



RECORD OF DECISION

Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico Bernalillo and Valencia Counties, New Mexico

The Final Integrated Feasibility Report and Environmental Impact Statement (GRR/SEIS) dated 20 December 2019, for the Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico addresses flood risk opportunities and feasibility in the Bernalillo and Valencia Counties, New Mexico. The final recommendation is contained in the report of the Chief of Engineers, dated 13 March 2020. Based on these reports, the reviews by other Federal, State, and local agencies, Tribes, input of the public, and the review by my staff, I find the plan recommended by the Chief of Engineers to be technically feasible, economically justified, in accordance with environmental statutes, and the public interest.

The Final GRR/SEIS, incorporated herein by reference, evaluated various alternatives that would reduce flood risk to developed areas and agricultural infrastructure, along with reduce the cost on continual maintenance and repair of the existing spoil bank in the study area. The recommended plan is the National Economic Development (NED) Plan and includes:

- Construction of approximately 48 miles of engineered levee to replace the existing spoil bank; and
- Implementation of the environmental compensatory mitigation and associated monitoring and mitigation area adaptive management plan. Monitoring will continue until the mitigation is determined to be successful based on the identified criteria within the Bernalillo to Belen Levee Habitat Mitigation Monitoring and Adaptive Management Plan (Chapter 5) included in Appendix E (Environmental Resources). Monitoring is expected to last no more than 10 years.

In addition to a “no action” plan, four alternatives were evaluated. The alternatives included the 1979 Authorized Plan (Alternative B), Preferred Alignment at Base + 7 Feet Height (Alternative C), Preferred Alignment at Base Height (Alternative D), and the Preferred Alignment at NED Height (Alternative E). Plan Formulation (Chapter 3) evaluated a total twenty-one possible alignments for the four units to determine the preferred alignment for all units. The twenty-one possible alignments were focused down to a single effective location and length for each study unit. These alignments were carried forward for development of Alternatives C, D, and E evaluating levee height. The Preferred Alternative plan (E) was identified as the environmentally preferable alternative. The Preferred alternative replaces the existing spoil bank with an engineered levee to protect against future flooding in the study area, provides 265.8 acres of habitat mitigation, and would increase the safe channel capacity to provide ecosystem benefits such as fluvial scouring and deposition.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 1:

Table 1: Summary of Potential Effects of Recommend Plan

	Significant adverse effect*	Less than significant effects due to mitigation**	Less significant effects	Resource unaffected by action
Aesthetics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Aquatic resources/wetlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Riparian fish and wildlife habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic properties	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other cultural resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hydrology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Land use	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Noise levels	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Public infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Socio-economics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Environmental justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tribal trust resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Climate change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

All practicable means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the GRR/SEIS will be implemented to minimize impacts. Mitigation for aquatic resources / wetlands (2.5 acres of ponds) overlapping the construction footprint would use excavation of the perimeter away from the levee to maintain habitat area (GRR/SEIS Chapter 4, Mitigative Vegetation Establishment). Mitigation for riparian fish and wildlife habitat would include 45 acres of lowered terraces or swales (for suitable flycatcher habitat) and 265.8 acres of riparian vegetation management habitat (including the 45 acres of flycatcher habitat) (GRR/SEIS Chapter 4, Mitigative Vegetation Establishment). Mitigation for Threatened/Endangered species includes 1) construction noise disturbance studies for flycatcher, cuckoo, and silvery minnow; 2) presence/absence monitoring for flycatcher and cuckoo; and 3) a floodplain water temperature study to evaluate thermal effects of the Vegetation Free Zone during spring runoff (GRR/SEIS Appendix E, Chapter 5 - Bernalillo to Belen Levee Habitat Mitigation Monitoring and Adaptive Management Plan).

The recommended plan will result in unavoidable adverse impacts to 265.8 acres of riparian habitat in the floodway. This area is designated critical habitat for two of the three endangered species that occur in the project area, requiring mitigation as discussed in the Biological Opinion (Appendix E). To mitigate for these unavoidable adverse impacts, the U.S. Army Corps of Engineers will limit the construction footprint to the area required for the replacing the spoil bank with the engineered levee and the vegetation-free zone to minimize loss of riparian habitat. Best management practices are summarized in section 8.7 of the GRR/SEIS. The Biological Assessment (February 7, 2018) in section 8.1 Appendix E describes the effects of riparian

habitat loss on three endangered species. The Bernalillo to Belen Levee Habitat Mitigation Monitoring and Adaptive Management Plan (Chapter 5 in Appendix E, Environmental Resources) describes required measures to mitigate habitat for endangered species.

Public review of the draft GRR/SEIS was completed on 23 July 2018. All comments submitted during the public comment period were responded to in the Final GRR/SEIS. A 30-day waiting period and state and agency review of the Final GRR/SEIS was completed on 21 January 2020.¹ Comments from state and federal agency review did not result in any changes to the final IFR/EIS.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (FWS) issued a biological opinion, dated 29 August 2018, that determined that the recommended plan will not jeopardize the continued existence of the following federally listed species or adversely modify designated critical habitat: Rio Grande Silvery Minnow (*Hybognathus amarus*), Southwestern Willow Flycatcher (*Empidonax traillii extimus*), and Yellow-billed Cuckoo (*Coccyzus americanus*). Reasonable and prudent measures include 1) construction noise disturbance studies for flycatcher, cuckoo, and silvery minnow; 2) presence/absence monitoring for flycatcher and cuckoo; 3) a floodplain water temperature study monitoring to evaluate thermal effects of the Vegetation Free Zone during spring runoff; and 4) habitat mitigation measures. All terms and conditions, conservation measures, and reasonable and prudent measures resulting from these consultations will be implemented in order to minimize take of endangered species and avoid jeopardizing the species.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties would not be adversely affected by the recommended plan. The Isleta Pueblo Tribal Historic Preservation Office concurred with the determination on 28 September 2015. Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties would not be adversely affected by the recommended plan. The New Mexico State Historic Preservation Office concurred with the determination on 21 January 2014.

Pursuant to the Section 404 Clean Water Act of 1972, as amended, all discharges of dredged or fill material associated with the recommended plan have been found to be compliant with the section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Section 4 in Appendix E (Environmental Resources) of the GRR/SEIS.

Pursuant to Section 401 of the Clean Water Act of 1972, as amended, a water quality certification was obtained from the New Mexico Environment Department. All conditions of the water quality certification shall be implemented in order to minimize adverse impacts to water quality.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

¹ 40 CFR 1506.10(b) requires the EIS to be publically available/30-day waiting period prior to the ROD being signed.

Technical, environmental, economic, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives.² Based on the review of these evaluations, I find that benefits of the recommended plan outweigh the costs and any adverse effects. This Record of Decision completes the National Environmental Policy Act process.³

Date

Michael L. Connor
Assistant Secretary of the Army
(Civil Works)

² 40 CFR 1505.2(B) requires identification of relevant factors including any essential to national policy which were balanced in the agency decision.

³ 40 CFR 1505.2 requires clearly stating the NEPA decision.