IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF MISSOURI CENTRAL DIVISION

SIERRA CLUB,)
Plaintiff,)
vs.) No. 03-04254-CV-C-SOW
UNITED STATES ARMY CORPS OF ENGINEERS, et al.,)))
Defendants.)
	ORDER

Before the Court are plaintiff Sierra Club's Motion for Summary Judgment (Doc. #37) and defendant United States Army Corps of Engineers and other federal defendants' Motion for Summary Judgment (Doc. #42). For the reasons stated below, plaintiff's motion is granted and defendants' motion is denied.

I. Background

Plaintiff Sierra Club moves for summary judgment on Counts I, II, and III of its First Amended Complaint, alleging that defendant United States Army Corps of Engineers (Corps) violated the National Environmental Policy Act ("NEPA"), 42 U.S.C. §4321, and the Administrative Procedure Act, 5 U.S.C. §706(2)(a), by preparing an Environmental Assessment (EA) instead of an Environmental Impact Statement. Plaintiff contends that the EA fails to comply with NEPA's requirements.

Defendants move for summary judgment as well and ask the Court to find that defendants have properly complied with the mandates of the Administrative Procedure Act, 5 U.S.C. §§701, et seq.

The undisputed material facts relevant to the pending motions for summary judgment are as follows: the Missouri River traverses over 2300 linear miles and drains one-sixth of the United States. During the past two centuries, the Missouri River, along with its adjacent wetlands and flood plains, has been significantly modified in various attempts to promote transportation, agriculture, and development. These modifications have included draining wetlands for cultivation, straightening stream channels to facilitate navigation, stabilizing banks to prevent erosion, and constructing agricultural levees, dams, reservoirs, and flood control levees to control water flow and exclude flood waters from the flood plain. These modifications have resulted in a loss of wetlands.

Historically, the Missouri River flood plain below Sioux City, Iowa covered 1.9 million acres. Due to the modifications identified above, approximately 168,000 acres of natural channel, 354,000 acres of meander belt habitat, and 50% of the Missouri River's surface have been lost. In addition, shallow-water habitat has been reduced by up to 90% in some areas while sandbars, islands, oxbows, and backwaters have been virtually eliminated. Forested flood plains along the Missouri River have decreased from 76% in the 19th century to 13% in 1972 and cultivated lands have increased from 18% to 83%.

By the late 1970's, the Lower Missouri River had been totally channelized and its natural flood plain ecosystems almost completely converted to agricultural or other uses. Today, the Lower Missouri River is flanked by levees and other flood control structures for most of its length.

In response to an April 27, 1989 request from the City of Jefferson City, Missouri, the Corps began a reevaluation of flood damage reduction measures on the left bank of the Missouri

River. In June of 1991, the Corps completed an initial appraisal of the Missouri River Levee System (MRLS) Unit L142. MRLS Unit L142 is an unconstructed unit of the MRLS on the northern bank of the Missouri River at Jefferson City near river mile 142. MRLS Unit L142 is part of a comprehensive plan for the Missouri River basin.

According to defendants, the project area has previously been altered from its natural state and consists mainly of cropland and industrial development. The area is currently protected to the 5 year flood level of protection by a small, non-Federal, agricultural levee called the Capitol View Levee. In 1992, funds were allocated to perform a General Reevaluation Report (GRR) for the area that includes the L142 levee. Defendants state that the Capitol View Levee has been breached or otherwise damaged in almost every recent flood event. The 1993 flood caused an estimated \$18 million in damages in Jefferson City, Missouri. Defendants assert that if this area remains unprotected in the future, the study area will continue to suffer repeated flood damages and large flood events will likely cause severe damage.

Prior to June 24, 1998, the Corps had determined its preferred plan for implementing flood damage reduction measures near river mile 142. The Corps preferred plan is a levee known as Alternative 10a. The levee s 4.7 miles in length. The height of the levee ranges from 15 to 23 feet. On June 24, 1998, the Corps requested formal comments from State and Federal agencies regarding "significant resources that might be impacted by implementation of the preferred plan." These agencies included the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service (NRCS), the U.S. Environmental Protection Agency (EPA), and the Missouri Department of Natural Resources.

On July 7, 1998, the NRCS informed the Corps that the proposed levee would cause

higher upstream flood levels and more scouring downstream, encourage more development in a flood prone area, and narrow the floodway. The NRCS recommended a nonstructural alternative instead. The United States Fish and Wildlife Service responded to the Corps' notice on June 1, 1999. With regard to cumulative impacts, the United States Fish and Wildlife Service told the Corps:

Cumulative impacts should be considered for the Missouri River as a whole It has been shown that more and larger levees are increasing the frequency and size of flood events We are disappointed that the Corps continues to not recognize these basic hydrology facts especially after repeated floods in the 1990's. It is our understanding that the reason for Corps' increasing flood protection from 80 to the proposed 1,100 year protection is the "upward spiraling effect" or cumulative impacts of the many structural measures, such as levees, on raising flood heights on the Missouri River floodplain. We should be working to restore wetland areas and floodplain values along the Missouri River to help reduce flooding, not destroying or altering these functions which increases flooding.

On June 1, 1999, the EPA responded to the Corps' public notice. The EPA stated:

Another primary concern is the cumulative impacts of levee construction on the Lower Missouri River. Structural flood control measures have clearly altered and continue to impact the physical, chemical, and biological integrity of the lower Missouri River. According to "Science for Floodplain Management into the 21st Century" (1994), all 750 miles of the Missouri River below Sioux City, Iowa have been channelized or stabilized for navigation and the subsequent development of floodplain lands.

The EPA added:

The far reaching effects of levees on the Lower Missouri River are commented on here because the Corps of Engineers has failed to consider the *meaning* of cumulative impacts as stated in the §404(b)(1) guidelines. Cumulative effects are discussed in the "Draft Environmental Assessment," Section 6.4; however, this discussion does not go beyond the area that will be protected by the

levee. There is no discussion of impacts upstream or downstream of the levee Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resource The Corps has failed to consider the cumulative impacts on the water resource, which is the lower Missouri River and the wetlands that are hydrologically connected [to] the River.

(Emphasis in original).

The EPA stated that with regard to the Corps' analysis of secondary impacts:

It was clear from the Public Meeting held in Jefferson City on May 20th, 1999, that there is widespread and popular support in the community for development in this area EPA believes that this project causes secondary effects by encouraging further development in the floodplain and that the Corps of Engineers has not gone far enough in analyzing secondary effects.

The Missouri Department of Natural Resources (MDNR) Water Pollution Control Program also responded to the Corps' public notice, stating:

In general, construction of levees may have detrimental impacts on river systems and may also remove flood water storage capacity. Reduced storage capacity can force flood waters downstream at an accelerated rate, causing additional flooding downstream as well as stream widening and shallowing. Upstream of levees, during high flows, flood heights and the amount of sediment deposits can increase because the water can back up and spread over a larger area, and the velocity of the water will slow above the constriction of the levees.

The MDNR added that extending "the levee, as described in the preferred alternative, would allow for more development in the floodplain."

In April of 2001, the Corps issued its final General Reevaluation Report (GRR) along with an Environmental Assessment (EA) and mitigated Finding of No Significant Impact (FONSI). In the EA, the Corps considered a number of alternatives, including four different

levee alignments, a ring levee, and the NEPA-required no action alternative. The Corps determined that Alternative 10a was the preferred alternative.

The Corps acknowledged that with "implementation of the Preferred Alternative, development in the vicinity of the airport may increase due to reduced flood threat." Yet, in an appendix to the EA, the Corps stated, "No short-term or long-term environmental effects of the proposed discharge as related to secondary impacts are expected. . . . Land available for development is limited in the project area, and would be restricted by airport regulations.

Therefore, secondary impacts to wetlands from future development pressures should not occur."

According to the Corps' report, the proposed levee's level of protection would provide a 99.7% chance of containing the 1% chance (100 year) event and an 88.9% chance of containing a flood of similar magnitude to the 1993 flood event in 2006 conditions.

The FONSI stated that "the implementation of the Missouri River Levee Unit L142 preferred alternative will not have a significant effect on the quality of the human environment with wetland mitigation as proposed, in place." The FONSI also concluded that preparation of an Environmental Impact Statement was not required.

In June of 2003, the Corps issued a Limited Reevaluation Report (LRR) and it was approved to incorporate new hydrologic and hydraulic data from the Upper Mississippi River System Flow Frequency Study (UMRSFFS) that was not available during the preparation of the GRR. The UMRSFFS is a comprehensive study of the Lower Missouri and Kansas River Basins completed in 2001. The LRR reviewed and compared the existing EA and the updated information from the LRR and concluded that the existing EA and FONSI remained adequate.

As part of analyzing the secondary effects of the project, the Corps performed an

Executive Order (EO) 11988 Analysis which evaluated the potential for development and the impacts on flood plains in association with the L142 levee. The EO 11988 concluded that the proposed Federal project generally avoids adverse impacts on the flood plain and successfully mitigates expected adverse impacts.

Defendants state that the Corps used the Hydologic Engineering Center River Analysis System (HEC-RAS) and input from hydologic studies along the Missouri River to evaluate the direct and cumulative effects of the proposed levee on the Missouri River.

Plaintiff Sierra Club brought the underlying lawsuit on November 21, 2003. Plaintiff alleges that the Corps' EA is defective because the Corps failed to look at the cumulative impact of its actions on flood heights and failed to evaluate the secondary (potential development) impacts of the proposed levee (Count I). Plaintiff contends that if the Corps had evaluated these cumulative and secondary impacts, the Corps would have been required to prepare an Environmental Impact Statement in lieu of an EA (Count II). Finally, plaintiff alleges that the Corps' failure to evaluate these impacts violates the Administrative Procedure Act (Count III).

Both plaintiff and defendants move for summary judgment on plaintiff's claims.

II. Standard

The Administrative Procedure Act (APA) requires that agency action be set aside when the agency acts in a manner that is arbitrary, capricious, or otherwise not in accordance with law. 5 U.S.C. §706(2)(a). An agency's action is arbitrary and capricious when the agency fails to consider an important aspect of the problem. Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co., 463 U.S. 29, 43 (1983).

In applying the APA standards to NEPA cases, and reviewing an agency's decision to

forego the preparation of an Environmental Impact Statement, the United States Court of Appeals for the Eighth Circuit has created a four-part test: (1) whether the agency took a hard look at the problem; (2) whether the agency identified the relevant areas of environmental concern; (3) for the problems studied and identified, whether the agency made a convincing case that the impact was insignificant; and (4) if there was an impact of significance, whether the agency convincingly established that changes in the project sufficiently reduced the impact to a minimum. Audubon Society of Cent. Ark. v. Dailey, 977 F.2d 428, 434 (8th Cir. 1992). An Environmental Assessment that fails to address a significant environmental concern is not adequate. Foundation on Economic Trends v. Heckler, 756 F.2d 143, 154 (D.C. Cir. 1985).

III. Discussion

Plaintiff Sierra Club argues that the Corps' Environmental Assessment is inadequate because the Corps failed to evaluate the cumulative impact of flood control measures on flood heights. Plaintiff adds that the Fish and Wildlife Service and the EPA, expressed concerns over the Corps' failure to sufficiently consider the cumulative impacts of the proposed levee. The Missouri Department of Natural Resources stated that construction of the proposed levee may remove flood water storage capacity, forcing floodwaters downstream at an accelerated rate.

NEPA does require an agency to take a hard look at the full range of environmental impacts, including the potential for cumulatively significant impacts to the environment from a combination of the proposal at issue with other existing and reasonably foreseeable actions. 40 C.F.R. §1508.25(a); Sierra Club v. Bosworth, 352 F. Supp.2d 909, 925 (D. Minn. 2005). A "cumulative impact" is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions

regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. §1508.7. The Corps' own regulations require an evaluation of cumulative impacts before a permit may be issued. 33 C.F.R. §320.4(a)(1).

An EA fails to satisfy the requirements of NEPA if it does not contain an evaluation of the cumulative impacts of a project. *See* Natural Resources Defense Council, Inc. v. United States Army Corps of Engineers, 457 F. Supp.2d 198, 230-31 (S.D. N.Y. 2006); Sierra Club v. Bosworth, 352 F. Supp.2d at 925-27; and Wyoming Outdoor Council Powder River Basin Resources Council v. United States, 351 F. Supp.2d 1232, 1243 (D. Wyo. 2005).

Sierra Club notes that below Sioux City, Iowa, the Missouri River is flanked by levees and other flood control structures for most of its length. According to plaintiff, the United States Fish and Wildlife Service, the EPA, the Missouri Department of Natural Resources, and the Missouri Department of Conservation all considered the cumulative impact of these flood control structures to be a significant environmental concern. Plaintiff Sierra Club claims that the Corps chose to forego an analysis of the cumulative impact of these structures.

Defendants concede that NEPA requires federal agencies to prepare Environmental Impact Statements (EISs) for "all major Federal actions significantly affecting the quality of the human environment." Sierra Club v. U.S.F.S., 46 F.3d 835, 837 (8th Cir. 1995)(quoting 42 U.S.C. §4332(2)(C)). Defendants suggest that based upon the EA, the GRR, and other supporting documents, the Corps properly found that "the implementation of the Missouri River Levee Unit L142 preferred alternative will not have a significant effect on the quality of the human environment with wetland mitigation as proposed, in place." This led the Corps to conclude that preparation of an EIS was not warranted and the Corps issued a FONSI.

Defendants rely on the EA to support their claim that the Corps did consider the cumulative impacts of the levee project. The conclusions in the EA are premised on models that the Corps ran comparing the existing conditions on the Missouri River with anticipated conditions once the levee is in place. According to defendants, the existing condition profiles in the model took into account the Missouri River valley and streambed as it existed at that time, with all of the existing levees. The Corps ran the HEC-RAS model with conditions ranging from no control by reservoirs and levees to full project development through the year 2000. The LRR, issued in 2003, updated the data. The Corps did not find a significant change between the flood profiles for the existing conditions and the anticipated conditions with the project in place in either the GRR or the LRR.

Plaintiff Sierra Club responds that defendants' brief confirms that the Corps looked at the incremental impact of the proposed levee, but ignored the cumulative impact of the flood control structures that flank the Missouri River for most of its length.

The Court finds that the EA failed to properly consider the cumulative impact of the proposed levee combined with the other flood control structures that currently flank the Missouri River. The Corps' conclusion that the current proposed levee would not create a significant change in the flood profile was arbitrary and capricious as the Corps failed to consider the cumulative impact of adding the proposed levee to the flood control structures already in place.

Next, plaintiff contends that the Corps' evaluation of secondary impacts (arising from potential development of property that would be protected by the levee) is also deficient.

Defendants state that the Corps did analyze the secondary effects. In the EA, the Corps noted that development may increase with the project, but that such development is not likely. In the

Executive Order 11988 Report, attached to the GRR and EA, the Corps elaborated on these

findings. The Corps concluded that "the project, if built, is not expected to induce significant

development in the protected area behind the levee." According to the Corps, only 100 acres in

the project area could be developed.

The Court finds that the Corps adequately evaluated the secondary impacts of the

proposed levee. The Corps' treatment of secondary impacts was not arbitrary or capricious.

IV. Conclusion

For the reasons stated above, it is hereby

ORDERED that plaintiff Sierra Club's Motion for Summary Judgment (Doc. #37) is

granted. It is further

ORDERED that defendant United States Army Corps of Engineers and other federal

defendants' Motion for Summary Judgment (Doc. #42) is denied. It is further

ORDERED that summary judgment is entered in favor of plaintiff as to Counts I, II, and

III of the First Amended Complaint insofar as plaintiff claims that the Corps' EA is defective

because the Corps failed to look at the cumulative impact of the proposed levee on flood heights

in light of the other flood control structures already in place along the Missouri River. It is

further

ORDERED that summary judgment is entered in favor of defendants as to plaintiff's

allegations that the Corps failed to evaluate the secondary (potential development) impacts of the

proposed levee.

/s/Scott O. Wright

SCOTT O. WRIGHT

Senior United States District Judge

Dated: May 24, 2007