would be implemented and would help prevent future deterioration of water quality in the reservoir should induced growth occur in the region., 2) Domestic Waste Treatment: Much of the rural portion of the project area uses onsite septic systems for domestic waste which is permitted by the Department of Health. CMWD would work with the Department of Health to ensure proper siting of on-site systems. Also, the area is trending away from on-site systems. This shift to greater sewer service would reduce the potential for indirect impacts to water quality from onsite systems. 3) Local Infrastructure Projects: There are numerous road improvement projects planned for the region. The City of Cullman plans to upgrade its water and sewer</p>

Comments	Source	Answers to the Comments
		<p>infrastructure. These projects and other developments will involve land disturbance. However, through permitting and implementation of BMPs these projects should have no substantial cumulative impacts to water quality. 4) Interaction with Other Proposed Reservoirs: Most reservoir projects result in some additional unpredicted growth that is related to the project itself. However, the multiple reservoirs in the upper portion of the Black Warrior River basin would allow any new growth to be distributed across northern Alabama rather than concentrated in one area. Less intensive development would have lower potential to impact the environment than concentrated development.</p>
4	<p>[the proposed project will] “reduce the risk of flooding”</p>	<p>Letter from James S. M. French of Dunn Investment Company, July 7, 2005</p> <p><b>Applicant Response:</b> Applicant agrees. The Duck River reservoir project will help control water flow and reduce the risk of flooding.</p> <p><b>Corps Response:</b> The EA, under <u>Floodplain Impacts</u> (Section 5.1.21), reads: “Because of area terrain and a poorly developed floodplain, the Duck River is subject to flash flooding. Storage in the proposed reservoir will act to moderate flooding in the areas downstream from the project. Erosion downstream of the project will decrease.”</p>
5	<p>[the proposed project will] “improve the level of flow during drought”</p>	<p>Letter from James S. M. French of Dunn Investment Company, July 7, 2005</p> <p><b>Applicant Response:</b> Applicant agrees. Minimum required low flows were adopted at the recommendation of ADCNR and will actually improve flow in the summer when the river, which averages only 22” in depth, is almost dry.</p> <p><b>Corps Response:</b> The Supplemental EA, 3.3 Impacts of the Water Supply Reservoir on Mulberry Fork, states that the impacts to the hydrology of the Mulberry Fork would be minor and would result in no long-term observable change in flow. As a result of the minimum flow requirements, post-dam flow flows would be significantly greater than the existing low flows without the dam, as determined by statistical analysis. The increase in low flows during the dry season would be a significant benefit to the river’s hydrology.</p>
6	<p>“Therefore, we request that the comment period be extended to 60 days, with comments due to the Corps by August 30.”</p>	<p>Letter from Jenny Dorgan, Program Coordinator, Alabama Environmental Council, July 6, 2005</p> <p><b>Applicant Response:</b> The comment period was extended until September 1, 2005.</p> <p><b>Corps Response:</b> The Public Notice was issued with a 45-day comment period which was extended 15 days.</p>
7	<p>“we request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated</p>	<p>Letter from Jenny Dorgan, Program Coordinator, Alabama</p> <p><b>Applicant Response:</b> Applicable regulations do not require a public meeting. The National Environmental Policy Act, and its implementing guidelines, contain no requirement that the Corps hold a “public meeting” or an “information meeting” on a Section 404 permit application. Under its own regulations, the Corps has the</p>

Comments	Source	Answers to the Comments
	Environmental Council, July 6, 2005	<p>discretionary authority to hold a hearing if needed. The Corps has determined that it has all the information it needs concerning the Duck River reservoir project and that a public meeting is therefore unnecessary.</p> <p><b>Corps Response:</b> Upon review of the requests for public meetings and/or hearings and review of the issues, the District Commander has determined that no new information would be forthcoming by holding a public hearing. Therefore, all requests for a public hearing were denied.</p>
8	“Therefore, we request that the comment period be extended to 60 days, with comments due to the Corps by August 30.” Letter from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, July 6, 2005	<b>Applicant and Corps response:</b> See response to comment 6.
9	“we request that the Corps schedule a public meeting to discuss the EA Supplement and the complex issues associated with this document.” Letter from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, July 6, 2005	<b>Applicant and Corps response:</b> See response to comment 7.
10	“This time, you state in your notice letter that you are not providing new notice to the public of the project and the new information. This is a violation of the letter and the spirit of the NEPA and the Administrative Procedures Act (APA), again.” Letter from Sandra Nichols, WildLaw Attorney Staff, WildLaw, July 7, 2005	<p><b>Applicant Response:</b> On June 29, 2005, the Corps of Engineers placed the entire Draft EA Supplement on public notice for 45 days. Usually, such drafts are not made available for public review and comment. Furthermore, the Corps took the unusual step of placing the Draft EA Supplement on its website highlighted as a “special project.” Copies were made available at the Cullman Power Board, the Cullman City Hall, the Cullman Public Library, and the Birmingham Public Library. NEPA and the APA do not require any further notice.</p> <p><b>Corps Response:</b> The project description as advertised in our 10 April 1996 Public Notice has remained unchanged; therefore, there was no need or regulatory requirement for the project to be readvertised for public comment.</p>

Comments	Source	Answers to the Comments
11	“water demand in Cullman had decreased”	<p>Letter from Sandra Nichols, WildLaw Attorney Staff, WildLaw, July 7, 2005</p> <p><b>Applicant Response:</b> The last three years have been unusually wet. Water supply has thus been above average. However, this is only a temporary condition. Cullman has had to take steps to reduce water consumption while an alternate water supply could be located. For instance, Cullman permitted the Vinemont, Antioch, and Westpoint Water (“VAW”) System to take half of their contracted water consumption off the system and also allowed Hanceville to bring their well on line. Furthermore, every water system has signed a 30-year contract to pay their share of the cost of the Duck River reservoir project, which shows their support for the project.</p> <p><b>Corps Response:</b> The United States District Court for the Northern District of Alabama, in <i>American Canoe Association v. White</i>, 277 F.Supp.2d 1244 (N.D. Ala.2003), did not question the need of the project nor the preferred alternative. Therefore, the needs and the alternatives analysis were not revised in the preparation of the Supplemental EA.</p>
12	“the poultry industry stress on the water bodies has decreased”	<p>Letter from Sandra Nichols, WildLaw Attorney Staff, WildLaw, July 7, 2005</p> <p><b>Applicant Response:</b> Applicant agrees and also notes that this comment’s observation provides further assurance that water quality in the proposed reservoir can be achieved. The point of reference for the analysis was a baseline year of 1999. From this baseline year, a 60% reduction in P-loading would be necessary to maintain water quality in the reservoir. Much of that reduction has already occurred, as evidenced by the following excerpt from the ADEM 2004 303(d) report.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p>

Comments	Source	Answers to the Comments
		<p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to Corps response to comment 11. Also, the reduction of possible sources of phosphorus and nitrogen loading within the watershed will help overall water quality in the area of the proposed reservoir.</p>
13	"water rates have increased"	<p>Letter from Sandra Nichols, WildLaw Attorney Staff, WildLaw, July 7, 2005</p> <p><b>Applicant Response:</b> Applicant agrees. The increase in water rates is consistent with similar trends among other utilities and services such as sewer, gas, electricity, and telecommunications. Rates in the Cullman water system accurately reflect the actual cost of production and are equitably apportioned among water users.</p> <p><b>Corps Response:</b> Comment and applicant's response is noted.</p>
14	"the capacity of Lake Catoma has increased and the reservoir abundantly supplies the demand."	<p>Letter from Sandra Nichols, WildLaw Attorney Staff, WildLaw, July 7, 2005</p> <p><b>Applicant Response:</b> Applicant agrees. Cullman increased the capacity of Lake Catoma. Lake Catoma meets current demands but studies conducted by the Corps predict that Lake Catoma will not adequate supply future water demands.</p> <p><b>Corps Response:</b> The overall project purpose is to meet emergency and future additional needs of nine water systems which provide water to all of Cullman County and portions of five surrounding counties. The project need is for a safe and dependable public water supply. Lake Catoma, the area's only water supply reservoir, is susceptible to contamination from a chemical spill and current water demand is approaching available reservoir capacity. <i>(Section 1.2 of the EA provides a complete discussion of the project need which includes 1) past and current demands, 2) population projections, 3) future demands, 4) emergency supply needs and 5) water conservation measures.)</i></p>

Comments	Source	Answers to the Comments
15 “You must notify the public and hold at least one public hearing in order to comply with the law”	Letter from Sandra Nichols, WildLaw Attorney Staff, WildLaw, July 7, 2005	<b>Applicant and Corps response:</b> See response to comment 7.
16 “it is mathematically impossible for the water level on the lower side [of the dam] not to drop”	Letter from Rodney, Paula, Carson, & Braxton Jones, August 2, 2005	<b>Applicant Response:</b> The analyses indicate that water levels below the dam would increase during critical low flow periods and be reduced at most other times. This is consistent with what occurs at other reservoirs. See also comments 92-95 below from the Alabama Department of Conservation and Natural Resources regarding flow rates during the typically dry period of the year. <b>Corps Response:</b> See Corps response to comment 5.
17 “This dam has never made a lot of logical sense when viewed from a cost-effective standpoint”	Email from William H. Mitchell of Fort Payne, AL, August 12, 2005	<b>Applicant Response:</b> Applicant disagrees. The Corps and several respected engineering firms completed an alternatives analysis and recommended damming the Duck River as the most cost effective method of ensuring that Cullman’s future water needs were met. <b>Corps Response:</b> The EA, Section 3.0-Alternatives, discussed in full the 20 possible alternatives. Many of these were eliminated because of cost. The Duck River (725 Alternative) was considered to be the least damaging practicable alternative to meet the project stated purpose and need.
18 “The dam would cause the loss of several species of fish in the river, as well as downstream in the Mulberry Fork.”	Email from William H. Mitchell of Fort Payne, AL, August 12, 2005	<b>Applicant Response:</b> Applicant disagrees. Independent analyses by the Corps of Engineers and CH2M HILL indicate that Mulberry Fork would not be appreciably impacted, as there would be no appreciable adverse impact to hydrology or water quality. There is no evidence to support the assertion that several species of fish would be lost from Mulberry Fork made by the commenter.  Upstream of the dam, Duck River would change from a flowing system to an impounded system, with an attendant shift in biota.  See also comments 92-95 below from the Alabama Department of Conservation and Natural Resources regarding flow rates and river impacts during the typically dry period of the year.  <b>Corps Response:</b> A fisheries evaluation concluded that the Duck River possibly supports 33 species of fish (14 species collected and 19 species inferred to be present). There were no threatened or endangered species of fish or mussels recorded. Considering habitat requirement, 13 would not tolerate lake conditions

Comments	Source	Answers to the Comments
		but should remain within the area below the dam or non-impounded areas above the dam. (EA, 5.1.7, <i>Wildlife and Fisheries</i> ).
19	“the situation would most likely be excessive and detrimental to the health of both waterways”	<p>Email from William H. Mitchell of Fort Payne, AL, August 12, 2005</p> <p><b>Applicant Response:</b> Applicant disagrees. Independent analyses by the Corps of Engineers and CH2M HILL indicate that Mulberry Fork would not be appreciably impacted. Upstream of the dam, Duck River would change from a flowing system to an impounded system, with an attendant shift in biota. See also comments 92-95 below from the Alabama Department of Conservation and Natural Resources regarding flow rates and river impacts during the typically dry period of the year.</p> <p><b>Corps Response:</b> The proposed 639.2 acre reservoir, near Cullman, Alabama, would impound/inundate total of 10.07 stream miles (14.1 percent) of the 71.41 total stream miles in the Duck River sub-basin (5.7 miles of Duck River streambed and the remaining impacts to streambeds of smaller seasonal streams within the sub-basin). Total area of inundated streambeds would be 44.7 acres. Additionally, there will be the loss of 1.2 acres of farm pond. Creation of the impoundment will inundate 1.32 acres of palustrine forested wetlands. (Refer to EA, Section 5.0- <i>Environmental Impacts and the Supplemental EA for further discussion on the environmental impacts of the proposed action.</i>) However, as noted in Corps Response to comment 5, there would be an increase in low flows on the Mulberry Fork during the dry season. There would be a slight reduction in peak flow in the Mulberry Fork but this would not constitute a significant impact on the hydrology of the river. The analyses in the Supplemental EA demonstrate that the proposed reservoir would have no significant negative impacts on flows in the Mulberry Fork. Additionally, the impoundment would serve as a settling basin for the removal of suspended particles, total phosphorus, and other pollutants through settling and natural biological processes in the reservoir, thereby providing better quality water for aquatic life in the Duck River downstream of the dam. (Supplemental EA Sections 3.2 and 3.3)</p>
20	“The purity of the water that would be realized from this dam is questionable at best”	<p>Email from William H. Mitchell of Fort Payne, AL, August 12, 2005</p> <p><b>Applicant Response:</b> Applicant disagrees. Independent analyses by the Corps of Engineers Engineer Research and Development Center (“ERDC”) and CH2MHILL indicate that the reservoir water quality would be sufficient for the intended use. The water quality in Duck River is better than that in the watershed supporting Lake Catoma, which is the principal source of drinking water. The following excerpt from the ADEM 2004 303(d) report show that water quality improvements are occurring in the watershed and indicate that necessary reductions in nutrient loading are obtainable.</p>

Comments	Source	Answers to the Comments
		<p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Water quality of the proposed reservoir was reevaluated in the Supplemental EA, Section 2 , which: 1) confirmed that a 60 percent reduction in nutrient loading was indeed required; 2) identified and quantified the known and suspected sources of such nutrient loading within the Duck River sub-watershed; 3) identified and evaluated methods of controlling such sources and reducing the associated loadings; 4) confirmed that those methods would achieve the necessary 60 percent reduction; and 5) identified contingent controls and adaptive management measures that could and would be employed should monitoring of the Duck River sub-watershed indicate that the requisite reductions are not being achieved. The Supplemental EA notes that measures required to achieve such reductions would</p>

Comments	Source	Answers to the Comments
		<p>have to be mandated by the Special Conditions of the Section 404 permit which is required for the reservoir's construction.</p>
21	<p>"better sources of water are available to provide for the citizens of Cullman County and surrounding areas"</p>	<p>Email from William H. Mitchell of Fort Payne, AL, August 12, 2005</p> <p><b>Applicant Response:</b> Applicant disagrees. The Corps recommended damming the Duck River as the most viable means of meeting Cullman's future water needs. Cullman accepted those recommendations and acted accordingly.</p> <p><b>Corps Response:</b> See Corps response to comment 17.</p>
22	<p>"some of the prospective customers for this water are no longer viable and thus the amount of water that could be sold is less than the figures originally projected"</p>	<p>Email from William H. Mitchell of Fort Payne, AL, August 12, 2005</p> <p><b>Applicant Response:</b> Applicant agrees. In order to temporarily reduce water consumption, Hanceville brought their well on line and the VAW System reduced their water withdrawals by half. Cullman allowed temporary modifications to Hanceville and the VAW's contracts in order to reduce consumption until the Duck River reservoir project was completed.</p> <p><b>Corps Response:</b> See Corps response to comment 17.</p>
23	<p>"With cost escalation and property values rising, the projected cost of this dam is most likely three to five times the estimate and at these figures would most probably never be in any way cost-effective for supplying water to the area, especially in light of the increased capacity of Catoma Lake."</p>	<p>Email from William H. Mitchell of Fort Payne, AL, August 12, 2005</p> <p><b>Applicant Response:</b> Applicant agrees that costs are rising. However, Cullman does not agree that costs are 3 to 5 times higher than estimates. Cost of living increases are generally around 3 percent a year, and must be taken into consideration. The other alternatives Cullman considered would be even more costly. The Duck River reservoir project will operate on a non-profit basis, and thus would not have been built if the applicant did not sincerely believe an additional water source was necessary for the county. The cost of the project will be paid by consumers and will not be paid for by tax revenue.</p> <p><b>Corps Response:</b> See Corps response to comment 17.</p>
24	<p>"Why is the reservoir needed if Lake Catoma produces 24 MGD, and they currently use 13-15 MGD?"</p>	<p>Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005</p> <p><b>Applicant Response:</b> Consumption rates over a short period of time, such as a month or day, do not accurately reflect Cullman's water needs. Studies by the Corps evaluated 40 years of historical use and produced comprehensive growth projections. In addition, capacity must be available to satisfy water demands during periods of peak demand. Cullman has had months that exceeded 19MGD average and days that exceeded 24MD.</p> <p><b>Corps Response:</b> In 1993, the Cullman-Morgan Water District was established to oversee development of a new water source for eight water systems. A Phase I and Phase II Water Supply Studies were conducted in 1994 and 1995. It was determined in the Phase I Study that the hydrological analysis and future demand projections would require that a new source supply a minimum of 18.9 MGD during drought</p>

Comments	Source	Answers to the Comments
		<p>conditions. (Refer to EA, Section 3.1, for the full discussion alternatives that were considered. Also, Section 3.5 of the EA discusses the reevaluation of alternatives. Also see Table 3.3 - Comparative Features of Alternatives.)</p>
25	<p>“Why is there such secrecy about the project? It appears someone has some money to make from the project, and they want to go ahead with it without opposition.”</p>	<p><b>Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005</b></p> <p><b>Applicant Response:</b> There has been no such “secrecy.” On the contrary—Every meeting held concerning the Duck River reservoir project has been advertised and conducted publicly. The Duck River reservoir project meetings have routinely been covered by the press. Documents and studies regarding the project have been available at public libraries and online for years.</p> <p><b>Corps Response:</b> On 10 April 1996, a Public Notice was issued advertising the proposed dam and reservoir. There was an extended comment evaluation period. On 29 June 2005, a Public Notice was issued advertising the availability of <i>Supplement to the Environmental Assessment – Water Supply Project, Duck River Reservoir, Cullman, Alabama</i> (dated June 7, 2005). Hard copies of the Supplemental EA were provided to all regulatory and/or commenting agencies and made available at public libraries in the vicinity of the project and also in the greater Birmingham area. An electronic copy of the Supplemental EA was placed on the Corps website. Also, hard copies of the original EA were available upon request. The Corps believes that the public has been fully informed and has been provided with the opportunity to comment on all facets of the proposed project.</p>
26	<p>“Do they want to set up Cullman as a water baron that will then milk the users to offset taxes?”</p>	<p><b>Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005</b></p> <p><b>Applicant Response:</b> No. The Duck River reservoir project will be operated as a non-profit enterprise, so there is no money to be made in its operation. The cost of the project will be paid by consumers and will not be paid for by tax revenue.</p> <p><b>Corps Response:</b> Refer to applicant response.</p>
27	<p>“Will Lake Catoma be relinquished as a source, making another Lake George type waterfront property for developers?”</p>	<p><b>Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005</b></p> <p><b>Applicant Response:</b> No. Lake Catoma will continue to be used as a water source. A new supply line will come from the Duck River to the water treatment plant. This will give the community an either/or supply, meaning water can be drawn from either source. The Duck River reservoir project will supplement current demands and help meet future needs. All properties will be acquired under federal guidance and review appraisals will assure land owners are paid fair market value.</p> <p><b>Corps Response:</b> There would be 100-foot-wide forested buffer around the reservoir which would be owned by the Cullman-Morgan Water District (CMWD). The buffer would be fenced. The proposed reservoir would be capable of supporting a navigable area for a variety of recreational vessels. The CMWD would not permit personal watercraft (jet skis, for example) and there would be a 10 horsepower limit on motors operating on the reservoir. (EA, 5.1.17 and 4.1.17)</p>

Comments	Source	Answers to the Comments
28 “Can Lake Catoma be expanded to hold more water if needed in the future?”	Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005	<p><b>Applicant Response:</b> No. The spillway at Lake Catoma was raised two feet. The spillway cannot feasibly be raised any further.</p> <p><b>Corps Response:</b> See Applicant’s response.</p>
29 “Has the City of Cullman taken over the project from the Morgan-Cullman Water District? And if so, does that not put the whole process back to the beginning, because the original petitioning entity no longer exists?”	Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005	<p><b>Applicant Response:</b> No. The CMWD still exists. The CMWD is an advisory committee that makes recommendations about the local water supply. The CMWD recommended, on the advice of financial experts, that the utilities board of the city should finance the project because the board owns the current reservoir and would receive the best bond rating. The city and county voted to accept that recommendation because the water system is operated on a non-profit basis and the financing costs will be shared by all the independent systems that benefit from it.</p> <p><b>Corps Response:</b> See Applicant’s response.</p>
30 “Has the data on demand projections and cost been reworked? How did the old projections compare to actual growth rates?”	Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005	<p><b>Applicant Response:</b> No. There is no need to update these projections until the project is approved. Any information could still be outdated depending on the date the permit is finally issued. Demand and cost data will be updated once the Duck River reservoir project receives final approval.</p> <p><b>Corps Response:</b> The United States District Court for the Northern District of Alabama, in <i>American Canoe Association v. White</i>, 277 F.Supp.2d 1244 (N.D. Ala.2003), did not question the need of the project nor the preferred alternative. Therefore, the needs and the alternatives analysis were not revised in the preparation of the Supplemental EA.</p>
31 “Could Lake George be tapped as a source? I understand the piping was removed, but it would be relatively inexpensive to redo it at modern standards.”	Letter from Bernard H. Byrnes of Hillsboro, AL, August 4, 2005	<p><b>Applicant Response:</b> Conceivably, Lake George could be tapped, and this alternative was evaluated by the Corps. Lake George was eliminated as a potential alternate water source, however, because it would supply only 4MGD, well short of the county’s projected demands. Furthermore, new piping and intake structures would also be required, adding to the cost of any such project.</p> <p><b>Corps Response:</b> Because of the small amount of raw water available in Lake George is far less than the 18 MGD requirement for new sources, and possible effects to Eight Mile Creek, this alternative was eliminated from further consideration. (Refer to EA, Section 3.1, for the full discussion of the alternatives that were considered. Also, Section 3.5 of the EA discusses the reevaluation of alternatives. Also see Table 3.3 - Comparative Features of Alternatives.)</p>

Comments	Source	Answers to the Comments
32	“I request that the comment period be extended to 90 days, with comments due to the Corps by September 31.”	Letter from D.W. Borland of Birmingham, Alabama, July 17, 2005  <b>Applicant and Corps response:</b> See response to comment 6.
33	“this misguided project significantly impacts the natural heritage and ecosystem of the Duck River and the natural capital which humans depend for sustainable conditions.”	Letter from D.W. Borland of Birmingham, Alabama, July 17, 2005  <b>Applicant Response:</b> Applicant disagrees and does not believe that the project will significantly impact the natural heritage and ecosystem of the Duck River. Commenter’s statement is rhetoric unsupported by any evidentiary support, nor does it even identify such purported “significant impacts.”  <b>Corps Response:</b> Disagree. Refer to the EA and Supplemental EA for discussions on project impacts.
34	“In addition to the impacts at the destructive project site, downstream interests and uses will be adversely impacted.”	Letter from D.W. Borland of Birmingham, Alabama, July 17, 2005  <b>Applicant Response:</b> Applicant does not believe the project will negatively impact downstream interests or uses. Commenter has not come forward with evidence to the contrary. In fact, operation of the Duck River reservoir project will enhance flows during periods of drought. The reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam. Thus, impacts will, in several senses, be positive.  <b>Corps Response:</b> Disagree. The Supplemental EA, 3.3 Impacts of the Water Supply Reservoir on Mulberry Fork, states that the impacts to the hydrology of the Mulberry Fork would be minor and would result in no long-term observable change in flow. As a result of the minimum flow requirements, post-dam flow flows would be significantly greater than the existing low flows without the dam, as determined by statistical analysis. The increase in low flows during the dry season would be a significant benefit to the river’s hydrology.

Comments	Source	Answers to the Comments
35 “It is hard for me to understand why we need a dam for a new water supply when the Cullman County Water Department just announced the need for a double digit rate hike because water usage has declined and as a result current income is not enough to cover expenses.”	Letter from Vince Meleski of Cullman, Alabama, July 21, 2005, (form letter 2)	<p><b>Applicant Response:</b> The Cullman County Water Department is one of seven different systems supplied water by Cullman. Each system pays the same price per 1000 gallons. Cullman County has its own distribution and billing system for its customers. Thus, rates and demand within the Cullman County Water Department System do not reflect total demand across the entire service area.</p> <p><b>Corps Response:</b> Refer to Corps’ response to comment 30.</p>
36 “Also it was forecast that water rates would go up 20% to cover the cost of the dam.”	Letter from Vince Meleski of Cullman, Alabama, July 21, 2005, (form letter 2)	<p><b>Applicant Response:</b> Applicant agrees. The 20% rate increase will cover repayment of the bonds used to finance construction of the dam. However, that 20% rate is based on current water consumption. As the service area grows and consumption increases, the total % needed to repay the bonds will decrease.</p> <p><b>Corps Response:</b> Refer to applicant’s response.</p>
37 “I believe that other alternatives should be considered, such as a meaningful water conservation program, before proceeding with such an environmentally damaging project.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<p><b>Applicant Response:</b> More than 12 alternatives were considered. Such consideration more than fulfilled the applicant’s and the Corps’ NEPA obligations. With respect to water conservation, it is taken very seriously by the county. For example, the Cullman Morgan Water District financially supports school programs designed to educate children about the importance of natural resource conservation.</p> <p><b>Corps Response:</b> Refer to Corps’ response to comment 17. As noted above, the Cullman/Morgan Water District has an education program in local schools on conservation and protection of water supplies. Also, Cullman County currently offers economic incentives to industries that reduce unnecessary water consumption.</p>
38 “There are other sources of water that should be further considered, like Smith Lake”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<p><b>Applicant Response:</b> More than 12 alternatives were considered in the original EA. The Corps required a second look at the viability of Smith Lake after Alabama Power agreed to consider allowing withdrawal of water from Smith Lake. However, cost analyses indicated the Smith Lake alternative would be more costly than the Duck River reservoir project.</p> <p><b>Corps Response:</b> The EA, Section 3.5, Reevaluation of Alternatives, provides a complete discussion on the comparison of alternatives including discussion of the 6 non-economic issues concerning use of water from Smith Lake.</p>

Comments	Source	Answers to the Comments
39 “The outdated financial information has not been revised to reflect current costs of the dam and alternative water sources, and impacts to water rates are unknown.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<p><b>Applicant Response:</b> Contracts for construction of the Duck River reservoir project will be competitively bid. The Corps will serve as the construction manager. Water rates will be adjusted to cover the cost of the project. New cost calculations will be conducted after a final permit has been issued for the project.</p> <p><b>Corps Response:</b> Refer to Corps’ response to comments 11 and 17.</p>
40 “The projected population of Cullman County may have been overestimated and should be compared to 2000 census information.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<p><b>Applicant Response:</b> See response to Comment 24. Growth estimates are not an exact science and, to the extent growth was inaccurately forecast, the inaccuracy does not rise to the level of relevance. Regardless of precise figures, there is no doubt that the population and industrial base of the county continue to grow rapidly. Providing a water supply for such a population is logical and sound public policy</p> <p><b>Corps Response:</b> Refer to Corps’ response to comment 30.</p>
41 “Two water systems no longer are included in the Cullman-Morgan Water District and this will alter the amount of water needed from the dam.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<p><b>Applicant Response:</b> Applicant agrees, but see response to comment 11.</p> <p><b>Corps Response:</b> Refer to Corps’ response to comment 30.</p>
42 “We need to know how lower water levels will affect discharges from major industries such as American Proteins, and municipal waste water treatment plants such as Hanceville, Cullman, Garden City, and Blountsville.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<p><b>Applicant Response:</b> Once the impoundment is full, water will flow over the spillway six or seven months out of the year. It will only take 14 inches of rain per year to keep the reservoir full, and the average rainfall is 52 inches. The only real period of concern is the low flow summer months. However, the Duck River reservoir project will increase flows during the summer months, ameliorating such concerns.</p> <p>In particular, the NPDES discharge permit program will be implemented to avoid negative impacts to receiving waters. The potential for impacts is greatest during low flow periods. As downstream water levels would be increased during critical low flow periods after construction of the reservoir, there would be no reduction in assimilative capacity of the stream and no negative effects on industrial and municipal discharges.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 5.</p>

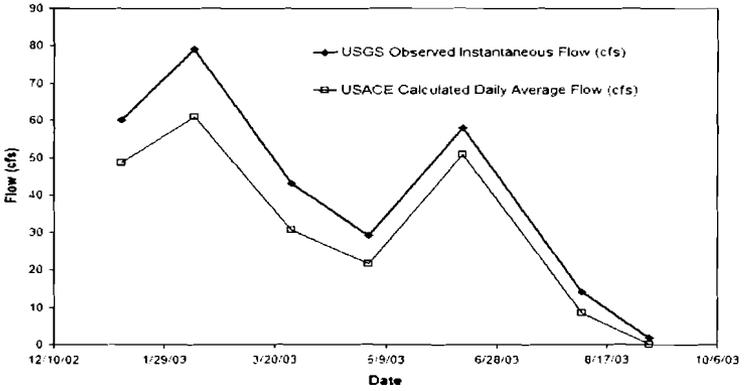
Comments	Source	Answers to the Comments
43 “The possibility of withdrawing water from Lake George should be discussed.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<b>Applicant Response:</b> See response to comment 31. <b>Corps Response:</b> Refer to Corps response to comment 31.
44 “Lake Catoma has been raised to provide additional water and this should be considered by the Corps.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<b>Applicant Response:</b> Applicant agrees. The spillway at Lake Catoma was raised by two feet at the expense of the City of Cullman due to water shortage concerns. This spillway modification provides up to 60 days of drought protection, but does not meet long term water supply needs. <b>Corps Response:</b> Refer to Corps response to comments 24 and 28.
45 “It is not known how Blount County Water Authority’s withdrawals from Warren Springs in the Mulberry Fork basin will contribute to the reduced flows from this project.”	Letter from James Clark of Cullman, Alabama, (n.d.) (form letter 3)	<b>Applicant Response:</b> The Blount County Water Authority withdrawals from Warren Springs are ongoing and have been made for years. These withdrawals are included in the hydrologic modeling for Mulberry Fork as a component of the current flow conditions. The analysis included the withdrawal from Warren Springs in determining whether the proposed Duck River Reservoir would impact Mulberry Fork. <b>Corps Response:</b> Refer to Supplemental EA, Section 3.0, Downstream Effects on Mulberry Fork.
46 “I remember some 15-years ago when the Birmingham Water Works Board wanted to dam the Locust Fork for ‘water we will need in 10- years.’ Over 10 years have past [sic] and I have not heard of customers served by the BWWB having water shortages.”	Letter from Joe Copeland of Cullman, Alabama, (n.d.) (form letter 3)	<b>Applicant Response:</b> Applicant has fully evaluated the current and future water needs of the community served by the Cullman-Morgan Water District and believes the need for the Duck River reservoir project exists. <b>Corps Response:</b> Refer to Corps response to comment 30.
47 “ <u>Beyond Dams: Options and Alternatives</u> , published by American Rivers and available on their website at <a href="http://www.americanriver.org">http://www.americanriver.org</a> , is a useful document that outlines, some additional alternatives to this project and should be fully considered by	Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005	<b>Applicant Response:</b> The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i> . The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and

Comments	Source	Answers to the Comments
the Corps.”		<p>succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Comment noted. Extensive studies were undertaken by the applicant and a wide range of alternatives considered by the applicant and the Corps in determining the least damaging practicable alternative to meet the project purpose.</p>
48 “This Supplement makes no attempt to update the six-to-ten-year old data used in the original permit application and environmental assessment”	Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005	<p><b>Applicant Response:</b> Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Pursuant to the Court’s remand, the Supplemental EA provides additional analysis on: 1) analysis of water quality in the proposed reservoir; 2) analysis of the proposed reservoir’s downstream effects on the Duck River and the Mulberry Fork; and 3) analysis of the cumulative effects of the proposed reservoir and other potential reservoirs on the environment.</p>
49 In regards to the reduction of pollutants in the river, the Corps cannot rely on voluntary, cost-shared best management practices (BMPs) to reduce the pollutants in the Duck River by 60 percent.”	Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005	<p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.</p> <p><b>Corps Response:</b> Refer to the Supplemental EA, Water Quality-Section 2.4.2-Nutrient Management, for a complete discussion of implementation of BMPs. Also, should a permit be issued, it would have special conditions requiring the implementation of BMPs and continued water quality monitoring of the area and reservoir water quality with requirements for corrective action.</p>
50 “Some proposed BMPs include fencing out cattle, crop rotation, buffer zones around stream	Letter from Nancy Mifford of Spanish Fort, Alabama,	<p><b>Applicant Response:</b> Existing legislation provides for creation of a permanent water authority to protect water supplies. Cullman restricts land use around the current water supply and has adequately protected that drinking water source for</p>

Comments	Source	Answers to the Comments
	August 8, 2005	<p>more than 40 years. Additionally, ADEM can control land use under the new AFO/CAFO regulations. Cullman is committed to maintaining high water quality standards for the people of Cullman County.</p> <p><b>Corps Response:</b> Should a permit be issued, it would require the permit to be transferred to a permittee (such as a Watershed Management Authority) who would have the authority, by law, to comply with and enforce all permit conditions. This would include establishing and enforcing a Watershed Management Plan that would be enforced concurrent to and in cooperation with a Clean Water Action Plan.</p>
51	<p>“If the District uses their authority and buys out land owners who are not willing to pay for and implement these BMPs, the extensive costs for both the land and the BMPs will have to be passed on to someone, most likely tax and rate payers. This method of enforcement is both costly and impractical.”</p>	<p>Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005</p> <p><b>Applicant Response:</b> ADEM routinely controls land use pursuant to existing AFO/CAFO regulations requiring landowners to use BMPs. All of the landowners in the affected area will be drinking the water from the new reservoir, so they have concrete interests in keeping the water clean. ADEM conducted a surprise inspection of the drainage basin two years ago and found only 2 minor land use violations (verifiable through Richard Hulcher of ADEM). Furthermore, the new CAFO regulations likely make land acquisition unnecessary. The cost of the project will be paid by consumers and will not be paid for by tax revenue.</p> <p><b>Corps Response:</b> Refer to applicant’s response.</p>
52	<p>“Recent articles in <i>The Cullman Times</i> indicate that demand for water is dropping, which will lead to increase in water rates for residents of Cullman County.”</p>	<p>Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005</p> <p><b>Applicant Response:</b> See response to comment 24.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 11.</p>
53	<p>“The Cullman Utilities Board reported average usage of 15 million gallons per day (MGD) for the month of June 2005, which is well below the rated capacity of Lake Catoma (25 MGD) and the predicted usage for 2005 (21.8 MGD) and calls into question the need for this new source of water.”</p>	<p>Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005</p> <p><b>Applicant and Corps response:</b> See response to comment 24.</p>
54	<p>“In addition, the audited financial statements of the Cullman Utilities Board for</p>	<p>Letter from Nancy Mifford of Spanish Fort, Alabama,</p> <p><b>Applicant Response:</b> Peak demand has previously exceeded average daily capacity. Demand in recent dry periods was met only because ADEM authorized emergency water supply measures.</p>

Comments	Source	Answers to the Comments
	August 8, 2005	<b>Corps Response:</b> Refer to Corps response to comments 11 and 24.
55 “Based on the information provided in the supplement, it does not appear that the Corps has addressed the federal court’s concerns regarding water quality and downstream impact.”	Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005	<p><b>Applicant Response:</b> Applicant disagrees. The Waterways Experiment Station at Vicksburg has worked with CH2MHILL and the National Resource Conservation Service (“NRCS”) in Cullman addressing water quality and downstream impacts. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Disagree. Refer to the Supplemental EA, Section 2.0, Water Quality and Section 3.0 Downstream Effects on Mulberry Fork. This assessment fully addresses the Court’s concerns regarding these 2 issues.</p>
56 “I recommend that the Corps revise the Supplement to address these comments and use that information to perform an Environmental Impact Statement.”	Letter from Nancy Mifford of Spanish Fort, Alabama, August 8, 2005	<p><b>Applicant Response:</b> The Corps of Engineers has concluded that an Environmental Impact Statement is unnecessary. Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Comment noted.</p>
57 “I am curious how the stage data recorded at the USGS River station was turned into flow data. Has the USGS approved this rating curve model?”	Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005	<p><b>Applicant Response:</b> The model for flow at the dam site was developed by the Corps, following established methods and based on 6 years of flow data, as indicated in this excerpt from the appendix:</p> <p>“Mark S. Flick II, a Civil/Hydraulic Engineer and Geospatial Data Systems Project Manager with the Nashville District, U.S. Army Corps of Engineers (USACE), completed the hydraulic work for the development of a rating curve at the Duck River stream gage using the HEC-RAS model for the USGS stage data from 1997 through 2003.”</p> <p>USGS approval of the model was neither required nor sought.</p> <p><b>Corps Response:</b> Refer to applicant’s response.</p>

Comments	Source	Answers to the Comments
----------	--------	-------------------------

58	<p>“I know there have been several flow measurements by USGS at this station. Have these data been used to calibrate the HEC-RAS results?”</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p>	<p><b>Applicant Response:</b> We do not know whether the HEC-RAS model for the Duck River was calibrated by the USACE. We do not think that sufficient flow measurements are available to perform a calibration exercise. However, we reviewed the developed HEC-RAS model for the Duck River and feel that it is doing a reasonable job to develop the rating curves. Further, before using the USACE calculated flows we did a QA/QC check using rainfall-runoff modeling as mentioned on page 12 of TM-3.</p> <p>To further answer your comment, we made a comparison between the instantaneous discharge measured by the USGS and daily average flow computed using the HEC-RAS model developed by the USACE. Based on this comparison and our rainfall-runoff based calculations as mentioned on page 12 of TM-3, we feel that the conversion of the stage data into corresponding flow is reasonable. The following figure indicates that the USACE calculated flows are systematically smaller than the observed flow which fall on the conservative side and thus appropriate for the purpose of this study.</p>  <table border="1"> <caption>Estimated Data from Flow Comparison Graph</caption> <thead> <tr> <th>Date</th> <th>USGS Observed Instantaneous Flow (cfs)</th> <th>USACE Calculated Daily Average Flow (cfs)</th> </tr> </thead> <tbody> <tr> <td>12/10/02</td> <td>60</td> <td>49</td> </tr> <tr> <td>1/29/03</td> <td>79</td> <td>61</td> </tr> <tr> <td>3/20/03</td> <td>43</td> <td>31</td> </tr> <tr> <td>5/9/03</td> <td>29</td> <td>22</td> </tr> <tr> <td>6/28/03</td> <td>58</td> <td>51</td> </tr> <tr> <td>8/17/03</td> <td>14</td> <td>8</td> </tr> <tr> <td>10/6/03</td> <td>2</td> <td>1</td> </tr> </tbody> </table> <p><b>Corps Response:</b> Refer to applicant’s response.</p>	Date	USGS Observed Instantaneous Flow (cfs)	USACE Calculated Daily Average Flow (cfs)	12/10/02	60	49	1/29/03	79	61	3/20/03	43	31	5/9/03	29	22	6/28/03	58	51	8/17/03	14	8	10/6/03	2	1
Date	USGS Observed Instantaneous Flow (cfs)	USACE Calculated Daily Average Flow (cfs)																									
12/10/02	60	49																									
1/29/03	79	61																									
3/20/03	43	31																									
5/9/03	29	22																									
6/28/03	58	51																									
8/17/03	14	8																									
10/6/03	2	1																									

Comments	Source	Answers to the Comments																																				
59	<p>“Can you please send me any measured or recorded flow data from the Duck River? (The USGS website is not helpful)”</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant Response:</b> Following is the USGS observed data for the Duck River.</p> <table border="1"> <thead> <tr> <th>Date/Time</th> <th>Stream Flow (cfs)</th> <th>Instantaneous Discharge (cfs)</th> </tr> </thead> <tbody> <tr> <td>2/21/1967 0:00</td> <td>331</td> <td></td> </tr> <tr> <td>3/27/1967 0:00</td> <td>21</td> <td></td> </tr> <tr> <td>10/16/1967 9:15</td> <td>5.3</td> <td></td> </tr> <tr> <td>1/27/2000 10:45</td> <td></td> <td>61</td> </tr> <tr> <td>1/9/2003 12:12</td> <td></td> <td>60</td> </tr> <tr> <td>2/11/2003 13:30</td> <td></td> <td>79</td> </tr> <tr> <td>3/27/2003 13:15</td> <td></td> <td>43</td> </tr> <tr> <td>5/1/2003 8:00</td> <td></td> <td>29</td> </tr> <tr> <td>6/12/2003 12:45</td> <td></td> <td>58</td> </tr> <tr> <td>8/5/2003 13:00</td> <td></td> <td>14</td> </tr> <tr> <td>9/5/2003 11:40</td> <td></td> <td>1.8</td> </tr> </tbody> </table> <p><b>Corps Response:</b> Refer to applicant’s response.</p>	Date/Time	Stream Flow (cfs)	Instantaneous Discharge (cfs)	2/21/1967 0:00	331		3/27/1967 0:00	21		10/16/1967 9:15	5.3		1/27/2000 10:45		61	1/9/2003 12:12		60	2/11/2003 13:30		79	3/27/2003 13:15		43	5/1/2003 8:00		29	6/12/2003 12:45		58	8/5/2003 13:00		14	9/5/2003 11:40		1.8
Date/Time	Stream Flow (cfs)	Instantaneous Discharge (cfs)																																				
2/21/1967 0:00	331																																					
3/27/1967 0:00	21																																					
10/16/1967 9:15	5.3																																					
1/27/2000 10:45		61																																				
1/9/2003 12:12		60																																				
2/11/2003 13:30		79																																				
3/27/2003 13:15		43																																				
5/1/2003 8:00		29																																				
6/12/2003 12:45		58																																				
8/5/2003 13:00		14																																				
9/5/2003 11:40		1.8																																				
60	<p>“In Table 10 in the Technical Memorandum 3, can you please explain how the export coefficients were calculated.”</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant and Corps response:</b> The export coefficients were calculated through an iterative process to closely match, but slightly exceed, the observed load in the system.</p>																																				
61	<p>“I would also like to know why the TP coefficients chosen for the Duck River are the same as or similar to the lowest of the presented literature values. Using the low values is not considered conservative estimation.”</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant and Corps response:</b> The coefficients selected were based on the best available literature and observations. Finding values that matched what was observed in the Duck River was considered most important. The coefficients selected resulted in model values that were above the observed levels for the base load (both on a mass loading basis and on concentration), but not so far above those observed levels as to be unreasonable. That is a conservative estimation by any reasonable analysis.</p>																																				
62	<p>“On page 9 in technical memorandum 3, the value or R used to determine the subwatershed curve number is not stated. Can you please let me know which value was used</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant and Corps response:</b> This question is not clear: the value of R is not used to determine the curve number. As mentioned on page 9 of TM-3, R represents the daily rainfall amount in inches. We developed a rainfall-runoff model (based on the SCS method) for the Duck River to calculate the daily runoff. Thus, R does not represent a curve number. Instead, CN represents a curve number.</p>																																				

Comments	Source	Answers to the Comments
<p>and the source of that value?"</p>		<p>As far as the value of the curve number is concerned, it is varied based on soil type, land use, and daily antecedent moisture conditions (AMC). Thus, the curve number is changed on a daily basis depending on conditions (wet, dry, moderate, moderately dry) as explained on pages 9 through 11 of TM-3. The rationale used for determining the values of daily curve number has been explained in Tables 6 and 7 of TM-3. Further, the curve numbers corresponding to the average moisture condition (CN2) for various subwatersheds have been listed in the 7th column of Table 8 in TM-3. Based on the daily AMC conditions (Table 7), the appropriate curve numbers were determined using equations (3), (4) and (5) which are functions of CN2. Thus, the curve numbers are well defined in the Supplement and the commenter statement "subwatershed curve number is not stated" is incorrect and indicates a lack of understanding of the rainfall-runoff approach described in the Supplement.</p>
<p>63 "On page 12 of technical memorandum 3, an example is used for a 'typical bermuda hay field.' If a farmer applies 300 pounds of nitrogen, this equates to 377 pounds of phosphorus (if poultry litter is applied). This section states that 300 pounds of excess phosphorus are being applied. How was this determination made? Where does it say that 300 pounds of nitrogen and 77 pounds of phosphorus should be applied? Shouldn't the size of the field be accounted for? What if the soils already have enough phosphorus? Are you assuming all soils in the county be the same? Please explain the rationale for this section. There is further mention of this 77 pound load on page 16, but no reference was supplied there either."</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p>	<p><b>Applicant and Corps response:</b> The comment is incorrect and reflects either a lack of reading of the Technical Memorandum ("TM") or a deliberate misstatement of the content of the TM. The entire section referenced by the commenter is clearly a presentation of historical practices, based on NRCS data and guidelines prior to 2000.</p> <p>The 300 pounds of nitrogen is the historic application rate – the TM neither states nor implies that this level should have been applied, only that it typically was applied.</p> <p>The TM never states or implies 377 pounds of phosphorus. What is clearly stated in TM3 is that using the NRCS accepted procedures prior to 2000, which are based on applying nitrogen to the land, applying 300 pounds per acre of nitrogen would have resulted in applying 377 pounds of P2O5, which would equate to only 162 pounds of phosphorus. The point of the historical discussion in the TM was to show that excess phosphorus was applied and that NRCS subsequently modified their recommended procedure to be based on phosphorus levels in the soil and the assimilative capacity of the crop being grown.</p> <p>The 77 pounds mentioned in the comment is P2O5, which would equate to only 33 pounds of phosphorus.</p> <p>The TM clearly states that all application rates discussed in this historical section were on a per acre basis, which does account for field size.</p> <p>The purpose of this historical background is to provide the basis for an assumption of the modeling that past excess applications of P must be accounted for and, as a</p>

Comments	Source	Answers to the Comments
		result, that future watershed-level reductions cannot be based only on reductions in current application rates.
64	“Have soil P values been determined in the Duck River watershed using the P Index? If so, why aren’t those data used in this assessment?”	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant and Corps response:</b> The following quote from the TM provides the answer to this comment:</p> <p>“The management plans written since January 2002 are based on soil tests and phosphorus limitations. The P Index is used to determine the extent to which phosphorus leaches into the streams, and the plans incorporate this information. The index takes into account soil type, slope, distance to streams, and management practices.”</p>
65	“How were the initial TN and TP values calculated in Table 15 in Technical Memorandum 3?”	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant and Corps response:</b> The numbers presented in Table 15 were calculated using the EPA approved Region 5 Model recommended by ADEM (<a href="http://www.adem.state.us/Education%20Div/Nonpoint%20Program/Guidance/WSNPSGrantGuid.htm">http://www.adem.state.us/Education%20Div/Nonpoint%20Program/Guidance/WSNPSGrantGuid.htm</a>) as mentioned in the supplement on page 16 of TM-3. In Table 15, the TN and TP loads without any BMP implementation and amount of TN and TP load reductions with BMP implementation are presented. There are a number of parameters which are used to calculate the TP and TN loads such as contributing areas, percent paved areas, location of the site under study, weather parameters, number of animals, BMP implementation information, etc. As far as the process of calculation is concerned, the commenter is suggested to read the Manual of the Region 5 Model which is readily available from the website mentioned in the Supplement.</p>
66	“What types of nutrient management activities are included in Table 15 that were used in the Region 5 model?”	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant and Corps response:</b> All of them. For more detail please refer to the Manual of Region 5 Model.</p>
67	“And are these activities required under existing AFO/CAFO regulations?”	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p> <p><b>Applicant Response:</b> It is unclear what comment this question is trying to make, but the AFO/CAFO regulations envision a number of measures to protect watershed water quality, to include appropriate nutrient management activities in the context of effective BMP implementation. It is unlikely that only activities explicitly required by the regulations would be required in the watershed.</p> <p><b>Corps Response:</b> AFO/CAFOs regulations are enforced by ADEM within the project area.</p>

Comments	Source	Answers to the Comments
<p>68 “The land use information used in the subwatersheds is not referenced. Can you tell me the source and date of the information used as well as the methods used to determine the percent land use information? Figure 3 in Section 2 (based on DEM data) is not a very useful demonstration of land use and topography for the average citizen trying to make comments on this document. Can you please provide a land use map with the subwatershed delineations.”</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p>	<p><b>Applicant and Corps response:</b> The following public sources were used:  <a href="http://data.geocomm.com/dem/demdownload.html">http://data.geocomm.com/dem/demdownload.html</a> - DEMs  <a href="http://www.webgis.com/lulc_shplatlong.html">http://www.webgis.com/lulc_shplatlong.html</a> - land use/ land cover</p> <p>See also for LULC and DEM:  <a href="http://seamless.usgs.gov">http://seamless.usgs.gov</a></p>
<p>69 “I have several questions regarding Section 2. The 30 meter VSA boundary was calculated based on the location of the existing river. Will this be revised to include VSAs 30 meters outside the reservoir boundaries? The current method is only good for looking at river loads – not for the reservoir. Also, please provide justification why a 30-meter area was used in the VSA in lieu of something larger.”</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p>	<p><b>Applicant and Corps response:</b> The 30 meter VSA was used to estimate a potential reduction that can be achieved by using BMPs along the inflowing stream. In this calculation, direct inputs from the reservoir shoreline are considered part of the uncontrollable “background” that cannot be reduced by BMPs. The 30-meter assumption for the VSA is likewise conservative, in that only those nutrients deposited with the VSA can be reduced by BMP and thus potentially be part of the 60% reduction. Input loads from beyond this strip are part of the uncontrollable background.</p>
<p>70 “45 lbs/acre/year was used as the assimilative capacity for crop uptake of TP in Cullman County. I am having trouble finding that number. Can you tell me exactly where that was found? The page cites NRCS 2000, yet there are three NRCS references for that year and I</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p>	<p><b>Applicant and Corps response:</b> The data for application, crop uptake, assimilative capacity, and the excess application all come from NRCS 2000, Kellogg et al. Manure Nutrients Relative to the Capacity of Cropland and Pastureland to Assimilate Nutrients – spreadsheet C97xtbsm.xls (1997 data) for fips code 01043. See <a href="http://www.nhq.nrcs.usda.gov/land/index/publication.html">www.nhq.nrcs.usda.gov/land/index/publication.html</a></p>

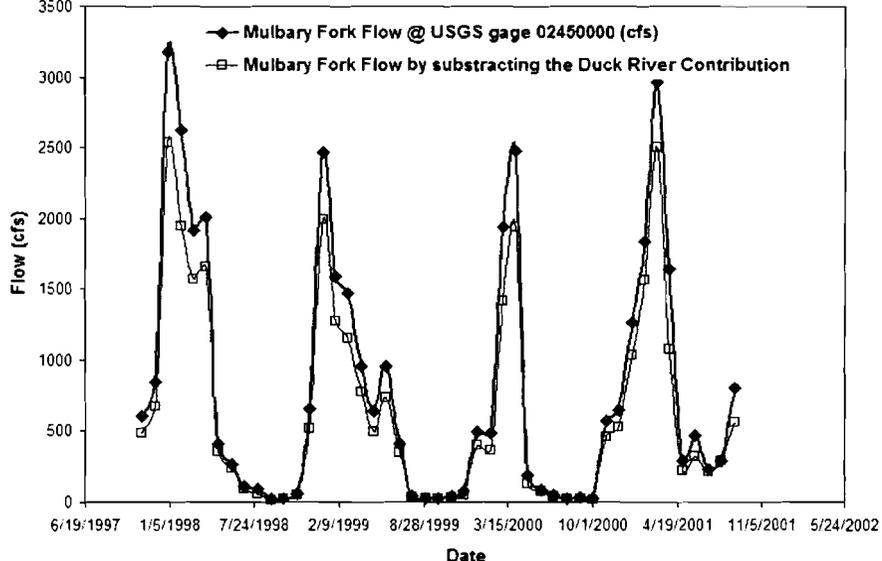
Comments	Source	Answers to the Comments
<p>can't find reference to that exact number. Also, it seems that this 45 lbs/acre/year is inappropriately used to calculate excess TP loading (page 2-8). The logical method would be to determine the actual loading rate (what the farmers are using), subtract how much TP the crops are using (reportedly 45 lbs/acre/year), and that tells you what excess TP you have in the watershed. The excess amount of TP had not been determined, so the uptake rate is being used as the excess rate. Are you saying that farmers are using 45 lbs/acre/year and that there are no crops to use it? Or are you saying that farmers are applying 90 lbs/acre/year and that the crops are only using half of it?"</p>		
<p>71 "Table 3 on page 2-8 does not offer any explanation of how these numbers were determined. Please provide calculations and references to show how these values were determined. The discussion following Table 3 mentions an 'observed' watershed export rate of 0.27 lbs/acre/year, yet there are two problems with this statement. First the 0.27 value according to table 3 is in units of ton/acre/year, which would be 0.54 lbs/acre/year. Second, the 0.27 value is from the category of erosion rate with</p>	<p>Email from April Hall, Watershed Specialist, Alabama Rivers Alliance, August 16, 2005</p>	<p><b>Applicant and Corps response:</b> The TM does explain the derivation of the numbers, as shown by the following excerpt:</p> <p>"The sediment delivery ratio (SDR) is assumed to range from 0.09 (large watershed) to 0.13 (small watershed) and is multiplied by the Soil Erosion Rate to calculate Sediment Yield. TP loss rate is calculated as 0.1% of the Sediment Yield. Note that the units shift from tons to pounds in moving from sediment yield to TP loss rate."</p> <p>Table 3 compares the expected reductions in phosphorus loading from three land management scenarios: no BMPs, limited BMPs, and full BMPs. The 0.27 value is with full BMPS and is not intended to be nor is it presented as current conditions.</p>

Comments	Source	Answers to the Comments
<p>maximum conservation, which is not the currently observed conditions in the watershed. If you use the most conservative assumptions offered in Table 3, and compare the export rate to the 45 lbs/acre/year (still not the appropriate value to use) a percentage of 4.5 percent results.”</p>		
<p>72 “I will email additional questions as they come up.”</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 16, 2005</p>	<p><b>Applicant Response:</b> All comments filed within the comment period were accepted and taken into consideration. Comments received after the close of the official comment period should be returned to sender. Future questions should be handled pursuant to the process set forth in the Freedom of Information Act.</p> <p><b>Corps Response:</b> All comments were to be received by the Corps by the close of the comment period. However, should additional new information be received after the close of the comment period, it would be included in the Corps’ evaluation of the project.</p>
<p>73 “Section 2, page 2-2, includes a discussion about the BATHTUB model and how the model was re-run with new data. However, with the exception of input values, there is little discussion about the model process. In the original EA, nutrient values from 7 out of 8 reservoirs in the southeast were used to determine the desired concentrations for the Duck reservoir. Were these same values used?”</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005</p>	<p><b>Applicant and Corps response:</b> The original model run is described in Ashby and Kennedy 1999. The Bathtub runs here were done exactly the same way except as noted (i.e. C.V. added to input concentrations). The nutrient target (60% reduction of estimated TP load) developed in 1999 was confirmed by this analysis and the same chlorophyll goal (i.e. 5-10 ug/L) was assumed - as in the first analysis.</p>
<p>74 “Appendix B says ‘CE distribution is based on data from 41 reservoirs, mostly eutrophic.’ I request additional information about this data. The location, age source, and</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005</p>	<p><b>Applicant and Corps response:</b> The dataset is described in Walker 1981 (Empirical methods for predicting eutrophication in impoundments. Report 1.) (Technical Report E-81-9) – which Ms. Hall has obtained from a source identified by ERDC staff. It is no longer in print and extra copies for distribution are not available from ERDC.</p>

Comments	Source	Answers to the Comments
values of the data used should be provided with the supplement.”		
75 “A report was prepared by WES for the previous BATHTUB model. Has no report been generated by ERDC for the current model?”	Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005	<b>Applicant and Corps response:</b> The model was not modified from Ashby and Kennedy 1999. That report is still fully applicable.
76 “I would like to know if the same assumptions and inputs such as rainfall, flow, internal loading, non-algal turbidity, etc have been updated or if the same values were used in the second run of the model.”	Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005	<b>Applicant and Corps response:</b> See response to comment 75.
77 “Were there scenarios (low, normal, high flow) analyzed and compared as in the 1999 EA?”	Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005	<b>Applicant and Corps response:</b> Yes, but the goal in this iteration was only to confirm (or not) that the updated input values produced the same results as in 1999. The input changes were very small and did not alter the earlier results (i.e. that a 60% reduction in load would be needed).
78 “If a report or summary of the model run has been prepared, can you please provide that to me before the end of the comment period?”	Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005	<b>Applicant and Corps response:</b> See response to comment 75.
79 “The first few pages in Appendix B provide the BATHTUB model results in a table and then a list of parameter with limited definitions. It is not clear why the values in the table (mean, CV) do not match those in the explanation part. Can you please explain what CE distribution means and why	Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005	<b>Applicant and Corps response:</b> The values listed in the explanation of the table are from the population of 41 USACE reservoirs used in the original development of the Bathtub model. These values are provided for reference. The values in the table are projected (model predictions) for the Cullman reservoir.

Comments	Source	Answers to the Comments																					
80	<p>these values differ from those in the table?"</p> <p>“Also, are the model results intended to represent average conditions over the entire area of the reservoir, or just one location within the reservoir?”</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005</p> <p><b>Applicant and Corps response:</b> The model was run with a single reservoir segment, completely mixed, so it is an overall average.</p>																					
81	<p>“Since seasonal variations in algal growth occur in reservoirs, have different seasonal scenarios been run with the model to determine if growing season nutrient level requirements differ from annual average requirements?”</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005</p> <p><b>Applicant and Corps response:</b> This level of resolution goes beyond the normal application of the Bathtub model – and beyond the 1999 analysis. The model takes into account the typical seasonal pattern of algal growth, and as the water residence time is projected to be on the order of 6 months, the response to seasonal input spikes should be dampened considerably. Bathtub can use the predicted average to also predict (statistically) the expected bloom frequency (see <math>FREQ(chla &gt;)</math>) If more dynamic predictions are required, then more sophisticated models (e.g. CE-QUAL-W2) are needed.</p>																					
82	<p>“I have requested some references used in the previous BATHTUB report from the ERDC – the BATHTUB references written by Walker. If you could help speed up the processing of this request, I would greatly appreciate it.”</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005</p> <p><b>Applicant Response:</b> Commenter may have obtained this information last September from a source identified by ERDC staff. The information is currently out of print and not directly available from ERDC. At any rate, neither the Corps nor the applicant is under any obligation to “speed up” information requests.</p> <p><b>Corps Response:</b> We understand that the commenter may have obtained this information last September from a source identified by ERDC staff. The information is currently out of print and not directly available from ERDC.</p>																					
83	<p>“For table 1, the change in storage is supposed to be equal to the change in flow, plus precipitation flow, minus evaporation, minus withdrawals. In the previous EA average annual rainfall was 56 inches per year and average annual evaporation was 39-50 inches per year. The area of the reservoir is 640 acres and the maximum withdrawal is 32 MGD. Please let me know if other values were used for these parameters. Using these values</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005</p> <p><b>Applicant and Corps response:</b> Following parameters were used in developing Table – 1.</p> <table border="1"> <thead> <tr> <th>Parameters</th> <th>Value</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>Storage</td> <td>321</td> <td>MGD</td> </tr> <tr> <td>Volume</td> <td>26,500</td> <td>acre-ft</td> </tr> <tr> <td>Precipitation</td> <td>55</td> <td>in/yr</td> </tr> <tr> <td>Evaporation</td> <td>33</td> <td>in/yr</td> </tr> <tr> <td>Surface area</td> <td>640</td> <td>acres</td> </tr> <tr> <td>Withdrawal</td> <td>27.70</td> <td>MGD</td> </tr> </tbody> </table> <p>In the previous EA, the safe yield was calculated to be 32 MGD. Based on the revised analysis a rating curve was developed using the HEC-RAS model and the observed stage data at the USGS gage near Berlin was converted into the conservative flow data. The response to comment # 58 indicates that the flow</p>	Parameters	Value	Units	Storage	321	MGD	Volume	26,500	acre-ft	Precipitation	55	in/yr	Evaporation	33	in/yr	Surface area	640	acres	Withdrawal	27.70	MGD
Parameters	Value	Units																					
Storage	321	MGD																					
Volume	26,500	acre-ft																					
Precipitation	55	in/yr																					
Evaporation	33	in/yr																					
Surface area	640	acres																					
Withdrawal	27.70	MGD																					

Comments	Source	Answers to the Comments
----------	--------	-------------------------

		<p>calculated based on this rating curve are conservative i.e., smaller than the actual flows. Thus, the reduced withdrawals may be an artifact of adopting a conservative approach in the Supplement Analysis.</p>
<p>84 “The values in Appendix F for flows in the Mulberry Fork are not correct. The flow readings at the USGS gage in Garden City already include the current undammed flows from the Duck River. There is no need to add them to the gage flows. To determine the change in flows at Garden City, one must only subtract the difference in Duck River flows that will result from the dam. For instance, if the flow in the Mulberry is 485 cfs (Nov-97), and the change in Duck River flows after the dam will be 17.11 cfs (33.11 cfs – 16 cfs) then the new flow at the Garden City gage would be 467.89 cfs.”</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005</p>	<p><b>Applicant and Corps response:</b> The values presented in Appendix F are correct. The commenter apparently misunderstood the presentation of data in Appendix F. In Tables 2 and 3 the Mulberry Fork flow is not the same as the USGS observed flow at the Garden City gage (# 02450000) instead it is equal to the USGS observed flow at the Garden City gage minus the Duck River contribution calculated by prorating the USGS observed flow based on the contributing watershed area. The procedure used in the calculation of the Mulberry Fork flow is correct and more conservative than the procedure suggested by the commenter. If commenter suggested procedure is used, one will subtract the Duck River flow at the USGS gage near Berlin (# 02449840) rather than the Duck River flow at the Garden City gage which will disregard the contribution of the Duck River watershed falling between these gages and thus resulting in the higher flow in the Mulberry Fork. Please see the following plot for further clarification.</p> 
<p>85 “While the net difference in flows between tables 2 and 3 are the same (17.11) the base values for flows were</p>	<p>Email from April Hall, Watershed Restoration Specialist, Alabama</p>	<p><b>Applicant and Corps response:</b> The net difference (17.11) is correct precisely because the values that it was based on also are correct. The commenter misunderstood the tables, as indicated in the response to comment 84.</p>

Comments	Source	Answers to the Comments																		
	Rivers Alliance, August 19, 2005																			
86 “Please provide the values of area, precipitation, and evaporation used in the Bankhead Lake flow calculations in Appendix F.”	Email from April Hall, Watershed Restoration Specialist, Alabama Rivers Alliance, August 19, 2005	<p><b>Applicant and Corps response:</b></p> <table border="1"> <thead> <tr> <th>Parameters</th> <th>Value</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>Volume</td> <td>296,215.00</td> <td>acre-ft</td> </tr> <tr> <td>Precipitation</td> <td>57.02</td> <td>in/yr</td> </tr> <tr> <td>Evaporation</td> <td>57.17</td> <td>in/yr</td> </tr> <tr> <td>Surface area</td> <td>9,245.00</td> <td>acres</td> </tr> <tr> <td>Withdrawal</td> <td>85.00</td> <td>MGD</td> </tr> </tbody> </table>	Parameters	Value	Units	Volume	296,215.00	acre-ft	Precipitation	57.02	in/yr	Evaporation	57.17	in/yr	Surface area	9,245.00	acres	Withdrawal	85.00	MGD
Parameters	Value	Units																		
Volume	296,215.00	acre-ft																		
Precipitation	57.02	in/yr																		
Evaporation	57.17	in/yr																		
Surface area	9,245.00	acres																		
Withdrawal	85.00	MGD																		
87 “The in-lieu stream mitigation value of \$437, 000 stipulated in the now-remanded permit for the Duck River Dam (Public Notice AL96-00912-U) is not mentioned in the Supplemental EA.”	Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005	<p><b>Applicant Response:</b> The in-lieu stream mitigation value of \$437, 000 stipulated in the now-remanded permit for the Duck River reservoir project (Public Notice AL96-00912-U) was not germane to addressing the deficiencies identified by the court. The court did not conclude that such mitigation was inadequate and the applicant has no evidence that this figure warrants recalculation or revisitation.</p> <p><b>Corps Response:</b> Comment noted. The Supplemental EA only addressed the areas remanded by the Court.</p>																		
88 “We now know that the actual cost of fully restoring the habitat and ecological functions of a highly degraded stream equivalent in size and potential productivity to the mainstream Duck River would be at least \$2,640,000/mile at a 2:1 mitigation ratio (we will, upon request, provide references and contacts to verify this value).”	Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005	<p><b>Applicant Response:</b> Applicant has fully taken into consideration the potential ecological impacts of the project on the Duck River. Negative impacts will be mitigated. In fact, operation of the Duck River reservoir will enhance flows during the summer months and periods of drought. The reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam.</p> <p><b>Corps Response:</b> Comment noted.</p>																		

Comments	Source	Answers to the Comments
89 “We respectfully request that the Corps and the applicant should reevaluate the issue of mitigation costs and increase the dollar value of the contribution to the Game and Fish Fund to at least \$1,311,000.”	Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005	<b>Applicant Response:</b> Applicant will pay all mitigation costs identified by the Corps, taking into consideration the availability of matching funds.  <b>Corps Response:</b> Comment noted.
90 “Unless a site can be located nearer the Duck River, we anticipate using money in the Game and Fish Fund to restore the natural pattern, profile, and dimensions of Swift Creek at the site of the gravel mine.”	Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005	<b>Applicant Response:</b> Applicant has fully taken into consideration the potential ecological impacts of the project on the Duck River. Negative impacts will be mitigated as required by the Corps and at locations decreed appropriate. Identification of any specific mitigation sites will involve coordination with appropriate state and federal agencies.  <b>Corps Response:</b> Comment noted.
91 “As stated in our letter of June 30, 1999, we are pleased that the applicant will provide the minimum continuous discharges presented in Table 6 (page 3-3).”	Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005	<b>Applicant and Corps Response:</b> Applicant will provide at least the minimum continuous discharges presented in Table 6 and approved by the Department of Conservation and Natural Resources. Because maximum withdrawal capacity will not often be needed, flows may, in fact, be better than the minimum flow schedule provided in Table 6.
92 “The minimum flows referred to as normal releases in Table 6 are actually higher in August, September, and October than the flows we originally recommended.”	Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005	<b>Applicant and Corps response:</b> See response to comment 91.
93 “These flows are the minimum flows in normal rainfall years – the discharge at the dam can (and often will) be higher, but never less such flows are not	Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of	<b>Applicant and Corps response:</b> See response to comment 91.

Comments	Source	Answers to the Comments
<p>natural flows (they are less than average monthly flows). However, they do mimic the natural flow regime which is important to fish and other aquatic biota, and in low rainfall months, they exceed the expected daily flows based on historical records for normal rainfall years at least 50% of the time.”</p>	<p>Conservation and Natural Resources, August 15, 2005</p>	
<p>94 “The Duck River is a flashy river, with greater than average variations in stream flow throughout the year. In such a system, median monthly flows which exceed the natural (historically expected) daily flows 50% (or more) of the time during low flow months can be viewed as protective minimum flows.”</p>	<p>Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 91.</p>
<p>95 ‘We feel that the minimum discharges in Table 6 will provide semi-natural flows and provide a fairly high degree of protection for the ecosystem of the Duck River during normal rainfall years, while still allowing for a water withdrawal of up to 32 mgd from the reservoir. We approve the minimum drought releases in Table 6 because they equal or exceed monthly 7Q10 flows.’</p>	<p>Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 91. The 32 mgd figure is an estimate of maximum withdrawal capacity and will not likely be reached anytime in the near future. Flows should likely be better than the minimum flow schedule provided in Table 6.</p>
<p>96 “However, we also recommend the “equal sharing of hardships” during officially declared droughts; i.e., whenever</p>	<p>Letter from Commissioner M. Barnett Lawley, of the State of Alabama</p>	<p><b>Applicant and Corps response:</b> See response to comment 91.</p>

Comments	Source	Answers to the Comments
<p>minimum flows are incrementally reduced, the amount of water withdrawn should be reduced by the same percentage in order not to maximize withdrawals at the expense of the aquatic ecosystem.”</p>	<p>Department of Conservation and Natural Resources, August 15, 2005</p>	
<p>97 “We still recommend and expect that a pre-construction Index of Biotic Integrity (IBI) study will be conducted and followed up by post-construction monitoring based on IBI techniques. This was a condition of the original permit and should be a condition if a new permit is issued.”</p>	<p>Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005</p>	<p><b>Applicant Response:</b> Applicant will provide an IBI if so required. In fact, an IBI was a condition of the original permit and is likely to be a condition of any new permit issued. An IBI is therefore likely to be conducted.</p> <p><b>Corps Response:</b> Should a permit be issued, it would require a biological monitoring program be conducted by a qualified biologist at the same sites used for water quality sampling, downstream from the reservoir, and in the lower reaches of the Duck River. The special condition would require the monitoring to begin before impoundment of the reservoir in order to establish baseline conditions. Collected data would be used to establish an Index of Biological Integrity that would allow year to year comparisons.</p>
<p>98 “The applicant should consult with Patrick O’Neal of the Geological Survey of Alabama to obtain publications and guidance on the latest and best methodology for performing IBI studies in Alabama streams. The applicant may also want to contract with one of the universities to monitor the impacts of the altered flows on the aquatic ecosystem using not only the IBI’s but other techniques.”</p>	<p>Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and Natural Resources, August 15, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 97.</p>
<p>99 “We noted an error in Figure 6 of Technical Memorandum 4 (page 8). In graph (a) Overall Flow, the “Flow Pre Dam Construction” label is erroneously attached to both the</p>	<p>Letter from Commissioner M. Barnett Lawley, of the State of Alabama Department of Conservation and</p>	<p><b>Applicant and Corps response:</b> Applicant will provide the minimum continuous discharges presented in Table 6. The identified typos do not affect flow estimates but will be corrected in the final document.</p>

Comments	Source	Answers to the Comments
	Natural Resources, August 15, 2005	
100	request for extension to the public review period	Hank Byrnes 919 County Rd. 291 Hillsboro, AL <b>Applicant and Corps response:</b> See response to comment 6.
101	request for extension to the public review period	Jane G. Trechsel 2610 Aberdew Rd. Birmingham, AL 35223 <b>Applicant and Corps response:</b> See response to comment 6.
102	“The Duck River dam project would create a 640-acre reservoir, drastically increasing rate payers’ utility bills and despoiling the local environment, in a community where demand for water is decreasing.”	Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005 <b>Applicant response:</b> See response to comment 36 and others. Long range projections show that water consumption in Cullman County will increase. These projections are reasonable in light of the current growth rates in population, housing, industrial expansion, retail and business growth as well as increasing tourism. <b>Corps Response:</b> Refer to Corps response to comments 11, 17, 30 and others herein.
103	“The Black Warrior watershed drains approximately 6,276 square miles of land and hosts a number of threatened and endangered species, including two species of fish and eleven species of mussels.”	Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005 The original Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i> . The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted. <b>Corps Response:</b> Refer to Corps response to comment 18.
104	“...the Corps seeks to renew a permit for a dam that will result	Letter from Andrew Fahlund, Vice <b>Applicant response:</b> The original Environmental Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental

Comments	Source	Answers to the Comments	
	<p>in the loss of more than 5 miles of Duck River and more than 500 acres of woodlands.”</p>	<p>President of Protection and Restoration with American Rivers, August 30, 2005</p>	<p>impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Comment noted. Refer to the EA, Section 5.0-Environmental Consequences, for a full discussion on the impacts of the proposed project.</p>
105	<p>“The Board calculated the average daily water use in June 2005 to be 15 million gallons, approximately 6 million gallons per day (MGC) lower than the predicted 2005 demand of 21.8 MGD. Lake Catoma’s rated capacity of 25 MGD belies the Corps’ claim that a new source of water is necessary. Furthermore, financial statements from the Cullman Utilities Board establish that, in the last two years, water demand peaked at 17.8 MGD in 2003 and 13.7 MGD in 2004.”</p>	<p>Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005</p>	<p><b>Applicant response:</b> See responses to comments 53 and 54.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 24.</p>
106	<p>“The Supplement makes no attempt to update obsolete economic data used in the original permit application and environmental assessment.”</p>	<p>Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005</p>	<p><b>Applicant Response:</b> Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p>

Comments	Source	Answers to the Comments
107	Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005	<p><b>Corps Response:</b> Refer to Corps comments to 11, 17, 30, and others herein.</p> <p><b>Applicant Response:</b> See response to comment 36. Rates are tied to actual cost. A rate increase occurs only when costs rise. The cost of the project will be paid by consumers and will not be paid for by tax revenue.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
108	Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005	<p><b>Applicant Response:</b> Independent analyses by the Corps of Engineers and CH2M HILL indicate that the reservoir water quality would be sufficient for the intended use. The following excerpt from the ADEM 2004 303(d) report indicate that necessary water quality can be achieved.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the</i></p>

Comments	Source	Answers to the Comments
		<p><i>effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to the Supplemental EA, Water Quality-Section 2.4.2-Nurtient Management, for a complete discussion of implementation of BMPs which would insure a 60% reduction in nutrient loading in the proposed reservoir. Also, refer to comments 80 and 81 and Corps response to these comments.</p>
109	<p>“...only four water samples were collected and analyzed for nutrients since the permit was issued in 2000; nor does the supplement include any discussion of funding sources for either monitoring or treatment costs.”</p>	<p>Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005</p> <p><b>Applicant Response:</b> The four water samples mentioned by the commenter were collected by the Water Watch group and not by SWCD. Please refer to section 2.5 on page 2-17 of the Supplement which provides a detailed discussion on the planned adaptive management activities including water quality monitoring in the Duck River watershed that will be implemented by SWCD after the permit is issued.</p> <p><b>Corps Response:</b> Should a permit be issued, it would require a water quality testing program be conducted for water in the proposed impoundment and its major tributaries. Monitoring would begin before impoundment of the reservoir in order to establish baseline conditions. Information from this program would be used to test the effect of BMPs and isolate any problem areas.</p>
110	<p>“The Corps as of yet has not collected water flow data in the area of the dam to sufficiently analyze flow impacts in the Mulberry Fork.”</p>	<p>Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005</p> <p><b>Applicant and Corps response:</b> A conservative approach has been adopted in the Supplement Analysis as explained while responding to comments # 58 and 84. Please refer to TM-4 of the Supplement in which a detailed water balance analysis has been conducted to determine the impacts in the Mulberry Fork. The pre- and post-Duck River Impoundment Project water balance results were further analyzed to test t whether the dam construction would have a significant effect in the Mulberry Fork using statistical techniques. As reported in the Supplement (TM-4, page 4), the construction of the Duck River impoundment will not have any adverse impact in the Mulberry Fork.</p>
111	<p>“...the Corps should hold a public hearing...”</p>	<p>Letter from Andrew Fahlund, Vice President of Protection and Restoration with American Rivers, August 30, 2005</p> <p><b>Applicant and Corps response:</b> See response to comment 7.</p>
112	<p>“This Supplement makes no attempt to update the six- to ten-year old data used in the</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork</p> <p><b>Applicant Response:</b> Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the</p>

Comments	Source	Answers to the Comments
	River, August 30, 2005	<p>applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Disagree.</p>
113	Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005	<p><b>Applicant Response:</b> Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 11, 17, 30 and others herein.</p>
114	Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005	<p><b>Applicant Response:</b> Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 112.</p>
115	Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005	<p><b>Applicant and Corps response:</b> See response to comment 109.</p>
116	Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005	<p><b>Applicant and Corps response:</b> See response to comment 58. Based on our professional judgment, we feel that the Corps model is based on sound engineering principles and adequately accurate to serve the desired application.</p>

Comments	Source	Answers to the Comments
	data points exist to verify the accuracy of the Corps' models.”	
117	“Despite vague references to winter paddling releases, the Corps has not analyzed the impacts to winter, white water recreation in the Duck River.”	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p> <p><b>Applicant Response:</b> The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Comment noted. Refer to the Supplemental EA, Section 3.0 Downstream Effects on Mulberry Fork. Section 3.3 states that except for a small reduction in the peak flow of the Mulberry Fork (maximum reduction of 73 cfs from peak flow exceeding 2,500 cfs), all other features would remain unchanged after construction of the proposed water supply reservoir. This slight reduction in peak flow in the Mulberry Fork would not constitute a significant impact on the hydrology of the river. Impacts on recreation will be fully considered by the Corps as it evaluated the proposed project.</p>
118	“...the Corps cannot rely on voluntary, cost-shared best management practices (BMPs) to reduce the pollutants in the Duck River by 60 percent.”	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p> <p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 49.</p>
119	“Recent articles in The Cullman Times indicate that demand for water is dropping, which will lead to increases in water rates for residents of Cullman.”	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p> <p><b>Applicant Response:</b> See response to comment 53.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 52.</p>

Comments	Source	Answers to the Comments
120 “Based on the information provided in the supplement, it does not appear that the Corps has addressed the federal court’s concerns regarding water quality and downstream impacts.”	Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005	<p><b>Applicant Response:</b> See response to comment 55. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 55.</p>
121 “I also request that a public hearing be held by the Corps.”	Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005	<p><b>Applicant and Corps response:</b> See response to comment 7.</p>
122 “There were numerous opportunities for public participation, and extensive studies by experts. In short, it is time to move forward and build this reservoir.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
123 “Duck River is not and has not been on the 303(d) list for “impaired” waters.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees that the Duck River is not on the 303(d) list for “impaired” waters.</p> <p><b>Corps Response:</b> Comment is noted.</p>
124 “All 8 miles of the stream leading into Cullman’s current drinking water supply (Lake Catoma) is listed as “impaired.” By contrast, the water in the Duck River reservoir is projected to be cleaner than what currently exists in Lake Catoma.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees that the water in the Duck River reservoir will be clean. In fact, the Reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam.</p> <p><b>Corps Response:</b> Comment is noted.</p>
125 “The Alabama Department of Environmental Management (ADEM), the U.S.	Letter from Dale Greer, Assistant Director of Cullman	<p><b>Applicant Response:</b> Applicant agrees that considerable resources have been expended cleaning up the Duck River Drainage Basin.</p>

Comments	Source	Answers to the Comments
	Economic Development Agency, August 29, 2005	<b>Corps Response:</b> Comment is noted.
126	Environmental Protection Agency (EPA), the Natural Resources Conservation Service (NRCS) and Cullman have spent over \$5,000,000 in a partnership of local, state and federal agencies cleaning up the Duck River Drainage Basin to improve water quality.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005
127	“... water pumped out of the Duck River Reservoir will be tested several times a day in the treatment process (as required by ADEM), which results in almost immediate awareness of problems and corrections to insure drinking water quality (also as required by ADEM).”	<p><b>Applicant Response:</b> Applicant agrees that water pumped out of the Duck River reservoir will be properly monitored.</p> <p><b>Corps Response:</b> Comment is noted.</p>
128	“A permanent Water Authority or Water District (as authorized by Alabama law) will be formed to govern the new water source, and ADEM has the enforcement authority (with AFO/CAFO regulations) to eliminate inappropriate or potentially harmful activities.”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
129	“ADEM performed a surprise review of 139 properties in the Duck River drainage basin between November 2003 and January 2004 and found only two instances of non-compliance in the watershed.”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
129	“ADEM has given Cullman County an award and made a presentation at a public clean water program citing the Duck River Clean Up program as a	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>

Comments	Source	Answers to the Comments
	Agency, August 29, 2005	
130 “Further, actual construction of the Duck River Dam will require several years and give the community adequate time to monitor; identify and correct any water quality issues that may arise.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees that all water quality issued will be properly monitored and corrected.</p> <p><b>Corps Response:</b> Comment is noted.</p>
131 “Only 1.2 acres of wetlands are impacted by this development, and Cullman will pay \$89,000 to a mitigation bank, creating four times as much new wetland.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees that mitigation efforts will be more than adequate.</p> <p><b>Corps Response:</b> Comment is noted.</p>
132 “The 100-foot buffer zone will create approximately 300 acres of permanent forest land and habitat for wildlife, and additional forest land and habitat will be created through reforestation of the borrow areas (for construction fill dirt) being purchased.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees that mitigation efforts will be more than adequate.</p> <p><b>Corps Response:</b> Comment is noted.</p>
133 “There are no threatened or endangered species affected by the proposal...”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant and Corps Response:</b> Applicant agrees that there will be no negative impacts on endangered species.</p>
134 “Extensive studies by the Corps of Engineers indicate that proposed flow regimes are beneficial and impacts are minimal.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees that the proposed flow regimes will be environmentally beneficial and will not negatively effect the environment.</p> <p><b>Corps Response:</b> Comment is noted.</p>

Comments	Source	Answers to the Comments
135 “Sixty percent of the year, the new Duck River impoundment will be full and water will naturally overflow the spillway on rain events.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees. <b>Corps Response:</b> Comment is noted.
136 “In fact, ADCNR is on record as stating construction of the dam will improve summer flows and drought flows.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees that construction of the reservoir will improve summer flows and flows during periods of drought. <b>Corps Response:</b> Comment is noted.
137 “The Cullman area needs to develop new sources of water.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees that Cullman needs to develop a new water source. <b>Corps Response:</b> Comment is noted.
138 “...Lake Catoma cannot meet our needs indefinitely.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees. Capacity at Lake Catoma is only 4 MGD. <b>Corps Response:</b> Refer to Corps response to comment 24.
139 “Cullman has taken steps to increase our capacity and to reduce consumption.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees. Cullman raised the height of the Lake Catoma spillway, eliminated leaks system-wide to reduce loses, allowed two contract customers to supplement their water supply from other sources, and has regularly promoted conservation through education programs. <b>Corps Response:</b> Comment is noted.
140 “Among the alternatives considered in the context of developing the Duck River reservoir proposal were two	Letter from Dale Greer, Assistant Director of Cullman Economic	<b>Applicant Response:</b> As reflected in the Supplement to the EA, applicant considered all reasonable alternatives. <b>Corps Response:</b> Refer to EA, Section 3.0 alternative, for a complete discussion of

Comments	Source	Answers to the Comments
different pipe lines from Smith Lake; two different pipe lines from the Tennessee River; a dam on Duck River; a dam at two different locations on Mulberry River; a dam on Brindley Creek; a dam on Eight Mile Creek, above Catoma; an expansion of Lake Catoma; drilling wells to increase groundwater supply; and utilization of Lake George.”	Development Agency, August 29, 2005	all alternatives considered and the rationale for the selection of the Duck River (725) as the most practicable alternative to meet the project needs.
141 “The proposed Duck River reservoir project enjoys substantial support.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees that the project has received considerable support. <b>Corps Response:</b> Comment is noted.
142 “ <i>The Cullman Times</i> , Cullman’s daily newspaper, has editorially endorsed the Duck River Project as the right decision for the future of Cullman County.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees that the project has received considerable support. <b>Corps Response:</b> Comment is noted.
143 “All decisions concerning Duck River have been made in public meetings, and every meeting was announced and covered by a reporter of <i>The Cullman Times</i> , the local newspaper.”	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<b>Applicant Response:</b> Applicant agrees that the public was made fully aware of the project. See also response to comment 10. <b>Corps Response:</b> Comment is noted.
144 “In addition, community leaders held a meeting at Holly Pond High School with affected property owners before any requirements were in place. Written invitations were sent to	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency,	<b>Applicant Response:</b> Applicant agrees that the public was made fully aware of the project. See also response to comment 10. <b>Corps Response:</b> Comment is noted.

Comments	Source	Answers to the Comments
every landowner in the proposed impoundment, as well as the owners of every parcel adjacent to an impacted parcel.	August 29, 2005	
145 “... the decision to pursue the Duck River dam and reservoir project was recommended after a thorough and comprehensive analysis by the Mobile and Nashville Districts of the U.S. Army Corps of Engineers.	Letter from Dale Greer, Assistant Director of Cullman Economic Development Agency, August 29, 2005	<p><b>Applicant Response:</b> Applicant agrees that the project was thoroughly studied by the Corps of Engineers, as reflected in the supplement to the EA.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 140.</p>
146 “I agree with and support the Corps’ analysis of this issue in the supplement to the EA, particularly with respect to its conclusion that the water quality of the proposed reservoir, if properly managed, will be adequate.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<p><b>Applicant Response:</b> Applicant agrees that the project was thoroughly studied by the Corps of Engineers, as reflected in the supplement to the EA.</p> <p><b>Corps Response:</b> Comment is noted.</p>
147 “... there is an established history of successful implementation of best management practices (BMPs) and other measures to improve water quality in the Cullman area.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
148 “Among other benefits, the 319 grant has provided the agricultural producers in the Duck River watershed with cost-share assistance to help place Natural Resource Conservation Service (NRCS)-approved practices on the ground.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> All BMPs that can be implemented will help increase the water quality within the project area.</p>
149 “Drystacks, for the storing of poultry litter, will be used when the crops can better utilize the nutrients.”	Letter from Tim Scott, Duck River Coordinator,	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.</p>

Comments	Source	Answers to the Comments
150 “Dead bird composters. Eight of these have been constructed with this project. They are used for handling day-to-day dead bird disposal from poultry operations.”	August 30, 2005 Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
151 “Rotational grazing systems.” This allows better quality forage for the livestock producers and creates filter strips for the filtering of water before entering the stream.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
152 “Riparian fencing. This fencing will allow the landowner to fence out the stream, giving very minimal livestock access to sensitive areas.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
153 “Six alternative water sources placed in watershed. These water sources consist of ponds or troughs, which allow the cattle to drink from these instead of drinking from the streams.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
154 “Cropland conversion. Such conversion will allow producers to take highly erodible cropland and convert it to hay or pasture ground, greatly reducing the erosion from the field.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. The reduction of soil erosion will help area water quality.

Comments	Source	Answers to the Comments
155 “Heavy use areas. This practice helps the livestock producers create an area where cattle can be fed without allowing the destruction of the area around the feeding site.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
156 “Stream crossings. These allow the landowners to use heavy use area protection to shore up the stream bank where the machinery or livestock must cross the streambed.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
157 “Winter feeding facilities. These facilities allow the landowner to construct a building to feed the cattle under dry conditions, rather than outside where waste and concentrated nutrient buildup can occur.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
158 “Education activities. Educational activities have been conducted with the majority of the landowners to educate them about the requirements and benefits of enhancing water quality in the watershed.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment noted. The Corps agrees that education can be an important key to better water quality.
159 “Two landowners have totally removed the waste storage lagoons from the premises by testing the nutrient content and applying the material to the adjacent agricultural fields.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
160 “The landowners have access to a hydro-seeder that sows seeds on areas that are not accessible for traditional sowing methods.	Letter from Tim Scott, Duck River Coordinator,	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Successful hydroseeding of gullies would help to reduce sedimentation and erosion within the watershed.

Comments	Source	Answers to the Comments
	August 30, 2005	
161 “In-house composting machine. This practice allows the poultry producers to use a machine that will compost the old litter and allow them to reuse the litter for the next flock”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
162 “Alternative bedding material. Two demonstrations have been conducted where sand is used for bedding instead of traditional sawdust. This greatly reduces the amount of litter needing to be land-applied.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
163 “One vendor dry stack has been constructed in the watershed. This is a demonstration project that allows a Certified Animal Waste Vendor to construct a building to store his customer’s litter during the winter months.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted. All BMPs that can be implemented will help increase the water quality within the project area.
164 “Waste Management Plans. Such plans have been written for most of the producers in the watershed.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Implementation of waste management plans will help the overall water quality within the project area.
165 “Duck Creek is no longer on ADEM’s 303(d) list of impaired streams.”	Letter from Tim Scott, Duck River Coordinator, August 30, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted.
166 “... in addition to the needs and concerns that previously existed, Cullman is, unfortunately, required to consider an alternate drinking	Letter from Woody Jacobs, Secretary, Cullman Utilities Board, August 30,	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted.

Comments	Source	Answers to the Comments
	2005	
167	“Title IV of the federal Bioterrorism Act of 2002 requires communities such as Cullman to conduct vulnerability assessments of critical infrastructure such as water supplies.”	Letter from Woody Jacobs, Secretary, Cullman Utilities Board, August 30, 2005 <b>Applicant Response:</b> Applicant agrees. <b>Corps Response:</b> Comment is noted.
168	“... the NGA recommends that alternate sources of drinking water be identified and developed.”	Letter from Woody Jacobs, Secretary, Cullman Utilities Board, August 30, 2005 <b>Applicant Response:</b> Applicant agrees. <b>Corps Response:</b> Comment is noted.
169	“There are apparently no other realistically potential water supply projects in the affected area or downstream of the Duck River.”	Letter from Woody Jacobs, Secretary, Cullman Utilities Board, August 30, 2005 <b>Applicant Response:</b> Applicant agrees. <b>Corps Response:</b> Comment is noted.
170	“I’m sure another drought like we had a few years ago would put the Duck River Dam Project back on track.”	Letter from Hershel & Linda Chumley (undated) <b>Applicant Response:</b> Applicant agrees. <b>Corps Response:</b> Comment is noted.
171	The Duck River Dam Project would allow our County to have a much needed alternate water source for many years.	Letter from Hershel & Linda Chumley (undated) <b>Applicant response:</b> Applicant agrees. <b>Corps Response:</b> Refer to Corps response to comments 11 and 24.
172	“We are in favor of the water project to bring more industry into our county and also maintain our quality of life.”	Letter from William and Ressie Hill, August 18, 2005 <b>Applicant Response:</b> Applicant agrees. The industrial growth of any community is dependant on the availability of water, sewer, and other infrastructure required by industry. The Duck River reservoir project will help guarantees the County’s ability to grow and improve the quality of life. <b>Corps Response:</b> Comment is noted.

Comments	Source	Answers to the Comments
173 "This letter is to advise of our support for the Cullman Duck River Dam Project, Cullman, Alabama."	Letter from Ezell Cornelius, Delores Cornelius, Ressie Hill, Larry Cornelius, Billy Cornelius and Nelda Chambers, August 19, 2005	<b>Applicant Response:</b> Applicant appreciates commenters' support. <b>Corps Response:</b> Comment is noted.
174 "I am in favor of Duck River Project."	Letter from Roger Bowen (undated)	<b>Applicant and Corps response:</b> See response to comment 173.
175 "I am in favor of Duck River Project."	Letter from Paula Bowen (undated)	<b>Applicant and Corps response:</b> See response to comment 173.
176 "I support Duck River Dam project."	Letter from Terry Wilson (undated)	<b>Applicant and Corps response:</b> See response to comment 173.
177 "I support the Duck River Project."	Letter from Raymond Gordon (undated)	<b>Applicant and Corps response:</b> See response to comment 173.
178 "I am in favor of Duck River Dam Project."	Letter from Michael K. Watt (undated)	<b>Applicant and Corps response:</b> See response to comment 173.
179 "I am in favor of Duck River Dam Project."	Letter from John E. Matteson, August 24, 2005	<b>Applicant and Corps response:</b> See response to comment 173.
180 "I support Duck River Land Project."	Letter from Mark [Bedford] (sp?), August 16, 2005	<b>Applicant and Corps response:</b> See response to comment 173.
181 "We can't afford to buy bottle water to take bath's and water our animals."	Letter from Reggie Stewart, August 23, 2005	<b>Applicant and Corps response:</b> See response to comment 173.
182 "Lake Catoma has been a wonderful source of water for 40 years and will continue to be so in years to come."	Letter from Knight, Griffith, McKenzie, Knight, McLeroy & Little, LLP, by James R. Knight, August 26, 2005	<b>Applicant Response:</b> Applicant has thoroughly analyzed Cullman County's present and future water needs. Lake Catoma does not have the capacity to satisfy future water demands. A supplemental water source is needed. <b>Corps Response:</b> Refer to Corps response to comment 24.
183 "The City of Cullman can presently process 24,000,000 gallons of water per day. This	Letter from Knight, Griffith, McKenzie, Knight, McLeroy &	<b>Applicant Response:</b> Applicant agrees with the commenter that the existing treatment plant can be enlarged to handle the new Duck River reservoir project water supply.

Comments	Source	Answers to the Comments
	Little, LLP, by James R. Knight, August 26, 2005	<b>Corps Response:</b> Comment is noted.
184 “In the foreseeable future Lake Catoma will not be able to furnish adequate raw water for the service area.”	Letter from Knight, Griffith, McKenzie, Knight, McLeroy & Little, LLP, by James R. Knight, August 26, 2005	<b>Applicant Response:</b> Applicant agrees. <b>Corps Response:</b> Refer to Corps response to comment 24.
185 “I believe that the Duck River Reservoir is the best alternative for an alternative raw water source to serve this community in the future.”	Letter from Knight, Griffith, McKenzie, Knight, McLeroy & Little, LLP, by James R. Knight, August 26, 2005	<b>Applicant Response:</b> Applicant agrees. <b>Corps Response:</b> The EA, Section 3.0-Alternatives, discussed in full the 20 possible alternatives. Many of these were eliminated because of cost. The Duck River (725 Alternative) was considered to be the least damaging practicable alternative.
186 “At the time that I retired in 1992, as far as I know, every person in Cullman County that wanted public water had a public water supply. The County Commission had approximately 15,000 customers.”	Letter from James Calvert, August 26, 2005	<b>Applicant Response:</b> Applicant agrees with the comments of the Former Cullman County Water Superintendent supporting the local system that supplies city water to every resident or business in Cullman County. <b>Corps Response:</b> Comment is noted.
187 “Without Lake Catoma there would be no water system.”	Letter from James Calvert, August 26, 2005	<b>Applicant Response:</b> Applicant agrees with this comment explaining that Lake Catoma is the primary impoundment supplying water for Cullman County. <b>Corps Response:</b> Comment is noted.
188 “[The City] can now process 24,000,00 gallons a day and with some modifications could increase that.”	Letter from James Calvert, August 26, 2005	<b>Applicant Response:</b> Applicant agrees with this comment describing the treatment system and its ability to expand for future treatment requirements. <b>Corps Response:</b> Comment is noted.
189 “With Duck River Reservoir as an alternate raw water source and with the other facilities at East Point including processing	Letter from James Calvert, August 26, 2005	<b>Applicant Response:</b> Applicant agrees with these comments supporting the Duck River alternative and the Duck River reservoir project’s ability to meet the county’s water needs for the foreseeable future.

Comments	Source	Answers to the Comments
		<b>Corps Response:</b> Comment is noted.
190	“I would like the public review period for the proposed Duck River Dam to be extended, and I support having a public meeting regarding the matter.” Email from John Carter-North, July 12, 2005	<b>Applicant response:</b> See response to comment 6. <b>Corps Response:</b> Refer to Corps response to comments 6 and 7.
191	“While the current 45-day comment period is longer than the standard review period, the complexity and scope of this proposed project warrants additional time to review the new material and other information associated with this project and to prepare informed comments.” Letter from Nelson Brooke, Black Warrior Riverkeeper, July 21, 2005	<b>Applicant and Corps response:</b> See response to comment 6.
192	“... we request that the comment period be extended to 60 days...” Letter from Nelson Brooke, Black Warrior Riverkeeper, July 21, 2005	<b>Applicant and Corps response:</b> See response to comment 6.
193	“... we request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.” Letter from Nelson Brooke, Black Warrior Riverkeeper, July 21, 2005	<b>Applicant and Corps response:</b> See response to comment 7.
194	“This dam has never made a lot of logical sense when viewed from a cost-effective standpoint, ...” Email from Bill Mitchell, August 12, 2005	<b>Applicant Response:</b> Applicant disagrees. Taking into consideration both cost and quantity, the Corps rated the Duck River reservoir project as the number one option of all the alternatives considered. <b>Corps Response:</b> Refer to Corps response to comment 17.
195	“The dam would cause the loss of several species of fish in the river, as well as downstream in the Mulberry Fork, ...” Email from Bill Mitchell, August 12, 2005	<b>Applicant Response:</b> See response to comment 18. <b>Corps Response:</b> A fisheries evaluation concluded that the Duck River possibly

Comments	Source	Answers to the Comments
		supports 33 species of fish (14 species collected and 19 species inferred to be present). There were no threatened or endangered species of fish or mussels recorded. Considering habitat requirement, 13 would not tolerate lake conditions but should remain within the area below the dam or non-impounded areas above the dam. (EA, 5.1.7, <i>Wildlife and Fisheries</i> ).
196	“The purity of the water that would be realized from this dam is questionable at best...”	Email from Bill Mitchell, August 12, 2005 <b>Applicant and Corps Response:</b> See response to comment 20.
197	“... there are better sources of water available to provide for the citizens of Cullman County and surrounding areas.”	Email from Bill Mitchell, August 12, 2005 <b>Applicant Response:</b> Applicant disagrees. Taking into consideration both cost and quantity, the Corps rated the Duck River reservoir project as the number one option of all the alternatives considered. <b>Corps Response:</b> Refer to Corps response to comment 21.
198	“... some of the prospective customers for this water are no longer viable and thus the amount of water that could be sold is less than the figures originally projected.”	Email from Bill Mitchell, August 12, 2005 <b>Applicant Response:</b> See response to comment 22. <b>Corps Response:</b> Refer to Corps response to comment 30.
199	“... the projected cost of this dam is most likely three to five times the estimate...”	Email from Bill Mitchell, August 12, 2005 <b>Applicant Response:</b> See response to comment 23. <b>Corps Response:</b> Refer to Corps response to comment 17.
200	“No one seems to know how this project will affect the water flow into the Mulberry.”	Email from Linda Stiefelmeyer, August 3, 2005 <b>Applicant Response:</b> Applicant disagrees. The original EA and supplement to the EA both address water flow. See also response to comment 5. <b>Corps Response:</b> Refer to Corps response to comment 34.
201	“My primary concern is the effects it will have on the fork of the Mulberry River.”	Email from Shannon Loeffler, August 25, 2005 <b>Applicant Response:</b> Downstream affects are thoroughly discussed in the original EA and supplement to the EA. See also response to comment 5. <b>Corps Response:</b> Refer to Corps response to comment 34.
202	“Rainwater could easily be used for drinking with no ill health effects.”	Email from Susan Glasscock Wells, August 28, 2005 <b>Applicant Response:</b> The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i> . The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was

Comments	Source	Answers to the Comments
		<p>legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 30. Also, Nashville District USACE and Lockwood Greene Technologies conducted Phase I and Phase II Water Supply Studies in 1994 and 1995. It was determined in the Phase I Study that the hydrological analysis and future demand projections would require that a new source supply a minimum of 18.0 MGD during drought conditions. Of the alternatives that were developed, the harvesting of rainwater was not considered. (Refer to EA, Section 3.0-Alternatives)</p>
203	<p>“Other countries as well as cities of Austin and San Antonio, Texas, Seattle, Washington, and water districts in the states of Maryland, Oregon, New York, and North Carolina have all explored and implemented rainwater harvesting.”</p>	<p>Email from Susan Glasscock Wells, August 28, 2005</p> <p><b>Applicant Response:</b> The original Environmental Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Comment noted. Refer to Corps response to comment 202.</p>

Comments	Source	Answers to the Comments
204 “Why is there no public meeting for the Duck River Dam?”	Email from Susan Glasscock Wells, August 28, 2005	<b>Applicant and Corps response:</b> See response to comment 7.
205 “Do basic searches for rain harvesting, rain barrels and cisterns, and sustainable development. See if we can come up with something that is less devastating to the ecosystems of Alabama for our water needs.”	Email from Susan Glasscock Wells, August 28, 2005	<b>Applicant Response:</b> Applicant has thoroughly considered all reasonable alternatives to the project. Furthermore, there is no indication whatsoever that the proposed project will have a “devastating” effect on Alabama’s ecosystems.  <b>Corps Response:</b> Refer to Corps response to comment 202.
206 “Millions of local, state and federal dollars have been spent enlisting the expert services of dozens of qualified experts in their fields to help Cullman select the most economic and environmentally beneficial solution to meet those needs.”	Letter from Donald E. Green, Mayor of Cullman, August 29, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted.
207 “This water system in non-profit. We sell the water at cost to ourselves and all of the wholesale customers.”	Letter from Donald E. Green, Mayor of Cullman, August 29, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted.
208 “Every independent system that purchases water from us has signed thirty-year contracts to pay their fair share of the cost of this project.”	Letter from Donald E. Green, Mayor of Cullman, August 29, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted.
209 “Numerous professional studies have verified that Lake Catoma is not capable of continuing to supply our needs.”	Letter from Donald E. Green, Mayor of Cullman, August 29, 2005	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Refer to Corps response to comment 24.
210 “Population of the City of Cullman, Cullman County and the water district service areas is	Letter from Donald E. Green, Mayor of Cullman, August 29,	<b>Applicant Response:</b> Applicant agrees.  <b>Corps Response:</b> Comment is noted.

Comments	Source	Answers to the Comments
<p>increasing.”</p> <p>211 “Wal-Mart’s Super Center in South Cullman opened three years ago, which has spawned tremendous growth including fast food establishments, strip shopping centers, a 10-screen movie theatre and other businesses. Similar growth is occurring along Alabama Highway 157 north of Cullman linked to the Cullman Regional Medical Center and related medical community.”</p>	<p>2005</p> <p>Letter from Donald E. Green, Mayor of Cullman, August 29, 2005</p>	<p><b>Applicant Response:</b> Applicant agrees that there is significant economic growth in Cullman county.</p> <p><b>Corps Response:</b> Comment is noted.</p>
<p>212 “Sales tax revenue is at an all time high.”</p>	<p>Letter from Donald E. Green, Mayor of Cullman, August 29, 2005</p>	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
<p>213 “Cullman has recruited two of the largest industrial projects in the Southeast in the past few years – Cullman Casting Corporation and Topre America Corporation.”</p>	<p>Letter from Donald E. Green, Mayor of Cullman, August 29, 2005</p>	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
<p>214 “Thirteen Cullman County companies now produce goods for the growing automotive industry in Alabama and the region.”</p>	<p>Letter from Donald E. Green, Mayor of Cullman, August 29, 2005</p>	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
<p>215 “In 2004, Cullman County was awarded the first Alabama Development Office Award for the most new and expanding industries in all 67 Alabama counties.”</p>	<p>Letter from Donald E. Green, Mayor of Cullman, August 29, 2005</p>	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
<p>216 “<i>Site Selection Magazine</i> ranked Cullman #3 in the Top 100 Micropolitan Areas in the United States for new and</p>	<p>Letter from Donald E. Green, Mayor of Cullman, August 29, 2005</p>	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>

Comments	Source	Answers to the Comments
	expanding industry.”	
217	“Cullman was ranked in the Top 10 Economic Development Groups in America by <i>Site Selection Magazine</i> .”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
218	“ <i>Southern Business and Development Magazine</i> ranked Cullman #2 in the Top Deals and Hot Markets among communities in the 17 Southern States in 2004.”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
219	“Capital investment by new and expending industries in Cullman County in the past decade has surpassed \$879 million and created over 7,400 announced jobs.”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
220	“Cullman has purchased 300 acres of property for new industrial parks to allow us to continue to grow.”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
221	“A new multi-million dollar recreation complex is under construction that will add to the tourism of the county.”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
222	“Residential development around scenic Smith Lake has exploded.”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 27.</p>
223	“The only limiting factor [on growth] is infrastructure, ...”	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
224	“... (i) the Corp’s regulations do not provide for or contemplate the holding of a “public meeting” (i.e., a meeting in which the Corps transmits	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 7.</p>

Comments	Source	Answers to the Comments
information to the public or engages in a question-and-answer session) in this context; ...”		
225 “... (ii) while the Corps has discretion to conduct a public hearing, a hearing in this case is not warranted, because it would not provide new or different information which would be helpful in the Corps’ decision-making process.”	Letter from William H. Satterfield, Counsel, City of Cullman, August 30, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 7.</p>
226 “With the cooperation of Holly Pond High School and community leaders we help a public meeting to address landowner questions and concerns about the project. Invitations were sent to every landowner in the impoundment area as well as adjacent owners in the area.”	Letter from Todd Hardman, Project Manager, St. John and Associates, Inc., August 31, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
227 “I encourage you to authorize this project and to dismiss the opposition received from non Cullman County residents.”	Letter from Todd Hardman, Project Manager, St. John and Associates, Inc., August 31, 2005	<p><b>Applicant Response:</b> Applicant agrees and also encourages the Corps to question the validity and motives of commentators located outside of the relevant watershed and Cullman County. However, applicant has reviewed all comments filed within the comment period.</p> <p><b>Corps Response:</b> The Corps considers all comments received irrespective of place of residence of the commenter.</p>
228 “I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.”	Letter from Elna Barnett (undated)	<p><b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.</p> <p><b>Corps Response:</b> The United States District Court for the Northern District of Alabama, in <i>American Canoe Association v. White</i>, 277 F.Supp.2d 1244 (N.D. Ala.2003) states: “Indeed, the court acknowledges that the need for an additional source of water for the District presents a real need that must be addressed, . . .”</p>
229 “I support the project and feel it is necessary to have an alternate water supply for emergency and	Letter from Herman Barnett (undated)	<p><b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 228.</p>

Comments	Source	Answers to the Comments
230	"I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Penny Naler (undated)
231	"I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Penny Naler (undated)
232	"I am totally for the new water dam in Cullman Co., Al."	Letter from William Holcomb Patty Holcomb and Terry Holcomb (undated)
233	"I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Kirk _____ (?) (undated)
234	"I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Brian Smith (undated)
235	"I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Kim Wilcutt (undated)
235	"I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Ronnie Wilcutt (undated)

Comments	Source	Answers to the Comments
236	“I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.” Letter from Jeff Nash (?) (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
237	“I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.” Letter from Tina Al-Dijaili (?) (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
238	“I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.” Letter from John Pa Pammell (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
239	“I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.” Letter from Brenda Hill (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
240	“I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.” Letter from Karen Sparks (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.

Comments	Source	Answers to the Comments
241 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Chris Wilder (undated)	Applicant Response: Applicant agrees that an alternate water supply is necessary. Corps Response: Refer to Corps response to comment 228.
242 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Wayne Wilson (undated)	Applicant Response: Applicant agrees that an alternate water supply is necessary. Corps Response: Refer to Corps response to comment 228.
243 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Millard Horton (undated)	Applicant Response: Applicant agrees that an alternate water supply is necessary. Corps Response: Refer to Corps response to comment 228.
244 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Macy Toomey (undated)	Applicant Response: Applicant agrees that an alternate water supply is necessary. Corps Response: Refer to Corps response to comment 228.
245 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Ashley K. _____ (?) (undated)	Applicant Response: Applicant agrees that an alternate water supply is necessary. Corps Response: Refer to Corps response to comment 228.
246 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to	Letter from David E. Horton (undated)	Applicant Response: Applicant agrees that an alternate water supply is necessary. Corps Response: Refer to Corps response to comment 228.

Comments	Source	Answers to the Comments
247 “I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.”	Letter from Donna Privett (undated)	<p><b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 228.</p>
248 “I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.”	Letter from Ken Cole (undated)	<p><b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 228.</p>
249 “I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.”	Letter from Greg Sparks (undated)	<p><b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 228.</p>
250 “I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations.”	Letter from Dusty _____ (?) (undated)	<p><b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 228.</p>

Comments	Source	Answers to the Comments
251 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from NaTasha Stewart (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
252 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Ruby (?) (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
253 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Glenda Cole (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
254 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Kayla Haynes (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
255 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and to maintain the quality of life we are accustomed to for future generations."	Letter from Kathy Haynes (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
256 "I support the project and feel it is necessary to have an alternate	Letter from Kay Stewart (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.

Comments	Source	Answers to the Comments
		<b>Corps Response:</b> Refer to Corps response to comment 228.
257	Letter from Dale Neely (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary. <b>Corps Response:</b> Refer to Corps response to comment 228.
258	Letter from Jen Reid (undated)	<b>Applicant Response:</b> Applicant agrees that an alternate water supply is necessary.
259	Letter from April Hall, Birmingham, September 1, 2005	<b>Applicant Response:</b> Applicant considered all reasonable alternatives to the project. Negative impacts will be mitigated. In fact, operation of the Duck River Reservoir will enhance flows during summer months and periods of drought. The Reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam. <b>Corps Response:</b> Refer to Corps response to comment 185.
260	Letter from April Hall, Birmingham Canoe Club, September 1, 2005	<b>Applicant Response:</b> Applicant considered all reasonable alternatives to the project. Negative impacts will be mitigated. In fact, operation of the Duck River Reservoir will enhance flows during summer months and periods of drought. The Reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam. <b>Corps Response:</b> Refer to Corps response to comment 117.
261	Letter from April Hall, Birmingham	<b>Applicant Response:</b> Applicant disagrees. Applicant considered all reasonable alternatives to the project. Negative impacts will be mitigated. In fact, operation of

Comments	Source	Answers to the Comments
	Canoe Club, September 1, 2005	<p>the Duck River Reservoir will enhance flows during summer months and periods of drought. The Reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 117.</p>
262	Letter from April Hall, Birmingham Canoe Club, September 1, 2005	<p><b>Applicant Response:</b> Applicant disagrees. Applicant considered all reasonable alternatives to the project. Negative impacts will be mitigated. Operation of the reservoir will, in fact, improve water flow during dry periods.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 5 and 117.</p>
263	Letter from April Hall, Birmingham Canoe Club, September 1, 2005	<p><b>Applicant Response:</b> Cullman's plan is to use both impoundments. The Duck River Reservoir project will serve as a back up supply and will help meet future needs. The treatment plant is located at Lake Catoma and costs should be lower using water at Catoma. Thus, there is no reason to believe the Duck River will become Cullman County's sole water source.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 24.</p>
264	Letter from April Hall, Birmingham Canoe Club, September 1, 2005	<p><b>Applicant Response:</b> There is no plan for using Duck River as the sole source. Cullman believes, with the help and support of ADEM and other agencies, that Lake Catoma will always be a viable source of water for the community.</p> <p><b>Corps Response:</b> Comment is noted.</p>
265	Letter from April Hall, Birmingham Canoe Club, September 1, 2005	<p><b>Applicant and Corps response:</b> See response to comment 7.</p>
266	Letter from Steve Masterson dated September 1, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>

Comments	Source	Answers to the Comments
267 “This project requires an Environmental Impact Statement and you have promised to do one, so one should be done.”	Letter from Steve Masterson dated September 1, 2005	<p><b>Applicant Response:</b> Applicant disagrees. The Corps properly concluded that no EIS is necessary.</p> <p><b>Corps Response:</b> Disagree.</p>
268 “How much of the \$4.622 million do you have left? You should let the public know what has been done with this money. An expense list showing when and how the money was spent should be available for this project.”	Letter from Steve Masterson dated September 1, 2005	<p><b>Applicant Response:</b> The \$4.622 million is controlled by the Corps of Engineers. Cullman draws funds with Corps approval as expenses are incurred. All expenditures are documented. The Corps must approve a Scope of Work or Memorandum of Understanding on every project activity before that work is approved. Mr. Masterson has been provided information on all expenditures from the Corps and the Appalachian Regional Commission and those expenditures are a matter of public record. Less than \$30,000 remains of the original \$4.622 million grant.</p> <p><b>Corps Response:</b> The Corps of Engineers Regulatory Division is evaluating the proposed action regarding issuance of a Department of the Army permit for proposed impacts to waters of the United States. The Regulatory Division has received no funds from nor paid funds to the applicant. In fact, the Regulatory Program is separately funded by Congress and as such, there is to be no cross-over of funding between the Regulatory Division and other Corps Divisions.</p>
269 “We request that the Corps deny the permit until an environmental impact statement (EIS) can be prepared and reviewed by the public.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<p><b>Applicant Response:</b> The Corps properly concluded that an EIS was unnecessary. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Comment noted.</p>
270 “We also request that the Corps hold a public hearing and a public meeting to address the concerns of the citizens of Alabama per 33 CFR 327.4(a) and 327.4(b) and 40 CFR 1506.6(c).”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney,	<b>Applicant and Corps response:</b> See response to comment 7.

Comments	Source	Answers to the Comments
271	<p>WildLaw, dated September 1, 2005</p> <p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> The Corps believes that it has sufficient data for a permit decision, and to address all issues identified by the Court.</p>
272	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> Applicant disagrees. Applicant and the Corps have acted in accordance with the requirements of the Clean Water Act.</p> <p><b>Corps Response:</b> The Corps will prepare an analysis pursuant to the 404(b)(1) Guidelines of the Clean Water Act.</p>
273	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> Applicant considered all reasonable alternatives to the project. Negative impacts will be mitigated. In fact, operation of the Duck River Reservoir will enhance flows during summer months and periods of drought. The Reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam.</p> <p><b>Corps Response:</b> Comment noted.</p>
274	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols,</p>	<p><b>Applicant Response:</b> NEPA does not require guarantees. Independent analyses by the Corps of Engineers and CH2M HILL indicate that the reservoir water quality would be sufficient for the intended use. The following excerpt from the ADEM 2004 303(d) report indicate that necessary water quality can be achieved.</p> <p><i>7.2 Watershed Protection Highlights</i></p>

Comments	Source	Answers to the Comments
	<p>Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to Corps response to comment 20.</p>

Comments	Source	Answers to the Comments
275 “...water demand is decreasing in Cullman County, ...”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant Response:</b> See response to comment 11. <b>Corps Response:</b> Refer to Corps response to comment 30.
276 “...the Duck River is a unique recreational resource that should be protected, ...”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant Response:</b> Cullman will continue to protect the Duck River as a recreational resource and will significantly mitigate any negative impact the Duck River reservoir project may have on recreation. Cullman has spent thousands of dollars cleaning up the drainage basin. ADEM and several federal agencies are a part of that effort and Cullman has been listed by ADEM as a successful model project for other communities to follow. <b>Corps Response:</b> Comment noted. Impacts to recreation will be fully considered by the Corps.
277 “... information used to support this project is more than 6 to 10 years old, ...”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant Response:</b> Applicant agrees that some of the information is that old. However, the Supplement to the EA has been prepared over the past 24 months based on the most recent data available. Applicant updated all relevant material in the supplement to the EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only. The Corps has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated. <b>Corps Response:</b> The information in the Supplemental EA was updated.
278 “... models and calculations used in the Supplement are not fully documented and justified.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and	<b>Applicant Response:</b> Applicant disagrees. The application of Bathtub in this specific case is fully documented in Ashby and Kennedy’s Technical Report EL-99-5, as well as a host of reports by W. Walker that Ms. Hall now has in her possession. <b>Corps Response:</b> The water quality evaluations in the EA and the Supplemental EA were prepared by the Corps of Engineers, Engineer Research and Development

Comments	Source	Answers to the Comments
	Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	Center (ERDC) in Vicksburg, and are sufficiently documented. Specific questions as to documentation, when asked, have been answered.
279	“In any case, information about water need is now egregiously out of date, in violation of the NEPA requirement that information analyzed by current.”	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p><b>Applicant Response:</b> Applicant disagrees. Applicant updated all relevant material in the supplement to the EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only. The Corps has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 11. The United States District Court for the Northern District of Alabama, in <i>American Canoe Association v. White</i>, 277 F.Supp.2d 1244 (N.D. Ala.2003) states: “Indeed, the court acknowledges that the need for an additional source of water for the District presents a real need that must be addressed, . . .”</p>
280	“Thus the arbitrary limitation to the headwaters basin and only twenty years render the supplemental cumulative effects analysis invalid.”	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p><b>Applicant Response:</b> Applicant disagrees. Applicant updated all relevant material in the Supplement to the EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only. The Corps has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Disagree. The EA addressed the proposed project which is located in the Duck River sub-watershed of the Mulberry Fork watershed. The Mulberry Fork watershed, along with the Sipsey Fork, Locust Fork, Upper Black Warrior river, and Lower Black Warrior River watersheds, lies within the Black Warrior River basin. The Black Warrior River basin is a component of the larger Mobile-Tombigbee basin, forming the eastern portion of the Tombigbee-Black Warrior Accounting Unit. The area of analysis in the EA consisted of the watersheds located in the upper reaches of the Black Warrior River Basin: the Mulberry Fork watershed, including the Duck River sub-watershed, and the Sipsey Fork watershed. The EA referred to this 2-watershed area as the “Upper Black Warrior headwaters basin.”</p> <p>However, based on the Court’s explicit concerns in <i>American Canoe Association v. White</i>, the area of analysis was expanded to consider potential interaction of the proposed Duck River reservoir with 2 proposed reservoir projects outside the Upper</p>

Comments	Source	Answers to the Comments	
		<p>Black Warrior headwaters basin. Specifically, the cumulative impacts analysis included consideration of potential interaction with the Tom Bevill reservoir, proposed for construction in the North River sub-watershed of the Upper Black Warrior River watershed and the BWWSB reservoir proposed for construction in the Locust Fork watershed. The Supplemental EA refers to this expanded area of analysis as the upper portion of the Black Warrior River watershed.</p> <p>The temporal limit for consideration in the Supplemental EA was the year 2025. While there is a degree of uncertainty associated with a 20-year forecast, extending the analysis beyond that period in an effort to consider additional potential cumulative impacts would be speculation rather than forecasting. (<i>Supplemental EA, Section 1.4 – Area of Analysis</i>)</p>	
281	<p>“Likewise, the Corps cannot limit analysis to hydrologically-linked water bodies if there are other impacts such as to endangered species.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> The potential for interaction with other projects is reasonably limited by the presence of existing downstream reservoirs and large hydrologic inputs. The proposed Duck River Reservoir can only have cumulative impacts to areas where it can exert an influence. Hydrologic separation prevents interaction with other reservoirs. While the existing downstream reservoir may interact with other projects farther downstream, the influence of the proposed headwaters reservoir would not extend past that larger downstream reservoir.</p>
282	<p>“However, an updated review of the potential for cumulative impacts on protected species habitat was completed for this Supplement to the EA, with consideration given to potential interaction with the Tom Bevill and BWWSB reservoirs.” Supp. EA at 4-12. No surveys or sources of such data have been provided in the Supplement.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> Surveys were not necessary, nor are they required under NEPA, to assess the potential for cumulative impacts. Existing data were reviewed and the potential for interaction impacts within the cumulative impacts analysis area were considered.</p>
283	<p>“Current and potential future recovery options should be considered by the Corps in further NEPA analysis.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration</p>	<p><b>Applicant and Corps response:</b> There are no planned recovery efforts within the identified area that would be influenced by the project. Any planned efforts are beyond the reach of impacts of the proposed project and would not be affected by the proposed project, either indirectly or cumulatively.</p>

Comments	Source	Answers to the Comments
		Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005
284	“The potential for fragmentation of aquatic habitat has yet to be assessed, although a significant increase in fragmented tributaries will occur with the construction of these dams.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005  <b>Applicant and Corps response:</b> All of the proposed dams are separated by existing reservoirs. The watersheds served by the proposed dams are not connected at present and there would be no interaction effects from and subsequent fragmentation resulting from the proposed reservoirs.
285	“Although the Supplement attempts to show how this proposed impoundment will not interact with other projects, it does not discuss how impounding yet another river in the area will affect the human environment. Loss of land, family farms and homes, recreation, and water access have not been adequately addressed in the Supplement.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005  <b>Applicant Response:</b> This comment attempts to raise questions regarding direct impacts. The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i> . The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.  <b>Corps Response:</b> Comment noted. The EA, Section 5.0-Environmental Consequences, addresses how the proposed project would affect the human environment. The Supplemental EA addresses the areas which the Court found deficient in the EA. The Corps believes the EA and Supplemental EA adequately addresses all project impacts. A separate decision document will be prepared by the Corps to support its decision regarding permit issuance.

Comments	Source	Answers to the Comments
<p>286 "... the loss of the resource of a free-flowing river is never mentioned."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> This was addressed previously as a direct impact. The original Environmental Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Refer to Corps' response to comment 285. The Supplemental EA, Section 4.5 Stream Habitat, addresses the impoundment in river miles.</p>
<p>287 "The total analysis of cumulative impacts in the EA and in the Supplement is insufficient for this project."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> Applicant disagrees. Cumulative impacts have been fully considered and were presented in the Corps' analysis. Negative impacts will be mitigated.</p> <p><b>Corps Response:</b> Disagree. The Corps believes the analysis of cumulative impacts as addressed in the EA and Supplemental EA are sufficient for a sound permit decision. Should a permit be issued, appropriate mitigation would be required to offset impacts to the aquatic environment.</p>
<p>288 "The Supplement confirms the needed 60 percent reduction in nutrient loading that was reported in the EA. However, the reductions do not seem feasible and may be underestimated."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated</p>	<p><b>Applicant Response:</b> Given the improvement already seen in the Duck River watershed compared to the 1999 baseline conditions, as evidenced by the following excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and</i></p>

Comments	Source	Answers to the Comments
	September 1, 2005	<p><i>pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Disagree. Refer to Corps response to comment 20.</p>
289	<p>“Two tributaries of the Duck River watershed are water-quality impaired due to excess nutrients from agricultural land uses. Even though these segments were removed from the Section 303(d) list after TMDLs were prepared, the tributaries are not meeting the criteria for their designated uses and are therefore still considered to be impaired. These water quality impairments, in addition to</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p>Given the improvement already seen in the Duck River watershed compared to the 1999 baseline conditions, as evidenced by the following excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as</i></p>

Comments	Source	Answers to the Comments
<p>existing poor water quality conditions in the mainstream, could lead to nutrient enrichment in the proposed reservoir, which will prevent a use classification upgrade to Public Water Supply and will create problems for water treatment.”</p>		<p><i>non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Comment noted.</p>
<p>290 “The analytical methods used in the Supplement are not representative of measured conditions in the river, use liberal assumptions, are not thoroughly documented and discussed, and use generalized data that is not justified.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant response:</b> These are vague accusations that are not substantiated by a reasonable review of the analyses. Data collected from a year-long study of the river were used, conservative assumptions were used, and the analyses are justified.</p> <p><b>Corps Response:</b> Data collected from a year-long study of the river were used, conservative assumptions were used, and the analyses are justified.</p>
<p>291 “It is troubling that the recent data collected by the SWCD personnel are not reliable since they will be performing the sampling required in the watershed plan for the reservoir.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney,</p>	<p><b>Applicant Response:</b> The techniques used to collect the data by the SWCD were not intended or required to comply with ADEM standards. This data were collected to identify and track trends through time and identify any immediate problem areas that needed to be addressed. Upon issuance of the permit, collection of water quality data will be conducted in accordance with all ADEM regulations and standards.</p> <p><b>Corps Response:</b> Should a permit be issued, it would require a monitoring plan to</p>

Comments	Source	Answers to the Comments
	WildLaw, dated September 1, 2005	be devised to meet the requirements of the state water quality conditions. Also, the permit would require implementation and enforcement of a Watershed Management Plan. This plan would include water quality testing program be conducted for water in the proposed impoundment and its major tributaries. Monitoring would begin before impoundment of the reservoir in order to establish baseline conditions. Information from this program would be used to test the effect of BMPs and isolate any problem areas.
292	“... the ecoregional references used to determine the acceptable pollutant loads of the proposed reservoir have not been referenced in the Supplement. If acceptable estimations of regionally acceptable nutrient limits are not available, ADEM and/or EPA ecoregional reference data should be used.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005  <b>Applicant and Corps response:</b> The objective of the Supplement analysis was to determine whether nutrient reductions of 60% can be achieved rather than determining the acceptable pollutant loads. The acceptable pollutant load of the proposed reservoir was determined in the EA. The Technical Report EL-99-5 (Ashby and Kennedy, 1999), a part of EA, contains a detailed discussion for acceptable phosphorus loading to the proposed reservoir. This phosphorus loading is based on the results from regional reservoirs (i.e., based on ecoregional approach) and a trophic response (chlorophyll level) lower than seen in most of these systems.
293	“BMPs are voluntary measures which may require the land owner to share the costs. There are no regulatory or enforcement mechanisms associated with the proposed BMPs.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005  <b>Applicant Response:</b> ADEM has enforcement authority for BMP implementation, as specified in the EA Supplement. See also responses to comments 12 and 288.  <b>Corps Response:</b> Refer to Corps response to comments 49, 50 and 51.
294	“Water quality improvements cannot be guaranteed without the assurance that BMPs will not only be carried out, but also properly maintained for the life of the reservoir. There is no evidence that funding for such a long-term undertaking will be available.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005  <b>Applicant response:</b> NEPA does not require a guarantee. Given the improvement already seen in the Duck River watershed compared to the 1999 baseline conditions, as evidenced by the following excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met and maintained.  <i>7.2 Watershed Protection Highlights</i>  <i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to</i>

Comments	Source	Answers to the Comments
		<p><i>Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to Corps response to comments 50 and 51.</p>
295	<p>“According to the Supplement, the CMWD will have the authority to buy out landowners who are not complying with the needed BMPs.” ... “This is not a feasible nor cost-effective method for assuring compliance with the watershed plan.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p><b>Applicant response:</b> Based on the results to date, as evidenced in the excerpt from the Alabama 2004 303(d) report, any use of “buy out” authority would most likely be limited. BMPs are being implemented throughout the watershed with good results and there is no indication that the trend for BMP implementation will not continue, as evidenced by the report.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as</i></p>

Comments	Source	Answers to the Comments
		<p><i>non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Comment is noted. Also, refer to Corps response to comment 50 and 51.</p>
296	<p>“The Supplement refers to BMPs that have already been implemented in the watershed by the Soil and Water Conservation District (SWCD). However there is no information provided to indicate if these BMPs are being implemented in the critical areas of nutrient loading and whether these BMPs are resulting in the promised water quality improvements.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p><b>Applicant Response:</b> Appendix G provided evidence that BMPs were being implemented. While not a component of the EA Supplement as a result of timing of release, the following excerpt from the ADEM 2004 303(d) report clearly indicates that BMP implementation is resulting in water quality improvement.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling,</i></p>

Comments	Source	Answers to the Comments
		<p><i>storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
297	<p>"The Supplement claims that there are certain areas in the watershed that contribute most of the nutrient loading (VSAs). It seems important for BMPs to be targeted in these areas first. Evidence should be provided that indicates if water quality is improving as a result of these BMPs. The water quality data collected by the SWCD, and dismissed in the Supplement, indicate increasing nutrient concentrations compared to earlier data from ADEM and TTL."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p><b>Applicant Response:</b> Given the improvement already seen in the Duck River watershed compared to the 1999 baseline conditions, as evidenced by the following excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The</i></p>

Comments	Source	Answers to the Comments
		<p><i>BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to Corps response to comment 291.</p>
298	<p>“The Supplement and EA entirely ignore the importance of sedimentation in the proposed reservoir. Recent observations in the Duck River indicate that the riverbed already contains excess sediment.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p><b>Applicant and Corps response:</b> BMPs and other components of the watershed management plan will reduce the sediment load on Duck River. While all streams function primarily to move sediment from a physical standpoint, the Duck River Reservoir will not be compromised by sediment loading.</p>
299	<p>“While excessive sediment is bad for habitat and aquatic life, insufficient sediment can reduce habitat, such as sand bars. Sediment is also a necessary vehicle for transport of valuable nutrients needed by fish and wildlife. If these materials are retained behind a dam, the aquatic habitat downstream may be adversely impacted.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p><b>Applicant response:</b> Downstream of the proposed dam, stream quality is likely to be improved from the reduction in sediment loading. With the implementation of BMPs and the watershed management plan, this improvement would likely be seen under the no action alternative as well as the proposed action.</p> <p><b>Corps Response:</b> A side effect of a dam is the reduction of downstream sediments.</p>
300	<p>“Modeling was recently performed by the Corps to estimate historical flows in the Duck River at the dam site. The modeling results were not included in the Supplement. In addition, calibration of the</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols,</p> <p><b>Applicant and Corps response:</b> The intent of the hydraulic modeling performed by the Corps was to develop the rating curve at the USGS dam site using which the USGS observed stage data can be converted into their corresponding flow. Figure 3 of the Supplement provides the modeling results. The detailed hydraulic modeling has not been included in the Supplement as it is not the focus of the Supplement. The HEC-RAS model contains 100 profiles ranging from discharges 1.0 cfs to 15,000 cfs. For calibration please refer to responses to comments 57, 58, and 59.</p>

Comments	Source	Answers to the Comments																				
<p>model with actual measurements of flows was not discussed.”</p>	<p>Staff Attorney, WildLaw, dated September 1, 2005</p>	<p>The rating curve at the USGS gage site developed based on the HEC-RAS modeling is given below:</p> <p style="text-align: center;">Cullman - Rating Curve for Duck River</p> <table border="1"> <caption>Estimated data points from the Rating Curve</caption> <thead> <tr> <th>Q Total (cfs)</th> <th>W.S. Elev (ft)</th> </tr> </thead> <tbody> <tr><td>0</td><td>592</td></tr> <tr><td>2000</td><td>596</td></tr> <tr><td>4000</td><td>598</td></tr> <tr><td>6000</td><td>599.5</td></tr> <tr><td>8000</td><td>601</td></tr> <tr><td>10000</td><td>602.5</td></tr> <tr><td>12000</td><td>604</td></tr> <tr><td>14000</td><td>605.5</td></tr> <tr><td>16000</td><td>606</td></tr> </tbody> </table>	Q Total (cfs)	W.S. Elev (ft)	0	592	2000	596	4000	598	6000	599.5	8000	601	10000	602.5	12000	604	14000	605.5	16000	606
Q Total (cfs)	W.S. Elev (ft)																					
0	592																					
2000	596																					
4000	598																					
6000	599.5																					
8000	601																					
10000	602.5																					
12000	604																					
14000	605.5																					
16000	606																					
<p>301 “The significance of low-flow releases from the dam have been exaggerated in the Supplement. The proposed flows from the dam in the low flow summer months are less than average flow conditions in those months. Proposed releases from the dam in August, September, and October are 6.4cfs, 6.5 cfs, and 7.6 cfs which are less than the average monthly river flows of 13.0 cfs, 10.4 cfs, and 12.8 cfs (1999 EA). So in fact, the downstream flows will actually be lower in normal and high flow conditions since less water</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> We disagree with this position. While it is true that dry period releases will be less than average monthly flows at many times, flows downstream of the dam will be higher during critical drought periods. It is these critical drought periods that have the greatest potential to impact aquatic life forms and by increasing flows at those times, the potential to impact aquatic life forms is reduced.</p> <p>The proposed releases are in excess of what the Alabama Department of Conservation and Natural Resources determined would be necessary to maintain aquatic life and functions. See comments 92-95 from the Alabama Department of Conservation and Natural Resources.</p>																				

Comments	Source	Answers to the Comments
	will be released into the river from the dam.”	
302	“... the quality of drought releases as compared to estimated low-flows (7Q10) in the river has not been discussed.”	<p><b>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</b></p> <p><b>Applicant and Corps response:</b> Implicit in the conclusion that there will be no adverse impacts to water quality from the project is that the low flow releases will not result in reduced water quality, otherwise a conclusion of reduced water quality during low flows would have been made.</p>
303	“While the proposed flows are greater than the 7Q10 flows, there is no evidence that such small increases in flows will be meaningful to water quality or aquatic habitat.”	<p><b>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</b></p> <p><b>Applicant Response:</b> Flows downstream of the dam will be higher during critical drought periods. It is these critical drought periods that have the greatest potential to impact aquatic life forms and by increasing flows at those times, the potential to impact aquatic life forms is reduced.</p> <p>We concur with the position of the Alabama Department of Conservation and Natural Resources, which disagrees with this position. See comments 92-95 regarding flow rates during the typically dry period of the year.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 91.</p>
304	“Peak and variable flows are essential in a river system for life cycle cues, removal of sediment and pollutants, and access to flood plain habitat. The effects of peak flow reduction should be thoroughly considered by the Corps in the EIS or revised EA.”	<p><b>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</b></p> <p><b>Applicant and Corps response:</b> The reduction in peak flow (approximate 5% reduction) is minimal and within normal variation in these flows. This reduction would be negligible on long-term river dynamics and needs no further consideration.</p>
305	“The information used in the Corps’ original permitting decision is now several years old, with some information dating back more than ten years. Outdated information such as population water usage, and	<p><b>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols,</b></p> <p><b>Applicant Response:</b> All relevant information was updated in the supplement to the EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only. The Corps has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p>

Comments	Source	Answers to the Comments
	Staff Attorney, WildLaw, dated September 1, 2005	<b>Corps Response:</b> Refer to Corps response to comments 11, 17, 30 and others.
306	“In the 1999 EA, the projected costs for the proposed Duck River dam were \$53,428,800. (EA at 3-2.) Yet it is believed that Cullman has already spent \$5,793,753 and the permit has yet to be issued.” Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant Response:</b> Projected costs have proven to be relatively accurate. This stands in marked contrast to some criticisms that Cullman has not be forthcoming enough as to the costs associated with the Duck River reservoir project. <b>Corps Response:</b> Comment is noted.
307	“Citizens of Cullman County will be required to pay for any portion of project costs not covered by federal funds. It is not clear in the environmental documents what implications these costs will have in the face of a projected rate increase of 10-15%, on top of a 5% increase.” Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant Response:</b> Any costs above and beyond the total amount of grant funds will be passed on to the rate payers. Those projections are included in the original EA. <b>Corps Response:</b> Refer to applicant’s response.
308	“In the time since the original EA was issued, Lake Catoma has been enlarged and now has 16% (or 2 million gallons per day – MGD) more capacity. The availability of additional water supply must be considered by the Corps in their determination of water needs.” Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant response:</b> See response to comment 14. <b>Corps Response:</b> Refer to Corps response to comments 14, 24 and 28.
309	“The Corps must reinitiate consultation with the U.S. Fish and Wildlife Service to assure there will be no jeopardy to any threatened or endangered Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama	<b>Applicant Response:</b> The Corps has fully complied with the requirements of NEPA. The Fish and Wildlife Service provided the Corps with comments on the Draft EA Supplement on May 3, 2004. There is no requirement for reinitiation. <b>Corps Response:</b> Refer to Corps response to comment 18. Additionally, the

Comments	Source	Answers to the Comments
species due to the project. 16 U.S.C. 1536(a)(2).”	Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	Service was provided with a copy of the Supplemental EA and provided no additional comments.
310 “The original EA does not meet the required NEPA standard for considering the impacts, direct, indirect or cumulative of a range of alternatives, including the specifically required “no action” alternative.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<p><b>Applicant Response:</b> The Corps has fully complied with the requirements of NEPA to include full analysis of direct, indirect, and cumulative effects. It is difficult to respond to this generic complaint since commenter does not identify specific information overlooked by the Corps.</p> <p><b>Corps Response:</b> The Corps believes the EA and Supplemental EA adequately addresses the impacts of the project.</p>
311 “A list of alternatives were presented in the EA, but were targeted only to sources able to supply large quantities of water. A reasonable range of alternatives, including smaller source, must be presented in the Corps’ environmental analysis.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<p><b>Applicant response:</b> All reasonable alternatives have been fully considered and were presented in the Corps’ analysis. These include simply enlarging existing reservoirs, tapping existing reservoirs, and other alternatives—all of which were fully examined and, for a variety of reasons, rejected after consideration. It is simply incorrect to state that “a reasonable range of alternatives, including smaller sources” were not considered.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 17 and 185.</p>
312 “The reservoir is proposed only as a back-up or emergency supply. The proposed reservoir will provide much greater water supply than is needed for a back-up or emergency supply. A smaller supply of water would sustain Cullman’s needs for the next several years. Smaller supplies through other sources have never been seriously considered.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<p><b>Applicant Response:</b> A smaller water supply would be inadequate to meet long-term growth projections. See also response to comment 27.</p> <p><b>Corps Response:</b> The Phase and Phase II studies determined that a water source capable of producing 18 MGD would be required to meet water demand.</p>
313 “An off-line pumped storage reservoir may be able to fulfill	Letter from April Hall, P.E.,	<b>Applicant and Corps response:</b> Storage alternatives were deemed unrealistic by the Corps and would be inadequate to meet long-term growth projections.

Comments	Source	Answers to the Comments
<p>the water needs of Cullman without creating the extensive damage from a new dam on the mainstream of a river and large costs to current water users.”</p>	<p>Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant response:</b> Applicant agrees that an emergency supply is a reasonable request. The city of Cullman has a hazmat team and a plan in place to address hazardous spills. The City works in conjunction with EMA.</p> <p><b>Corps Response:</b> Comment noted.</p>
<p>314 “While an emergency supply of water may be a reasonable request, no efforts have been made to minimize the risk of potential spills. There have been no studies on methods that may prevent hazardous spills on Highway 157, which crosses Lake Catoma.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> The relocation of the water intake upstream would dramatically reduce available water. The intake is currently placed at the deepest end of the lake to produce the most yield.</p>
<p>315 “The relocation of the water intake upstream of the highway would also be logical to consider.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> The city of Cullman has a hazmat team and a plan in place to address hazardous spills. The City works in conjunction with the Emergency Management Agency (“EMA”).</p> <p><b>Corps Response:</b> Refer to applicant’s response.</p>
<p>316 “In addition if a spill occurs in Lake Catoma, the water treatment plant may already be contaminated before an alternate supply is engaged. Analysis should be performed to ensure that the treatment plant can halt withdrawals from Lake Catoma in a timely manner to prevent intake of potential contaminants.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> The city of Cullman has a hazmat team and a plan in place to address hazardous spills. The City works in conjunction with the Emergency Management Agency (“EMA”).</p> <p><b>Corps Response:</b> Refer to applicant’s response.</p>

Comments	Source	Answers to the Comments
<p>317 “Typically, drought conditions in Alabama are short in duration. Therefore, an alternate water supply to provide additional water during this time should be adequate to address drought conditions and the applicant’s concerns. The capacity of the proposed reservoir is 8 billion gallons, which would provide 32 MGD for 250 days. This is in addition to the water available from Lake Catoma, which can provide 25 MGD of water for 138 days in drought conditions (Lake Catoma Reservoir Study). Clearly, a smaller supply of water will be sufficient to provide Cullman with “additional” water during times of emergency or drought for the foreseeable future.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> The reservoir is intended to provide adequate water supply for conditions approaching or exceeding a “period of record drought,” not “typical drought conditions.”</p>
<p>318 “A copy of the American Rivers publication Beyond Dams: Options and Alternatives has been included in these comments. This publication includes several innovative ideas for water supply projects that are less damaging to the environment than this proposed dam.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> All reasonable alternatives have been fully considered and were presented in the Corps’ analysis. A wide variety of alternatives were considered and rejected in favor of the Duck River reservoir project.</p> <p><b>Corps Response:</b> Comment noted. The EA, Section 3.0-Alternatives, discussed in full the 20 possible alternatives. Many of these were eliminated because of cost. The Duck River (725 Alternative) was considered to be the least damaging practicable alternative to meet the project stated purpose and need.</p>
<p>319 “Water conservation must be adequately implemented in the area before a new water supply is considered.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and</p>	<p><b>Applicant Response:</b> All reasonable alternatives have been fully considered, and water conservation measures underlie all serious alternatives as an important component of each. Nevertheless, water conservation alone will not meet the applicant’s need. Applicant continues to welcome, however, any specific suggestions for water conservation measures.</p>

Comments	Source	Answers to the Comments
<p>320</p> <p>“Regardless of the sufficiency of the information when the EA was originally released, it is now grievously out of date. For example, the estimated population data for the Water District is ten years old. (EA at 1-2).”</p>	<p>Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p> <p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Corps Response:</b> Refer to applicant’s response.</p> <p><b>Applicant Response:</b> The EA is not “out-of-date.” All relevant information was updated in the supplement to the EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only. The Corps has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated. In particular, applicant believes estimated population figures are, given, the lifespan of the project, still relevant.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 11, 17, 30 and others herein.</p> <p><b>Applicant Response:</b> NEPA only requires analysis of those aspects of a project relevant to making the decision. As was discussed in the original EA, potential protected species impacts were comparable among the alternatives given consideration and would not distinguish among them. As only the proposed action was carried forward, the impacts of the proposed action on protected species (none) were compared to those of the no action alternative (also none).</p> <p>The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 309.</p>
<p>321</p> <p>“Neither the EA or supplement describes impacts to protected species from other alternatives, part of the alternatives analysis required ...”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> NEPA only requires analysis of those aspects of a project relevant to making the decision. As was discussed in the original EA, potential protected species impacts were comparable among the alternatives given consideration and would not distinguish among them. As only the proposed action was carried forward, the impacts of the proposed action on protected species (none) were compared to those of the no action alternative (also none).</p> <p>The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 309.</p>

Comments	Source	Answers to the Comments
<p>322 "... regardless of whether other projects will have greater impacts, the cumulative impacts must be analyzed for this project and its alternatives, which also explained above, has not been done."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> As only the proposed action was considered, as justified in the EA, no other alternatives need be considered for cumulative impacts. CEQ encourages screening alternatives and limiting the analysis to those factors relevant to the decision. NEPA does not require full consideration of all originally considered alternatives, only those carried forward in the EA (the proposed action in this case).</p> <p><b>Corps Response:</b> Comment noted.</p>
<p>323 "... City of Cullman data reveals that water demand for the District remained steady or even dropped during the last five years."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to Comment 11.</p>
<p>324 "According to recent articles published in the Cullman Times as well as the audited financial statements of the Cullman Utilities board for fiscal years 2003 and 2004, water demand has been decreasing in Cullman County."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 11.</p>
<p>325 "The 2005 water demand predicted in the 1999 EA was 25 MGD. According to the financial statements and water usage information from the Cullman Utilities Board, peak water demand in 2003 and 2004 was 17.8 MGD and 13.7 MGD respectively. Water usage data</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated</p>	<p><b>Applicant and Corps response:</b> See response to comment 24.</p>

Comments	Source	Answers to the Comments
for 2005 provided by the Utilities Board indicates that year to date peak demand was 16.1 MGD.”	September 1, 2005	
326 “The VAW Water Authority is now supplementing its water supply elsewhere and the City of Hanceville water system has completely withdrawn its use of the Cullman system.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant and Corps response:</b> See response to comment 11.
327 “... several industrial water users are no longer using water from Cullman, including VF Corporation, Americold, and the Greif Brothers Container Corporation. The numbers of active poultry operations are also decreasing, according to Alabama agricultural data.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant Response:</b> Those 3 industrial companies named by commenter have closed since 2001. However, the Alabama Development Office shows 21 new industries have announced in Cullman County since 2001. <b>Corps Response:</b> Refer to applicant’s response.
328 “... the EA makes great claims about good intentions for protecting water quality during construction, the powers of the future watershed management authority, and the Watershed Management Plan. But there must be <i>evidence</i> that they will in fact be enforced. Such evidence should include the source of funding for implementation of the Watershed Management Plan.”	Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005	<b>Applicant Response:</b> By signing the permit, applicant will commit to meeting its terms and conditions. Measures to meet these terms and conditions, such as the Watershed Management Plan, will be adequately funded. Applicant has no interest in committing itself legally to a course of action that it cannot complete. <b>Corps Response:</b> Refer to Corps response to 49 and 50.
329 “Clearly a significant impact to the environment will occur if	Letter from April Hall, P.E.,	<b>Applicant Response:</b> The Corps properly concluded that an EIS was unnecessary. Applicant updated all relevant material in the supplement to the EA. The Court’s

Comments	Source	Answers to the Comments
<p>this project is permitted. An EIS is needed to further identify the magnitude of these impacts, and the reasonable alternatives and mitigation measures to avoid or reduce these significant impacts.”</p>	<p>Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p>opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only. The Corps has updated those portions of the original EA that the Court identified as insufficient. Based on the updated material the Corps maintains its previous opinion that an EIS is not necessary. Commenter has not come forward with specific information that would suggest additional information should be updated. Negative impacts will be mitigated.</p> <p><b>Corps Response:</b> Disagree.</p>
<p>330 “A Public Hearing Should Be Scheduled”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 7.</p>
<p>331 “... the Corps failed to notify interested parties about the new release of the supplemental EA.”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> On June 29, 2005 the Corps of Engineers placed the Draft EA Supplement on public notice for 45 days. The Corps took the unusual step of placing the Draft EA Supplement on its website highlighted as a “special project.” Copies were made available at the Cullman Power Board, the Cullman City Hall, the Cullman Public Library, and the Birmingham Public Library. NEPA and the APA do not require any further notice.</p>
<p>332 “The adjacent landowners who stand to lose their property depending on the outcome of the Corps’ decision were not contacted either...”</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> On June 29, 2005 the Corps of Engineers placed the Draft EA Supplement on public notice for 45 days. The Corps took the unusual step of placing the Draft EA Supplement on its website highlighted as a “special project.” Copies were made available at the Cullman Power Board, the Cullman City Hall, the Cullman Public Library, and the Birmingham Public Library. NEPA and the APA do not require any further notice.</p>

Comments	Source	Answers to the Comments
<p>333 "The public should be notified of the new information available because they have a right to be made aware of all of the information to be used for making a final decision, and to comment on all of the information."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> On June 29, 2005 the Corps of Engineers placed the Draft EA Supplement on public notice for 45 days. The Corps took the unusual step of placing the Draft EA Supplement on its website highlighted as a "special project." Copies were made available at the Cullman Power Board, the Cullman City Hall, the Cullman Public Library, and the Birmingham Public Library. NEPA and the APA do not require any further notice.</p>
<p>334 "... this permit should be not issued because the application is fraudulent. Although both the EA and the supplemental EA assert that permit applications were submitted by the Cullman Morgan Water District, a permit cannot be issued to a defunct corporation."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> The Cullman Morgan Water District is incorporated and the incorporation papers are on file at the Cullman County Courthouse. All permit applications were properly submitted in accordance with applicable rules and regulations.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
<p>335 "Although the CMWD has expressed opinions to the media and elected officials, no meetings or other operations have taken place in several years. There is no available information about the selection of a board of directors. Thus, pursuant to Alabama law, the corporation is now defunct and must dissolve."</p>	<p>Letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p><b>Applicant Response:</b> See response to comment 334.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
<p>336 "...the Corps has provided very little information about the values used to determine the desired trophic level of the reservoir, the variables used in the model such as interior loading, and model results. The results table included in</p>	<p>Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement,</p>	<p><b>Applicant and Corps response:</b> The original report on the Water Quality Assessment for the Proposed Water Supply Reservoir Duck River Cullman, AL was prepared by Steven Ashby and Robert Kennedy and included in the original environmental assessment as Appendix F. Information in this document related to trophic status was used for the re-evaluation conducted for and summarized in the supplement to the EA. In addition, the modeling results are provided in Appendix B of the supplement.</p>

Comments	Source	Answers to the Comments
Appendix B does not match the data provided in the explanation of the variables.”	September 1, 2005	
337 “Table 1 in the Supplement shows the revised nutrient concentrations that were used in the most recent BATHTUB model. This data conflicts with the data shown on page 7 of Appendix B, which indicates a total phosphorous (TP) concentration of 0.07 mg/l.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> The TM provides the value of 0.7 mg/L and then goes on to explain why other values were considered more appropriate to match observed data. The more appropriate values were used in the model.
338 “...the loading rate was not calculated based on the size of the watershed and is not representative of the TP loading from the entire watershed.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> The loading rate is based on observed flow and concentration. Loading rates were on a per/acre basis, which does account for watershed size.
339 “The source and date of the land use data is not provided in the document. The use of land use data in the BATHTUB model is not described in the Supplement or EA.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> See response to comment 68.
340 “It is not clear if the recent version of BATHTUB used the same reservoir data or if new data from these (or other) reservoirs were used.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> See response to comments 74 and 75.

Comments	Source	Answers to the Comments
341 "It is not clear which category animal feeding operations (AFOs) were placed. If they were considered to be pasture, the Corps should provide evidence that AFOs generate similar nutrient loads to those of pasture land uses."	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	Applicant and Corps response: AFOs were treated as AFOs from the standpoint of nutrient export. AFOs were not treated as pasture and no effort was made to imply that there was any similarity in nutrient export potential from AFOs and pasture.
342 "The Supplement defines the VSA as a 30-meter area around the stream network. This 30-meter area is not justified sufficiently. The areas defined as VSAs for the current stream network would change dramatically with the construction of a reservoir."	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	Applicant and Corps response: Please see response to comment 69.
343 "The Corps should require soil testing in this watershed to more accurately determine nutrient loading and the potential effectiveness of BMPs or use existing soil test data."	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	Applicant and Corps response: As was stated in the TM, soil testing was done. The following quote from Appendix B TM 3 demonstrates this: "The management plans written since January 2002 are based on soil tests and phosphorus limitations. The P Index is used to determine the extent to which phosphorus leaches into the streams, and the plans incorporate this information. The index takes into account soil type, slope, distance to streams, and management practices."
344 "The land use method and the VSA method are contradictory for determining nutrient loads."	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	Applicant and Corps response: The approaches are different and expected to produce somewhat differing (but similar) results. Arriving at roughly the same answer from different directions increases our confidence in the result. It was acknowledged that the different estimation methods would produce different results. The method that was considered most accurate in portraying conditions in the Duck River watershed was selected for analysis.
345 "... it is still not clear if the Corps has sufficiently determined the loads generated	Attachment to Comments from ARA, Wildlaw, et al,	Applicant Response: Independent analyses by the Corps of Engineers and CH2M HILL indicate that the reservoir water quality would be sufficient for the intended

Comments	Source	Answers to the Comments
<p>by AFOs or the key areas to be targeted for BMPs.”</p>	<p>Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005</p>	<p>use. The analyses were based on sufficient data, and evidence from implementation of BMPs in the past years supports the conclusions reached from modeling. The following excerpt from the ADEM 2004 303(d) report indicate that necessary water quality can be achieved.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This WVA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to Supplemental EA, Section 2.3-Potential for Comprehensive Watershed Management to Achieve Required Phosphorus Reductions and Desirable Trophic Status, which states that existing data include estimates of nutrients generated by AFOs, based on Census of Agriculture data, and information on soil erosion rates and associated nutrient export from various land use types. Also, refer to the EA, Section 9.4.1-Water Quality Monitoring, which</p>

Comments	Source	Answers to the Comments
		states that monitoring would begin before impoundment of the reservoir in order to establish baseline conditions. Information from this program would be used to test the effect of BMPs and isolate any problem areas.
346 “The assumption that one rate can be applied for all soil types and topography in the watershed is not acceptable.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> A single rate of export was not applied for the entire watershed (see Appendix B of the supplement, Table 10 of TM No. 3) to estimate total pollutant loads. However, a single export coefficient value was used as a consistency check on the lower limit of total phosphorus runoff as explained on Page 2-8.
347 “... pasture and cultivated lands are combined to determine a load which is then compared to literature values ONLY for pasture.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> That is correct. The comparison to pasture is more conservative than a comparison to cultivated land to determine the amount of phosphorus that must be removed. Typical row crop operations have a higher phosphorus uptake than pasture grasses and would have less available phosphorus for transport off site.
348 “Site specific data is needed to determine the actual levels of erosion rates occurring in the watershed as well as the reasonably expected reductions in loads.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> NEPA does not require this level of detail. A conservative estimate based on literature values was used.
349 “The nutrient loading associated with stream bank erosion should be ignored without further evidence that these conditions are actually occurring in the watershed.”	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement,	<b>Applicant and Corps response:</b> This would ignore what is occurring in the watershed. The developed watershed management plan has already identified and documented the occurrence of bank erosion problems.

Comments	Source	Answers to the Comments
<p>350 "It is clear that a significant reduction in pollutants will be needed for the river and proposed reservoir to meet water quality standards. However, it is not clear that an aggressive watershed approach to reduce pollutants using BMPs will be successful."</p>	<p>September 1, 2005 Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005</p>	<p><b>Applicant response:</b> Given the improvement already seen in the Duck River watershed compared to the 1999 baseline conditions, as evidenced by the following excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Should a permit be issued, it would have special conditions that would require the implementation and enforcement of all BMPs which were designed to insure that there would be 60-percent reduction in nutrient loading within the project area, i.e. waters going into the proposed reservoir. Also, the permit would require compensation for impacts to upland habitat surrounding the</p>

Comments	Source	Answers to the Comments
<p>351</p> <p>“The supplement states on page 2-13 that the current TP load of 0.24 lbs/acre/yr (5500 lbs/23282 ac) needs to be reduced to loads associated with woodlands, which is 0.1 lbs/acre/yr. This essentially means all man-made influences on water quality must be removed from the watershed in order to meet water quality standards. This seems like a substantial undertaking, which cannot be achieved using only voluntary measures.”</p>	<p>Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005</p>	<p>proposed project. These areas would be placed under a Restrictive Covenant and managed for old growth forest and would serve as a vegetated buffer for the reservoir. These buffer areas would help maintain water quality within the reservoir are project area.</p> <p><b>Applicant and Corps response:</b> ERDC does not disagree with this comment – it will indeed be a major undertaking. There is, however, no indication that the reductions cannot be achieved. See also responses to comments 12, 49, 50, and 288.</p>
<p>352</p> <p>“It is not clear why the TTL water quality data were manipulated to such a large degree. The mean concentrations from the overall set of TTL data were revised based on concentrations from just three of TTL’s eleven sites were used to determine concentrations in Table 2. Other sample sites are located within the boundaries of the proposed reservoir. The elimination of data from these sites should be explained.”</p>	<p>Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005</p>	<p><b>Applicant and Corps response:</b> The sites were selected to make the analysis as accurate as possible a representation of what would influence the water quality in the proposed reservoir. Site selection was done without consideration of the specific data collected at each site. The justification for the sites selected is clearly stated in TM3:</p> <p><i>Some TTL sites were located on other tributaries of Duck Creek and some were located far from the dam site upstream of Duck Creek. The TMDL report (ADEM, 2002) indicates that the northern part of the Duck Creek watershed contains several significant point sources (Dunn Farm, Berry Rosco Farm, Fairview School, etc.). The pollutant load delivered by these point sources and other nonpoint sources will be subject to several attenuation mechanisms through natural processes such as adsorption, settling, transformation, and plant uptake, etc., while traveling to the dam site. Therefore, including water quality data for sites that are far from the dam site would be inappropriate. For this reason, only water quality data for sites that are located on Duck Creek and near the dam site are considered. These sites are Duck River at Dam Site, Duck River at County Road 1651, and Duck River at County Road 1669. Table 2 presents the statistics for the combined water quality data for these three sites.</i></p>

Comments	Source	Answers to the Comments
<p>353</p> <p>"To further manipulate the data, the sample collected near the dam site during a high flow event was eliminated from the data set. The removal of this data point, and the continued reduction in representative concentrations, is not warranted."</p>	<p>Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005</p>	<p><b>Applicant and Corps response:</b> This comment is incorrect. The "sample collected near the dam site during a high flow event" was not eliminated from the data set. Because the sampling conducted was biased, an approved procedure was used to correct the bias to be more representative of the watershed. This was clearly explained in the document:</p> <p><i>It is noteworthy that the same data yield two different TP concentrations based on the method of analysis but very similar results for TN. The first method is a purely statistical procedure in which discharge of the sampling event was not considered in calculating the mean concentrations of TP and TN. The second method (Vollenweider, 1970) takes the discharge of the sampling event into consideration. It can be concluded that the first method is biased depending on the types and numbers of events sampled. This method will give a representative average concentration only when many events are sampled. If only large events are sampled with few low flow events, the average concentration will be higher because it does not represent low flow events, which occur frequently and have lower pollutant concentrations. Figure 3 shows that the large flow events are less frequent and are the periods when most of the pollutant load is removed from the watershed along with the generated runoff. Therefore, to calculate a representative average concentration of a pollutant, it is necessary to consider both the magnitude and the frequency of runoff-producing events in a typical year. Using the Vollenweider method (1970) the pollutant loads generated by high flow events are calculated and then back-converted into concentrations using the average flow. When limited sampling data are available, this method is considered as a more reliable procedure.</i></p> <p><b>Applicant and Corps response:</b> The comment is incorrect and indicates his/her lack of knowledge of both calculation of phosphorus loading and issue of its being representative. The calculation of phosphorus loading is based on most commonly used and well documented technique suggested by Vollenweider (1970, 1975, and 1976). Regarding the issue of it being representative, the commenter should read the detailed statistical discussion provided in TM-3 of the Supplement to choose the most representative phosphorus loading. The commenter is also suggested to read the response to comment 353.</p> <p>References:</p> <ol style="list-style-type: none"> <li>Vollenweider, R. A. 1970. Scientific fundamentals of the eutrophication of lakes and flowing waters with particular reference to nitrogen and phosphorus as factors in eutrophication, in Clark, J. w., Viessman, Jr., and hammer, M. J., 1977. Water Supply and Pollution Control, IEP – a Dun-Donnelley Publisher, New York.</li> <li>Vollenweider, R. A. 1975. Input-Output Models with Special References to the Phosphorus Loading Concept in Limnology. Schweiz. Z. Hydrol. 37:53-83.</li> </ol>
<p>354</p> <p>"The loadings were calculated by using the mean concentration at each sample location, the modeled flow, and the area of the reservoir. This method does not result in loadings that would be representative of the watershed area, since only the area of the reservoir was used."</p>	<p>Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005</p>	<p><b>Applicant and Corps response:</b> The comment is incorrect and indicates his/her lack of knowledge of both calculation of phosphorus loading and issue of its being representative. The calculation of phosphorus loading is based on most commonly used and well documented technique suggested by Vollenweider (1970, 1975, and 1976). Regarding the issue of it being representative, the commenter should read the detailed statistical discussion provided in TM-3 of the Supplement to choose the most representative phosphorus loading. The commenter is also suggested to read the response to comment 353.</p> <p>References:</p> <ol style="list-style-type: none"> <li>Vollenweider, R. A. 1970. Scientific fundamentals of the eutrophication of lakes and flowing waters with particular reference to nitrogen and phosphorus as factors in eutrophication, in Clark, J. w., Viessman, Jr., and hammer, M. J., 1977. Water Supply and Pollution Control, IEP – a Dun-Donnelley Publisher, New York.</li> <li>Vollenweider, R. A. 1975. Input-Output Models with Special References to the Phosphorus Loading Concept in Limnology. Schweiz. Z. Hydrol. 37:53-83.</li> </ol>

Comments	Source	Answers to the Comments
355 "The Corps developed a flow rating curve for the dam site based on rainfall and river stage data collected at the USGS station near the dam site. There is no indication that the USGS has approved this rating curve or that this model has been calibrated to actual flow measurements in the river."	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	3. Vollenweider, R. A. 1976. Advances in Defining Critical Loading Levels for Phosphorus in Lake Eutrophication, Mem. Ist Ital. Idrobiol. 33:53-83. <b>Applicant and Corps response:</b> The model for flow at the dam site was developed by the Corps, following established methods and based on 6 years of flow data, as indicated in this excerpt from the appendix: "Mark S. Flick II, a Civil/Hydraulic Engineer and Geospatial Data Systems Project Manager with the Nashville District, U.S. Army Corps of Engineers (USACE), completed the hydraulic work for the development of a rating curve at the Duck River stream gage using the HEC-RAS model for the USGS stage data from 1997 through 2003." USGS approval of the model was neither required nor sought.
356 "No information about the location and details of the existing BMPs are provided in the Supplement."	Attachment to Comments from ARA, Wildlaw, et al, Comments on the Water Quality Section of Duck River Dam EA Supplement, September 1, 2005	<b>Applicant and Corps response:</b> This information is not relevant to the decision. No BMPs were in place in the baseline year. As is indicated in the excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met. [Note: ADEM's excerpt can be found in Applicant's response to comment 108.]
357 "I am curious how the stage data recorded at the USGS Duck River station was turned into flow data. Has the USGS approved this rating curve model?"	Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005	<b>Applicant and Corps response:</b> See response to comment 57.
358 "I know there have been several flow measurements by USGS at this station. Have these data been used to calibrate the HEC-RAS results?"	Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols,	<b>Applicant and Corps response:</b> See response to comment 58.

Comments	Source	Answers to the Comments
<p>359</p> <p>"In Table 10 in the Technical Memorandum 3, can you please explain how the export coefficients were calculated. I would also like to know why the TP coefficients chosen for the Duck River are the same as or similar to the lowest of the presented literature values."</p>	<p>Staff Attorney, WildLaw, dated September 1, 2005</p> <p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comments 60 and 61.</p>
<p>360</p> <p>"On page 9 in technical memorandum 3, the value of R used to determine the subwatershed curve number is not stated. Can you please let me know which value was used and the source of that value?"</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 62.</p>
<p>361</p> <p>"On page 12 of technical memorandum 3, an example is used for a "typical bermuda hay field". If a farmer applies 300 pounds of nitrogen, this equates to 377 pounds of phosphorus (if poultry litter is applied). This section states that 300 pounds of excess phosphorus are being applied. How was this determination made? Where does it say that 300 pounds of nitrogen and 77 pounds of phosphorus should be applied? Shouldn't the size of the field be accounted for? What if the</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 63.</p>

Comments	Source	Answers to the Comments
<p>soils already have enough phosphorus? Are you assuming all soils in the county to be the same? Please explain the rationale for this section."</p>		
<p>362 "Have soil P values been determined in the Duck River watershed using the P Index? If so, why aren't those data used in this assessment? Howa were the initial TN and TP values calculated in Table 15 in Technical Memorandum 3? What types of nutrient management activities are included in Table 15 that were used in the Region 5 model? And are these activities required under existing AFO/CAFO regulations?"</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> Part 1 of this comment is a repeat of comment 64. See response to comment 64. Part 2 of this comment is a repeat of comment 65. See response to comment 65. Part 3 of this comment is a repeat of comment 66. See response to comment 66.</p>
<p>363 "The land use information used in the subwatersheds is not referenced. Can you tell me the source and date of the information used as well as the methods used to determine the percent land use information?"</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 68.</p>
<p>364 "Figure 3 in Section 2 (based on DEM data) is not a very useful demonstration of land use and topography for the average citizen trying to make comments on this document. Can you please provide a land use map with the subwatershed delineations."</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated</p>	<p><b>Applicant and Corps response:</b> It is very difficult to print these coverages in an 8 ½ x 11 format. It is possible to provide the subwatershed delineations as ESRI (GIS) files.</p>

Comments	Source	Answers to the Comments
<p>365</p> <p>“The 30 meter VSA boundary was calculated based on the location of the existing river. Will this be revised to include VSAs 30 meters outside the reservoir boundaries? The current method is only good for looking at river loads – not for the reservoir.”</p>	<p>September 1, 2005</p> <p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p>Applicant and Corps response: See response to comment 69.</p>
<p>366</p> <p>“Also, please provide justification why a 30-meter area was used in the VSA in lieu of something larger.”</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p>Applicant and Corps response: See response to comment 69.</p>
<p>367</p> <p>“45 lbs/acre/year was used as the assimilative capacity for crop uptake of TP in Cullman County. I am having trouble finding that number. Can you tell me exactly where that was found?”</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p>Applicant and Corps response: See response to comment 70.</p>
<p>368</p> <p>“Also, it seems that this 45 lbs/acre/year is inappropriately used to calculate excess TP loading (page 2-8). The logical method would be to determine the actual loading rate (what the farmers are using), subtract how much TP the crops are using</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney,</p>	<p>Applicant and Corps response: See response to comment 70.</p>

Comments	Source	Answers to the Comments
<p>(reportedly 45 lbs/acre/year), and that tells you what excess TP you have in the watershed. The excess amount of TP has not been determined, so the uptake rate is being used as the excess rate. Are you saying that farmers are using 45lbs/acre/year and that there are no crops to use it? Or are you saying that farmers are applying 90 lbs/acre/year and that the crops are only using half of it?"</p>	<p>WildLaw, dated September 1, 2005</p>	
<p>369 "The discussion following Table 3 mentions an "observed" watershed export rate of 0.27 lbs/acre/year, yet there are two problems with this statement. First the 0.27 value according to table 3 is in units of ton/acre/year, which would be 0.54 lbs/acre/year. Second, the 0.27 value is from the category of erosion rate with maximum conservation, which is not the currently observed conditions in the watershed. If you us the most conservative assumptions offered in Table 3, and compare the export rate to the 45 lbs/acre/year (still not the appropriate value to use) a percentage of 4.5 percent results."</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comment 71.</p>
<p>370</p>	<p>"Section 2, page 2-2, includes a discussion about the BATHTUB model and how the model was re-run with new</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration</p> <p><b>Applicant and Corps response:</b> See response to comment 73.</p>

Comments	Source	Answers to the Comments
<p>data. However, with the exception of input values, there is little discussion about the model process. In the original EA, nutrient values from 7 out of 8 reservoirs in the southeast were used to determine the desired concentrations for the Duck reservoir. Were these same values used?"</p>	<p>Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	
<p>371 "A report was prepared by WES for the previous BATHTUB model. Has no report been generated by ERDC for the current model? I would like to know if the same assumptions and inputs such as rainfall, flow, internal loading, non-algal turbidity, etc have been updated or if the same values were used in the second run of the model. Were three scenarios (low, normal, high flow) analyzed and compared as in the 1999 EA?"</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b></p> <p>The first part of this comment is a repeat of comment 75. See response to comment 75.</p> <p>The middle part of this comment is a repeat of comment 76. See response to comment 76.</p> <p>The last part of this comment is a repeat of comment 77. See response to comment 77.</p>
<p>372 The first few pages in Appendix B provide the BATHTUB model results in a table and then a list of parameters with limited definitions. It is not clear why the values in the table (mean, CV) do not match those in the explanation part. Can you please explain what CE distribution means and why these values differ from those in the table? Also, are the model results intended to represent average conditions over the entire area of the reservoir, or</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, WildLaw, dated September 1, 2005</p>	<p><b>Applicant and Corps response:</b> See response to comments 79 and 80.</p>

Comments	Source	Answers to the Comments
<p>just one location within the reservoir?"</p>		
<p>373 "Since seasonal variations in algal growth occur in reservoirs, have different seasonal scenarios been run with the model to determine if growing season nutrient level requirements differ from annual average requirements?"</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p>Applicant and Corps response: See response to comment 81.</p>
<p>374 "I cannot simulate the water balance results contained in Appendix B. For table 1, the change in storage is supposed to be equal to the change in flow, minus evaporation, minus withdrawals. In the previous EA average annual rainfall was 56 inches per year. The area of the reservoir is 640 acres and the maximum withdrawal is 32 MGD. Please let me know if other values were used for these parameters."</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p>Applicant and Corps response: See response to comment 83.</p>
<p>375 "The values in Appendix F for flows in the Mulberry Fork are not correct. The flow readings at the USGS gage in Garden City already include the current undammed flows from the Duck River. There is no need to add them to the gage flows. To determine the change in flows at Garden City, one must only subtract the difference in Duck River flows that will result from the dam. For instance, if the</p>	<p>Attachment to letter from April Hall, P.E., Watershed Restoration Specialist, Alabama Rivers Alliance and Sandra S. Nichols, Staff Attorney, Wildlaw, dated September 1, 2005</p>	<p>Applicant and Corps response: See response to comments 84 and 85.</p>

Comments	Source	Answers to the Comments
<p>flow in the Mulberry is 485 cfs (Nov-97), and the change in the Duck River flows after the dam is 17.11 cfs (33.11 cfs – 16 cfs) then the new flow at the Garden City gage would be 467.89 cfs. While the net difference in flows between tables 2 and 3 are the same (17.11) the base values for flows were incorrectly estimated.”</p>		
<p>376 “A reservoir which will duplicate, in volume, Lake Catoma is a luxury that will be a waste of water user’s dollars.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> See response to comment 14. <b>Corps Response:</b> Refer to Corps response to comments 11, 14, 17, 30, and others herein.</p>
<p>377 “It will also destroy a free flowing stream that is considered to be one of the best Class II canoeing and kayaking streams in Alabama.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant response:</b> Negative impacts will be mitigated. In fact, operation of the Duck River Reservoir will enhance flows during summer months and periods of drought. The Reservoir should also remove suspended particles and other pollutants from the Duck River downstream of the dam. <b>Corps Response:</b> Refer to Corps response to comment 117 and 276.</p>
<p>378 “The original court ruling requiring the supplemental assessment has not been satisfied - - most significantly the clean up of agricultural pollution to the river.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated. <b>Corps Response:</b> Corps disagrees.</p>
<p>379 “The river is still listed as impaired by Alabama Department of Environmental Management. From the supplement it cannot be determined if the river has been improved to drinking water standards.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> Exhaustive research and analysis, conducted by both the Corps and independent consultants, demonstrate that water quality in the proposed reservoir (and its discharges) will meet all Federal and State requirements. Furthermore, comments like this ignore a central truth – that this reservoir is going to be an alternate source of drinking water. In no way would it be in applicant’s interest to allow water quality to deteriorate. Lastly, the Duck River is not listed as “impaired” under ADEM’s 303(d) list. <b>Corps Response:</b> Refer to applicant’s response and Corps response to comment</p>

Comments	Source	Answers to the Comments
<p>380</p> <p>“There are not adequate water analyses to demonstrate that a 60% or any other reduction in nutrient loadings has been achieved. If as stated a 60% reduction will get the reservoir to a mildly eutrophic state, it is essential that the improvement be shown before proceeding.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p>291.</p> <p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 49, 50, 291 and 350.</p>
<p>381</p> <p>“Frequent water analyses over time should be taken to show that there is a satisfactory improvement in the river and that it has achieved a stable condition. Since nutrient levels can go from good to undesirable in a short period of time based on rainfall, significant data must be accumulated.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> This information is not relevant to the decision. Reduction in nutrient loading need only be achieved by the time the reservoir is operational, not prior to proceeding. As is indicated in the following excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the</i></p>

Comments	Source	Answers to the Comments
<p>382 "Manure application in the Duck River watershed has continued for years and thus has very likely saturated the soil with phosphorous (P). In this case high amounts of P from applied manure can be reaching the water when the soil can no longer absorb P. ... Application of any additional P from manure will not be absorbed and can be carried off into the watershed."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><i>effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to Corps response to comment 49, 50, 291, and 350.</p> <p><b>Applicant and Corps Response:</b> As is indicated in TM 3, the modeling includes past excess application rates and the carry-over phosphorus load in soils in determining whether BMP implementation would be effective in achieving the necessary nutrient load reductions.</p>
<p>383 "The plan is to control the water quality by BMPs (best management practices). BMPs for manure management operations are only voluntary and are unenforceable. Some farmers may diligently follow BMP, while others will pay lip service to the BMPs."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant response:</b> ADEM has enforcement authority for BMP implementation, as specified in the EA Supplement. As is indicated in the following excerpt from the ADEM 2004 303(d) report, it would appear that the anticipated reductions can be met.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical, planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and</i></p>

Comments	Source	Answers to the Comments
<p>384</p> <p>“The original EA called for regular water testing to monitor nutrient loading. This does not appear to have happened. Regular water sampling and testing of watershed water is necessary to show that an acceptable quality has been reached and will be maintained.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><i>objectives.</i></p> <p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman’s drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> Refer to applicant response and to Corps response to comments 49, 50, 51 and 380.</p> <p><b>Applicant response:</b> Water quality in the proposed reservoir and its discharges will meet all Federal and State requirements. Regular monitoring and analysis of water quality will be a condition of the permit. To date, monitoring and sampling in the watershed has been limited because no permit is in place to impose such obligations or to set standards for the same.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 380.</p>
<p>385</p> <p>“A Survey of the Duck River, Cullman County, Alabama for Threatened and Endangered Freshwater Mussels and Snails” by Michael M. Ganghoff, Ph.D. shows, as of early 2005, that the Duck River has poor populations of expected snails and mussels. This is not normal for freshwater streams in the Mobile Basin. He concludes that this is likely because of poor water quality due to agricultural pollutants.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant and Corps response:</b> Dr. Ganghoff’s study supports the conclusion that water in the Duck River is impacts by high nutrient loads. This was known at the time the project was initiated and was the reason for the need to obtain a 60% reduction in nutrient loading to maintain water quality in the proposed reservoir. As has been discussed multiple times (starting with comment 12), it is apparent that the measures being implemented in the Duck River watershed to reduce nutrient loading are being effective and it is likely that the necessary reductions will be achieved.</p> <p>Further, Dr. Ganghoff’s study also supports the conclusion that the proposed impoundment will have no substantial direct impacts to aquatic life forms, because the current degraded conditions do not support significant populations of aquatic organisms, primarily mussels and snails.</p>

Comments	Source	Answers to the Comments
<p>386 "There has been a major expenditure by the district to improve water quality in the Duck River watershed through the implementation of BMPs, but they were unable to give me any indication of improvement data to compare before and after implementation of BMPs. From this, I conclude that their organization has no proof that their efforts yielded positive effects on water quality."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant and Corps response:</b> BMP improvement data is listed in the supplement to the EA. ADEM has published data on their web site listing the improvement credit value for each BMP.</p>
<p>387 "The EA Supplement states that there will be annual reports to verify the nutrient loading is properly reduced. I have been unable to find any such reports to verify success or failure."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> Water quality in the proposed reservoir and its discharges will meet all Federal and State requirements. Regular monitoring and analysis of water quality will be a condition of the permit.</p> <p><b>Corps Response:</b> Should a permit be issued, it would require regular water quality monitoring, analysis and corrective action, if needed.</p>
<p>388 "The fact that there is still no proof, other than modeling, of water quality improvement, even after investment of significant funding to improve water quality, means that the court's finding that COE did not make a sufficient analysis for its FONSI should still stand."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> This statement is demonstrably false as indicated in the following excerpt from the ADEM 2004 303(d) report.</p> <p><i>7.2 Watershed Protection Highlights</i></p> <p><i>The Duck River Watershed Project addresses significant impacts to water quality from agriculture including sediment, nutrients from fertilizers, animal waste, and pesticide runoff. This UWA Category 1 watershed (HUC 031060109 - 020 and 030) is located in east Cullman in north central Alabama. The watershed drains to Mulberry Fork and ultimately to the Black Warrior River. The watershed comprises slightly over one-third of the 118,400 acre Duck Creek-Mulberry Fork Conservation Priority Area (CPA) in east Cullman and West Blount Counties. The 1996 Section 303(d) list of priority waters identifies 6.4 miles of Duck River in Cullman County as non-supporting of water quality standards. Impairments are related to pH (low), nutrients and organic enrichment/dissolved oxygen. The Duck River Watershed Project provides land owners and land users with education, technical planning, and financial assistance to implement best management practices such as handling, storing, and utilizing animal waste - primarily from poultry and beef cattle production. The project is proceeding according to scheduled milestones and objectives.</i></p>

Comments	Source	Answers to the Comments
		<p><i>All workplan best management practices (BMPs) were implemented in 2003. The BMPs included dry stacks for poultry litter, incinerators and composters for poultry mortality, conversion from cropland to grassland, and the installation of 10,000 feet of riparian zone protection (about 70 acres). Management practice implementation in the Duck River Creek Watershed are also designed to protect the City of Cullman's drinking water source (Lake Catoma). While it is difficult to quantify the effectiveness of individual BMPs installed as a result of this project, these activities most likely contributed to the delisting of Duck River as seen in the 2002 303(d) list. And is further supported by the absence of this waterbody on the proposed 2004 listing.</i></p> <p><b>Corps Response:</b> No new permit decision has been made to date.</p>
<p>389 “The Duck River below the dam to the Mulberry Branch is going to see tremendously reduced flow and will be severely impacted.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> There would be a reduction in peak flows, but the flows through the dam will be protective of aquatic life and aquatic uses. See comments 92-95 below from the Alabama Department of Conservation and Natural Resources regarding flow rates and river impacts during the typically dry period of the year.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 5, 117 and 276.</p>
<p>390 “Mussels and snails living in the watershed above the reservoir will suffer since they will no longer be connected to their species in the areas under the reservoir and below the dam. Fish, mussels and snails living in the Duck River below the dam will suffer dramatic impacts from the reduction in natural flow variation that is part of their normal life cycle.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> The first part of this comment would appear spurious given the commenter's previous comment (comment 385) regarding the lack of mussels and snails in the system.</p> <p>We concur with the Alabama Department of Conservation and Natural Resources, which disagrees with the portion of the comment regarding downstream impacts. See comments 92-95.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 5 and 18.</p>

Comments	Source	Answers to the Comments
391 “Around the United States dams are being removed because of the negative impacts on wildlife and watersheds. Country-wide there were 60 dams slated for removal in 2004.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Applicant is aware of no dam being removed that has been determined to provide a necessary alternate water source for a community. Applicant believes, after exhaustive research as documented in the EA and affirmed in the <i>American Canoe Association v. White</i> decision, that the Duck River reservoir is necessary to meet water demands. <b>Corps Response:</b> Comment noted.
392 “The Mulberry is used for canoeing and kayaking on more than one day a year. If the water level reduction is enough to impact a race on one day, it will certainly impact water sports on other days during the spring float season. As a minimum, adequate weekend flow during daylight hours should be guaranteed in any plans.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant response:</b> This comment attempts to raise questions regarding direct impacts. The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i> . The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted. <b>Corps Response:</b> Refer to Corps response to comments 5 and 117.
393 “Another issues has been the potential of a hazardous material spill on the AL Hwy 157 bridge over Lake Catoma. No solutions were considered for this problem. If a spill entered the lake, the water supply would be impacted until the lake was cleaned up.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant and Corps response:</b> See response to comment 316.
394 “Close AL Hwy 157 to hazardous material traffic.”	Email from Vince Meleski at Wild South, September 1,	<b>Applicant Response:</b> A local community has no authority to close a state highway. <b>Corps Response:</b> Comment noted. The Corps has no authority to close a state

Comments	Source	Answers to the Comments
395 "Devise some type of spill collection system for the new AL Hwy 157 bridge(s)."	2005 Email from Vince Meleski at Wild South, September 1, 2005	highway. <b>Applicant Response:</b> The community has hazmat teams in place to address spills. <b>Corps Response:</b> Refer to applicant's response.
396 "Devise a spill collection system for the new AL Hwy 157 bridge being planned for the widening of Hwy 157 to four lanes."	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Hazmat teams are in place in Cullman and the Cullman Utilities Board, working with the Cullman office of federal Emergency Management Agency has a plan for addressing spill collection in Lake Catoma. <b>Corps Response:</b> Refer to applicant's response.
397 "Add a water intake, for the treatment plant, north of the Hwy 157 bridge(s)."	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> An intake North of Highway 157 would dramatically reduce the quantity of water available. The intakes are located on the deepest end of the reservoir to allow for maximum yield of the available water. An intake further up the lake would result in significantly less available water. Contamination also would routinely disperse throughout the water column. <b>Corps Response:</b> Refer to applicant's response.
398 "Due to the location of the current intake, the decayed material that causes the problem accumulates at the intake end of the lake. Water taken further upstream would have lower levels of Fe and Mn, and would require less costly treatment."	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant and Corps response:</b> Actually, water at the shallower end of the reservoir would have greater algae and decayed material problems than the deeper end. Regardless, there are intakes at five different depths at Lake Catoma to allow treatment plant operators to draw the best possible quality of water from the reservoir.
399 "To me the most significant issue concerning the dam is the need for 35 million gallons of water a day, and without a real need for the water, then why spend \$40 or \$50 million or possible more to destroy a beautiful free flowing stream?"	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Cullman will not spend money to construct a dam and reservoir unless the water is needed. <b>Corps Response:</b> Refer to Corps response to comments 11 and 279.

Comments	Source	Answers to the Comments
Comments	Source	Responses
400 “A review of raw water usage taken from Lake Catoma shows that usage for the last five years has been flat or possible actually declining slightly.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> See response to comment 11. <b>Corps Response:</b> Refer to Corps response to comments 11 and 279.
401 “The original EA predicted rapidly increasing water usage. This has not occurred.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Consumption records at the water treatment plant show water consumption has steadily increased over the past 40 years. <b>Corps Response:</b> Refer to Corps response to comments 11 and 279.
402 “With all the above mentioned growth, the water usage has not increased. The various water districts have made many changes and implemented leak reduction plans that have kept usage constant.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Cullman and the water systems paid for those improvements to reduce consumption until an alternative water source could be developed. We respectfully contend that those reductions have bought us additional time, but have not altered the fact that additional water is needed for the future. <b>Corps Response:</b> Refer to Corps response to comments 11 and 279.
403 VAW and Cullman County have announced rate increases to cover expenses, because at the lower usage rates they are not generating enough income to cover expenses. This was verified by the Cullman City Clerk in a <i>Cullman Times Article</i> .”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Rate increases are based on a number of different factors and have occurred in every system supplied by Cullman over the past 40 years. <b>Corps Response:</b> Refer to applicant’s response.
404 “Several industries have closed and thus usage has been reduced.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Usage has been reduced at certain plants which have recently closed. New industry has more than replaced those loses. <b>Corps Response:</b> Refer to applicant’s response.
405 “Originally one of the reasons the dam was needed was because poultry production was increasing. My conclusion is that poultry production is decreasing and therefore	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Alabama Agriculture Statistic Service Reported an increase in Cullman County of over 3 million birds from 2003 to 2004. 169,000,000 poultry in Cullman County in 2004

Comments	Source	Answers to the Comments
demand for water is decreasing.”		166,000,000 poultry in Cullman County in 2003  Cullman ranked number 1 in Alabama in broiler production in 2004 and number 1 in egg production from layer hens. Poultry contributes more than 400 million dollars annually to the Cullman County economy.  <b>Corps Response:</b> Refer to applicant's response and Corps response to comments 11, 12 and 279.
406 “VAW has revised their billing schedule to make up for past water price increases that they had absorbed without passing on to their customers. The new billing will raise water costs significantly for the impacted farmers. This will lead them to consider water conservation, finding another source, or closing their operations. Any on of these will reduce future water usage and thus mean less demand.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> VAW pays the same price for water as every other system supplied by Cullman. An annual audit determines the cost at the end of every year based on expenses and the number of gallons produced. VAW only pays for the water it chooses to purchase.  <b>Corps Response:</b> Refer to applicant's response.
407 “The water systems have had a major water leak repairing programs which corrected severe leakage problems and has thus reduced the usage of water. These programs will continue to yield benefits and reduce water usage in the future.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Applicant agrees. In fact, leakage and other unexplained losses have been reduced from approximately 30% to approximately 10% in recent years in large part to increase conservation measures initiated as a result of the system's water supply shortage during periods of draught. Even with such measures, however, the need for an alternate water supply continues to exist.  <b>Corps Response:</b> Refer to applicant's response.
408 “A serious, systematic water conservation program could reduce future water usage.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Water conservation is important and is a part of the public education program in Cullman schools. The Cullman Morgan Water District, Cullman Utilities Board and City of Cullman contribute to the salary of the program's administrator. New manufacturing guidelines for plumbing supplies already produce equipment that uses less water. All systems purchasing water from Cullman have implemented extensive line loss programs in recent years. Cullman has issued public appeals for consumption reductions in high use summer periods and city and county officials have discussed mandatory reductions and penalties for

Comments	Source	Answers to the Comments
409 "In the original EA, population estimates of Cullman County were almost 90,000 people by 2005. The latest estimate by the US Census bureau is 78,270 for 2003. It appears that the actual population increase is closer to the McGraw Hill projections in the original EA than to the Cullman-Morgan Water District (CMWD) projections."	Email from Vince Meleski at Wild South, September 1, 2005	<p>non-critical use, such as watering lawns, during high water use periods. Conservation is a part of the local community program. Per capita use continues to decline in Cullman and nationwide, but growth overshadows those reductions.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p> <p><b>Applicant Response:</b> Population estimates must consider the water district, not just Cullman County. The water service area includes about half of Winston County, a sizeable area in southern Morgan County, and portions of three other neighboring counties.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
410 "The original EA looks at 30 million plus gallon options. Smaller increments such as 5 or 10 million were not included."	Email from Vince Meleski at Wild South, September 1, 2005	<p><b>Applicant Response:</b> The original Environmental Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 24.</p>
411 "Other options that should be considered are a moderate amount of water from Smith Lake or the Tennessee River or other sources."	Email from Vince Meleski at Wild South, September 1, 2005	<p><b>Applicant Response:</b> The original Environmental Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was</p>

Comments	Source	Answers to the Comments
		<p>legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> The alternatives analysis in the EA addresses several alternatives which included a pipeline from the Tennessee River. Several pipeline routes were considered but due to the high cost of building a pipeline to the service areas and placing an intake structure/pump station on the Tennessee River, this alternative was eliminated from further consideration.</p> <p>The Smith Lake (Plan A) was another alternative: Smith Lake is an Alabama Power Company hydroelectric reservoir formed by damming the Sipsey Fork of the Black Warrior River. Due to a higher cost than Smith Lake Plan B, this alternative was eliminated from further consideration.</p> <p>Smith Lake (Plan B): The Phase I Study showed this alternative to be the lowest cost for any of the alternatives developed in the initial screening process. However, consultation with Alabama Power Company concerning water withdrawals from Smith Lake raised concerns over a lack of control over cost escalation and the fact that sufficient water to meet future needs would not be available. Therefore, this alternative was eliminated from further consideration.</p> <p>Smith Lake Pipeline: This alternative was developed in the Phase II Study and is an outgrowth of alternatives discussed above. Alabama Power Company agreed that raw water withdrawals up to 36 MGD could be allowed. Consequently Smith Lake was deemed suitable for further consideration. This alternative would require construction of an intake structure/pump station on Smith Lake and 14.5 miles of pipeline to the existing treatment plant. Because of capacity to meet current needs and serve as an emergency/alternative source of raw water, this alternative was carried forward to the Phase II Study for further analysis.</p> <p>Reevaluation of Smith Lake Pipeline: Based upon the preliminary design of the</p>

Comments	Source	Answers to the Comments
		<p>pumping station and pipeline, the Phase II Study estimated that construction costs would total \$52.9 million. Including operation and maintenance costs, the total project cost estimate was \$61.4 million. The pipeline would cross 3.6 acres of wetlands, convert 245 acres of forested uplands to utility right of way, relocate 6 homes and 3 businesses and impact 4 historic properties. Using the 1995 Phase II Study cost estimates, the Smith Lake Pipeline Alternative would cost \$15.0 million more to construct and operate than the Duck River (725) Alternative.</p> <p>The 6 non-economic issues concerning use of water from Smith Lake include: 1) the primary water allocation is for downstream navigation and power generation. Water supply would be allowed provided the primary needs are met; 2) During loss of peak demand capacity, normal hydroelectric power is generated by combustion of fossil fuels; 3) The Smith Lake drainage basin covers 945 square miles with no established water management authority. The Duck River drainage basin is 37 square miles with the Cullman-Morgan Water District incorporated under Alabama law so it can become a water management authority with the powers of condemnation, intergovernmental cooperation, acquiring property and the ability to file lawsuits; 4) Smith Lake has no buffer zone; 5) Two tributaries of Smith Lake are on the State 303(d) List; and 6) Smith Lake receives wastewater treatment plant effluents. <i>(The E4, Section 3.5, Reevaluation of Alternatives, provides a complete discussion on the comparison of alternatives including discussion of the 6 non-economic issues concerning use of water from Smith Lake.)</i></p>
<p>412          “The goal of 32 million gallons a day is more than double the current water usage. This is over 100% more water than is currently available in Lake Catoma. 32 million gpd (Duck River Reservoir) plus the 25 million gpd (Lake Catoma) is 57 million gpd. This is an unbelievable water inventory to serve a system that is using 11 to 14 million gpd at the present.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> The \$5 million federal grant from the Appalachian Regional Commission mandated a back up or emergency water supply equivalent to the size of the existing water supply in place (i.e., 24 MGD at Lake Catoma). Engineering studies by the Corps and private engineering firms recommended the Duck River site and the recommended size of the impoundment. Cullman accepted those recommendations and voted to pursue these recommended options. Lake Catoma was constructed more than 40 years ago with a capacity of 24 MGD when the average daily consumption was less than 20 percent of that quantity. It was built to allow for future growth and it has certainly provided for it. The Duck River reservoir project is projected to provide for similar long-term growth, allowing Cullman to continue to grow.  <b>Corps Response:</b> Refer to Corps response to comment 279.</p>
<p>413          “Cullman County residents do not understand the difference</p>	<p>Email from Vince Meleski at Wild</p>	<p><b>Applicant Response:</b> See response to comment 7. All public meetings concerning the Duck River reservoir project have been open to the public. At all such meetings</p>

Comments	Source	Answers to the Comments
<p>between a hearing and a meeting on the dam. They think either option will allow public participation of questions and answers. Requests for hearings should be considered as requests for meetings.”</p>	<p>South, September 1, 2005</p>	<p>the public has been free to ask questions and to make comments concerning the project. <b>Corps Response:</b> Comment noted. Refer to Corps response to comment 7.</p>
<p>414 “Reconnect to Lake George for supplemental or emergency water. Lake George was reported to supply 4 million gpd.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant and Corps response:</b> Lake George was considered as an alternate water source. However, the 4 MGD capacity of Lake George is not sufficient to serve as an alternative or emergency system.</p>
<p>415 “Connect to Smith Lake or the Tennessee River for 5 to 10 million gpd.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> Professional engineers with both the U.S. Army Corps of Engineers and private engineering firms examined the Smith Lake and the Tennessee River options and eliminated them. Duck River was the recommended alternative. <b>Corps Response:</b> Refer to Corps response to comment 411.</p>
<p>416 “Buy water from adjacent water systems. Can water be purchased from systems already tied to Smith Lake or the Tennessee River?”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant \ Response:</b> The Town of Arley in Winston County is the only authorized withdrawal entity on Smith Lake above the dam. Their plant size is only 2 million gallons per day. There is not sufficient capacity from the Arley system to meet Cullman’s needs. A water withdrawal from below Smith Dam would require treatment at the existing Cullman plant and the original EA review verified that either Smith Lake pipeline alternative would be more costly than Duck River. The Corps, in their alternatives analysis, determined there was not sufficient water capacity or pipeline routes existing or potentially available to meet Cullman’s needs. The alternatives analysis conducted by the Corps found no finished water supplies on the Tennessee River that could supply Cullman’s needs. <b>Corps Response:</b> Refer to applicant’s response.</p>
<p>417 “Tie in to adjacent water systems so water could be obtained if there ever was an emergency.”</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> The alternatives analysis in the EA found no supplies sufficient to meet Cullman’s emergency needs. If a pipeline were constructed for an emergency basis, it would require regular operation to prevent extensive problems within the line (algae build up; pipe problems; etc.). The alternatives analysis did not indicate any possibility of that being an answer for Cullman’s water needs. The Corps is required to consider all existing or potential sources of water as a requirement to an EA.</p>

Comments	Source	Answers to the Comments
		<p><b>Corps Response:</b> Refer to EA, Section 3.0, for a full discussion on all alternatives considered.</p>
<p>418 "Implement a water conservation program."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> The community has an education program in local schools on conservation and protection on water supplies. Cullman has spent thousands of dollars to reduce line losses and has taken other steps to foster conservation.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
<p>419 "Brainstorm for water conserving ideas. This is where a panel could be very useful."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> Cullman County continually works to improve its service to the community. As increased conservation directly translates to reduced charges for service, the community typically is receptive to ideas that result in increased conservation. Cullman County will continue to identify and develop water conservation practices, both within the water supply system and throughout its customer base.</p> <p><b>Corps Response:</b> Comment is noted.</p>
<p>420 "Develop an action plan for times of sever drought. Include items such as limiting lawn watering, limiting car washing, eliminating street cleaning, eliminating or reducing other non-essential water uses by city and county governments and citizens."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> Such a plan has been discussed by city and county leaders in the past and public appeals were made in the newspapers and other local media outlets encouraging water use for only essential purposes.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
<p>421 "Include community education on water conservation."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> This is currently being done through the Cullman NRCS office.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
<p>422 "Set up program to reduce water usage by offering assistance to people to buy low flow toilets and shower heads."</p>	<p>Email from Vince Meleski at Wild South, September 1, 2005</p>	<p><b>Applicant Response:</b> Low flow toilets and shower heads are the norm in the industry today.</p> <p><b>Corps Response:</b> Refer to applicant's response.</p>
<p>423 "Work with industries, poultry farmers, and other major users to develop conservation</p>	<p>Email from Vince Meleski at Wild South, September 1,</p>	<p><b>Applicant Response:</b> See response to comment 419. Cullman has been very receptive to water conservation suggestions. Cullman currently offers economic incentives to industries that reduce unnecessary water consumption.</p>

<b>Comments</b>	<b>Source</b>	<b>Answers to the Comments</b>
methods.”	2005	<b>Corps Response:</b> Comment is noted.
424 “Review conservation actions of other water systems around the country.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> See response to comment 419. Cullman personnel routinely keep up to date with other water systems around the country. <b>Corps Response:</b> Comment is noted.
425 “Actively repair leaks.”	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Every system supplied water by Cullman actively works to repair leaks. In fact, Cullman’s line-loss is currently below 10%. <b>Corps Response:</b> Refer to applicant’s response.

Comments	Source	Answers to the Comments
426 "Require wholesale customers to take active erosion controls when doing ground disturbing activities such as replacing or installing water lines."	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant and Corps response:</b> ADEM currently has jurisdiction over erosion control regulations and enforcement.
427 "Forsake new industries that will require large quantities of water."	Email from Vince Meleski at Wild South, September 1, 2005	<b>Applicant Response:</b> Local officials evaluate every potential new industry to determine the impact of the proposed development on local infrastructure (water, sewer, natural gas, electricity, telecommunications, etc.) before recruiting the industry. Cullman officials have told companies in the past that their utility demands exceeded local capacity or availability (including instances where water demand was too great). <b>Corps Response:</b> Refer to applicant's response.
428 "It is unfortunate that this project is still under consideration despite seemingly overwhelming judicial and popular opposition."	Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005	<b>Applicant Response:</b> Judge Karen Bowdre ruled that "need for the project had been justified." She ruled the EA was deficient in three areas and the Supplement to the EA has addressed those three issues. Popular opposition does not exist in Cullman County. The project has been endorsed by the City, the County, the independent water systems, the chamber of commerce and even editorially endorsed by Cullman's daily newspaper. The local legislative delegation and Alabama's federal legislative delegation is on record supporting (often providing grant funds) the project. <b>Corps Response:</b> Comment noted. The Supplemental EA addresses deficiencies found by the Court. The Corps has received comments both for and against issuance of the permit.
429 "I'm afraid the likely outcome of this project is going to be a shallow, highly enriched, and putrid lake that will quickly fill with sediment and cause increased scour in both the downstream reaches of the Duck River and the Mulberry Fork."	Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005	<b>Applicant Response:</b> The first part of this comment has been addressed numerous times (see comments 12, 20, 108, 274, 288-89, 293-97, 345, 350-51, 356, 378, 381, 383, 386, and 388) – when considered logically, all indications are that sufficient water quality can be achieved in the reservoir. The second part of this comment is addressed in comments 431-433 (also made by this commenter). <b>Corps Response:</b> Disagree.
430 "To my knowledge, no surveys have been conducted by qualified biologists to determine if endangered species are	Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager,	<b>Applicant Response:</b> All possible impacts on endangered species have been properly considered by qualified personnel. For a discussion of such issues, please see the EA, particularly section 5.1.9 and Appendix E.

Comments	Source	Answers to the Comments
<p>present in the mainstem Mulberry Fork near and downstream of the Duck River's confluence."</p>	<p>Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Corps Response:</b> Refer to Corps response to comments 18, 97 and 98.</p>
<p>431 "Further, construction of proposed dam will exacerbate erosion and channel incision in both the Duck and Mulberry Fork rivers due to the interruption of sediment migration downstream."</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Applicant and Corps response:</b> The sediment load currently delivered to Mulberry Fork by Duck River is excessive, as indicated by the need for a watershed management plan to address numerous water quality issues including sedimentation. Implementation of the watershed management plan would greatly reduce the sediment load carried by the Duck River and result in a substantial reduction in sediment transferred to the Locust Fork, to the benefit of both rivers. While the proposed reservoir would further reduce the sediment load going to the Duck River, the impact relative to the sediment load carried by the mainstem Mulberry Fork and other tributaries would be negligible.</p>
<p>432 "... the already highly-incised reaches of the Duck River downstream of the Dam site will likely be subjected to more channel incision and bank erosion."</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Applicant and Corps response:</b> Channel incision and bank erosion result primarily from high flow events, which will be reduced in number and further damped by the dam. With a reduction in these channel shaping events, the downstream reaches will be less subject to the forces that cause erosion and bank failure. Reduced incision and bank erosion downstream of the dam are the likely results of the proposed reservoir.</p>
<p>433 "Channel incision is likely to be most dramatic in the Mulberry Fork below the Duck River confluence because the Duck appears to provide the Mulberry with substantial amounts of sediment."</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Applicant and Corps response:</b> Sediment load is not a safeguard against channel incision, as the amount of sediment transported in is unrelated to the amount of bank scour and erosion occurring at a given point. The erosive forces of high flow events cause channel incision, and the sediment being carried does not alter that. Sediment deposition may temporarily mask channel incision through creation of a false bottom, but channel incision would still be occurring.</p>
<p>434 "I find it distressing that the Supplement is rife with misleading statistics. For example, Where as it may be true that only ~ 9% of the total streams (by length) in the Black Warrior drainage are</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning</p>	<p><b>Applicant Response:</b> The approximate 9% impoundment number is factual and the additional amount of impounded stream will not interact with the ramifications of the past impoundment actions in the upper Black Warrior basin from the standpoint of additional loss of most "unique and bio-diverse rivers in North America". The Duck River is far from bio-diverse, as other comments, including other statements by this commenter, have pointed out. Nor would the proposed Duck River reservoir have any direct, indirect, or cumulative impacts to any of the remaining river areas</p>

Comments	Source	Answers to the Comments
<p>impounded, many of the impounded reaches were formerly among the most unique and bio-diverse rivers in North America.”</p>	<p>Center, August 30, 2005</p>	<p>that are unique and biodiverse.</p> <p><b>Corps Response:</b> The Corps believes that the analysis in the Supplemental EA is factual and not misleading. Refer to Supplemental EA, Sections 1.4-Area of Analysis and 4.1.2-Limits of Analysis: The special limits of the cumulative impacts analysis were identified as the Upper Black Warrior headwaters basin. The entire Black Warrior watershed was not part of the cumulative analysis.</p>
<p>435 “The impoundment of the mainstem Sipsey Fork and Black Warrior rivers completely eliminated many endemic fish and mollusks formerly restricted to these rivers.”</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Applicant Response:</b> The original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the <i>lawsuit American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Comment noted. Refer to Corps response to comment 18.</p>
<p>436 “Currently, only a few vestigial pockets of native biodiversity survive in the Black Warrior Drainage.”</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Applicant Response:</b> None of these “vestigial pockets” are within the area that would be affected by the Duck River reservoir, either directly, indirectly, or cumulatively. As such, this comment is not germane to the decision to be made.</p> <p><b>Corps Response:</b> Refer to EA, Section 4.0 – Environmental Setting without the Project.</p>
<p>437 “Similarly, it seems unreasonably optimistic to assume that the voluntary Best Management Practices (BMPs) prescribed will be sufficient to reduce nutrient loading in the</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural</p>	<p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.</p>

Comments	Source	Answers to the Comments
<p>reservoir. This is unrealistic given that much of the Duck Watershed has already been severely degraded by unsustainable agricultural practices. Why should the same local agricultural operators who have defiled this river with animal waste products implement BMPs of their own accord?"</p>	<p>History Learning Center, August 30, 2005</p>	<p><b>Corps Response:</b> Refer to Corps response to comments 49, 50 and 51.</p>
<p>438 "... during my surveys of the Duck in the spring of 2005, I found no gill-breathing snails (family Pleuroceridae) anywhere in the Duck River watershed. This is exceptionally unusual for a moderate-to-high-gradient stream in Alabama and many streams on the 303(d) list can support pleurocerid snails."</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Applicant Response:</b> The original Environmental Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 18, 97 and 98.</p>
<p>439 "The rivers and streams of the Mobile Basin are already seriously compromised biologically and this project will only exacerbate the problems contributing to the declines of may aquatic species."</p>	<p>Letter from Michael M. Gangloff, Ph.D., Invertebrate Collection Manager, Auburn University Museum and Natural History Learning Center, August 30, 2005</p>	<p><b>Applicant and Corps Response:</b> Analysis of the available evidence does not support this statement. All available evidence indicates that there would be no appreciable interaction between the proposed Duck River impoundment and any previous impoundments in the Mobile River system.</p>
<p>440 "Loss of Free-Flowing River –</p>	<p>Email from Robert</p>	<p><b>Applicant Response:</b> This was addressed previously as a direct impact. The</p>

Comments	Source	Answers to the Comments
<p>Many of the rivers in the Mobile Basin, including the Warrior have been dammed, but there are no dams between the Duck River and Tuscaloosa. Damming the Duck River will remove significant free-flowing river in that part of the watershed and will remove a significant base for white-water recreation, other streamside recreation and wildlife habitat in the Mulberry Fork watershed.”</p>	<p>R. Reid, Jr., Alabama Audubon Council, Alabama Environmental Council, and Alabama Ornithological Society, August 30, 2005</p>	<p>original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Cane Association v. White</i>. The conclusion of that exhaustive judicial review of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 117 regarding winter flow on the Mulberry Fork. Loss of a portion of a free flowing river and impacts to recreation will be considered by the Corps in the permit decision.</p>
<p>441 “That part of Cullman County is a leading producer of broiler chickens in the nation. Damming the river will serve to concentrate those wastes in the reservoir and also reduce the amount of water available to dilute the wastes received downstream.”</p>	<p>Email from Robert R. Reid, Jr., Alabama Audubon Council, Alabama Environmental Council, and Alabama Ornithological Society, August 30, 2005</p>	<p><b>Applicant Response:</b> Once the impoundment is full, water will flow over the spillway normally 5 to 7 months out of the year. Low flow will be augmented by the dam in the typical low flow summer months. Discharge will actually be better. The flow regime for the Duck River project is based on the recommendations of the Alabama Department of Conservation and Natural Resources. Commenter’s concerns should also be lessened by the knowledge that maximum drawdown of the Duck River Reservoir will not routinely occur for 20 to 30 years. Duck River is an emergency backup and future supply. ADEM has adopted new AFO and CAFO regulations to reduce poultry waste and its impact on water supplies.</p> <p><b>Corps Response:</b> Refer to applicant’s response and to Corps response to comments 49, 50 and 51 regarding BMPs. Also, should a permit be issued, it would require the implementation and enforcement of water quality conditions.</p> <p><b>Applicant Response:</b> See response to comments 14 and 38.</p>
<p>442 “A less expensive source of water for Cullman County appears to be water from Smith Lake. Further raising the water level of Lake Catoma, which supplies water for the county, could also be considered.”</p>	<p>Email from Robert R. Reid, Jr., Alabama Audubon Council, Alabama Environmental Council, and Alabama</p>	<p><b>Corps Response:</b> Refer to Corps response to comments 14, 28 and 38.</p>

Comments	Source	Answers to the Comments
443 "Demand for water is less than projected!"	Ornithological Society, August 30, 2005	Applicant Response: See response to comment 11. Corps Response: Refer to Corps response to comments 11 and 279.
444 "The withdrawal of up to 4 million gallons per day by Blount County Water Authority from Warren Springs, a tributary of the Mulberry Fork River has not been considered."	Attached letter to email from Lawden H. Yates, August 30, 2005	Applicant and Corps Response: See response to comment 45.
445 "Cullman, Blountsville, Hanceville, and Garden City all discharge treated waste water into Mulberry below the confluence of the Duck River."	Attached letter to email from Lawden H. Yates, August 30, 2005	Applicant and Corps Response: The Duck River project would be capable of increasing water flow in the event of any problems with sewer discharge into the Mulberry. Decreased concentrations of waste and higher oxygen levels from Duck River reservoir project water will benefit plant and animal life. Development of the Duck River project will therefore have a positive impact downstream.
446 "A chicken processing plant and a chicken rendering dog food plant also discharge into the Mulberry River which needs water from the Duck to increase flow and water quality."	Attached letter to email from Lawden H. Yates, August 30, 2005	Applicant and Corps Response: Water from the Duck River impoundment could be used to supplement flow if needed.
447 "Reduced flows in the Duck also affect recreation on it, as well as the Mulberry."	Attached letter to email from Lawden H. Yates, August 30, 2005	Applicant and Corps Response: Once the impoundment reaches full pool, water will flow over the spillway 5 to 7 months out of the year. Low flow levels mandated by ADCNR will provide better flow in periods of drought times. The entire flow regime is at levels recommended by ADCNR.
448 "Restoration of Lake George as a drinking water source has not been considered."	Attached letter to email from Lawden H. Yates, August 30, 2005	Applicant and Corps Response: See response to comment 31.
449 "...the Cullman Water Works raised the level of the dam on Lake Catoma two feet. This by itself provides a lot of water."	Attached letter to email from Lawden H. Yates, August 30, 2005	Applicant Response: Applicant agrees, although the water so supplied does not obviate the need for the proposed project. Corps Response: Refer to Corps response to comments 24 and 28.

Comments	Source	Answers to the Comments
450 “The area of Cullman County that possibly needs additional water for growth is in the western part of Cullman County. This is exactly where Smith Lake is located.”	Attached letter to email from Lawden H. Yates, August 30, 2005	<b>Applicant Response:</b> Alternatives analyses conducted by the Corps rate the Duck River as the best option for an alternate water source after considering Smith Lake. <b>Corps Response:</b> Refer to Corps response to comment 411.
451 “... due to the long lasting affects of this project will have, at the least, a complete environmental impact study should be required.”	Attached letter to email from Lawden H. Yates, August 30, 2005	<b>Applicant Response:</b> After supplementing the EA, the Corps maintained its position that a full EIS was unnecessary. <b>Corps Response:</b> Refer to Corps response to comment 56. The Corps believes the Supplemental EA fully addresses the Court’s concerns.
452 “... an appropriate and complete environmental assessment of the damage this project would cause to the Duck River as well as the Mulberry Fork River is needed.”	Letter from Judy Yates, August 30, 2005	<b>Applicant and Corps Response</b> Both the EA and the supplement to the EA evaluate the impacts to Duck River and Mulberry Fork.
453 “I ask that the Corps[ <u>s</u> ] require a full and complete assessment of the environmental impact this project would have as well as having a public meeting that would allow input from the communities that would be affected by this project.”	Letter from Judy Yates, August 30, 2005	<b>Applicant Response:</b> After supplementing the EA, the Corps maintained its position that a full EIS was unnecessary. See also response to comment 7. <b>Corps Response:</b> Refer to Corps response to comments 7 and 56. Also, the Corps believes the Supplemental EA fully addresses the Court’s concerns.
454 “I am sure that once there is a Lake on Duck River, Lake Catoma will be revisited and will also become a recreational lake.”	Letter from Judy Yates, August 30, 2005	<b>Applicant Response:</b> Cullman plans to continue using Lake Catoma as the county’s primary water source. Regulations are currently in place restricting recreational use of Lake Catoma. <b>Corps Response:</b> Refer to applicant’s response.

Comments	Source	Answers to the Comments
455 "As a general matter, therefore, Alabama Power supports the Cullman-Morgan Water District's efforts here to develop this important alternate source of drinking water for the community it serves."	Letter from Willard Bowers, Alabama Power Company, August 23, 2005	<p><b>Applicant Response:</b> Applicant also believes the project is necessary.</p> <p><b>Corps Response:</b> Comment noted.</p>
456 "The analysis of this project pursuant to an Environmental Assessment, as supplemented, as opposed to an Environmental Impact Statement, was the correct method of analysis to undertake. Numerous dams and impoundments around the nation have been analyzed pursuant to an Environmental Assessment."	Letter from Willard Bowers, Alabama Power Company, August 23, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Comment is noted.</p>
457 "Downstream impacts of the proposed reservoir, particularly on the Mulberry Fork, would be minimal."	Letter from Willard Bowers, Alabama Power Company, August 23, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 5.</p>
458 "...adequate hydrologic and geographic separation exists to buffer their impacts from the proposed Duck River reservoir."	Letter from Willard Bowers, Alabama Power Company, August 23, 2005	<p><b>Applicant Response:</b> Applicant agrees.</p> <p><b>Corps Response:</b> The Corps believes the proposed impacts of the Duck River dam and reservoir have been addressed in the EA and Supplemental EA.</p>
459 "We are so excited hoping the dam will be built & we can have plenty of water."	Letter from Omer, Betty, Alan, Steve, & Glenn at Crystal Glass Company, Inc., August 16, 2005	<p><b>Applicant Response:</b> Applicant believes the new reservoir will meet the County's growing water needs.</p> <p><b>Corps Response:</b> Comment noted.</p>

Comments	Source	Answers to the Comments
460 "If a study has been performed perhaps a public meeting as to inform the public about the results, would be informative."	Letter from Rodney Morgan, February 11, 2005	<b>Applicant and Corps Response</b> See response to comment 7.
461 "A decrease in the flows of the Duck and Mulberry Rivers will impact development in the Cullman, Blount, Jefferson and Walker County areas. Has the Cullman Water Board addressed this issue?"	Letter from Rodney Morgan, February 11, 2005	<b>Applicant and Corps Response:</b> Water flow was addressed in both the EA and supplement to the EA. See also response to comment 5.
462 "I urge you to review <u>Beyond Dams: Option and Alternatives</u> , published by American Rivers and available on their website at <a href="http://www.americanrivers.org">http://www.americanrivers.org</a> "	Letter from Alabama Fisherman & Hunter's Association, August 10, 2005	<b>Corps Response:</b> Suggestion noted. See also response to comment 17. <b>Corps Response:</b> Refer to Corps response to comment 47.
463 "The outdated financial information has not been revised to reflect current costs of the dam and alternative water sources."	Letter from Alabama Fisherman & Hunter's Association, August 10, 2005	<b>Applicant and Corps Response:</b> See response to comment 30.
464 "The population projections and water demand estimates have not been revised based on 2000 census information and recent water usage trends."	Letter from Alabama Fisherman & Hunter's Association, August 10, 2005	<b>Applicant and Corps Response:</b> See response to comment 30.
465 "Little attempt has been made to collect sufficient water quality data to further characterize water pollution problems in the Duck River watershed."	Letter from Alabama Fisherman & Hunter's Association, August 10, 2005	<b>Applicant Response:</b> Water quality monitoring has been on-going for years. Cullman has an annual contract with United States Geologic Survey for stream gauge monitoring in the Duck River. Cullman has paid the salary of an NRCS employee for more than 5 years to implement BMPs and administer other pollution prevention programs in the Duck River Drainage Basin. <b>Corps Response:</b> Refer to applicant's response and also to Corps response to comment 291.
466 "The Corps has not collected water flow data in the area of	Letter from Alabama Fisherman &	<b>Applicant and Corps Response:</b> This comment is substantially the same as comment 116. See response to comment 116.

Comments	Source	Answers to the Comments
the dam to sufficiently analyze flow impacts in the Mulberry Fork.”	Hunter’s Association, August 10, 2005	
467 “Decreased flow from the Duck River will decrease the amount of fresh water flowing into the Mulberry Fork. Less fresh water means less ability for the Mulberry to meet its use classification of Fish & Wildlife, which it is currently unable to support.”	Letter from Alabama Fisherman & Hunter’s Association, August 10, 2005	<p><b>Applicant Response:</b> The analyses indicate that the impact of the proposed reservoir on water quality and hydrology in Mulberry Fork will be negligible. No negative impacts on the ability of Mulberry Fork to meet its designated use are anticipated.</p> <p><b>Corps Response:</b> Refer to applicant’s response and also to Corps response to comment 5.</p>
468 “Despite vague references to winter paddling releases, the Corps has not analyzed the impacts to winter whitewater recreation in the Duck River.”	Letter from Alabama Fisherman & Hunter’s Association, August 10, 2005	<p><b>Applicant and Corps Response:</b> See response to comment 117.</p>
469 “...the Corps, cannot rely on voluntary, cost-shared best management practices (BMPs) to reduce the pollutants in the Duck River by 60 percent..”	Letter from Alabama Fisherman & Hunter’s Association, August 10, 2005	<p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 49, 50, 51 and 291.</p>
470 “Recent articles in <u>The Cullman Times</u> indicate that demand for water is dropping, which will lead to increases in water rates for residents of Cullman County.”	Letter from Alabama Fisherman & Hunter’s Association, August 10, 2005	<p><b>Applicant Response:</b> See response to comment 11.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 279.</p>
471 “Based on the information provided in the supplement, it does not appear that the Corps has addressed the federal court’s concerns regarding	Letter from Alabama Fisherman & Hunter’s Association, August 10, 2005	<p><b>Applicant Response:</b> Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would</p>

**Comments****Source****Answers to the Comments**

	water quality and downstream impacts.”		suggest additional information should be updated. <b>Corps Response:</b> The Corps believes the Supplemental EA addresses the Court’s concerns regarding water quality in the proposed reservoir and also any potential downstream impacts to the Mulberry Fork.
472	“I also request that a public hearing be held by the Corps.”	Letter from Alabama Fisherman & Hunter’s Association, August 10, 2005	<b>Applicant and Corps Response:</b> See response to comment 7.
473	“I hereby request a public meeting regarding the proposed Duck River Dam in Cullman County.”	Letter from April Hall, December 2, 2004	<b>Applicant and Corps Response:</b> See response to comment 7.
474	“... we request, an extended public comment period of at least 60 days in lieu of the standard 30-day period in order to have adequate time to thoroughly review the permit and associated documents.”	Letter from April Hall, December 2, 2004	<b>Applicant and Corps Response:</b> See response to comment 6.
475	“Section 2, page 2-2, includes a discussion about the BATHTUB model and how the model was re-run with new data. However, with the exception of input values, there is little discussion about the model process.”	Attachment from April Hall, August 19, 2005	<b>Applicant and Corps Response:</b> See response to comment 73.

<b>Comments</b>	<b>Source</b>	<b>Answers to the Comments</b>
<p>476</p> <p><b>Comments</b></p> <p>“A report was prepared by WES for the previous BATHUB model. Has no report been generated by ERDC for the current model? I would like to know if the same assumptions and inputs such as rainfall, flow, internal loading, non-algal turbidity, etc have been updated or in the same values were used in the second run of the model.”</p>	<p><b>Source</b></p> <p>Attachment from April Hall, August 19, 2005</p>	<p><b>Responses</b></p> <p><b>Applicant and Corps Response:</b> See response to comments 75 and 76.</p>
<p>477</p> <p><b>Comments</b></p> <p>“The first few pages in Appendix B provide the BATHUB model results in a table and then a list of parameters with limited definitions. It is not clear why the values in the table (mean, CV) do not match those in the explanation part.”</p>	<p><b>Source</b></p> <p>Attachment from April Hall, August 19, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 79.</p>
<p>478</p> <p><b>Comments</b></p> <p>“Since seasonal variations in algal growth occur in reservoirs, have different seasonal scenarios been run with the model to determine if growing season nutrient level requirements differ from annual average requirements?”</p>	<p><b>Source</b></p> <p>Attachment from April Hall, August 19, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 81.</p>
<p>479</p> <p><b>Comments</b></p> <p>“Using these values and the flows and initial storage shown in table 1, the values just don’t add up.”</p>	<p><b>Source</b></p> <p>Attachment from April Hall, August 19, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 83.</p>

Comments	Source	Answers to the Comments
480 “The values in Appendix F for flows in the Mulberry Fork are not correct.”	Attachment from April Hall, August 19, 2005	Applicant and Corps Response: See response to comment 84.
481 “Please provide the values of area, precipitation, and evaporation used in the Bankhead Lake flow calculations in Appendix F.”	Attachment from April Hall, August 19, 2005	Applicant and Corps Response: See response to comment 86.
482 “We urge the Corps to hold a public hearing on this dubious project in compliance with the spirit of the National Environmental Policy Act.”	Attachment from April Hall, August 19, 2005	Applicant and Corps Response: See response to comment 7.
483 “Cullman County water needs may be overestimated.”	Attachment from April Hall, August 19, 2005	Applicant and Corps Response: See response to comment 24.
484 “The supplement is based on outdated financial information.”	Attachment from April Hall, August 19, 2005	Applicant and Corps Response: See response to comment 30.
485 “Dam construction will result in exorbitant rate increases.”	Attachment from April Hall, August 19, 2005	Applicant Response: The Cullman system is operated on a non-profit basis. Only the actual cost of processing the water is charged to the customers. Corps Response: Refer to applicant’s response.
486 “The supplement failed to address water quality issues in the proposed Duck River reservoir.”	Attachment from April Hall, August 19, 2005	Applicant Response: This comment has been addressed numerous times (see comments 12, 20, 108, 274, 288-89, 293-97, 345, 350-51, 356, 378, 381, 383, 386, and 388) – when considered logically, all indications are that sufficient water quality can be achieved in the reservoir. Corps Response: Refer to applicant’s response and also to Corps response to comment 291
487 “Additionally, the Corps’ plan to reduce the pollutants in Duck River by 60% through voluntary, cost-shared best management practices (BMPs) can only be described as overly	Attachment from April Hall, August 19, 2005	Applicant Response: Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.

Comments	Source	Answers to the Comments
<p>488            “The Corps has not adequately studied the downstream effects of the proposed dam.”</p>	<p>Attachment from April Hall, August 19, 2005</p>	<p><b>Corps Response:</b> Refer to Corps response to comments 50, 51 and 291.  <b>Applicant Response:</b> Analyses indicate that the proposed project would have no significant impacts on hydrology and water quality downstream of the dam on the Duck River or to Mulberry Fork.  <b>Corps Response:</b> Refer to Corps response to comments 5 and 117.</p>
<p>489            “I am not in favor of constructing a dam on the Duck River... I believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging project.”</p>	<p>Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005</p>	<p><b>Applicant Response:</b> All reasonable alternatives have been fully considered and were presented in the Corps’ analysis. These include simply enlarging existing reservoirs, tapping existing reservoirs, and other alternatives—all of which were fully examined and, for a variety of reasons, rejected after consideration. It is simply incorrect to suggest otherwise.  <b>Corps Response:</b> Refer to Corps response to comment 17.</p>
<p>490            “This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and does not sufficiently address the items raised in the federal court ruling.”</p>	<p>Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005</p>	<p><b>Applicant Response:</b> With regard to water quality: The analyses are based on conditions as of 1999, not current conditions. The reduction in nutrient loading necessary for the reservoir to operate efficiently is from 1999 levels, not the loading as of 2005.            With regard to other data: As a response to the first part of the comment, the original Environmental Assessment (“EA”) provided a comprehensive examination of the proposed project’s potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps’ Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps’ NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is that it is noted.</p>

Comments	Source	Answers to the Comments
		<p>To the last part of the comment:</p> <p>The analyses presented in the EA Supplement are sufficient to address the three areas of deficiency that were noted by the District Court.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 48. The Corps believes the Supplemental EA addresses the Court's concerns.</p>
491 "The outdated financial information has not been revised to reflect current costs of the dam and alternative water sources."	Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005	<b>Applicant and Corps Response:</b> See response to comment 30.
492 "The population projections and water demand estimates have not been revised based on 2000 census information and recent water usage trends."	Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005	<b>Applicant and Corps Response:</b> See response to comment 30.
493 "Little attempt has been made to collect sufficient water quality data to further characterize water pollution problems in the Duck River watershed."	Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005	<b>Applicant Response:</b> See response to comment 115. <b>Corps Response:</b> Refer to Corps response to comment 109.
494 "The Corps has not collected water flow data in the area of the dam to sufficiently analyze flow impacts in the Mulberry Fork."	Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005	<b>Applicant and Corps Response:</b> See response to comment 116.
495 "Despite vague references to winter paddling releases, the Corps has not analyzed the impacts to winter white water recreation in the Duck River."	Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005	<b>Applicant and Corps Response:</b> See response to comment 117.
496 "...the suggestion that voluntary, cost-shared best management practices (BMPs) will be sufficient to reduce the pollutants in the Duck River by	Letter from Mark E. Martin, Black Warrior RiverKeeper, Inc., August 30, 2005	<b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.

Comments	Source	Answers to the Comments
60 percent is disconcerting.”		Corps Response: Refer to Corps response to comments 49, 50, 51 and 291.
497 “I am writing to request a public meeting regarding the proposed Duck River Dam in Cullman County, Alabama.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., November 22, 2004	Applicant and Corps Response: See response to comment 7.
498 “...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., November 22, 2004	Applicant and Corps Response: See response to comment 6.
499 “I am not in favor of constructing a dam...I believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging project.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	Applicant Response: Comment noted. Corps Response: Refer to Corps response to comment 24.

Comments	Source	Answers to the Comments
----------	--------	-------------------------

Comments	Source	Responses
500 “This Supplement makes no attempt to update the six to ten-year old data used in the original permit application and environmental assessment, and does not sufficiently address the items raised in the federal court ruling.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	Applicant and Corps Response: See response to comment 490.
501 “The outdated financial information has not been revised to reflect current costs of the dam and alternative water sources.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	Applicant and Corps Response: See response to comment 30.
502 “The population projections and water demand estimates have not been revised based on 2000 census information and recent water usage trends.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	Applicant and Corps Response: See response to comment 30.
503 “Little attempt has been made to collect sufficient water quality data to further characterize water pollution problems in the Duck River watershed.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	Applicant and Corps Response: See response to comment 465.
504 “The Corps has not collected water flow data in the area of the dam to sufficiently analyze flow impacts in the Mulberry Fork.”	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	Applicant Response: Cullman has a contract with the USGS to monitor and collect flow data. Corps Response: Refer to Corps response to comments 5 and 117.
505 “Decreased flow from the Duck River will decrease the amount of fresh water flowing into the Mulberry Fork. Less fresh water means less ability for the Mulberry to meet its use classification of Fish &	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	Applicant Response: See response to comment 467. Corps Response: Refer to Corps response to comment 5.

Comments	Source	Answers to the Comments
	Wildlife, which it is currently unable to support."	
506 "Despite vague references to winter paddling releases, the Corps has not analyzed the impacts to winter white water recreation in the Duck River."	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	<b>Applicant and Corps Response:</b> See response to comment 117.
507 "In regards to the reduction of pollutants in the river, the Corps cannot rely on voluntary, cost-shared best management practices (BMPs) to reduce the pollutants in the Duck River by 60 percent. "	Letter from Nelson Brooke, Black Warrior Riverkeeper, Inc., August 8, 2005	<b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected. <b>Corps Response:</b> Refer to Corps response to comments 49, 50, 51 and 291.
508 "I am generally not in favor of constructing a dam on one of Alabama's last free flowing rivers. I believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging project."	Letter from Maggie Johnston, Camp McDowell Environmental Center, August 15, 2005	<b>Applicant Response:</b> Comment noted. <b>Corps Response:</b> Refer to Corps response to comment 24.
509 "This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and environmental assessment and does not sufficiently address the items raised in the federal court ruling."	Letter from Maggie Johnston, Camp McDowell Environmental Center, August 15, 2005	<b>Applicant and Corps Response:</b> See response to comment 490.
510 "The outdated financial information has not been revised to reflect current costs of the dam and alternative water sources."	Letter from Maggie Johnston, Camp McDowell Environmental Center, August 15, 2005	<b>Applicant and Corps Response:</b> See response to comment 30.
511 "The population projections and	Letter from Maggie	<b>Applicant and Corps Response:</b> See response to comment 30.

Comments	Source	Answers to the Comments
water demand estimates have not been revised based on 2000 census information and recent water usage trends.”	Johnston, Camp McDowell Environmental Center, August 15, 2005	
512 “Little attempt has been made to collect sufficient water quality data to further characterize water pollution problems in the Duck River watershed.”	Letter from Maggie Johnston, Camp McDowell Environmental Center, August 15, 2005	<b>Applicant Response:</b> See response to comment 115. <b>Corps Response:</b> Refer to Corps response to comment 109.
513 “The Corps has not collected water flow data in the area of the dam to sufficiently analyze flow impacts in the Mulberry Fork.”	Letter from Maggie Johnston, Camp McDowell Environmental Center, August 15, 2005	<b>Applicant and Corps Response:</b> See response to comment 116.
514 “Despite vague references to winter paddling releases, the Corps has not analyzed the impacts to winter white water recreation in the Duck River.”	Letter from Maggie Johnston, Camp McDowell Environmental Center, August 15, 2005	<b>Applicant and Corps Response:</b> See response to comment 117.
515 “In regards to the reduction of pollutants in the river, the Corps cannot rely on voluntary, cost-shared best management practices (BMPs) to reduce the pollutants in the Duck River by 60 percent.”	Letter from Maggie Johnston, Camp McDowell Environmental Center, August 15, 2005	<b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected. <b>Corps Response:</b> Refer to Corps response to comments 49, 50, 51 and 291.
516 “FLFR is not in favor of constructing a dam on one of Alabama’s last free flowing rivers. I believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging	Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005	<b>Applicant Response:</b> Comment noted. <b>Corps Response:</b> Refer to Corps response to comment 24.

Comments	Source	Answers to the Comments
<p>517 "This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and environmental assessment and does not sufficiently address the items raised in the federal court ruling."</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 490.</p>
<p>518 "The outdated financial information has not been revised to reflect current costs of the dam and alternative water sources."</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 30.</p>
<p>519 "The population projections and water demand estimates have not been revised based on 2000 census information and recent water usage trends."</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 30.</p>
<p>520 "Little attempt has been made to collect sufficient water quality data to further characterize water pollution problems in the Duck River watershed."</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p>	<p><b>Applicant Response:</b> See response to comment 115. <b>Corps Response:</b> Refer to Corps response to comment 291.</p>
<p>521 "The Corps has not collected water flow data in the area of the dam to sufficiently analyze flow impacts in the Mulberry Fork."</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p>	<p><b>Applicant Response:</b> See response to comment 116. <b>Corps Response:</b> Refer to Corps response to comments 5 and 117.</p>
<p>522 "Despite vague references to winter paddling releases, the Corps has not analyzed the impacts to winter white water recreation in the Duck River."</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 117.</p>
<p>523 "In regards to the reduction of pollutants in the river, the Corps cannot rely on voluntary, cost-shared best management</p>	<p>Letter from Cindy Lowry, Friends of the Locust Fork River, August 30,</p>	<p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water</p>

Comments	Source	Answers to the Comments
<p>practices (BMPs) to reduce the pollutants in the Duck River by 60 percent.”</p>	<p>2005</p>	<p>quality in the reservoir and in the Duck River will be protected.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 49, 50, 51 and 291.</p>
<p>524 “The loss of the segment of river that lies within the area to be inundated will represent a major blow to recreational canoeing and kayaking in north Alabama.”</p>	<p>Letter from Murray Carroll, Conservation Chairman of the Huntsville Canoe Club</p>	<p><b>Applicant Response:</b> The area to be inundated averages 22 inches in depth and has very little flow in the summer months. There is very little recreation canoeing or kayaking in that area. Canoeing and kayaking is very prevalent downstream once the Duck River merges with the Mulberry Fork. Cullman has agreed to supplement water flow in the spring to benefit canoeing and kayaking activities.</p> <p><b>Corps Response:</b> Refer to applicant’s response and to Corps response to comments 117.</p>
<p>525 “... we ask that the Corps require public hearings and a full Environmental Impact Statement that considers all the ramifications involved with the destruction of this section of river.”</p>	<p>Letter from Murray Carroll, Conservation Chairman of the Huntsville Canoe Club</p>	<p><b>Applicant Response:</b> See response to comment 7. The Corps reasonably concluded that an EIS was not necessary.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 7. Also, the Corps believes the Supplemental EA addresses any downstream impacts to the Mulberry Fork from the proposed project.</p>
<p>526 “We would like to see demonstrated proof that such drastic pollution reduction efforts have been achieved in north Alabama through voluntary and educational efforts. Studies may indicate that this is “possible”, but we would like to see demonstrated proof that these goals are achievable.”</p>	<p>Letter from Murray Carroll, Conservation Chairman of the Huntsville Canoe Club</p>	<p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 49, 50, 51 and 291.</p>
<p>527 “There has been no recent updated financial information concerning current construction cost for the dam, treatment systems and required connecting water mains.”</p>	<p>Letter from Murray Carroll, Conservation Chairman of the Huntsville Canoe Club</p>	<p><b>Applicant and Corps Response:</b> See response to comment 30.</p>
<p>528 “We are concerned, as we have stated, with the complete loss of whitewater recreation on the entire Duck River and reduced</p>	<p>Letter from Murray Carroll, Conservation Chairman of the</p>	<p><b>Applicant Response:</b> See responses to comments 5 and 276.</p> <p><b>Corps Response:</b> Refer to applicant’s response and also to Corps response to comment 117.</p>

Comments	Source	Answers to the Comments
<p>529 Flows on the Mulberry Fork River.”</p> <p>“We request that the Corps do a thorough environmental inventory of the proposed lake site and the areas downstream on the Duck River and Mulberry Fork River to ascertain that no threatened or endangered species of plant or animal life will be negatively impacted by this project.”</p>	<p>Huntsville Canoe Club</p> <p>Letter from Murray Carroll, Conservation Chairman of the Huntsville Canoe Club</p>	<p><b>Applicant Response:</b> See response to comment 488. No other routes exist for the proposed project to impact downstream protected species, should they occur. Therefore, it is very unlikely that any impacts to protected species would result. Environmental surveys are not necessary to make that conclusion.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 18, 97 and 98.</p>
<p>530 “Our club is very concerned about the prospect of damming and effectively eliminating one of the finest sections of Class II whitewater in the state of Alabama.”</p>	<p>Letter from Bob Keener, Huntsville Canoe Club Member</p>	<p><b>Applicant Response:</b> There is no Class II whitewater on the section of Duck River to be impounded. See also response to comment 534.</p> <p><b>Corps Response:</b> Refer to applicant’s response and also to Corps response to comment 117 regarding winter flow on the Mulberry Fork.</p>
<p>531 “... we ask that the Corps require public hearings and a full Environmental Impact Statement that considers all the ramifications involved with the destruction of this section of river.”</p>	<p>Letter from Bob Keener, Huntsville Canoe Club Member</p>	<p><b>Applicant and Corps Response:</b> See response to comment 7. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p>
<p>532 We would like to see demonstrated proof that such drastic pollution reduction efforts have been achieved in north Alabama through voluntary and educational efforts.”</p>	<p>Letter from Bob Keener, Huntsville Canoe Club Member</p>	<p><b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 49, 50, 51 and 291.</p>
<p>533 “There has been no recent updated financial information concerning current construction cost for the dam, treatment systems and required connecting water mains.”</p>	<p>Letter from Bob Keener, Huntsville Canoe Club Member</p>	<p><b>Applicant and Corps Response:</b> See response to comment 30.</p>
<p>534 “... it appears that the entire</p>	<p>Letter from Bob</p>	<p><b>Applicant Response:</b> This comment implies that the entire Duck River is currently</p>

Comments	Source	Answers to the Comments
<p>Duck River will be lost to boating and the Mulberry Fork River, which is used by thousands of whitewater paddlers annually, will be severely impacted during the whitewater season...</p>	<p>Keener, Huntsville Canoe Club Member</p>	<p>available to boating. That is not the case, particularly during summer periods of low rainfall. Also, the entire Duck River will not be lost to boating after impoundment. Limited boating will be permitted on the new impoundment. Other sections of the river will remain open to boating. Cullman has agreed to release extra water to supplement whitewater season. The typical high flow white water season coincides with the time when the impoundment will be full and water will be flowing over the spillway.</p> <p><b>Corps Response:</b> Refer to applicant response and also to Corps response to comment 117.</p>
<p>535 “We request that the Corps do a thorough environmental inventory of the proposed lake site and the areas downstream on the Duck River and Mulberry Fork River to ascertain that no threatened or endangered species of plant or animal life will be negatively impacted by this project.”</p>	<p>Letter from Bob Keener, Huntsville Canoe Club Member</p>	<p><b>Applicant and Corps Response:</b> See response to comment 529.</p>
<p>536 “The Huntsville Canoe Club and other whitewater enthusiasts would like to have the opportunity to represent our concerns at public hearings. The Corps should present a full Environmental Impact Statement prior to these hearings.”</p>	<p>Letter from Ken Pevahouse, Vice President, Huntsville Canoe Club</p>	<p><b>Applicant Response:</b> See response to comment 7. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 7. Also, the Corps believes the Supplemental EA fully addresses the Court’s concerns.</p>
<p>537 “It has come to my attention that you are not planning to reissue the public notice and may not even hold public hearings... I am writing to inform you that this will be yet another violation the National Environmental Policy Act (NEPA).”</p>	<p>Letter from Sandra S. Nichols, WildLaw Staff Attorney, May 5, 2005</p>	<p><b>Applicant Response:</b> See response to comment 7. The Corps has acted in accordance with NEPA.</p> <p><b>Corps Response:</b> Refer to Corps response to comments 7 and 10.</p>
<p>538 “On behalf of Wild South and</p>	<p>Letter from Sandra</p>	<p><b>Applicant and Corps Response:</b> See response to Comment 7.</p>

Comments	Source	Answers to the Comments
the Friends of Mulberry Fork, we request that the Corps hold a public [sic] meeting on this EA and permit.”	S. Nichols, WildLaw Staff Attorney, November 18, 2004	
539 “We request an additional 30-day period in order to have adequate time to thoroughly review the analysis and other information.”	Letter from Sandra S. Nichols, WildLaw Staff Attorney, November 18, 2004	<b>Applicant and Corps Response:</b> See response to comment 6.
540 “I am a resident of Cullman County AL. and very much in favor of the construction of the Duck River Reservoir.”	Letter from Terry Linton	<b>Applicant Response:</b> Applicant agrees that the project is necessary. <b>Corps Response:</b> Comment is noted.
541 “I Support the City & County in their efforts to Build a Second Water Supply for Cullman.”	Letter from Bessie McIntosh, August 14, 2005	<b>Applicant Response:</b> Applicant agrees that the project is necessary. <b>Corps Response:</b> Refer to Corps response to comment 279.
542 “I am in favor of the proposed Duck River Dam.”	Letter from Daniel Pugh	<b>Applicant Response:</b> Applicant agrees that the project is necessary. <b>Corps Response:</b> Refer to Corps response to comment 279.
543 “I believe it would be a good alternate water source and the continuing of Cullman County.”	Letter from Maegan Stewart	<b>Applicant Response:</b> Applicant agrees that the project is necessary. <b>Corps Response:</b> Refer to Corps response to comment 279.
544 “I Seth Murphee a resident of Cullman County supports the Lake Project.”	Letter from Seth Murphee	<b>Applicant Response:</b> Applicant agrees that the project is necessary. <b>Corps Response:</b> Refer to Corps response to comment 279.
545 “The Dam will cover my forty acres of property, I regret this but if this community needs additional water, they certainly need my support. I would think a community needs would and should come first over the argument of a few who are thinking of their own recreational pursuits.”	Letter from Marjorie Noble Craig, August 15, 2005	<b>Applicant Response:</b> Applicant agrees that the project is necessary. <b>Corps Response:</b> Refer to Corps response to comment 279.
546 “... I understand the need for an additional water supply and support the efforts to construct a	Letter from Robert Harbison, August 31, 2005	<b>Applicant Response:</b> Applicant agrees that the project is necessary. <b>Corps Response:</b> Refer to Corps response to comment 279.

Comments	Source	Answers to the Comments
new lake to ensure a more adequate water supply to the area.”		
547 “... I am writing is to request a public meeting regarding this dam.”	Letter from Janice Barrett, August 3, 2005	<b>Applicant and Corps Response:</b> See response to comment 7.
548 “... please allow time for public review and comment on the draft plan.”	Letter from Janice Barrett, August 3, 2005	<b>Applicant and Corps Response:</b> See response to comment 6.
549 ““This Supplement uses six- to ten-year old data used from the original permit application, the water quality data is meaningless today, and was not of much value when the application was made.”	Letter from Bernard H. and Patricia M. Byrnes, August 11, 2005	<b>Applicant and Corps Response:</b> The analyses are based on conditions as of 1999, not current conditions. The reduction in nutrient loading necessary for the reservoir to operate efficiently is from 1999 levels, not the loading as of 2005.
550 “I am particularly concerned about the legal status of the “District”, or the “Supply Authority” to acquire debt and issue bonds to pay for the project. The original entity of the “Project” and the signers have not maintained the stipulations of its original charter.”	Letter from Bernard H. and Patricia M. Byrnes, August 11, 2005	<b>Applicant Response:</b> The CMWD is an advisory committee. At the recommendation of the City of Cullman, the Cullman County Commission, and the independent water systems supplied by Cullman, the Cullman Utilities Board, which owns and operates Lake Catoma and the Treatment Plant, will be the relevant financing entity for the Duck River reservoir project. A permanent water authority or water district, as authorized by Alabama Law, is the proposed management entity once the project is completed. <b>Corps Response:</b> Refer to Corps response to comments 49, 50 and 51.
551 “Somehow the “alternative/ supplement” aspect of the reservoir was dropped and it became a sole source to provide for all of the projected needs.”	Letter from Bernard H. and Patricia M. Byrnes, August 11, 2005	<b>Applicant Response:</b> See response to comment 263. <b>Corps Response:</b> Refer to Corps response to comment 24.
552 “The need for this project was questioned when the first application was made, and demand for water has been dropping.”	Letter from Bernard H. and Patricia M. Byrnes, August 11, 2005	<b>Applicant Response:</b> See response to comment 11. <b>Corps Response:</b> Refer to Corps response to comment 279.
553 “It appears that people are being disingenuous when they say that	Letter from Bernard H. and Patricia M.	<b>Applicant Response:</b> Applicant is confident that BMPs will reduce pollution by 60%. Exhaustive analysis and research indicates this to be the case. If BMPs do not

Comments	Source	Answers to the Comments
pollutants can be reduced by voluntary adoption of best management practices which would reduce the pollutants in the Duck River by 60 percent.”	Byrnes, August 11, 2005	meet this threshold, the Corps has the ability to take steps to modify the permit in order to achieve a 60% reduction of pollutants in the Duck River. At any rate, water quality in the reservoir and in the Duck River will be protected. <b>Corps Response:</b> Refer to Corps response to comments 49, 50, 51 and 291.
554 “It does not appear that the Corps will be able to address the federal court’s objections regarding water quality and downstream impacts.”	Letter from Bernard H. and Patricia M. Byrnes, August 11, 2005	<b>Applicant Response:</b> Applicant disagrees. Applicant has updated all relevant information contained in the original EA. The Court’s opinion in <i>American Canoe Association v. White</i> took issue with certain portions of the original EA only and the applicant has updated those portions of the original EA that the Court identified as insufficient. Commenter has not come forward with specific information that would suggest additional information should be updated. <b>Corps Response:</b> The Corps believed the Supplement EA addressed all of the Court’s concerns in <i>American Canoe Association v. White</i> .
555 “Please look at the facts and reconsider this costly mistake before it’s too late.”	Letter from Jeff & Kim Hall, August 24, 2005	<b>Applicant Response:</b> All reasonable alternatives to the project have been considered. <b>Corps Response:</b> Comment is noted.
556 “I am writing to request a public meeting regarding the Duck River Dam project in Cullman County, Alabama.”	Letter from Melba J. King, December 20, 2004	<b>Applicant and Corps Response:</b> See response to comment 7.
557 “I am writing to request a public meeting regarding the proposed Duck River Dam in Cullman County, Alabama.”	Letter from Steve Masterson, December 8, 2004	<b>Applicant and Corps Response:</b> See response to comment 7.
558 “... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Steve Masterson, December 8, 2004	<b>Applicant and Corps Response:</b> See response to comment 6.
559 “We are very concerned with the Duck River Dam project.”	Letter from Tanya S. Milliken, Sr., August 27, 2005	<b>Applicant Response:</b> Applicant is concerned that the project is necessary to provide an adequate backup water supply and to meet growing water demands. <b>Corps Response:</b> Comment is noted.
560 “If a study has been performed perhaps a public meeting as to inform the public about the	Letter from Rodney Morgan, February 15, 2005	<b>Applicant and Corps Response:</b> See response to comment 7.

Comments	Source	Answers to the Comments
561 results, would be informative." "I am concerned that the proposed project is not an efficient use of our tax dollars."	Letter from Rodney Morgan, February 15, 2005	<b>Applicant Response:</b> Tax dollars will not fund the project. The cost of operation of the system is paid for by the customers using the water. <b>Corps Response:</b> Refer to applicant's response.
562 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from Sean Alexander, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
563 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from Danny L. Andrews, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
564 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from Margaret W. Austin, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
565 "In anticipation of the imminent	Letter from Eric	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.

Comments	Source	Answers to the Comments
<p>release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Baker, March 5, 2005</p>	
<p>566 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Jeff Barrow, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>567 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Lise Buck, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>568 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public</p>	<p>Letter from Deborah Carpenter, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>		
<p>569 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Clifton R. ____, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>570 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Linda F. Cox, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>571 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Andre Cleaver, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>572 “In anticipation of the imminent release of the environmental</p>	<p>Letter from Mark ____, March 5,</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	2005	
573 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from Rachel Diliberto, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
574 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from Tony Diliberto, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
575 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the	Letter from Amelia Ann Dodd, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.

Comments	Source	Answers to the Comments
<p>release and public notice of the permit, EA, and any other relevant documents.”</p>		
<p>576 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Jennifer L. Dolcelli, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>577 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Gregory _____, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>578 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Brian Fisher, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>579 “In anticipation of the imminent release of the environmental assessment and Section 404</p>	<p>Letter from Phillip C. _____, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>		
<p>580 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Dana L. Gardner, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>581 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from J. C. Goodwin, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>582 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the</p>	<p>Letter from James Graham, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>583 permit, EA, and any other relevant documents.”</p> <p>“In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Betty V. Harrison, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>584 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Jessica Hartley, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>585 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Allen C. Hredde, Jr., March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>586 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps</p>	<p>Letter from Lisa Hendricks, March 5, 2005</p>	<p><b>Applicant and Corps response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>		
<p>587 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from James C. Herring, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>588 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Susan Herring, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>589 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other</p>	<p>Letter from _____ Hill, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>590 relevant documents.”</p> <p>“In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from _____ Hill, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>591 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from _____ Hill, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>592 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Martin Hinrichs, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>593 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this</p>	<p>Letter from Donna Holley, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>issue. . . . I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>		
<p>594 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. . . . I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Terry D. Howell, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>595 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. . . . I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Fred Huey, III, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>596 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. . . . I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other</p>	<p>Letter from Kay Henderson, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>597</p> <p>relevant documents.”</p> <p>“In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from William Hudson, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>598</p> <p>“In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Carol _____, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>599</p> <p>“In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Allen Jones, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
----------	--------	-------------------------

Comments	Source	Responses
<p>600</p> <p>"In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Wesley Johnson, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>601</p> <p>"In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Lorraine _____, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
602 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from Mike Lawrence, March 5, 2005	Applicant and Corps Response: See responses to comments 6 and 7.
603 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from William F. Lawrence, March 5, 2005	Applicant and Corps Response: See responses to comments 6 and 7.
604 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."	Letter from Andrew P. Lee, March 5, 2005	Applicant and Corps Response: See responses to comments 6 and 7.
605 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps	Letter from Brian McAnnally, March 5, 2005	Applicant and Corps Response: See responses to comments 6 and 7.

Comments	Source	Answers to the Comments
<p>hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>		
<p>606 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Robert Mitchum, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

<p>607 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Kyle E. Parker, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>608 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public</p>	<p>Letter from Jerry W. Pennington, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>609 comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p> <p>“In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Roger Perrin, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>610 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Chilton Powell, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>611 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from B. Douglas Pratt, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>612 “In anticipation of the imminent release of the environmental</p>	<p>Letter from Lynn Rassmussen, March</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	5, 2005	
613 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Judith A. Ranelli, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
614 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Kenzi Rauth, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
615 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public	Letter from Stephen Rayfield, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.

<b>Comments</b>	<b>Source</b>	<b>Answers to the Comments</b>
comment period following the release and public notice of the permit, EA, and any other relevant documents.”		
616 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Heather Reed, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
617 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Jim Robertson, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
618 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Linda Rosshirt, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
619 “In anticipation of the imminent release of the environmental	Letter from Alan Scott and Suzie	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.

Comments	Source	Answers to the Comments
assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Scott, March 5, 2005	
620 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Luke Scott, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
621 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”	Letter from Gabriella Schliut, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
622 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public	Letter from Nancy S. Shue, March 5, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.

Comments	Source	Answers to the Comments
<p>comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>		
<p>623 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Bob Shepard, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>624 “In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents.”</p>	<p>Letter from Helen and Ted Sparks, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>625 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Jennifer Taylor, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>626 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Donna Tolbat, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>627 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ... I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Renee Nash, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>628 "In anticipation of the imminent release of the environmental assessment and Section 404</p>	<p>Letter from Chris Voegele, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>		
<p>629 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Pati Wilson, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>630 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the permit, EA, and any other relevant documents."</p>	<p>Letter from Gayle Yester, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>631 "In anticipation of the imminent release of the environmental assessment and Section 404 permit I request that the Corps hold a public meeting on this issue. ...I am requesting an extension to the public comment period following the release and public notice of the</p>	<p>Letter from No Name, March 5, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>permit, EA, and any other relevant documents.”</p>		
<p>632 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from John T. Ackerman, PhD and Kim Ackerman, July 7, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>633 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Daniel Bigay</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>634 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Wanda Biggs, July 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>635 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Curtis Biggs</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>636 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from John S. Booth, July 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>637 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Mary Booth, July 16, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

**Comments****Source****Answers to the Comments**

638	<p>“... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	Letter from Bryan Burgess, July 21, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
639	<p>“... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	Letter from Carter Brooke, August 1, 2005	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.

Comments	Source	Answers to the Comments
<p>640 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Jill Chambers</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>641 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Martin H. Chambers</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>642 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Debra D. Fishburne, July 19, 2005</p>	<p><b>Applicant and Corps response:</b> See responses to comments 6 and 7.</p>
<p>643 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from William S. Fishburne, III, July 19, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>644 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Andrew F. Freeland, Jr., July 18, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>645 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Leonie Gail, July 19, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>646 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Karen A. Garver</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>647 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Joel Gragg, July 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>648 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Terry Harrison</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>649 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Shane Hulsey, July 21, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

**Comments****Source****Answers to the Comments**

650	“...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ...I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”	Letter from _____	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.
651	“...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ...I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”	Letter from Florence M. Jackson	<b>Applicant and Corps Response:</b> See responses to comments 6 and 7.

Comments	Source	Answers to the Comments
<p>652 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Willis G. Jackson</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>653 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Margaret Wade Johnston, July 6, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>654 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Mark Johnston, July 6, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>655 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from John Knight, July 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>656 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Katherine Lolurto, July 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>657 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Jason McClure, July 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>658 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ...I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Nicole McClure</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>659 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ...I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Steve Masterson, July 12, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

<b>Comments</b>	<b>Source</b>	<b>Answers to the Comments</b>
<p>660 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Dan Murchison</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>661 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>No Name</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>662 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter form Margo A. _____</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>663 “... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter fro Michelle Reynolds</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>664 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ...I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Dan Tempas, July 6, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>665 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ...I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Neal Watts, July 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>666 “...I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ...I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document.”</p>	<p>Letter from Drayton Wear, July 19, 2005</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>667 “...I am writing to request an</p>	<p>Letter from Bonnie</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>

Comments	Source	Answers to the Comments
<p>extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document."</p>	<p>White, July 19, 2005</p>	
<p>668 "... I am writing to request an extension to the public review period for the Environmental Assessment Supplement issues for the Proposed Duck River Reservoir in Cullman County, Alabama. ... I request that the Corps schedule a public meeting to discuss this EA Supplement and the complex issues associated with this document."</p>	<p>Letter from David Willis</p>	<p><b>Applicant and Corps Response:</b> See responses to comments 6 and 7.</p>
<p>669 "I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued."</p>	<p>Letter from Eric Baker, August 3, 2005</p>	<p><b>Applicant Response:</b> To the first part of this comment: The original Environmental Assessment ("EA") provided a comprehensive examination of the proposed project's potential for environmental impact. That EA was challenged, and ultimately examined in detail, in Federal District Court in the lawsuit <i>American Canoe Association v. White</i>. The conclusion of that exhaustive judicial review and examination was that the overwhelming bulk of the EA, and the Corps' Finding of No Significant Impact based on that EA, was legally sufficient and adequate to meet the Corps' NEPA obligations. Only three areas of deficiency were noted by the District Court, which then invited the Corps to make the necessary corrections. The Draft Supplement to the EA is intended to, and succeeds in, providing the requested additional analysis and making the requested corrections. Efforts to revisit the original analysis and conclusions of the EA, as the commentator seeks to do here, are, therefore, misplaced, untimely, and unproductive. So are questions that do not convey any additional information regarding the subjects examined in the Draft Supplement to the EA. Therefore, the best that can be said regarding the comment is</p>

Comments	Source	Answers to the Comments
		<p>that it is noted.</p> <p>To the second part of the comment: The water quality analyses are based on conditions as of 1999, not current conditions. The reduction in nutrient loading necessary for the reservoir to operate efficiently is from 1999 levels, not the loading as of 2005.</p> <p><b>Corps Response:</b> Refer to Corps response to comment 17 regarding Alternatives. Also, the Supplemental EA provided information and analysis on possible project impacts.</p>
<p>670            "I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued."</p>	<p>Letter from Pam Belrose, August 3, 2005</p>	<p><b>Applicant and Corps Response:</b> This comment is the same as to comment 669. Please see comment 669 for the response.</p>
<p>671            "I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued."</p>	<p>Letter from Claire Preston</p>	<p><b>Applicant and Corps Response:</b> Please see response to comment 669.</p>
<p>672            "I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit</p>	<p>Letter from Betty V. Harrison, August 3, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>

Comments	Source	Answers to the Comments
<p>673</p> <p>was issued.”</p> <p>“I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from Vander E. Hill, August 3, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>
<p>674</p> <p>“I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from Fred Huey, III, August 3, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>
<p>675</p> <p>“I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from Betsy Gibson,</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>
<p>676</p> <p>“I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman</p>	<p>Letter from David A. Gay</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>

Comments	Source	Answers to the Comments
<p>677 County since the last permit was issued.”</p> <p>“I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from David H. Johnson, August 3, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>
<p>678 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from Brian McAnnally, August 3, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>
<p>679 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from John David Mitchell</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>
<p>680 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes</p>	<p>Letter from W.C. Peinhardt, August 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>

Comments	Source	Answers to the Comments
that have occurred in Cullman County since the last permit was issued."		
681 "I feel the original cost estimate for the Smith Lake Pipeline was grossly inflated !!	Letter from W.C. Peinhardt, August 15, 2005	<b>Applicant and Corps Response:</b> The cost estimate for the Smith Lake alternative was prepared by the Corps and private engineers. Cost estimates on every alternative were listed in the original EA.
682 "I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued."	Letter from Elizabeth Preston	<b>Applicant and Corps Response:</b> See response to comment 669.
683 "I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued."	Letter from Frank Preston	<b>Applicant and Corps Response:</b> See response to comment 669.

Comments	Source	Answers to the Comments
684 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”	Letter from Kathryn M. Preston	Applicant and Corps Response: See response to comment 669.
685 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”	Letter from Lawrence J. Preston	Applicant and Corps Response: See response to comment 669.
686 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”	Letter from Stephen Preston	Applicant and Corps Response: See response to comment 669.
687 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and	Letter from V. Rundquist, August 3, 2005	Applicant and Corps Response: See response to comment 669.

<b>Comments</b>	<b>Source</b>	<b>Answers to the Comments</b>
<p>does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>		
<p>688 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from Charles C. Tanner, August 28, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>
<p>689 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”</p>	<p>Letter from _____ Vern, August 3, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 669.</p>

Comments	Source	Answers to the Comments
690 “I believe that other alternatives should be considered...The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”	Letter from Lauren Johnson Whiteside	<b>Applicant and Corps Response:</b> See response to comment 669.
691 “I believe that other alternatives should be considered... The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”	Letter from Elizabeth Yates	<b>Applicant and Corps Response:</b> See response to comment 669.
692 “I believe that other alternatives should be considered...The Corps of Engineers makes no attempt to update the six- to ten-year old data used in the original permit decision and does not consider the changes that have occurred in Cullman County since the last permit was issued.”	Letter from Virginia H. Yates	<b>Applicant and Corps Response:</b> See response to comment 669.
693 “...I have serious reservations concerning the dam construction. This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and environmental assessment	Letter from Julia Bright, August 18, 2005	<b>Applicant Response:</b> The analyses are based on conditions as of 1999, not current conditions. The reduction in nutrient loading necessary for the reservoir to operate efficiently is from 1999 levels, not the loading as of 2005. <b>Corps Response:</b> Refer to applicant’s response and Corps response to comment 669.

Comments	Source	Answers to the Comments
<p>and does not sufficiently address the items raised in the federal court ruling.”</p>		
<p>694 “I believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging project. This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and environmental assessment and does not sufficiently address the items raised in the federal court ruling.”</p>	<p>Letter from Dell Brooke, August 15, 2005</p>	<p><b>Applicant and Corps Response:</b>            To the first part of this comment: The first two parts of this comment are the same as comment 669. Please see comment 669 for the responses.             To the last part of the comment: The analyses presented in the EA Supplement are sufficient to address the three areas of deficiency were noted by the District Court.</p>
<p>695 “We believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging project. This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and environmental assessment and does not sufficiently address the items raised in the federal court ruling.”</p>	<p>Letter from Hans Paul and Lori Oswald, August 20, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 694.</p>
<p>696 “I believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging project. This Supplement makes no attempt to update the</p>	<p>Letter from Elizabeth L. Salter, August 30, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 694.</p>

<b>Comments</b>	<b>Source</b>	<b>Answers to the Comments</b>
<p>six- to ten-year old data used in the original permit application and environmental assessment and does not sufficiently address the items raised in the federal court ruling.”</p>		
<p>697            “I believe that other alternatives should be pursued, such as a comprehensive water conservation program, before proceeding with such an environmentally damaging project. This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and environmental assessment and does not sufficiently address the items raised in the federal court ruling.”</p>	<p>Letter from Margaret Wade Johnston, August 30, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 694.</p>

Comments	Source	Answers to the Comments
<p>698 "I believe that other alternatives should be pursued, such as comprehensive water conservation program before proceeding with such an environmentally damaging project. This Supplement makes no attempt to update the six- to ten-year old data used in the original permit application and environmental assessment and does not sufficiently address the items raised in the federal court ruling."</p>	<p>Letter from Ms. Carter Brooke, August 15, 2005</p>	<p><b>Applicant and Corps Response:</b> See response to comment 694.</p>
<p>699 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and the maintain the quality of life we are accustomed to for future generations."</p>	<p>Letter from Kathy Haynes and Crane Hill'</p>	<p><b>Applicant Response:</b> Applicant agrees that an alternate water source is needed. <b>Corps Response:</b> Refer to Corps response to comment 279.</p>
<p>700 "I support the project and feel it is necessary to have an alternate water supply for emergency and drought situations and the maintain the quality of life we are accustomed to for future generations."</p>	<p>Letter from Keith May</p>	<p><b>Applicant Response:</b> Applicant agrees that an alternate water source is needed. <b>Corps Response:</b> Refer to Corps response to comment 279.</p>

Comments	Source	Answers to the Comments
<p>701 "Cullman County has learned that the Duck River Project will cost more than the \$50 million cap previously agreed upon by the City and the County and Cullman county is investigating other water sources and will likely not be involved in the Duck River Project.</p>	<p>Letter from Wiley Kitchens, chairman Cullman County Commission, August 29, 2005</p>	<p><b>Applicant Response:</b> This letter, drafted by Wiley Kitchens, was never intended to be sent as a comment letter to the corps of Engineers concerning the Duck River reservoir project, nor did it represent the official position of the county commission. The draft letter was erroneously submitted to the Corps by a third party on December 19, 2005. For those reasons, the applicant believes that this letter should be not considered a comment letter on the proposed project. See also comment 702.</p> <p><b>Corps Response:</b> Refer to Applicant's response.</p>
<p>702 "I did not intend for the letter [of August 29, 2005] to be addressed to the Army Corps of Engineers, or for the letter to be mailed. The letter was never mailed and my office has the original. The letter was to be addressed and sent to the City of Cullman, but only later if a county commission meeting was held and in total agreement to send. My personal view was presented in the draft letter that all efforts must be made to keep the project in budget. . . .</p>		<p><b>Applicant's Response:</b> The content of this letter speaks for itself. While Mr. Kitchens personally wishes to keep the Duck River reservoir project in budget, it is also clear that he wishes the Corps to recognize that his earlier draft letter did not represent the position of the Cullman County Commission, and was, in fact, never even mailed.</p> <p><b>Corps Response:</b> Refer to Applicant's response.</p>

Comments	Source	Answers to the Comments
703 "Taxpayers don't need to be subsidizing the poultry operations and the giant poultry industries, who have billions of dollars income, to build dams for their chickens and to subsidize the hauling of their litter and paying for cleaning up polluted waters."	Letter from Dr. and Mrs. Bryan E. Burgess, August 10, 2005	<b>Applicant Response:</b> The Duck River reservoir project will not operate as a "subsidy" for any particular industry but instead will provide a reliable backup source of water during dry periods and will support continued residential growth and the development of a wide variety of industries in Cullman County. The cost of the project will be paid by consumers and will not be paid for by tax revenue. <b>Corps Response:</b> Refer to applicant's response and also to Corps response to comment 279.
704 "The building of a lake should be prohibited, since it will most likely lead to more animal feeding operations needing water for growing chickens and consequently to more impaired waters and the use of taxpayer dollars to support the large chicken corporations."	Letter from Dr. and Mrs. Bryan E. Burgess, August 10, 2005	<b>Applicant and Corps Response:</b> See response to comment 703.
705 "I support the Duck River Dam Project for the Cullman-Morgan Water District."	Letter from Donald B. Morgan, Cullman, AL, August 22, 2005	<b>Applicant Response:</b> Applicant appreciates commenter's support. <b>Corps Response:</b> Comment is noted.
706 "I am in favor of building the lake and believe it will be a very important part of the growth of Cullman."	Letter from Howard Cole, Cullman, AL, August 15, 205	<b>Applicant Response:</b> Applicant appreciates commenter's support. <b>Corps Response:</b> Comment is noted.

Comments	Source	Answers to the Comments
707 "I am in favor of the project."	Letter from Gertrude Cole; Cullman, AL, August 15, 2005	<b>Applicant Response:</b> Applicant appreciates commenter's support. <b>Corps Response:</b> Comment is noted.
708 "I am a property owner who will be directly affected by the Project. I do support it."	Letter from Buddy Cole, Cullman, AL, August 15, 2005	<b>Applicant Response:</b> Applicant appreciates commenter's support. <b>Corps Response:</b> Comment is noted.
709 "I believe the Duck River Project would be a benefit to our country and environment."	Letter from Donald P. Pugh, August 28, 2005	<b>Applicant Response:</b> Applicant appreciates commenter's support. <b>Corps Response:</b> Comment is noted.
<b>End of Comments</b>		