



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
1616 CAPITOL AVENUE
OMAHA NE 68102-4901

CENWO-ED-HB

13 March 2015

MEMORANDUM FOR CENWO-PM-AP (Vanosdall)

SUBJECT: Executive Order 11988 Compliance Memo for the Lower Yellowstone Diversion Dam Replacement Weir and Fish Bypass Channel

1. Flood Risk and Floodplain Management Section has reviewed the proposed construction and have found it to be in compliance with EO 11988. Additional documentation supporting the EO 11988 compliance is provided in the comments below.
2. Guidance on compliance with EO11988 can be found in numerous documents including Further Advice on Executive Order 11988 Floodplain Management, and specific to the Corps of Engineers Engineer Regulation (ER) 1165-2-26, Implementation of Executive Order 11988 on Flood Plain Management. The following comments are provided in reference to ER 1165-2-26 Section 8 General Procedures:
 - a. Determine if the proposed action is in the base flood plain. The project is located in Dawson County, Montana which participates in the National Flood Insurance Program (NFIP). The project is located in the Zone A Special Flood Hazard Area (SFHA) on Map Panel 300140 0009A. As a part of this project hydrologic and hydraulic modeling has been done, this information confirms the project's location within the 1-pct annual chance flood boundaries.
 - b. Identify and evaluate practicable alternatives to the action or to location of the action. The project's purpose is to modify an existing diversion dam feature located on the Yellowstone River. Additionally, the project will create a fish bypass channel. As such the project is functionally dependant on its location in the floodplain.
 - c. Advise the general public in the affected area and obtain their views and comments. The project has been communicated to local officials and the community through ongoing project development and community outreach. These outreach activities have included public meetings, public review, and comment opportunities.
 - d. Identify beneficial and adverse impacts due to the action. Final Supplement to the 2010 Final Environmental Assessment provides a comprehensive identification of project benefits and impacts. As it pertains to flood risk management the project will have no adverse impacts on the 100-yr flood elevations. New hydraulic modeling was

CENWO-ED-HB

SUBJECT: Executive Order 11988 Compliance Memo for the Lower Yellowstone Diversion Dam Replacement Weir and Fish Bypass Channel

developed to determine potential impacts. The modeling shows small increases in the 100-yr flood elevations located at upstream and downstream of the diversion weir. The largest increase is 0.22 feet. The 100-year delineation of the with project modeling show a 100-yr floodplain that is contained within the effective Zone A SFHA.

e. Identify the potential for the project to induce development in the base floodplain. The project is not expected to have any impact on development potential. The features are located away from residential areas and do not alter zoning requirements.

f. Determine viable methods to minimize any adverse impacts. The planning process has identified various alternatives for development, which are identified in Final Supplement to the 2010 Final Environmental Assessment Section 2. The proposed project was selected amongst the various alternatives based on criteria including minimizing any adverse impacts to the natural and beneficial values of the floodplain.

3. ER 1165-2-26 Section 13 D provides guidance on items to include in NEPA statement of findings for feasibility reports and includes the following:

a. Reasons why the proposed action must be located in the floodplain. The project's purpose is to modify an existing diversion dam feature located on the Yellowstone River. Additionally, the project will create a fish bypass channel. As such the project is functionally dependant on its location in the floodplain.

b. Facts considered in making the determination to locate in the flood plain, including alternative sites and actions considered. The planning process has identified various alternatives for development, which are identified in Final Supplement to the 2010 Final Environmental Assessment Section 2. The location of the project is functionally required to be at the Intake Diversion Dam.

c. Statement on whether the proposed action conforms to applicable state or local floodplain protection standards. The proposed project conforms to applicable state and local floodplain standards. A floodplain permit was obtained in 2010 for the new main canal headworks and installation of fish screens. Similarly a local floodplain development permit is being obtained through Dawson County.

d. Statement on whether the action affects the natural and beneficial values of the floodplain. Section 4 of the Final Supplement to the 2010 Final Environmental Assessment provides a comprehensive identification of project benefits. As it pertains to flood risk management the project will have no adverse impacts on the 100-yr flood

CENWO-ED-HB

SUBJECT: Executive Order 11988 Compliance Memo for the Lower Yellowstone Diversion Dam Replacement Weir and Fish Bypass Channel

elevations. New hydraulic modeling was developed to determine potential impacts. The modeling shows small increases in the 100-yr flood elevations located at upstream and downstream of the diversion weir. The largest increase is 0.22 feet. The 100-year delineation of the with project modeling show a 100-yr floodplain that is contained within the effective Zone A SFHA.

e. Steps taken to design or modify the proposed action to minimize potential harm to or within the floodplain. The planning process has identified various alternatives for development, which are identified in Final Supplement to the 2010 Final Environmental Assessment Section 2. The proposed project was selected amongst the various alternatives based on criteria including minimizing any adverse impacts to the natural and beneficial values of the floodplain.

f. A general listing of involved agencies, groups, and organizations are the U.S. Department of the Interior Bureau of Reclamation and U.S. Army Corps of Engineers.

4. If you have any questions or comments regarding this review, please contact Mr. Lowell Blankers at (402) 995-2323.



TONY D. KRAUSE, P.E., CFM
Acting Chief, Flood Risk and Floodplain
Management Section
Hydrologic Engineering Branch
Engineering Division