

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
NORTHEASTERN DIVISION**

ALABAMA RIVERS ALLIANCE,		
INC., et al.,		
Plaintiffs,		
v.		CV-07-BE-1609-NE
U.S. ARMY CORPS OF ENGINEERS,		
et al.,		
Defendants.		

MEMORANDUM OPINION

This case comes before the court on “Plaintiffs’ Motion for Summary Judgment” (doc. 32); “City of Cullman’s Motion for Summary Judgment” (doc. 57); and “Federal Defendants’ Cross-Motion for Summary Judgment” (doc. 59). Plaintiffs, Alabama Rivers Alliance, Black Warrior Riverkeeper, Friends of the Mulberry Fork River, Wild South, Nelson Brooke, James Robertson, and Paul Perret, object to the decision of the United States Army Corps of Engineers to issue a permit under § 404 of the Clean Water Act to the Cullman-Morgan Water District to construct a dam across the Duck River in Cullman County, Alabama. Defendants are Peter Geren, the Secretary of the Army; Robert L. Van Antwerp, the Chief of Engineers in the Department of the Army; Peter F. Taylor, the District Engineer and District Commander for the Mobile District of the Corps of Engineers; and the United States Army Corps of Engineers (Corps). The City of Cullman and the Utilities Board of the City of Cullman are intervenors. The parties have fully briefed all the motions for summary judgment.

For the reasons stated below, the court finds that the Plaintiffs’ motion (doc. 32) is due to

be DENIED, the City of Cullman's motion (doc. 57) is due to be GRANTED, and the Federal Defendants' motion (doc. 59) is due to be GRANTED.

The court determined in a prior incantation of this case that the Corps had not taken the requisite "hard look" at several considerations in issuing the original permit and FONSI. *Am. Canoe Ass'n v. White*, 277 F. Supp. 2d 1244 (N.D. Ala. 2003). Based on that determination, the court remanded the case to the Corps so that the Corps could take the requisite hard look. Following the remand, the Corps conducted further analysis and ultimately decided to issue another FONSI and permit. The court concludes that the Defendants in the present case are entitled to judgment as a matter of law because the Corps' decision was not arbitrary and capricious and because the Corps took a hard look at the issues discussed below. A separate order to that effect will be entered simultaneously.

INTRODUCTION

Plaintiffs brought this action pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(2), and the Clean Water Act (CWA), 33 U.S.C. § 1344(b)(1). Plaintiffs argue that the Corps' Finding of No Significant Impact (FONSI), the Corps' resulting decision not to prepare an environmental impact statement (EIS), and the Corps' ultimate decision to issue the permit were arbitrary and capricious. Plaintiffs also assert that the Corps' environmental assessment is inadequate, arbitrary, and capricious, and that the Corps failed to consider all appropriate alternatives.

Plaintiffs ask this court to find that the Corps' decision to issue a FONSI and not to prepare an environmental impact statement was arbitrary and capricious and not in accordance with 42 U.S.C. § 4332(2)(C). Plaintiffs also ask this court to find that the Corps failed to

properly consider alternatives, specifically the option of protecting the existing water source from contamination, in violation of 40 C.F.R. § 1508.9 and 42 U.S.C. § 4332(2)(E). Plaintiffs urge the court to find that the Corps' determination that the discharge of fill material into the Duck River to create the dam complies with guidelines published under 33 U.S.C. § 1344(b)(1) was arbitrary and capricious. Plaintiffs further urge the court to declare that the Corps' failure to supplement the original environmental assessment with a discussion of the reduction in the growth of water demand, reduction in population growth, reduction in poultry production, and increase in water supply was arbitrary and capricious. Plaintiffs ask the court to declare that the Corps' determination that a 3,300 pounds per year reduction in Total Phosphorous (TP) load at the proposed Duck River reservoir is possible was arbitrary and capricious.

Plaintiffs, in essence, ask the court to declare that the Corps issued a permit for the Duck River dam in violation of NEPA and the CWA and to vacate that permit. They also ask the court to enjoin the Corps from allowing the Duck River Project to proceed until the Corps prepares an environmental impact statement or adequately supplements the environmental assessment.

The parties have fully briefed the issues raised in the cross motions for summary judgment. The issue before the court, essentially, is whether the Corps' decision to issue a FONSI based upon the allegedly inadequate supplemental environmental assessment conducted in 2006, and the resulting issuance of a permit to build the dam, was arbitrary and capricious. Upon due consideration and for the reasons stated below, the court answers this question in the negative.

FACTS¹

I. Background

Cullman County is located in north central Alabama approximately 50 miles north of Birmingham, Alabama's largest city, and approximately 50 miles south of Huntsville. Cullman County covers a land area of 743 square miles and features 11 incorporated municipalities. Little groundwater exists in the area, so local water systems utilize a surface supply that is interconnected over a large area. These systems now serve a large population in Cullman County and portions of five adjoining counties.

In March 1996, the Cullman-Morgan Water District (CMWD) and City of Cullman applied to the Corps for a permit under CWA § 404, 33 U.S.C. § 1344, for the purpose of constructing a dam on the Duck River to impound a reservoir. Section 404 of the CWA requires the Corps to issue a permit for "the discharge of dredged or fill material" into navigable waters; thus, a § 404 permit is a prerequisite to the building of any dam. The Corps completed an environmental assessment (EA) pursuant to NEPA in October 1999 (1999 EA) and an evaluation of compliance with guidelines published under CWA § 404(b)(1) in January 2000. The Corps determined in the 1999 EA, based on two studies conducted in 1994 and 1995, that a water supply was needed to meet the projected water supply needs of the CMWD and to serve as an emergency source in the event the current water source became contaminated. The 1999 EA considered twenty-one alternatives to the creation of a dam on the Duck River for the purpose of increasing water supply. Ultimately, the Corps determined that no practicable alternatives to

¹ The facts set out below are gleaned from the submitted administrative record, the parties' submissions of facts claimed to be undisputed, their respective responses to those submissions, and the court's own examination of the evidentiary record.

alleviating the water supply problem would have a less adverse impact on the aquatic ecosystem than the damming of Duck River. The Corps determined that the proposed project did not constitute a major federal action significantly affecting the quality of the human environment and that it complied with the § 404(b)(1) guidelines. On February 1, 2000, the Corps issued Permit No. AL96-00912-U (2000 Permit) to the CMWD and the City of Cullman authorizing the construction of the Duck River dam.

Following the issuance of the original 2000 Permit, several environmental groups, including the American Canoe Association and the Alabama Rivers Alliance, filed suit for declaratory and injunctive relief to vacate the permit. On August 15, 2003, this court vacated the permit and remanded the matter to the Corps, concluding that the Corps did not take a “hard look”² at the cumulative effects of other proposed projects on the Black Warrior River Basin, the future water quality of the proposed reservoir, and the downstream effects of the proposed dam on the Mulberry Fork of the Black Warrior River. This court directed the Corps to take a hard look at those issues, reconsider its decision, and determine whether an Environmental Impact Statement (EIS) was required for the Duck River project.

In June 2005, the Corps published a Draft Supplemental Environmental Assessment (2005 DSEA) for the proposed Duck River dam and reservoir project and allowed for a 60-day period of public comment on the project. The City of Cullman and the Corps consulted with CH2MHill, an environmental and engineering consulting firm, to determine ways to thoroughly improve the water quality analysis for the supplemental environmental assessment. During the

² See *Sierra Club v. U.S. Corps of Eng'rs*, 295 F.3d 1209, 1214 (11th Cir. 2002) (discussing the “hard look” standard).

public comment period, the City of Cullman provided a detailed letter expressing the continued need for the project.

On August 24, 2006, the Corps issued an Environmental Assessment Summary, 404(b)(1) Analysis, Statement of Findings, and Decision Document (2006 DD), which took into account the analysis from both the original environmental assessment, the supplemental environmental assessment, and the public comments. The 2006 DD concluded that the proposed Duck River project did not constitute a major federal action significantly affecting the quality of the human environment, did not require the preparation of an EIS, and complied with the § 404(b)(1) guidelines. On November 9, 2006, the Corps issued Permit No. SAM-2006-00912-U to the CMWD and the City of Cullman authorizing the construction of the Duck River dam. In September 2007, the Plaintiffs filed this suit seeking declaratory and injunctive relief from the November 2006 Permit.

II. Effects of Duck River Dam

The proposed Duck River dam will permanently obstruct the river with a 135-foot high and 1,925-foot long rock fill dam. Whitewater canoeing and kayaking in the Duck River above and below the dam may be diminished or eliminated. However, the Corps has agreed to coordinate with the Birmingham Canoe Club to release an extra 161 cubic feet per second in support of the Club's annual canoe and kayak race on Mulberry Fork.

A 5.7- mile stretch of the Duck River and 3.2 miles of other streams, totaling approximately 640 acres, will be permanently submerged by the reservoir created behind the dam. The reservoir will also submerge approximately 35 acres of farm land, and 13 existing residences will be demolished. County Road 1651 will be closed in two places, and a new

connecting route between County Roads 1678 and 1676 will be constructed. Approximately 54 acres of existing forest will be replaced by the dam, spillway, pipeline corridor, and borrow area; however, the City of Cullman has agreed to undertake the management of 555 acres of buffer zone, dam, spillway area, and borrow area for old growth forest. Approximately 360 of those acres would be a buffer zone around the reservoir and would be subject to a no-development restrictive covenant.

Approximately 1.32 acres of wetlands would be inundated by the reservoir. However, the Corps has agreed to preserve in perpetuity 5.28 acres of wetlands in exchange. Furthermore, the creation of the reservoir could lead to the development of nearly 3 acres of additional wetlands along the reservoir's fringes.

Thirteen species of fish now living in the Duck River will not tolerate "lake conditions" when the reservoir is created behind the dam. Resident terrestrial species incapable of relocating when the reservoir is created will be eliminated. However, the lake habitat and fringe wetlands would provide a habitat for some animals, and migratory birds should especially benefit from the aquatic habitat created by the reservoir.

Water use rates will increase by approximately 20% to cover repayment of the bonds used to finance construction of the dam, assuming the current water consumption rate continues. However, as the service area grows and consumption increases, the percentage of the rate increase for each user will decrease.

Accelerated eutrophication of the reservoir will occur absent a 60% reduction in Total Phosphorous (TP) loads. The success of the plan to reduce the TP load in the reservoir depends on effective implementation and enforcement of best management practices at animal feeding

operations (AFOs) and concentrated animal feeding operations (CAFOs) and effective implementation and enforcement of tillage and other cropland management practices. Private property owners and agribusinesses within the 23,347-acre watershed may be required to implement practices and alter land management activities to limit pollution of the reservoir. The 2005 DSEA acknowledges that some uncertainties remain regarding the potential effectiveness of the recommended management activities and the potential for full compliance by all property owners in the watershed. The entity charged with the responsibility to oversee the implementation and enforcement of these management practices is the Watershed Management Authority (WMA).

III. Alternatives

The Corps determined in the 1999 EA, based on two studies conducted in 1994 and 1995, that an additional water source was needed, because the Lake Catoma reservoir might not be able to provide enough water based on projected demands, and because Lake Catoma might become unusable due to contamination by *e. coli* or other hazardous materials spilled by trucks utilizing the roadways bordering Lake Catoma. However, the population has grown at a slower rate than projected in 1999; poultry production has actually decreased, rather than increasing as projected; several businesses and cities have stopped utilizing the Lake Catoma water supply; and the height of the Lake Catoma dam was increased, resulting in a 16% increase in water generating capacity. The Corps did not draft a new analysis section regarding the continuing need for the Duck River project in light of these factors when completing the 2005 EA and the 2006 DD, though it did rely on and note new information, regarding the heightened Lake Catoma dam and the City of Cullman's statement that the need for the project continued, in stating that the project was still

necessary.

Plaintiffs filed this suit asserting that the Defendants failed to prepare an EIS for the proposed Duck River project, in violation of NEPA § 102(2)(C); that the Defendants failed to properly consider alternatives to the Duck River dam, in violation of 40 C.F.R. § 1508.9, NEPA § 102(2)(C), and CWA § 404(b)(1); and that the Defendants failed to discuss new circumstances and information relevant to the issue of whether the Duck River dam is needed, in violation of 40 C.F.R. § 1508.9 and NEPA § 102(2)(C). The Plaintiffs and Defendants have filed cross motions for summary judgment, and the parties have fully briefed all motions.³

LEGAL STANDARDS

The Clean Water Act, 33 U.S.C. §§ 1251-1387, establishes a comprehensive program designed to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To achieve this goal, the CWA prohibits the discharge of pollutants, including dredged or fill material, into navigable waters unless authorized by a CWA permit. 33 U.S.C. § 1311(a). The CWA defines “navigable waters” as “waters of the United States,” which in turn is defined by regulation to include certain wetlands. 33 C.F.R. § 328.3(a), (b).

Section 404 of the CWA authorizes the Secretary of the Army, acting through the Corps, to regulate discharges of dredged and fill material into wetlands through the issuance of permits. 33 U.S.C. § 1344. All CWA § 404 permits must meet the guidelines issued by the EPA and the Corps under CWA § 404(b)(1), 33 U.S.C. § 1344(b)(1). *See* 33 U.S.C. § 1344(e)(1). The

³ While the Defendants contend that review of the Corps’ decision in this case should be limited to only the three issues for which the case was previously remanded, the court will consider all the arguments briefed.

guidelines in CWA § 404 require the Corps to consider whether “practicable” alternatives to a proposed project exist. *See* 40 C.F.R. § 230.10. “An alternative is practicable if it is available and capable of being done after taking into consideration costs, existing technology, and logistics in light of overall project purposes.” 40 C.F.R. § 230.10(a)(2).

“The object of NEPA is to require federal agencies to consider environmental values when making decisions [such as the issuance of permits under CWA § 404]. The initial responsibility of the federal agency is to determine the extent of the environmental impact.” *C.A.R.E. Now, Inc. v. Federal Aviation Admin.*, 844 F.2d 1569, 1572 (11th Cir. 1988). NEPA “is not a substantive environmental statute which dictates a particular outcome if certain consequences exist. Instead, NEPA creates ‘a particular bureaucratic decisionmaking process.’” *Sierra Club v. U.S. Corps of Eng’rs*, 295 F.3d 1209, 1214 (11th Cir. 2002) (quoting *Sierra Club v. Marsh*, 872 F.2d 497, 497 (1st Cir. 1989)).

Section 102(2)(C) of NEPA, 42 U.S.C. § 4332(2)(C), requires a federal agency to prepare an environmental impact statement when it determines that a major federal action significantly affects the quality of the human environment. To determine whether an action may have significant environmental impacts, and therefore requires an EIS, an agency must follow the regulations promulgated by the federal Council on Environmental Quality (CEQ). 40 C.F.R. § 1500.3; *Hill v. Boy*, 144 F.3d 1446, 1450 (11th Cir. 1998). The CEQ regulations direct federal agencies to first prepare an environmental assessment that “briefly provide[s] sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.” 40 C.F.R. § 1508.9(a)(1). An environmental assessment, therefore, will reach one of two conclusions: “either that the project requires the preparation of an EIS to detail

its environmental impact, or that the project will have no significant impact . . . necessitating no further study of the environmental consequences which would ordinarily be explored further through an EIS.” *Hill*, 144 F.3d at 1450 (quoting *Sabine River Auth. v. U.S. Dep’t of Interior*, 951 F.2d 669, 677 (5th Cir. 1992)). If the agency concludes that the project will have no significant impact, as in the instant case, the agency must issue a FONSI explaining why the action will have no significant impact on the environment. 40 C.F.R. §§ 1501.4(e), 1508.13.

STANDARD OF REVIEW

Under Rule 56(c) the Federal Rules of Civil Procedure, a court should grant summary judgment when “there is no genuine issue as to any material fact . . . and the moving party is entitled to judgment as a matter of law.” Where an action is brought pursuant to the Administrative Procedure Act, “[t]he focal point for judicial review of an administrative agency’s action should be the administrative record.” *P.E.A.C.H., Inc. v. U.S. Army Corps of Eng’rs*, 87 F.3d 1242, 1246 (11th Cir. 1996) (citing *Fla. Power & Light Co. v. Lorion*, 470 U.S. 729, 743-44 (1985)). Where “no one contends the material facts are in dispute or that the [c]ourt needs to go beyond the administrative record,” the court must resolve the case “on the facts contained in the administrative record.” *Ga. River Network v. U.S. Army Corps of Eng’rs*, 334 F. Supp. 2d 1329, 1334 (N.D. Ga. 2003).

In the Eleventh Circuit, courts “review an agency’s decision not to prepare an EIS under an ‘arbitrary and capricious’ standard of review.” *Hill*, 144 F.3d at 1450 (citing *P.E.A.C.H.*, 87 F.3d at 1248 (applying an arbitrary and capricious standard of review to Corps’s decision not to prepare an EIS); *N. Buckhead Civic Ass’n v. Skinner*, 903 F.2d 1533, 1538 (11th Cir. 1990) (adopting the arbitrary and capricious standard when reviewing agency action in NEPA cases)).

In applying the “arbitrary and capricious” standard, a district court must give deference to the agency and refrain from substituting its own judgment for that of the agency. *Sierra Club*, 295 F.3d at 1216 (citing *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)). The “standard requires substantial deference to the agency, not only when reviewing decisions like what evidence to find credible and whether to issue a FONSI or EIS, but also when reviewing drafting decisions like how much discussion to include on each topic, and how much data is necessary to fully address each issue.” *Sierra Club v. Van Antwerp*, 526 F.3d 1353, 1361 (11th Cir. 2008). However, the court has a duty to look beyond the scope of the decision itself to the relevant factors that the agency considered. “This duty requires the court to consider not only the final documents prepared by the agency, but also the entire administrative record.” *Sierra Club*, 295 F.3d at 1216 (citation omitted).

The Eleventh Circuit has adopted four criteria that a court should consider in determining whether an agency’s decision not to prepare an EIS is arbitrary and capricious:

First, the agency must have accurately identified the relevant environmental concern. Second, once the agency has identified the problem it must have taken a “hard look” at the problem in preparing the EA. Third, if a finding of no significant impact is made, the agency must be able to make a convincing case for its finding. Last, if the agency does find an impact of true significance, preparation of an EIS can be avoided only if the agency finds that changes or safeguards in the project sufficiently reduce the impact to a minimum.

Hill, 144 F.3d at 1450 (citing *Coalition on Sensible Transp., Inc. v. Dole*, 826 F.2d 60, 66-67 (D.C. Cir. 1987) (quoting *Sierra Club v. U.S. Dep’t of Transp.*, 753 F.2d 120, 127 (D.C. Cir. 1985))).

In determining whether an agency has met the second step of this process and taken a “hard look” at relevant environmental problems, the Eleventh Circuit has offered the following

guidance:

An agency has met its “hard look” requirement if it has “examined the relevant data and articulated a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. [29,] 43 [(1983)]. The court will overturn an agency’s decision as arbitrary and capricious under “hard look” review if it suffers from one of the following: (1) the decision does not rely on the factors that Congress intended the agency to consider; (2) the agency failed entirely to consider an important aspect of the problem; (3) the agency offers an explanation which runs counter to the evidence; or (4) the decision is so implausible that it cannot be the result of differing viewpoints or the result of agency expertise. *Id.* . . . If the court finds deficiencies in the agency’s reasoning, it may not rectify them or provide a reasoned basis for the agency decision which the agency itself has not articulated. *Id.* . . . Instead, it must remand to the agency so that it may reconsider its own reasoning and decision.

Sierra Club, 295 F.3d at 1214.

When a court is reviewing a final agency action under the APA, the scope of the court’s review is properly limited to the administrative record that was before the agency at the time the agency made its decision. *Fla. Power & Light Co. v. Lorion*, 470 U.S. 729, 743 (1985); *Pollgreen v. Morris*, 770 F.2d 1536, 1545 (11th Cir. 1985). “The role of the court in reviewing the sufficiency of an agency’s consideration of environmental facts is limited both by the time in which the decision was made and by the statute mandating review.” *Fund for Animals v. Rice*, 85 F.3d 535, 546 (11th Cir. 1996). Thus, the court disregards any evidence that was filed by the parties and any evidence outside the record, and focuses exclusively on the administrative record in analyzing the Corps’ decision.

Where the initial level of judicial review of agency action lies in a district court, the district court does not act as a fact-finder. *Fla. Power & Light Co.*, 470 U.S. at 744. Instead, “[t]he task of the reviewing court is to apply the appropriate APA standard of review, 5 U.S.C. §

706, to the agency decision based on the record the agency presents to the reviewing court.” *Id.* at 743-44. Thus, the only issue before this court is whether the Corps’ decision to issue a FONSI and not to prepare an EIS for the Duck River project was an arbitrary and capricious action that violated the APA.

DISCUSSION

Plaintiffs challenge the Corps’ decision to issue a FONSI, and not prepare an EIS, as an arbitrary and capricious action that violates the APA. *See* 5 U.S.C. § 7602(A)(C). Plaintiffs first assert that the Corps acted arbitrarily and capriciously and violated NEPA § 102(2)(C) by failing to prepare an EIS for the proposed Duck River project. All federal agencies must prepare an environmental impact statement for any “major federal action significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). A federal action affects the quality of the human environment if it will or may have an effect on the environment. 40 C.F.R. § 1508.3. In evaluating whether the effects on the quality of the human environment are significant, the federal agency should consider, among other things:

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

...

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

40 C.F.R. § 1508.27(b). A federal agency must analyze both the direct and the indirect effects. 40

C.F.R. § 1508.8. “[I]f a finding of no significant impact is made, the agency must be able to

make a convincing case for its finding.” *Hill v. Boy*, 144 F.3d 1446, 1450 (11th Cir. 1998).

Plaintiffs assert that the Duck River project will “significantly affect the quality of the human environment” by permanently flooding 640 acres of land, destroying thirteen residences, adopting land use and agribusiness operational restrictions, significantly reducing river flows below the proposed dam, and completely transforming the existing ecological environment.

Defendants assert that the Corps fully considered each of these issues.

The Corps considered the loss of the surrounding wetlands, which it admits would be an adverse impact. (AR 158:1646, 324:3155-56, 459:4099).⁴ However, the Corps plans to compensate for that loss by purchasing credits from a mitigation bank and creating shallow waterbottoms areas and fringe wetlands around the reservoir. The Corps concluded that these mitigation efforts would adequately compensate and indeed may result in the creation of more wetland area than was originally lost. The court finds that the Corps took a “hard look” at the potentially significant impacts of the loss of surrounding wetlands, by accurately identifying the relevant environmental concern, examining the relevant data regarding mitigation, and explaining how those mitigating factors would reduce the adverse impact to a minimum. Accordingly, the court determines that the Corps’ decision was not arbitrary or capricious regarding the wetlands, because the Corps took a hard look at the issue.

The Corps also considered the potential effects on the ecosystem caused by the flooding of approximately 640 acres of wildlife habitat. (AR 158:1642-47, 324:3155-61, 459:4099). The Corps concluded that 33 species of fish may be present in the Duck River, but that no threatened

⁴ Citations to the administrative record will follow the format “Document Number: Bates Page Number.”

or endangered species are present. The Corps also noted that only 13 of the fish species may be unable to adapt to a lacustrine environment. The Corps also noted that the resulting reservoir and fringe wetlands would provide a habitat for a greater number and variety of animal species. The Corps also concluded that migratory birds will especially benefit from the aquatic habitat created by the reservoir. Additionally, the Corps intends to maintain a 360-acre buffer zone of vegetation, the 100-acre dam and spillway area, and 94 acres of burrow and old-growth forest area, to compensate for the lost terrestrial habitat. On these grounds, the Corps determined that the impacts on the ecosystem would not be significant. The court finds that the Corps took a “hard look” at the potentially significant impacts on the ecosystem by accurately identifying the relevant environmental concerns, examining the data regarding animal species and habitat loss versus creation, and explaining how the creation of new habitats for more species would compensate for the loss of some. Accordingly, the court determines that the Corps’ decision was not arbitrary or capricious regarding the effects on the ecosystem, because the Corps took a hard look at the issue.

The Corps also considered the impact on property owners in the area where the reservoir will be impounded. (AR 158:1648-50, 459:4105). The Corps concedes that the project will require the relocation of 13 residential sites and the loss of 35 acres of prime farmlands. The Corps notes that relocation assistance will be carried out in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, and that every effort will be made to acquire property without condemnation. The Corps determined that property acquisition could be beneficial to some property owners and adverse to others. As such, the Corps concluded that consideration of property ownership did not weigh for or against the

issuance of the project permit. The court finds that the Corps took the requisite “hard look” at the potential impacts on property owners, and its decision that any impacts on property owners would not be significant was not arbitrary or capricious.

The Corps also considered the impact of water flow below the dam and reservoir. (AR 324:3143-46, 459:4104-05). The Corps noted that the downstream areas on the Duck River and Mulberry Fork are popular locations for boating and kayaking. The Corps reevaluated the existing and anticipated stream flow conditions in these areas and determined that the reservoir could potentially reduce flow conditions during peak flow times. However, the Corps also noted that the proposed dam could be used to regulate flow. For example, the permit for the reservoir contains a special condition allowing for the coordination of augmented or regulated high flows during the annual Birmingham Canoe Club race on the Mulberry Fork. Based on these considerations, the Corps determined that the Duck River reservoir would not detrimentally affect the downstream recreation to any significant degree. The court finds that the Corps took a “hard look” at the potential downstream impacts, by accurately identifying the relevant environmental concerns, examining the relevant data regarding mitigation, and explaining how those mitigating factors would reduce the adverse impact to a minimum or even create a benefit. Accordingly, the court determines that the Corps’ decision was not arbitrary or capricious as to the downstream effects, because the Corps took a hard look at the issue.

The Corps also considered the impacts on surrounding property owners of adopting land use and agribusiness operational restrictions to minimize TP loadings. (AR 158:1648, 324:3137-38, 459: 4108). The Corps determined that the project should help increase the economic and industrial development of the area, including increased job opportunities, a higher per capita

income, more urbanized development, and increased commercial, agricultural, residential, and recreational growth. The Corps, thus, concluded that the economic benefits related to the creation of the reservoir weighed in favor of issuing the project permit. The court finds that the Corps took a “hard look” at the impacts of the land use and agribusiness regulations involved in the project, and its decision that the economic benefits would not be a significant impact was not arbitrary or capricious.

Plaintiffs further assert that the post-impoundment water quality is highly uncertain, involving unique or unknown risks. Plaintiffs thus argue that the Corps’ decision to prepare a FONSI was arbitrary and capricious and that the Corps violated NEPA § 102(2)(C) by not adequately addressing the future water quality of the reservoir. Plaintiffs note this court’s previous analysis in *American Canoe Ass’n v. White*, 277 F. Supp. 2d 1244, 1262-63 (N.D. Ala. 2003). In *American Canoe*, this court determined that the Corps failed to make a convincing case that its assumption that the watershed management plan would reduce nutrient loadings by 60% justified a finding of no significant impacts. Plaintiffs assert that little has changed since this court’s decision in *American Canoe* and that the watershed management plan would only reduce nutrient loadings by the requisite amount if it were 100% effective.

The Defendants assert that as part of the Supplemental EA the Corps conducted an exhaustive analysis of data gathered regarding the water quality of the proposed reservoir. The Corps candidly admits that achieving the necessary TP reductions presents a challenge, but based on the collected data, the Corps determined the reductions were achievable. The Corps also included a provision in the permit specifically prohibiting any impoundment of water by the project until the TP load reductions were achieved.

The Corps identified three potential sources of excessive TP loading that must be addressed: (1) AFOs and CAFOs, (2) soil erosion-derived sediment yield from agricultural land, and (3) contributions from urban and other sources, such as septic systems and urban/suburban runoff. (AR 324:3118-42, 459:4100-03). The Corps determined that AFOs/CAFOs and soil erosion would contribute about 90% of the TP loading from the watershed to the proposed reservoir. The Corps also determined that these two sources could be controlled through agricultural BMPs and other land management practices.

Utilizing three different analytical methodologies, the Corps determined that BMPs and proper nutrient management at AFOs could account for up to 40% of the requisite TP reduction. The Corps determined that tillage and other management practices alone could reduce soil erosion enough to account for 30-40% of the requisite TP reduction. The Corps also noted that more aggressive countermeasures against soil erosion could account for up to 70% of the TP reduction needed. The Corps noted that an ADEM-approved water quality and watershed management plan is already being implemented, which should reduce TP loadings before the reservoir is even constructed. The Corps noted that by 2005, 85% of the AFOs and CAFOs inspected had either no or merely minor (i.e., paperwork-related) violations of the BMPs and watershed management plan.

The Corps concluded that full implementation of BMPs at AFOs and CAFOs, aggressive land management to reduce soil erosion, and erosion control together would most probably achieve the 60% reduction in TP loadings for the reservoir, without even implementing countermeasures to address other TP sources. The Corps has also identified several contingent controls and adaptive management measures to monitor and react to ongoing or unanticipated

problems in the effectiveness of the watershed management plan. The Corps also concluded that by monitoring and maintaining the water quality in the Duck River reservoir, water quality downstream should also improve.

The court finds that the Corps has accurately identified the relevant environmental concerns, examined the relevant data, and articulated a satisfactory explanation for its determination that the TP loading reduction goals are achievable. The court concludes, therefore, that the Corps' decision that water quality of the reservoir would not be a significant impact was not arbitrary or capricious.

Plaintiffs also assert that the Corps' decision to issue a FONSI was arbitrary and capricious, and violative of NEPA § 102(2)(E) and 40 C.F.R. § 1508.9, by failing to adequately address alternatives to the proposed Duck River project. NEPA requires that all agencies of the federal government shall "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." NEPA § 102(2)(E), 42 U.S.C. § 4332(2)(E). "The CEQ regulations direct federal agencies to first prepare an EA that 'provide[s] sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.'" *Am. Canoe Ass'n*, 277 F. Supp. 2d at 1251; 40 C.F.R. §§ 1501.3, 1508.9; 33 C.F.R. § 230.10. An environmental assessment "[s]hall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives." 40 C.F.R. § 1508.9(b); *see also* 33 C.F.R. § 230.10(b).

Plaintiffs also assert that the Corps violated CWA § 404(b)(2) by failing to consider all practicable alternatives to the proposed Duck River project that would have less adverse impact.

The regulations require an agency to consider all practicable alternatives to the creation of a dam:

Except as provided under section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.

40 C.F.R. § 230.10. The regulations also articulate what constitutes a practicable alternative:

An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered.

40 C.F.R. § 230.10(a)(2).

Plaintiffs assert that the Corps should have addressed protection of the Lake Catoma reservoir from *e. coli* bacteria or a hazardous material spill as a practicable alternative to the creation of a new reservoir. The Defendants assert that the Corps' consideration of twenty-one alternatives to meet the future demand projections was adequate.

The articulated purpose of the proposed reservoir is to meet emergency and future additional needs of nine water systems that provide water to all of Cullman County, Alabama, and parts of five surrounding counties. (AR 158:1000). Two water supply studies, considering past growth and future estimates, indicated that the average daily water usage for the area would reach the maximum capacity of the current water supply, Lake Catoma, by 2006. Additionally, the second water supply study indicated that the area needed an emergency water supply in case Lake Catoma became unusable due to an *e. coli* contamination or hazardous waste spill. (AR 158:1005).

Though efforts to protect Lake Catoma from contamination may prevent the need for an emergency water supply, Plaintiffs fail to establish how such efforts could meet the other purpose for which the reservoir has been proposed – the creation of an additional water source to meet increasing demand in the area. The Eleventh Circuit has stated that “an alternative partially satisfying the need and purpose of the proposed project may or may not need to be considered depending on whether it can be considered a ‘reasonable alternative.’” *N. Buckhead Civic Ass’n v. Skinner*, 903 F.2d 1533, 1542 (11th Cir. 1990). The Eleventh Circuit affirmed the district court’s decision in that case finding that, where the alternative at issue failed to address one of the main purposes of the proposed project, such alternative was not a reasonable one requiring consideration. *Id.* Here, protecting the Lake Catoma water supply from contamination may address the need for an *emergency*, alternative water supply for the area, but it would not fulfill the need for an *additional* water supply to meet demands that exceed the capacity of Lake Catoma. The court fails to see how the Corps’ decision to issue a FONSI and permit can be arbitrary or capricious for failure to consider an alternative that does not adequately meet the purpose and needs for which the project is proposed. *See ‘Ilio’ Ulaokalani v. Rumsfeld*, 464 F.3d 1083, 1097 (9th Cir. 2006) (“The scope of reasonable alternatives that an agency must consider is shaped by the purpose and need statement articulated by that agency.”).

Plaintiffs also assert that the Corps violated 40 C.F.R. § 1508.9 by failing to include a discussion of new circumstances or information regarding increases in water supply and decreases in water demand in a supplement to the 1999 EA or in the 2005 DSEA. When significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts arise, an EA should be supplemented. 40 C.F.R. §

1502.9(c)(i)-(ii).

Plaintiffs assert that the Corps should have considered not just the needs analysis in the original 1999 EA, but also new information brought to light by the 2005 DSEA and public comments that the water demand was significantly below what the 1999 EA originally projected. Defendants argue that the Corps did consider new information in determining that the need for the project still exists. Defendants also assert that the Plaintiffs' argument should be collaterally estopped because this court previously held that the Corps adequately addressed and reasonably concluded that the water demand justified the need for an additional water source.

As an initial matter, the court notes that its previous finding that the Corps adequately assessed the need for the project in the 1999 EA does not relieve the Corps from its continuing legal duty to supplement its assessment when and if new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impact arise. *See, e.g., Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 374 (1989) (“NEPA does require that agencies take a ‘hard look’ at the environmental effects of their planned action, even after a proposal has received initial approval.”). Though the EA Summary states that the needs analysis itself was not revised in preparing the 2005 DSEA, the court notes that the Corps did mention new circumstances underscoring the need for the proposed reservoir in the 2005 DSEA. (AR 324:3113, 459:4089). For example, the Corps noted that the Lake Catoma dam had been heightened, to increase its capacity in response to drought conditions and increased demand. (AR 324:3113). That the Lake Catoma dam had to be heightened shows the demand for water is increasing beyond the supply available in Lake Catoma. The Corps also considered public comments received during the comment period. One such comment came from the City of

Cullman, which authored a letter expressing the continued need for the project. (AR 393:3540-42). Thus, even though the needs analysis section was not redrafted in the 2005 DSEA, the Corps did take a hard look at the continuing need for an additional water source to meet the future needs of the CMWD, as is required by the Supreme Court's *Marsh* decision.

The court finds that the Corps reasonably concluded that a need for an additional water source still exists, despite the fact that the water demand may have been less than the 1999 EA originally projected. The court, therefore, concludes that the Corps did not violate 40 C.F.R. § 1508.9, because it considered new circumstances as evidence of the continuing need for the additional water source.

CONCLUSION

For the reasons stated above, the court finds that the Defendants are entitled to judgment as a matter of law, because the court finds that, under the deferential⁵ standard of review, the Corps' decision to issue a FONSI was not arbitrary or capricious and did not violate the applicable legal standards. Defendants' and Intervenors' motions for summary judgment, therefore, are GRANTED, and the Plaintiffs' motion is DENIED.

DATED this 31st day of March, 2009.

⁵ "The court's role is to ensure that the agency came to a rational conclusion, not to conduct its own investigation." *Sierra Club v. Van Antwerp*, 526 F.3d 1353, 1360 (11th Cir. 2008). "It is enough that the agency considered all the relevant factors and that there is credible evidence in the record to support the decision and the proposed action." *D'Olive Bay Restoration & Pres. Comm., Inc. v. U.S. Army*, 513 F. Supp. 2d 1261, 1283 (S.D. Ala. 2007). Thus, though the court might prefer to preserve the free flow of Alabama's waterways, the substantially deferential standard of review does not allow the court to substitute its own preference for the Corps' decision.

Karon O. Bowdre

KARON OWEN BOWDRE
UNITED STATES DISTRICT JUDGE