

REPLY TO  
ATTENTION OF:DEPARTMENT OF THE ARMY  
U.S. Army Corps of Engineers  
WASHINGTON, D.C. 20314-1000

CECW-OR

26 JAN 1995

MEMORANDUM THRU COMMANDER, OHIO RIVER DIVISION

FOR COMMANDER, HUNTINGTON DISTRICT

SUBJECT: Request for Section 404(q) Elevation, North Fork Hughes River

1. On 22 December 1994, the Acting Assistant Secretary of the Army (Civil Works) (AASA(CW)) responded to requests by the Environmental Protection Agency (EPA) and the Department of the Interior (DOI) for higher level review of a permit proposed by the U.S. Army Corps of Engineers Huntington District. The project proposed by the Little Kanawha Soil Conservation District involves the construction of a dam on the North Fork Hughes River near Harrisville, West Virginia.
2. The requests from EPA and DOI were made pursuant to Part IV of the 1992 Section 404(q) Memoranda of Agreement between the Department of the Army and EPA and the Department of the Army and DOI. The main issues EPA and DOI presented for consideration were based on their conclusion that substantial and unacceptable adverse impacts to an aquatic resource of national importance would occur. In addition, both EPA and DOI believe that it has not been clearly demonstrated that the proposed project is the least environmentally damaging practicable alternative which meets the project purpose.
3. The enclosed AASA(CW) letters concur with the EPA and DOI position that the North Fork Hughes River, which will be directly impacted, is an aquatic resource of national importance. However, the AASA(CW) was unable to determine whether the proposed project would result in substantial and unacceptable adverse impacts to this resource or if the net loss to the resource, after considering mitigation, would be unacceptable. In addition, the AASA(CW) notes that there is a lack of substantive information regarding environmental impacts in Huntington District's Section 404(b)(1) Guidelines evaluation alternatives analysis and that the analysis did not indicate that all special aquatic sites (i.e., riffle and pool complexes) had been considered.

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Hughes River

4. By enclosed memorandum, dated 22 December 1994, the AASA(CW) indicates that a re-evaluation of the alternatives analysis as required by the Section 404(b)(1) Guidelines must be accomplished. Prior to reaching a final decision, Huntington District must:

(a) Review all existing information to identify the full range of alternatives which have been considered, or raised for consideration, and re-evaluate those alternatives. The Huntington District should determine the characteristics of a viable project and the criteria to be used to identify practicable alternatives. Detailed practicability analyses should only be conducted for alternatives which would have less impact on the environment than the proposed project. The re-evaluation of alternatives must address the extent to which all criteria, including consideration of the environmental impacts, have been applied to the full array of practicable alternatives, including the applicant's preferred alternative. The Huntington District must ensure that the re-evaluation of alternatives takes into consideration the value of and impacts to all special aquatic sites. This re-evaluation is to be conducted in coordination with the Natural Resources Conservation Service, EPA, and the U.S. Fish and Wildlife Service.

Prepare a comprehensive alternatives analysis document which summarizes the re-evaluation of alternatives described above. This document is to include a description of the criteria used in identifying potential alternatives, the process or methodology used to screen alternatives, and the re-evaluation of alternatives. If deemed appropriate, the Huntington District may require that the applicant, or their agent, compile the documentation. However, the Huntington District is expected to be familiar with the project's existing supporting documentation for purposes of providing specific instructions concerning the preparation of the summary document and in order to validate the information presented. The summary document is to be incorporated into the project file and is not expected to be submitted to higher headquarters for review and approval.

(c) Within 60 days of the date of this memorandum, brief Washington level officials concerning the results of the review of existing information. This briefing will include representatives from the Assistant Secretary of the Army (Civil Works) and this office, as well as Washington level representatives from EPA, DOI, and the Natural Resources

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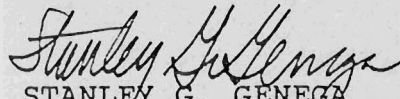
SUBJECT: Requests for Section 404(q) Elevation, North Fork  
Hughes River

Conservation Service. The content of the briefing is to include a summary of the criteria and methodology used to identify and evaluate viable alternatives. The briefing should also include recommendations concerning the need to conduct any additional analysis as may be required to complete a sufficient Section 404(b)(1) Guidelines analysis.

d. Proceed to a final decision based on additional case specific guidance from this office. This guidance can be expected to contain feedback from the briefing described above. The Huntington District should also expect that future guidance will most likely indicate that the "short form procedure" used by the Huntington District for evaluation under the Section 404(b)(1) Guidelines is not appropriate in this case.

5. If you have any questions or comments, please call Ms. Cheryl Smith at (202) 272-1780. Ms. Smith will also assist you in scheduling the Washington level briefing.

3 Encls

  
STANLEY G. GENECA  
Major General, USA  
Director of Civil Works

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MEMORANDUM FOR CECW-OR

SUBJECT: Permit Elevation for the North Fork Hughes River Dam

1. In a Memorandum dated January 26, 1995, the Huntington District was directed By CECW-OR to determine the characteristics of a viable project for the above referenced application and to develop criteria to be used to identify practicable alternatives.

2. Background Reasoning of the Huntington District. The following are the basic premises that the Huntington District will use in determining the characteristics of the viable project and developing the criteria to be used to identify the practicable alternatives.

a. Basic Purpose. The basic purposes as defined by the Huntington District for this project are flood protection, water supply, and flat-water recreation. *"STATE WANTS FLATWATER RECREATION - GREEN"*  
*IN GIS, STATED AS REC NEEDS THAT CAN BE MET BY FLATWATER REC.*

b. Overall Purpose. The overall purpose as defined by the Huntington District is: By the responsible use of public funds, build a multipurpose dam in the North Fork Hughes River to provide flood protection to Cairo, West Virginia by no homes being in the high hazard zone (<3' of water) during a hundred-year storm event (elevation around 676 feet msl); provide adequate water supply for current and projected needs for the watershed (a total of 330 AF or 1750 gpm); and water recreation ( acres) in the North Fork Hughes watershed, in order to provide an economic stimulus to the region.

c. Alternative Reevaluation. In the court decision, Citizens Against Burlington (938 F.2 at 199.), it states "An agency cannot redefine the goals of the proposal...Congress did not expect agencies to determine for the applicant what the goals of the applicant's proposal should be." With this and other court cases as guidance, the District will not redetermine the needs of the proposed project as defined by the applicant. All alternatives must meet the needs of the applicant.

d. Benefit/Cost Ratios compared to profits. An alternative is practicable if it is available and capable of being done after taking into consideration cost, logistics, and existing technology in light of overall project purposes (230.10(A)(2)). If an alleged alternative is unreasonably expensive to a "for-profit" applicant, the alternative is

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considered not practicable due to its cost. Likewise, when a project is publicly funded, it must have a positive benefit/cost ratio to be considered economically viable. Therefore, any alternative that does not have a positive benefit/cost ratio should not be considered practicable due to cost.

e. Summary. Prior to reevaluating the proposal submitted by the NRCS, we conclude that a practicable alternative must have a positive cost/benefit ratio, that the above basic and overall purposes satisfy the guidelines, and that we will redetermine the needs of the applicant.

3. Characteristics of a viable project. The project must include alternatives that either separately or in combination meet all three basic purposes and provide an economic stimulus to the region. A viable project must include: flood protection for Cairo, West Virginia; adequate water supply for current and projected needs; and flat-water recreation. The applicant has explored Federal funding for this project since the early 70's. Several attempts to justify a viable project have failed due to a negative cost/benefit ratio. The project is being funded through the Appalachian Regional Commission with special funding from the United States Congress. Since the applicant has no alternative but to use public funds through the Appalachian Regional Commission (ARC), any proposed project must meet the ARC's requirements which are to have a positive benefit/cost ratio and promote economic development in the North Fork Hughes River watershed.

4. Criteria to identify practicable alternatives. A practicable alternative is defined in 230.10 (a)(2) as being available and capable of being done after taking into consideration cost (in this case a positive benefit/cost ratio), existing technology, and logistics in light of the overall purposes. Using the above characteristics of a viable project, criteria has been developed to determine practicable alternatives for each of the three project purposes. See attachment A. For an alternative to be considered practicable it must meet all the criteria listed for at least one of the three purposes of the project and be able to combine with others to form an alternative that meets all three criteria, must have a positive benefit/cost ratio and must promote economic development in the watershed.

5. As directed by the CECW-OR, the District reviewed all existing information and identified the full range of alternatives which have been considered for this project. (See attachment B.) The alternatives which would have more of an environmental impact than the proposed project were then

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eliminated from consideration. The alternatives that had less environmental impact than the proposal were then screened using the criteria developed in attachment A. The alternative or alternatives that together may meet the characteristics of a viable project were then re-evaluated, considering the environmental impacts, including the impacts to all special aquatic sites and with the coordination of the NRCS, FWS, and EPA. This evaluation is included in attachment C.

(nfhr.a12)

## ALTERNATIVE:

## ENVIRONMENTAL RESOURCES THAT WILL BE LOST BY IMPLEMENTATION OF THIS ALTERNATIVE:

Aquatic Resources:

Free flowing river (miles) -

Potential wild and scenic river (miles) -

Wetlands (acres) -

Pool/riffle complexes -

Vegetative shallows -

Fish and Wildlife Resources:

Riparian habitat -

Mussel habitat -

(nfhrea.ms)

Fish and wildlife values including mussels and birds (Habitat Units) -

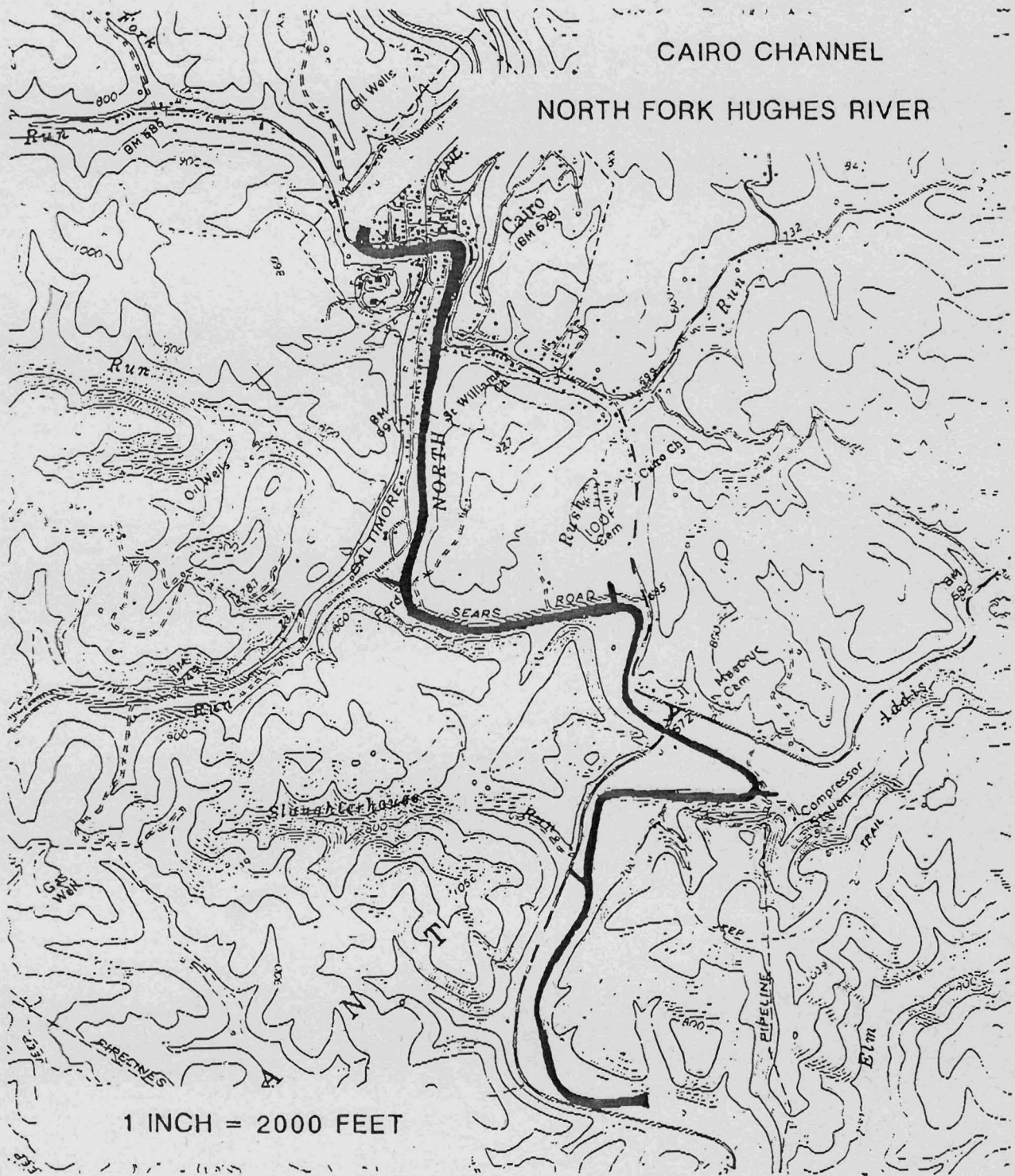
Cummulative impacts -

Wetlands -

Pool and riffle complexes -

## RESOURCES THAT WILL BE GAINED BY THE IMPLEMENTATION OF THIS ALTERNATIVE:

WV North Fork Hughes River  
 JLH 2/1/95  
 channel through Cairo 1

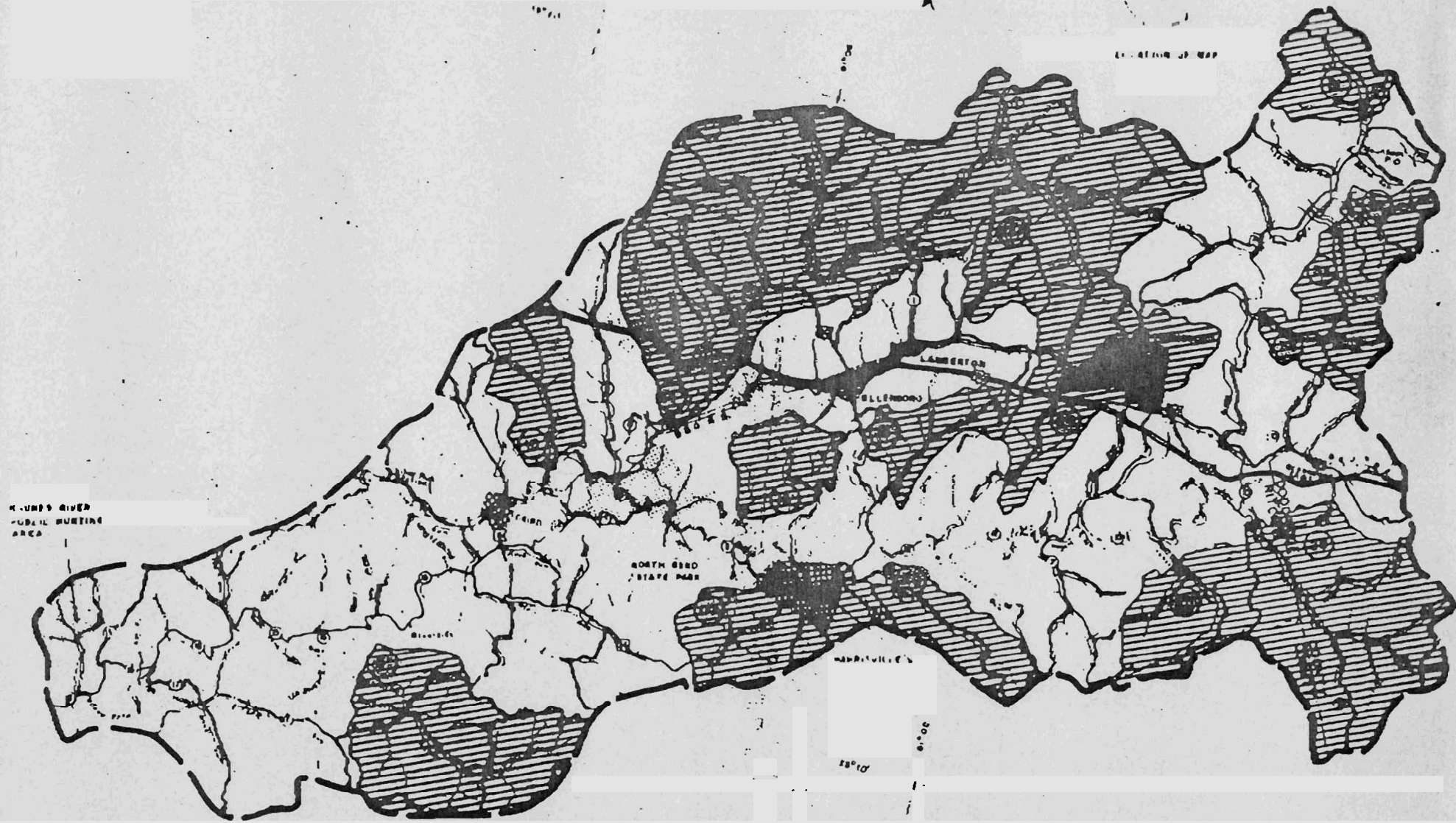




LEGEND



LOCATION OF MAP



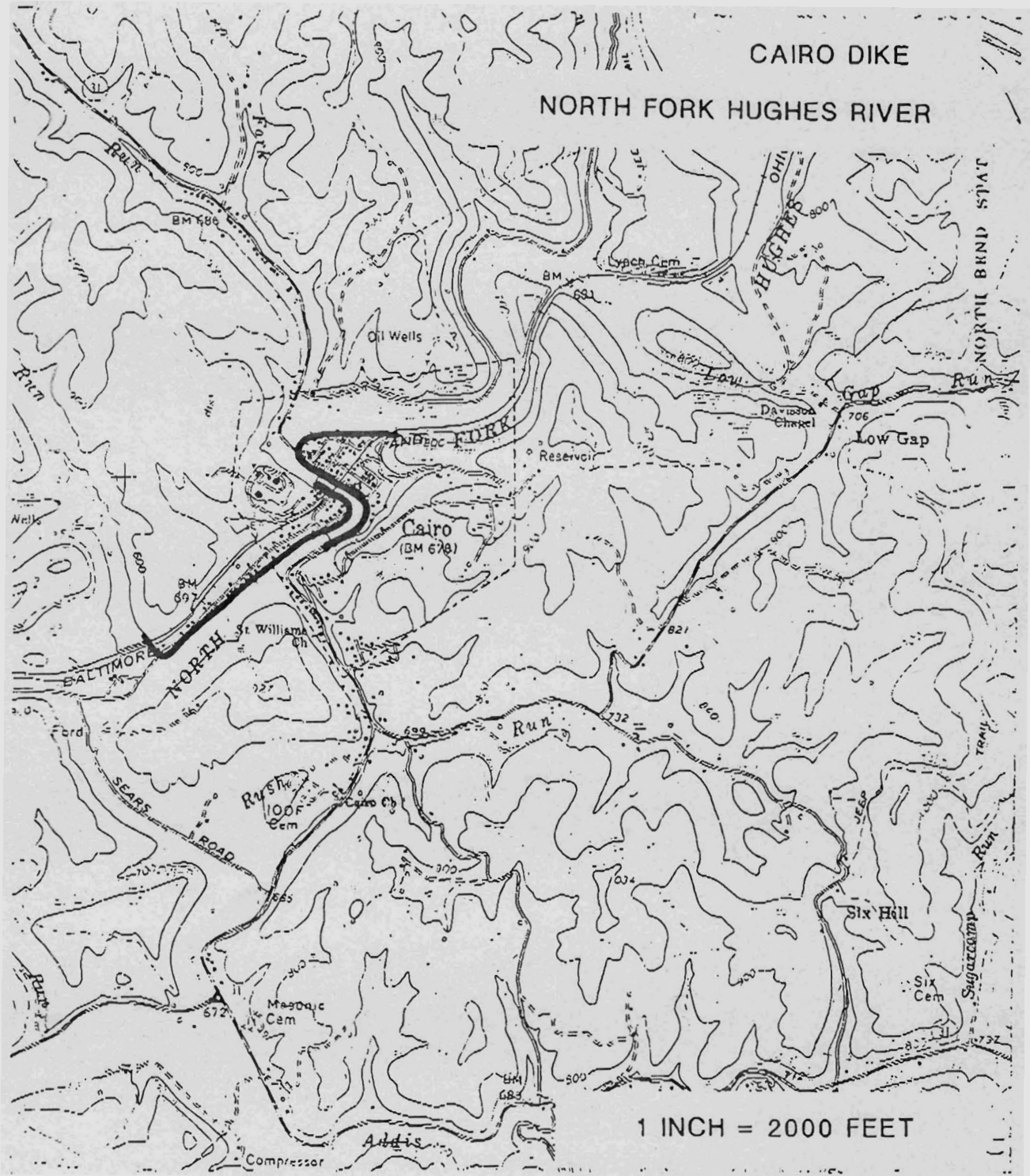
HUGHES RIVER  
MUDAIL HUNTING  
AREA

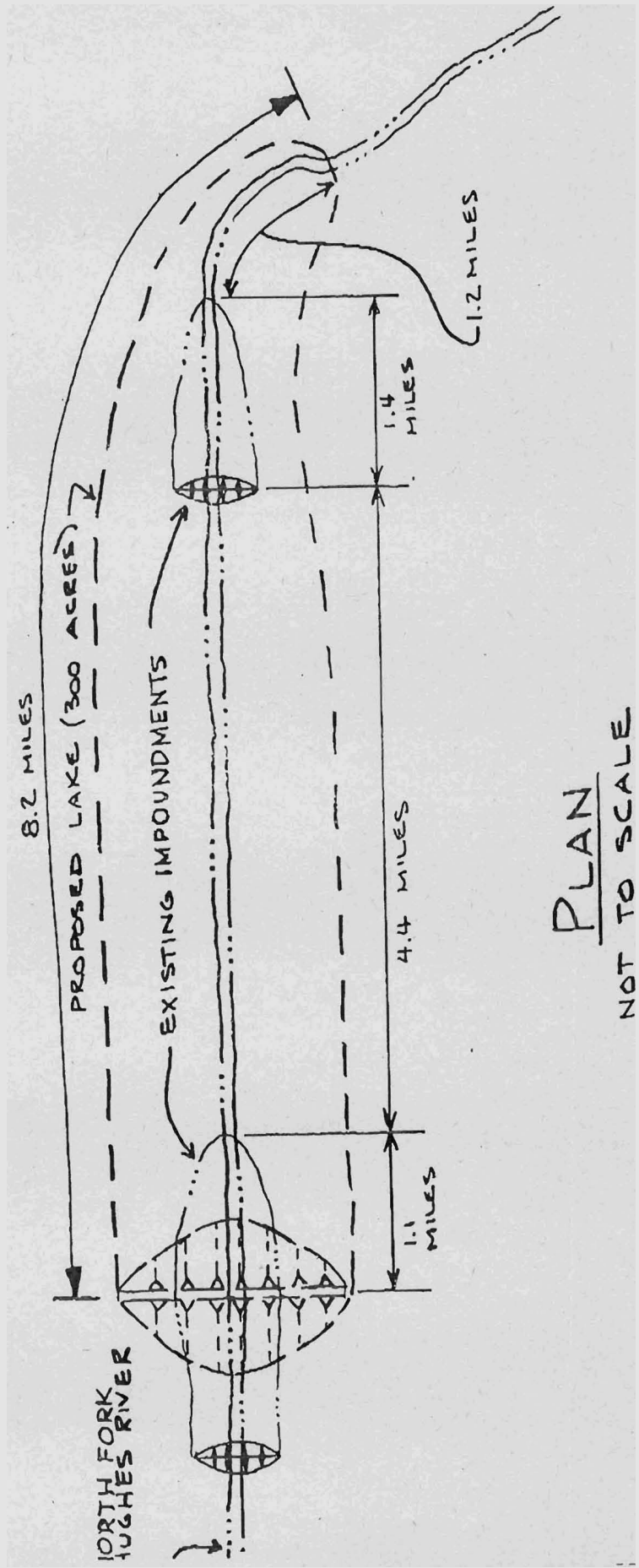
NORTH FORK HUGHES RIVER  
WATERSHED  
DODDRIDGE AND RITCHIE COUNTIES  
WEST VIRGINIA

ALTERNATE D  
FIFTEEN SMALLER UPSTREAM DAMS

06-11-95

WV North Fork Hughes River  
 JLH 3/1/95  
 Dike through Cairo 1





PLAN  
 NOT TO SCALE

*Evaluated Measures*

Attachment B

The Full Range of Alternatives which Have been Considered for this Project

Alternative	Flood control	Water supply	Recreation	DROP NOW OUT ERM
No action	No	No	No	
Multipurpose dam (proposal) 38.8	Yes	Yes	Yes	
Conservation and land treatment only	No	No	No	
System of upstream dams 51.4	No	Yes	Some	X
Dry dam <sup>25 mrl</sup> at MPD site	Yes	No <sup>DUYDS - 200K</sup> <del>HT!</del>	No	<del>X</del>
Stream 31.6 mrl channelization through Cairo	No	No	No	
Relocate Cairo <sup>11.6 mrl</sup>	Yes	No	No	
Dike around Cairo <sup>23, 471, 020</sup>	Yes	No	No	
Flood warning system in Cairo	No	No	No	
Flood-proofing Cairo? ( <i>~ 11 million</i> )	Yes	No	No	
Strict enforcement of FEMA	No	No	No	
Single purpose water supply dam at Lost Run 7.4	No	Yes	No	2.8 sq. miles 25 ac lake
Water from wells near St Marys 13	No <sup>#11 for pipes</sup> <sup>#2 for wells</sup>	Yes	No	
Water directly from the Ohio River 13	No <sup>#11</sup>	Yes	No	
Continued use of WTP using MPD as supply 38.8 + <sup>more</sup> main cost	Yes	Yes	Yes	

14K ac ft  
676 - 100 YR  
NEED ELEVATION

2.

3  
the mill for TRT. PLAN



1972 report

Alternative	Flood control	Water supply-	Recreation
Groundwater	No	<del>No</del> No	No
Raise levels of existing water supply dams?	No	<del>No</del> Yes	no
← Water conservation measures	No	Some	No
200-Acre lake at proposed site for water supply and flood control 31.6	Yes	Yes	Some
200-Acre lake at proposed site for recreation and flood control 34.3	Yes	No	Yes
100-Acre lake at proposed site for recreation and flood control 34	Yes	No	Some
200-Acre lake on Bonds Creek 8.8	No	No	No Yes
48-Acre lake on Bonds creek 8.8	Some	No	Some
Alternatives to flat-water recreation	No	No	No

(NFHRAL.BIG)

## Alternatives

Evaluated Measures (combination or single) which forms an alternative. Flood control/water supply/recreation.	Is this alternative practicable considering cost, technology and logistics? Why or why not?	V I A B L E
1) Multipurpose Dam	YES	YES
2) Continued use of WTPs using MPD as supply	YES	YES
3) Dry Dam/Lost Run/ 200-Acre Lake Bonds Ck.	No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	NO
4) Dry Dam/Lost Run/ 48- Acre Lake Bonds Ck.	Cost \$41.2 million. Recreation benefits are lower, therefore not a positive b/c ratio.	NO
5) Dry Dam/St. Marys or Ohio River/200-Acre Lake Bonds Ck.	Cost \$46.8 million. No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	NO
6) Dry Dam/St. Marys or Ohio River/48-Acre Lake Bonds Ck.;	Cost \$46.8 million. Recreation benefits are lower, therefore not a positive b/c ratio.	NO
7) Dry Dam/raise existing dams/200-Acre Lake Bonds Ck.	No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	NO
8) Dry Dam/raise existing dams/48-Acre Lake Bonds Ck.	Not practicable because you can't raise the existing dams.	NO
9) Relocate Cairo/Lost Run/48-Acres Lake Bonds Ck.	Cost \$27.8 million. Don't know recreation benefits of 48-Acre Lake.	NO

10) Relocate Cairo/Lost Run/200-Acre Lake Bonds Ck.	No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	?
11) Relocate Cairo/St. Marys or Ohio River/200-Acre Lake Bonds Ck.	No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	NO
12) Relocate Cairo/St. Marys or Ohio River/48-Acre Lake Bonds Ck.	Cost \$33.4 million. Don't know benefits of 48-Acre Lake.	NO
13) Relocate Cairo/raise existing dams/200-Acre Lake Bonds Ck.	No because 200-Acre Lake on Bonds Ck. and raise the existing dams are not practicable due to technology and logistics.	NO
14) Relocate Cairo/raise existing dams/48-Acre Lake Bonds Ck.	No because raising existing dams is not practicable due to technology and logistics.	NO
15) Dike/Lost Run/200-Acre Lake Bonds Ck.	No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	NO
16) Dike/Lost Run/48-Acre Lake Bonds Ck.	Cost \$40.2 million. Recreation benefits are lower, therefore not a positive b/c ratio.	NO
17) Dike/St. Marys or Ohio River/200-Acre Lake Bonds Ck.	No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	NO
18) Dike/St. Marys or Ohio River/48-Acre Lake Bonds Ck.	Cost \$45.8 million. Recreation benefits are lower, therefore not a positive b/c ratio.	NO
19) Flood proof Cairo and any other evaluated measures	No. Not practicable because you can't raise the houses due to logistics and technology.	NO

20) 200-Acre Lake NFHR-Water Supply/200-Acre Lake Bonds Ck.	NO No because 200-Acre Lake on Bonds Ck. is not practicable due to technology and logistics.	NO
21) 200-Acre Lake NFHR-Water Supply/48-Acre Lake Bonds Ck.	Cost \$40.2 million. Recreation benefits are lower, therefore not a positive b/c ratio.	NO
22) 200-Acre Lake NFHR for Recreation/Lost Run	Cost \$41.7 million. Need b/c ratio.	?
23) 200-Acre Lake NFHR for Recreation/St. Marys or Ohio River.	Cost \$47.3 million. Need b/c ratio.	?
24) 200-Acre Lake NFHR for Recreation/raise levels of existing dams	No because raising existing dams is not practicable due to technology and logistics.	NO
25) 100-Acre Lake NFHR for Recreation/Lost Run	Cost \$41.4 million. Probably not enough recreational benefits for a positive b/c ratio.	?
26) 100-Acre Lake NFHR for Recreation/St. Marys or Ohio River	Cost \$47 million. Probably not enough recreational benefits for a positive b/c ratio.	?
27) 100-Acre Lake NFHR for Recreation/raise levels of existing dams	No because raising existing dams is not practicable due to technology and logistics.	NO

(NFHRAL.FIN)





STATE OF WEST VIRGINIA  
DEPARTMENT OF COMMERCE, LABOR AND ENVIRONMENTAL RESOURCES  
DIVISION OF NATURAL RESOURCES

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GASTON CAPERTON  
Governor

CHARLES B. FELTON, JR.  
Director

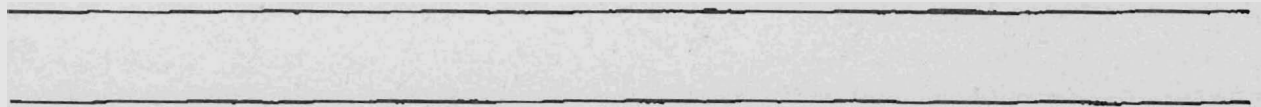
DATE: 2-15-95

FACSIMILE TRANSMITTAL COVER

TO: Pam Hill  
USACOE

FROM: Bernie Dowler  
Division of Natural Resources  
Wildlife Resources Section  
FAX Number 304-558-3147  
Phone Number 304-558-2771

COMMENTS: \_\_\_\_\_



Number of pages including cover: 2

Water-based recreational opportunities in Ritchie County are extremely limited. The North and South Forks of Hughes River flow completely through the county, but they are relatively small and have limited public access. Opportunity for flatwater recreation is even less available. Only six public fishing ponds and lakes, totaling 107 1/2 acres, are situated within 50 road miles of Harrisville. The small size of these impoundments limits opportunity for recreational boating.

The 200-acre North Fork of Hughes River Lake will nearly double the amount of flatwater acreage in this region of scant aquatic resources and its large size will accommodate recreational use several fold. The large lake will compliment stream fishing in the area through the diversity it offers. Two or more smaller lakes close together would not provide as good recreational benefits as one large impoundment.

Public ponds and lakes within 50 road miles of Harrisville:

<u>Lake</u>	<u>County</u>	<u>Acres</u>
North Bend Pond	Ritchie	1 1/2
Pennsboro Lake	Ritchie	9
Tracy Lake	Ritchie	11
Cedar Creek Pond	Gilmer	8
Conaway Run Lake	Tyler	30
Mountwood Lake	Wood	<u>48</u>
Total 6 Lakes		107 1/2