

**Middle Rio Grande Flood Protection  
Bernalillo to Belen, New Mexico  
Mountain View, Isleta, and Belen Units**

Appendix K:  
Public Comments and Responses

December 2019



**US Army Corps  
of Engineers** ®  
Albuquerque District

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**DEPARTMENT OF DEFENSE**

**Department of the Army, U.S. Army Corps of Engineers**

**Notice of Intent To Prepare a Draft Integrated General Reevaluation Report and Supplemental**

**Environmental Impact Statement, Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico:**

**Mountain View, Isleta and Belen Units**

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DOD.

**ACTION:** Notice of intent.

**SUMMARY:** The U.S. Army Corps of Engineers (Corps) intends to prepare a General Reevaluation Report and Supplemental Environmental Impact Statement (GRR/SEIS). This is in compliance with the National Environmental Policy Act (NEPA), for the Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico Project (Project). This also is the implementation of actions to avoid or minimize potential effects to Endangered Species Act (ESA) listed species and/or associated critical habitat. The GRR/SEIS will supplement the *May 1979, Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico, Final Environmental Impact Statement (FEIS)*. That document assessed impacts from alternatives to reduce flood risk to structures, infrastructure and life safety. The previously proposed alternative included reconstructing the existing spoil bank system maintained by the Middle Rio Grande Conservancy District (MRGCD) with structurally competent levee system.

**ADDRESSES:** Comments should be mailed to Albuquerque District, U.S. Army Corps of Engineers, CESPAPM-LE, Bernalillo to Belen Levee GRR/SEIS, 4101 Jefferson Plaza NE., Albuquerque, NM 87109, or submitted via email to [Michael.D.Porter@usace.army.mil](mailto:Michael.D.Porter@usace.army.mil), designated by inserting “Bernalillo to Belen Levee SEIS” in the subject line. Comments may also be submitted at public meetings that will be scheduled at a later date.

**FOR FURTHER INFORMATION CONTACT:**

Questions about the proposed action and SEIS can be answered by contacting Dr. Michael D. Porter, Fishery Biologist, Albuquerque District, U.S. Army Corps of Engineers, CESPAPM-LE, 4101 Jefferson Plaza NE., Albuquerque, NM 87109, by phone at (505) 342-3264; or via email to [Michael.D.Porter@usace.army.mil](mailto:Michael.D.Porter@usace.army.mil) designated by including “Bernalillo to Belen Levee SEIS” in the subject line.

**SUPPLEMENTARY INFORMATION:** The original spoil banks were constructed by MRGCD as part of their authority to drain wetlands and deliver irrigation water. Preparation of this GRR/SEIS became necessary due to the changes that have occurred since the project was authorized as described below. A longer period of record for hydrological data is now available to allow improved and updated hydrological analysis. New levee design criteria that address long duration flows have also been adopted by the Corps in 1993. Any proposed plan now has to incorporate new design features that prevent seepage through the levee or its foundation due to prolonged flow against the riverward toe. The Corps has adopted a probabilistic determination of flood risk to perform levee design. Three species that have been listed as threatened or endangered since 1994 occur within the study area (two with critical habitat).

These include the Western Yellow-billed Cuckoo, the Southwestern Willow Flycatcher, and the Rio Grande Silvery Minnow.

The GRR/SEIS will investigate and determine the extent of Federal interest in a range of alternative plans designed to reduce the risk of flooding in the communities between Albuquerque and Belen. The GRR/SEIS will describe the risk of flooding in the communities between Albuquerque and Belen; evaluate a range of alternatives to reduce flood risk and potential environmental impacts; and describe measures to minimize or mitigate for potential environmental impacts. On November 27, 1995, the Corps published the notice of intent (NOI) to prepare the SEIS for the MRG GRR study in the **Federal Register** (Vol. 60, No. 227).

*Previously Proposed Action:* The Corps has previously proposed a Tentatively Selected Plan for the Project to rehabilitate the spoil bank system with an engineered levee in four Middle Rio Grande Units. The levee for the Mountain View (4.4 miles), Isleta West (3.2 miles), Belen East (18.1 miles), and Belen West Units (22.1 miles) are designed to provide protection for the 0.1% probability flood. The Corps initiated consultation with the U.S. Fish and Wildlife Service (Service) on the effects of the Project on species listed under the ESA. As part of that consultation, the Corps has proposed several conservation measures that would modify structures or operation and maintenance of the Project. The Service is preparing a Biological Opinion (BiOp) and the Corps expects that the Service may incorporate the conservation measures as part of the BiOp. The Corps will need to complete applicable environmental compliance, including evaluation under NEPA, prior to adopting and implementing any terms and conditions in the BiOp. The proposed GRR/SEIS would constitute that evaluation under NEPA. The Corps has proposed several measures to improve conditions for listed species, including the actions described in the Public Involvement Process section below, subject to authority and funding:

*Public Involvement Process:*

Coordination has been ongoing since 2008 with both public and private entities that have jurisdiction or an interest in land and resources in the Middle Rio Grande Valley of New Mexico. These entities include the general public, local governments, the Pueblo of Isleta, the U.S. Bureau of Reclamation, the Service, the MRGCD, the New Mexico Department of Game and Fish, and the Interstate Stream Commission. Coordination will continue throughout the development of the SEIS through comment letters, public meetings and field visits. All interested parties, including federal, state, tribal, and public entities, will be invited to submit comments on the draft SEIS when it is circulated for review.

The planning effort is also being coordinated with the Service pursuant to the requirements of the Fish and Wildlife Coordination Act of 1972 and the ESA of 1973, as amended. Consultation with the Advisory Council on Historic Preservation and the New Mexico State Historic Preservation Officer is ongoing pursuant to the National Historic Preservation Act of 1966.

*Significant Issues To Be Analyzed:* Significant issues to be analyzed in the development of the SEIS include the effect of the alternatives on endangered or threatened species and their critical habitat; floodplain development; water quality; riparian ecological systems; social welfare; human safety; cultural resources; and aesthetic qualities. Development of mitigation measures will be undertaken for any unavoidable impacts.

*Request for Review Comments:* The Corps invites affected federal, state, and local agencies, affected Native American tribes, and other interested organizations and persons to participate in the review of the GRR/SEIS. The Corps invites interested parties to provide specific comments on issues and the preferred alternative in the GRR/SEIS related to the construction of the Project. Comments, requests to be placed on the GRR/SEIS mailing list, and requests for information may be submitted to the address above. All comments and materials received, including names and addresses, will become part of the administrative record and may be released to the public. Interested parties should not submit confidential business or otherwise sensitive or protected information.

*Public Scoping Meeting:* The Corps currently plans to conduct public review meetings for this GRR/SEIS in 2017. The exact date, time, and location of the public meetings has not yet been determined. The Corps will publicize this information once the meeting arrangements have been made. The draft GRR/SEIS is currently scheduled to be available for public review in summer 2017. The final GRR/SEIS is currently scheduled to be available for public review in spring 2018.

**James L. Booth,**

*Lieutenant Colonel, U.S. Army, District  
Commander.*

[FR Doc. 2017-10075 Filed 5-17-17; 8:45 am]

**BILLING CODE P**

**Federal Register** /Vol. 82, No. 183 / Friday, September 22, 2017 /Notices **44409**

**ENVIRONMENTAL PROTECTION AGENCY**

**[ER-FRL-9035-3]**

**Environmental Impact Statements;**

**Notice of Availability**

*Responsible Agency:* Office of Federal Activities, General Information (202) 564-7146 or <http://www2.epa.gov/nepa/>.

Weekly receipt of Environmental Impact Statements (EIS) Filed 09/11/2017 Through 09/15/2017 Pursuant to 40 CFR 1506.9.

**Notice**

Section 309(a) of the Clean Air Act requires that EPA make public its comments on EISs issued by other Federal agencies. EPA's comment letters on EISs are available at:

<https://cdxnodengn.epa.gov/cdx-nepa-public/action/eis/search>.

*EIS No. 20170178, Draft Supplement, USACE, NM, Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units Integrated General Reevaluation Report and Supplemental Environmental Impact Statement, Comment Period Ends: 11/06/2017, Contact: Michael D. Porter 505-342-3264.*

**Federal Register** /Vol. 83, No. 111 / Friday, June 8, 2018 /Notices **26665**

**ENVIRONMENTAL PROTECTION AGENCY**

**[ER-FRL-9039-7]**

**Environmental Impact Statements;**

**Notice of Availability**

*Responsible Agency:* Office of Federal Activities, General Information (202) 564–7156 or <https://www2.epa.gov/nepa/>.

Weekly receipt of Environmental Impact Statements Filed 05/28/2018 Through 06/01/2018 Pursuant to 40 CFR 1506.9.

**Notice**

Section 309(a) of the Clean Air Act requires that EPA, make public its comments on EISs issued by other, Federal agencies. EPA’s comment letters on EISs are available at:

<https://cdxnodengn.epa.gov/cdx-enepa-public/action/eis/search>.

*EIS No. 20180121, Draft Supplement, USACE, NM, Middle Rio Grande Flood Protection Bernalillo to Belen New Mexico Integrated General Reevaluation Report and Supplemental Environmental Impact Statement, Comment Period Ends: 07/23/2018, Contact: Michael D. Porter 505–342–3264.*

Notices of availability of the draft document also were as published in the *Albuquerque Journal*. Copies were made available to the general public at the Albuquerque Main Library, Albuquerque, NM and the Los Lunas Public Library, Los Lunas, NM.

A digital copy of the draft document and appendices was made available to the general public on the Albuquerque District’s website.

Letters were mailed to the following entities to inform them of the availability of the draft GRR/SEIS-II at <http://www.spa.usace.army.mil/Missions/Environmental/Environmental-Compliance-Documents/Environmental-Impact-Statements-ROD/>:

### Agencies Contacted

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U.S. Bureau of Reclamation, Albuquerque, NM  
U.S. Fish and Wildlife Service, Albuquerque, NM  
U.S. EPA, Region 6, Dallas, TX  
New Mexico Department of Game and Fish, Santa Fe, New Mexico  
New Mexico Interstate Stream Commission, Albuquerque, NM

### Additional Contacts

#### Agency Staff

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David Gensler	Middle Rio Grande Conservancy District
Mike Hamman	Middle Rio Grande Conservancy District
Yasmeen Najmi	Middle Rio Grande Conservancy District
Skylar Bauer	National Park Service
Malia Volke	NM Department of Game and Fish
Matt Wunder	NM Department of Game and Fish
Rolf Schmidt-Peterson	NM Interstate Stream Commission
Chris Stageman	NM Interstate Stream Commission
Page Pegram	NM Interstate Stream Commission
Ramona Montoya	Pueblo of Isleta
Jessica Tracy	Pueblo of Isleta, Water Resources Department
Susan Milsap	U.S. Fish and Wildlife Service, Ecological Services
Jennifer Owen-White	U.S. Fish and Wildlife Service, Valle de Oro NWR
Brenda Alberts	Valencia County, Code Enforcement Officer
Seth Muller	Valencia County, Emergency Manager
Aaron Chavez	Valencia Regional Emergency Communications Center
Loretta Hatch	Village of Bosque Farms, Floodplain Manager
Michael Jaramillo	Village of Los Lunas , Public Works Director
Pat Jaramillo	Village of Los Lunas, Park Ranger Supervisor

#### New Mexico Citizens

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Ann @ BikeABQ	Ken Reese
Alicia Aguilar	Kevin Doyle
Dianne Cress	Liz Dicharry
Guy Dicharry	Richard Barrish
Janet Jarratt	Teri Jillson
Joseph Dallmann	Wilson Marshal

**Notice of Availability**  
**Draft Integrated General Reevaluation Report and Supplemental Environmental Impact Statement, Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units**

The U.S. Army Corps of Engineers (Corps), Albuquerque District, has released the “**Draft Integrated General Reevaluation Report and Supplemental Environmental Impact Statement, Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units**”. The U.S. Army Corps of Engineers (Corps) announces the availability of a General Reevaluation Report and Supplemental Environmental Impact Statement (GRR/SEIS) for Public Review. The GRR/SEIS evaluates alternatives to replace the existing spoil bank with an engineered levee to reduce flood risk within the Middle Rio Grande between Bernalillo and Belen, New Mexico. It also documents the existing condition of environmental resources adjacent to the spoil bank and potential impacts on those resources that could result from implementing the alternatives. The Middle Rio Grande Conservancy District (MRGCD) is the non-Federal Sponsor for the project.

Public meetings have been scheduled at the following locations:

- (1) Mountain View Community Center, 201 Prosperity Ave SE, Albuquerque, NM, 87102, Wednesday October 4, 2017 at 5:00-7:00 PM.
- (2) Isleta Community Center, Pueblo of Isleta, Isleta, NM, 87105, Thursday October 5, 2017 at 5:00-7:00 PM.
- (3) Los Lunas Transportation Center – Auditorium, 101 Courthouse Rd, Los Lunas, NM, 87031, Tuesday October 10, 2017 at 5:00-7:00 PM.

Public review of the GRR/SEIS DEA will start when the Notice of Availability is posted by the Environmental Protection Agency in the Federal Register. The Notice will state when the Review Period Ends. The document will also be available on the Corps web site at <http://www.spa.usace.army.mil/Missions/Environmental/Environmental-Compliance-Documents/Environmental-Impact-Statements-ROD/>. A CD will be sent upon written request.

Comments on the GRR/SEIS should be sent to:

*U.S. Army Corps of Engineers*  
*Albuquerque District*  
*Environmental Resources Section*  
Attn: CESP-PM-LE  
Bernalillo to Belen Levee GRR/SEIS  
4101 Jefferson Plaza NE  
Albuquerque, New Mexico 87109-3435

Paper copies of this document are also available for review at:

Albuquerque Main Library	Los Lunas Public Library
501 Copper NW	460 Main St NW
Albuquerque, NM 87102	Los Lunas, NM 87031

Public meetings were held periodically since 2008 at several locations to encourage public participation. The meetings were advertised in the same newspapers as the notice of availability of the draft document. Attendance exclusive of the Corps is shown below:

Date	Location	Number of participants
July 21, 2008	Village of Los Lunas Municipal Building	11
July 23, 2008	Mountain View Community Center	5
July 24, 2008	Isleta Community Center	9
February 26, 2013	Isleta Community Center	6
December 3, 2013	Village of Los Lunas Municipal Building	12
December 19, 2013	Isleta Community Center	6
December 4, 2014	Mountain View Community Center	16
October 4, 2017	Mountain View Community Center	3
October 5, 2017	Los Lunas Transportation Center	3
October 10, 2017	Isleta Community Center	10
	Total attendance	81

No substantive comments were made on the draft GRR/SEIS-II. Following are written comments on the draft document, along with annotated responses by the Corps.

Following are written comments on the draft document, along with annotated responses by the Corps.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Region 6**  
**1445 Ross Avenue, Suite 1200**  
**Dallas, TX 75202-2733**

Michael Porter Ph.D.  
U.S. Army Corps of Engineers Environmental  
Resources Section Attn: CESP-PM-LE  
Bernalillo to Belen Levee 4101 Jefferson Plaza NE  
Albuquerque, NM 87109

SUBJECT: Middle Rio Grande Flood Protection from Bernalillo to Belen, New Mexico:  
Mountain View, Isleta and Belen Units

Dear Mr. Porter:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency, Region 6 office in Dallas, Texas, has completed its review on the above-referenced General Reevaluation Report and Supplemental Environmental Impact Statement (GRRJSEIS). The United States Army Corps of Engineers (USACE) evaluated alternatives to replace existing spoil banks with engineered levees to reduce flood risk within the Middle Rio Grande between Bernalillo and Belen, New Mexico. The recommended engineered levee system would reduce the flood risk to over 19,200 acres of mixed-use land with a current population estimated at 16,300 residents and an estimated \$722,549,000 in damageable property.

EPA has rated the GRRJSEIS as **LO "Lack of Objections"**. The EPA's Rating System Criteria can be found here: <http://www.epa.gov/oecaerth/nepa/comments/ratings.html>.

EPA appreciates the opportunity to review the GRR/SEIS. Our classification will be published on the EPA website, <http://www.epa.gov/compliance/nepa/eisdata.html>, according to our responsibility under Section 309 of the CAA to inform the public of our views on the proposed Federal action. Please send our office one copy of the Final GRRJSEIS. If you have any questions or concerns, please contact Eli Martinez of my staff at (214) 655-2119 or at [martinez.eli@epa.gov](mailto:martinez.eli@epa.gov) for assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert Houston".

Robert Houston  
Chief, Special Projects Section Compliance Assurance  
and Enforcement Division

*USACE response: Thank you for your comment.*



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Region 6**  
**1445 Ross Avenue, Suite 1200**  
**Dallas, TX 75202-2733**

Michael Porter Ph.D.  
U.S. Army Corps of Engineers Environmental  
Resources Section Attn: CESP-PM-LE  
Bernalillo to Belen Levee 4101 Jefferson Plaza NE  
Albuquerque, NM 87109

**SUBJECT: Middle Rio Grande Flood Protection from Bernalillo to Belen, New Mexico:  
Mountain View, Isleta and Belen Units**

Dear Dr. Porter:

The U. S. Environmental Protection Agency (EPA) has reviewed the U.S. Army Corps of Engineers (USACE) Draft Integrated General Reevaluation Report and Supplemental Environmental Impact Statement (GRR/SEIS) for the Middle Rio Grande Flood Protection from Bernalillo to Belen Project (CEQ No. 20180121 ). Our review is provided pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations ( 40 CFR Parts 1500 - 1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The USACE proposes to replace the spoil banks with an engineered levee along the Middle Rio Grande to reduce flood risk along 32 river miles of the Rio Grande in the communities between Bernalillo to Belen, New Mexico. The Draft Integrated GRR/SEIS evaluated a range of alternative plans designed to reduce the risk of flooding to these communities. A GRR/SEIS was necessary due to changes that have occurred since the project was authorized in 1986, such as new levee design criteria that address long duration flows adopted by the USACE since 1993. Any proposed plan must now incorporate new design features that prevent seepage through the levee or its foundation due to prolonged flow against the riverward toe. In addition, the USACE adopted a probabilistic determination of flood risk to perform levee design.

Based on our review, we have rated the Draft Integrated GRR/SEIS as Lack of Objections (LO). A description of the EPA's rating system can be found at <https://www.epa.gov/nepa/Environmental-impactstatement-rating-system-criteria> .

We appreciate the opportunity to review the Draft Integrated GRR/SEIS. The staff contact for the review is Eli Martinez and he can be reached at (214) 665-2119 or [martinez.eli@epa.gov](mailto:martinez.eli@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Cheryl T. Seager", followed by a long horizontal line.

Cheryl T. Seager  
Director  
Compliance Assurance and

*USACE response: Thank you for your comment.*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6

1201 Elm Street, Suite 500

Dallas, Texas 75270-2102

January 14, 2020

Dr. Michael D. Porter  
EIS Team Leader  
Albuquerque District  
U.S. Army Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, New Mexico 87109

Dear Dr. Porter:

Pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500 – 1508), and our NEPA review authority under Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Army Corps of Engineers Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico, Integrated General Reevaluation Report and Final Supplemental Environmental Impact Statement (EIS) (CEQ No. 20190297). The Final Supplemental EIS addresses the potential environmental effects of proposed rehabilitation of existing spoil banks and an engineered levee along the Middle Rio Grande to reduce flood risks to communities from Bernalillo to Belen, New Mexico.

EPA Region 6 commented on the Draft Supplemental EIS on July 23, 2018 and had no comments or objections to the proposed project. In review of the Final Statement, we have no additional comments to offer. Once completed, please send our office one copy of the Record of Decision at the address above. If you have any questions, please contact Michael Jansky, the project review lead, at 214-665-7451 or [jansky.michael@epa.gov](mailto:jansky.michael@epa.gov).

Sincerely,

A handwritten signature in black ink that reads "Arturo J. Blanco".

Arturo J. Blanco  
Director

Office of Communities, Tribes and  
Environmental Assessment



# United States Department of the Interior

## OFFICE OF THE SECRETARY

Office of Environmental Policy and Compliance 1001 Indian  
School Road NW, Suite 348  
Albuquerque, New Mexico 87104

ER 17/0434  
File 9043.1

November 6, 2017

VIA ELECTRONIC MAIL ONLY

Michael D. Porter  
U.S. Army Corps of Engineers, Albuquerque District 4101  
Jefferson Plaza NE  
Albuquerque, NM 87109-3435

Subject: Review of the Draft Supplemental Environmental Impact Statement (DEIS) for the Middle Rio Grande Flood Protection Project, Bernalillo to Belen, New Mexico

Dear Mr. Porter:

The U.S. Department of the Interior has reviewed the September 2017 Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units, Draft Integrated General Reevaluation Report and Supplemental Environmental Impact Statement (GRR/SEIS). The GRR/SEIS is proposed to address alternative plans to provide higher levels of flood risk management to floodplain communities within the Bernalillo to Belen portion of the Middle Rio Grande floodway. The following comments from the U.S. Geological Survey and Bureau of Reclamation are provided based on their respective roles as streamgauge operators and as landowners in the project area, and under the authority of the National Environmental Policy Act (NEPA) of 1969 (83 Stat. 852; 42 U.S.C. 3501 et seq.).

*USACE response:* Thank you for your comment.

### **General Comment: Tiering from 1979 Environmental Impact Statement**

USACE has tiered the GRR/SEIS from an original EIS, as encouraged by the Council on Environmental Quality (CEQ) regulations at 40 CFR 1502.20, Tiering, to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision. We did not see the original 1979 EIS (nor the 1979 Feasibility Study) in the list of references, nor does it appear to be readily available on line via Google search. 40 CFR 1502.20 requires that the agency state where the earlier document is available. Putting that document up on the website with the GRR/SEIS and providing that link in the References list would make it so.

*USACE response:* The 1979 Feasibility Study is referenced in Appendix E. Both documents are now be accessible on the USACE web portal at:

<https://spa.usace.afpims.mil/Missions/Environmental/Environmental-Compliance-Documents/Environmental-Impact-Statements-ROD/>

### **Specific Comment: Listed Species**

The Executive Summary, Section 2.2.4, and Section 4.1.10(a) should indicate that critical habitat has been proposed for the yellow-billed cuckoo, and whether any of the proposed critical habitat is within the study area. **USACE response:** The Yellow-Billed Cuckoo is mentioned in the Executive Summary and impacts to its habitat are discussed extensively in Appendix E. Compensation for impacts to Cuckoo habitat can be found in the Mitigation Plan.

We recommend using the Latin names for these species, as well as for the Rio Grande silvery minnow, when first introduced in text.

**USACE response:** See the introductory paragraph for each special status species.

### **U.S. Geological Survey**

#### **General Comment: USGS Streamgages on the Middle Rio Grande**

The USGS operates streamgages throughout the U.S. to collect water quantity and quality data for a variety of purposes. Continuous operation of USGS streamgages is essential for our stakeholders. These sites often have permanent infrastructure and are vulnerable to disruption when nearby construction occurs in the vicinity of these streamgages. Three active USGS streamgages listed in the table below may potentially be impacted by the proposed project.

Impacts to these streamgages, alterations to river hydraulics and coordination with the USGS should be discussed within the DSEIS.

**USACE response:** USACE will coordinate with USGS on the stream gages in the project area.

<b>USGS Station Number</b>	<b>USGS Station Name</b>	<b>USGS Site Status</b>
08330210	Lower San Jose Drain at Outfall, NM	Current
08330875	Rio Grande at Isleta Lakes near Isleta, NM	Current
08331160	Rio Grande near Bosque Farms, NM	Current

The DSEIS should list these structures as sites to be safeguarded. The USGS New Mexico Water Science Center should be contacted and given sufficient advance notice before construction near active USGS streamgages. Efforts should be made to preserve the streamgages and minimize impacts to the data integrity collected at those sites. Additionally, alterations to river hydraulics such as levee construction and channel modifications impact USGS calculations of flow at streamgages. Design and final as-built channel and overbank geometries should be shared with the USGS.

**USACE response:** USACE will coordinate with USGS on the stream gages in the project area.

#### **Specific Comment: USGS Reference**

The DSEIS has a reference on page 161 to a USGS publication with a broken URL, so the URL should be removed.

Roelle, J.E., and W.W. Hagenbuck. 1995. Surface Cover Changes in the Rio Grande Floodplain, 1935-89 in LaRoe, E.T., G.S. Farris, C.E. Puckett, P.D. Doran, and M.J. Mac, eds. 1995.

Our living resources: a report to the nation on the distribution, abundance, and health of

U.S. plants, animals, and ecosystems. U.S. Department of the Interior, National Biological Service, Washington, DC.

[http://biology.usgs.gov/status\\_trends/static\\_content/documents/OLR.pdf](http://biology.usgs.gov/status_trends/static_content/documents/OLR.pdf)

*USACE response:* The link has been updated as follows:

[https://www.fs.fed.us/rm/boise/AWAE/labs/awae\\_flagstaff/Hot\\_Topics/riphreatbib/roelle\\_hagenbuck\\_surfacecoverchgs.pdf](https://www.fs.fed.us/rm/boise/AWAE/labs/awae_flagstaff/Hot_Topics/riphreatbib/roelle_hagenbuck_surfacecoverchgs.pdf)

## **Bureau of Reclamation**

### **General Comments**

The Bureau of Reclamation and MRGCD are the major landowners for this action, which is particularly important due to the size of the levee improvements and the vegetation clearance zone. Reclamation recommends developing a map that shows the acreage in question and the various landowners. Factors that come into play and should be mentioned include the need for obtaining access and use permits from these and other landowners. Any landowner issues will need to be resolved before construction.

*USACE response:* Land ownership and acreage for each project area can be found in Table 1 of Appendix I. Section 6 discusses Real Estate Requirements - Description of Lands, Easements, and Rights-Of-Way required for the Project.

A map that indicates land ownership and acreage would be a useful addition to the text. Reclamation recommends checking the acreage cited in a number of locations, because there are discrepancies (see editorial comments in the table below). The levee footprint, terrace lowering, and vegetation management discussion in the Executive Summary should include reference to the entities owning land within these areas.

*USACE response:* USACE will develop a map and supporting documentation.

### **Specific Comments**

Section 1.1.3, second paragraph, mentions “water resource problems within the authorized study area.” It may not need a long explanation, but by bringing this up the reader may be concerned that all impacts from the levee project have not been properly analyzed and assessed. Are the water resource issues related to the levee project?

*USACE response:* USACE will clarify statement with citations to the 2015 Reclamation Water Operations Biological Assessment and 2016 Biological Opinion.

Section 3.7 = This section mentions the Rio Grande as being perched, and that is a key condition of the river further south. Is this a true statement for this reach of the river?

*USACE response:* Yes. For a subreach of the river in the study area.

Section 3.10 = Mitigation beyond the levee work area will need to address landowner considerations along the river.

*USACE response:* As stated in the Mitigation Plan, The process for identifying enhanced habitat sites will start with interagency coordination with Reclamation and other Collaborative Program stakeholders proposing habitat restoration in or near the project area.

Section 4.1.6 = The as-yet-unknown borrow areas in the floodplain may have to account for existing riparian bird habitat.

*USACE response:* USACE has described the environmental baseline and discussed impacts to habitat in Appendix E. Existing native riparian gallery forest would not be used as borrow sites. Selection criteria for borrow sites emphasizes non-native / invasive species as primary areas for mitigation.

Section 4.1.13 = This section brings up some new numbers, the recommended plan is on MRGCD for 444 acres and on Reclamation for 609 acres, so is that the total levee/staging/borrow/mitigation acreage? The last section states that USACE has obtained signatures; has this occurred yet?

*USACE response:* Check acreage and signatures.

Table 19 = From a general perspective the estimate stated in the table looks ok. Where did the cost for cultural resource survey and recovery come from, and why are there no biological surveys and mitigation shown? Later on in chapter 6 it states that all areas have been surveyed except for staging and borrow areas, which have not been determined at this stage. Are the shown costs realistic?

*USACE response:* Mitigation and monitoring costs will be added to the table. The Mitigation & Monitoring Plan has been completed and costs have been reviewed for accuracy.

Section 6.4 = There are features in the proposed work that have not been defined yet as staging and borrow areas. Until all features of the proposed work are defined it is early to state that there will be no adverse effects. It would be of value to add a sentence that explains that effects will continue to be assessed as design progresses.

Staging and borrow areas relevant to levee construction and habitat mitigation have not yet been defined. Potential Impacts to cultural resources have been addressed through consultation with Isleta Pueblo and the agreement to construct a fence along a Traditional Cultural Property adjacent to the construction area. This specific area has also been designated as a mitigation site and will include the removal of invasives and the planting of native vegetation to account for habitat lost during construction. USACE has previously produced documentation under a programmatic agreement in 1996 to mitigate for adverse effects to spoil bank features. In sum, the entire proposed levee alignment has been previously surveyed and these are the only two historic properties present. Due to the above mitigation stated, the recommended plan is likely to result in no adverse impacts to historic properties.

Section 6.9 = Last sentence states that O&M will not increase the use of either construction materials or fossil fuels, but is this a comparison to current uses? When the levees are engineered there should be less need for repairs and further construction, but the clear vegetation zone would increase the use of fuel due to the mowing program.

*USACE response:* USACE will revise statement regarding the continued use of fossil fuels for maintenance.

Appendix E = The exclusionary period of April 15 to September 1 is used here, but this period was not stated in the GRR/SEIS. In Section 5.5 of BA for willow flycatcher critical habitat is designated and for yellow billed cuckoo critical habitat is proposed, but in the body of the GRR/SEIS it does not indicate that critical habitat has been proposed for this species.

*USACE response:* The avian nesting exclusionary period is mentioned several times in the SEIS. USACE will reference Conservation Measures (Appendix E) in Sections 4.1.7 (mitigation) and 6.3.4 (Special Status Species) of the integrated document.

Appendix I = This report seems to have used language from the report for the levee project below SADD. The real estate plan has information on the LFCC and Reclamation which is not appropriate for this project. We recommend going through the report to ensure that the text applies to the area of this proposed action. When final acreage is known this report might need to be updated. At that point Reclamation will know what permits are needed.

*USACE response:* USACE will revise Appendix I, including pg 5 (LFCC), pg 15 (San Marcial), and pg 6 (add yellow-billed cuckoo).

Editorial comments are shown below.

Location	Sec or page #	Comment/Recommendation
Throughout		Spell out acronyms one time only. Recommend checking document throughout for any inconsistencies.
Exec Summary	Table ES-1	Provide corresponding footnote for "1979 total miles"
Sec 1.2.1	paragraph 1	This community is referred to as "Los Chavewhiz." Figs 1, 2, 15, and 26 use "Los Chaves."
Sec 1.5.2.7	paragraph 1	"Separate" instead of "separable"?
Sec 2.2.4	paragraph 3	Isleta should be Isleta Pueblo
Sec 3.7		Rio Grande, not Rio Grande River
Sec 3.13.2	paragraph 1	Last line of paragraph is not a complete sentence.
Sec 6.7	paragraph 2	"Would benefit" rather than "would benefit would"
Throughout	Discrepancies in total acreage #s	There are inconsistencies in acreage within text and between text, tables, and figures. E.g., Sec 3.9.4, 218.8 acres, not 216.8 acres; Section 4.1.8, 212.5 acres, not 218.8 acres; and Appendix E text, 236.6 acres, not 305.8 acres (which is mentioned in main text) .

*USACE response: Thank you for your comments.*

Thank you for the opportunity to review the Draft Report and Supplemental EIS. If you or other staff members have any questions regarding our comments, please contact J. Michael Norris at 603/226-7847 ([mnorris@usgs.gov](mailto:mnorris@usgs.gov)) of the U.S. Geological Survey, or Hector Garcia at 505/463-4660 ([hgarcia@usbr.gov](mailto:hgarcia@usbr.gov)) of the Bureau of Reclamation.

Sincerely,



Stephen R. Spencer, Ph.D. Regional  
Environmental Office



**UNITED STATES DEPARTMENT OF THE INTERIOR**  
**FISH AND WILDLIFE SERVICE**  
**Valle de Oro National Wildlife Refuge**  
**7851 2nd street SW**  
**Albuquerque, NM 87105**  
**505-248-6667**



15 November 2017

Dear Mr. Porter,

Thank you for the opportunity to comment on the US Army Corps of Engineer's Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units Integrated General Reevaluation Report and Supplemental Environmental Impact Statement. Please accept the following comments on behalf of the Valle de Oro National Wildlife Refuge (NWR).

1. When identifying the Mountain View unit for the project area, we request that Valle de Oro NWR called out as a location that will be impacted by the project.

*USACE response: USACE will revise map and text in the SEIS.*

2. We request that Valle de Oro NWR management is coordinated with on construction timelines and that considerations be made for refuge visitors and school groups for continued use of the bridge and access to the bosque adjacent to Valle de Oro NWR.

*USACE response: USACE will continue discussions with Valle de Oro NWR during the design process to refine construction management adjacent to the refuge.*

3. We request that the current bridge access is maintained throughout construction or restored immediately after construction is complete in that immediate area.

*USACE response: The crossing will be maintained throughout construction for vehicle access. Public access shall be coordinated with Valle de Oro NWR and managed during construction.*

4. If the bridge needs to be removed and reinstalled, it must meet the same ADA accessibility specifications as well as specifications for large equipment access including fire engines.

*USACE response: The crossing is essential for construction access. There are no plans or need to remove the crossing for levee construction.*

5. If the AMAFCA stormwater drainage outfall is constructed before this project, we request that it is either not impacted or restored to full working condition (with coordination with AMAFCA) immediately after construction is done in the immediate area.

*USACE response: USACE will coordinate construction with Valle de Oro NWR.*

6. If future pedestrian bridges are constructed connecting Valle de Oro NWR to the adjacent bosque before this project begins, we request that all bridges are restored to full working condition immediately after construction is done in the immediate area.

*USACE response: USACE will coordinate construction with Valle de Oro NWR and AMAFCA to maintain pedestrian bridges.*

7. There was early discussion of including the design and base course for an extension of the Paseo del

Bosque trail from the South Diversion Channel terminating at the refuge. Designs for this extension are included in some of the engineering drawings but not the main document. We request that the extension of the Paseo del Bosque hike and bike trail is included in all relevant documents and is designed to terminate at the southern end of Valle de Oro NWR.

*USACE response:* After meeting with the Valle del Oro Refuge staff and other stakeholders, the MRGCD will consider designating an unimproved trail utilizing maintenance access roads within the new levee footprint from the South Diversion Channel to Valle del Oro Refuge. This trail would be shared use access with occasional maintenance and management activities. An improved trail would require separation from maintenance and management access. This would require widening the levee footprint from the proposed alternatives and be cost prohibitive. As part of the Second Street SW improvements, Bernalillo County is planning to construct a pedestrian bridge over the South Diversion channel and a paved trail connection from the Paseo del Bosque trail following South Second Street to the Valle del Oro Refuge. The USACE letter dated 30 September 2015 (see below) expresses support for the 2nd Street Complete Corridor Phase II Project by local stakeholders. Development of a recreational trail in conjunction with the levee project is the responsibility of local stakeholders working with MRGCD and Valle de Oro NWR.

8. Early on in the process there was discussion on native grass restoration along the levee, we request to see this included.

*USACE response:* Native grasses will be planted in the vegetation-free zone and on the levee.

9. Any access through Valle de Oro NWR property or storage of equipment and materials on refuge would require a Special Use Permit from refuge management.

*USACE response:* USACE will coordinate construction access with Valle de Oro NWR and obtain appropriate permits.

10. We appreciate being consulted on methods for future invasive species control adjacent to the area.

*USACE response:* USACE will coordinate invasive plant control measure with Valle de Oro NWR.

11. We recommend restoration work in the bosque also include native grasses and not just trees, as disturbed areas will be prone to an increase in invasive species.

*USACE response:* USACE will coordinate vegetation management measures with Valle de Oro NWR.

12. The cumulative effects analysis does not analyze the other projects occurring in the vicinity of the project, we suggest a further review of other projects occurring in the area.

*USACE response:* The effects section of the SEIS has been expanded.

Thank you for your consideration of these comments. Please feel free to reach out to me with any questions or if you need any clarification. We look forward to coordinating with you on work adjacent to Valle de Oro NWR.

Sincerely,



Jennifer Owen-White

Refuge Manager - Valle de Oro National Wildlife Refuge Jennifer\_owenwhite@fws.gov  
7851 2<sup>nd</sup> street SW Albuquerque,  
NM 87103  
505-248-6667 office  
505-933-2708 cell



• 7851 2<sup>nd</sup> St. SW • Albuquerque, NM 87105 • [info@friendsofvalledeoro.org](mailto:info@friendsofvalledeoro.org)

Michael Porter  
U.S. Army Corps of Engineers, Albuquerque District 4101  
Jefferson Plaza NE  
Albuquerque, NM 87109

November 6, 2017

RE: USACE Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units Integrated General Reevaluation Report and Supplemental Environmental Impact Statement

Dear Mr. Porter,

The Friends of Valle de Oro National Wildlife Refuge (NWR) are supportive of the US Army Corps of Engineers levee project outlined in the *Middle Rio Grande Flood Protection Bernalillo to Belen, NM: Mountain View, Isleta and Belen Units Integrated General Reevaluation Report and Supplemental Environmental Impact Statement* which will prevent property damage and decrease risks to human health and safety in Mountain View and in the outlined plan area.

Here are some additional comments on the levee plan from Friends of Valle de Oro NWR:

1) The Friends of Valle de Oro NWR have assurances from former USACE Project Manager, Michael Martinez, that a 10' recreational trail and sub-grade prep will be included in the levee engineer project from the South Diversion Channel in Mountain View southward approximately 3 miles to the southwest corner of Valle de Oro NWR. This recreational trail will essentially extend the Paseo del Bosque recreational trail and is supported by Friends of Valle de Oro National Wildlife Refuge (NWR), Valle de Oro NWR, MRGCD, AMAFCA, Bernalillo County, the City of Albuquerque, as well as residents of Mountain View. This trail will serve to connect the Refuge with other educational and community resources along the trail as well as provide alternative access to the Refuge for visitors and for the environment. This 10' recreational trail is in some of the levee plan engineering drawings (pages 4, 5, 7, 8, 10, 11) and should also be included in the plan document.

*USACE response:* After meeting with the Valle del Oro Refuge staff and other stakeholders, the MRGCD will consider designating an unimproved trail utilizing maintenance access roads within the new levee footprint from the South Diversion Channel to Valle del Oro Refuge. This trail would be shared use access with occasional maintenance and management activities. An improved trail would require separation from maintenance and management access. This would require widening the levee footprint from the proposed alternatives and be cost prohibitive. As part of the Second Street SW improvements, Bernalillo County is planning to construct a pedestrian bridge over the South Diversion channel and a paved trail connection from the Paseo del Bosque trail following South Second Street to the Valle del Oro Refuge.

2) We understand that 10% of the levee project funds may be allocated to recreation, which would accommodate the incorporation of a recreational trail, an extension of the Paseo del Bosque trail from the South Diversion Channel southward to the southwest corner of Valle de Oro NWR, as outlined in #1 above. This 10% allocated to recreation should be referenced in the report.

*USACE response:* There are no funds in the Bernalillo to Belen Levee Project allocated for recreation improvements. The current project cost is estimated at \$250,000,000. The USACE letter of support for Bernalillo County's "2nd Street Complete Corridor Phase II" funding request to the Federal Lands Access Program recognized that "paving and further development of the recreational trail will be done by other stakeholders who will also coordinate maintenance of the trail with the MRGCD."

3) Reference the recreational trail mentioned in #1 above, we would like it to be located on the west side of the levee, or on top of the levee, if possible, to optimize the Bosque view and recreational experience that users of this trail will have.

*USACE response:* The public will be able to use unimproved maintenance access roads on the top, east and west sides of the levee as informal trails from the South Diversion Channel to the Valle del Oro Refuge. Any designated trail would have to be managed by a local entity with potential impacts to management activities, access, neighboring properties, environmental and cultural resources factored into the location.

4) The existing bridge at the southwest corner of Valle de Oro National Wildlife Refuge/west end of Salida Sandia which spans the Riverside Drain provides important access to the Bosque which is an extension of the Valle de Oro NWR experience; the Refuge is projected to eventually attract more than 75,000 visitors annually. This bridge also provides emergency vehicle access to the Bosque for the Mountain View community, in the case of fires, etc., as well as a crossover for recreationists using the Paseo del Bosque trail (when extended to the Refuge). Therefore, if the bridge needs to be removed and reinstalled as part of the USACE levee project,

- a) Its rebuild should be part of this levee project and included in the plan.
- b) Bridge access should be maintained throughout the project or, if that isn't possible, access should be restored immediately after construction is done in the area.
- c) If the bridge needs to be removed and reinstalled, it must meet the same ADA accessibility specifications as well as specifications for large equipment access including fire engines.
- d) If the bridge needs to be removed and reinstalled, Valle de Oro NWR should be coordinated with on construction timelines so that impact to Refuge visitors and school groups who use the bridge to access the bosque is considered and minimized.

*USACE response:* The crossing will be maintained throughout construction for vehicle access. Public access shall be coordinated with Valle de Oro NWR and managed during construction.

5) If additional pedestrian bridges accessing Valle de Oro NWR are constructed before this USACE levee project, the same considerations 4 (a), (b), (c), and (d) above should be addressed.

*USACE response:* USACE will continue to coordinate with Valle de Oro NWR on their plans for pedestrian access to the bosque, and other features that may be affected by levee construction. The coordination will minimize impacts to infrastructure and levee construction.

6) Plan Section 5.1.1, Climate and Climate Change, only references increasing temperatures, decreases in winter snowfall and earlier snow melt---it does not reference the fact that climate change will result in increasing incidents of severe rainstorm events, although it should. This increase in severe weather events will absolutely contribute to increased incidents of flooding, which is another reason this levee engineer plan is necessary and beneficial.

*USACE response:* Thank you for your comment.

7) When identifying the Mountain View unit for the project area, Valle de Oro NWR should be called out as a location that will be impacted.

*USACE response:* Appendix E 1.3 General Project Background states, *The Mountain View Unit is mainly rural with some industrial and small businesses, and includes the recently established Valle de Oro National Wildlife Refuge.* The Refuge is also listed multiple times in the SEIS as an adjacent land owner and is again mentioned in the Cumulative Effects section.

8) Valle de Oro NWR should be a habitat mitigation site for trees/plantings, given the fact that habitat in the Bosque adjacent to Valle de Oro NWR in the Mountain View area will be removed for this project and the Refuge will be restoring bosque habitat on-site.

*USACE response:* USACE will continue to coordinate with Valle de Oro NWR on possible mitigation for the levee project. Mitigation site location will be identified with the USFWS-ES office and are dependent on the type of mitigation being proposed and the landscape and soil characteristics that have the highest probability of meeting the objectives stated in the Mitigation Plan. Removal of non-native vegetation will be determined by the location and area where those species exist, and

habitat restoration will be completed in areas where requisite species are likely to become established. As mentioned earlier, site locations will also be evaluated for usable fill material to aid in levee construction.

9) Valle de Oro NWR should be consulted on methods for future invasive species control as well as plantings in the levee project area adjacent to the Refuge.

*USACE response:* USACE will continue to coordinate with Valle de Oro NWR on invasive species control and plantings in the Mountain View area.

10) Cumulative effects from other scheduled and ongoing projects in Mountain View during the proposed and actual USACE levee project timeframe should be considered and analyzed.

*USACE response:* The effects section of the SEIS has been expanded.

Thank you for giving us this opportunity to comment, and for considering these items for inclusion in the USACE levee project plan.



Teri Jillson President  
Friends of Valle de Oro National Wildlife Refuge

**From:** [Ken Reese](#)  
**To:** [Porter, Michael D CIV USARMY CESPA \(US\)](#)  
**Subject:** [EXTERNAL] Mountain view Levee  
**Date:** Monday, October 30, 2017 7:09:54 PM

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Mr Porter,

I am a South Valley resident and former member of the Board of the Friends of Valle de Oro NWR.

I am writing to comment on the draft "Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units. Integrated General Reevaluation Report and Supplemental Environmental Impact Statement."

I support the points below pertaining the recreational trail along the Mountain View section of the levee.

Please contact me with any questions. Sincerely,

Kenneth Reese 505-966-676  
1620 Bernard Thomas Lane SW Albuquerque, NM  
87105

- 1) I am supportive of this ACE levee project which will prevent property damage and decrease risks to human health and safety in Mountain View and in the outlined plan area.

*USACE response:* Thank you for your comment.

- 2) It is my understanding that a 10' recreational trail is included in the levee engineer project from the South Diversion Channel in Mountain View southward approximately 3 miles to the southwest corner of Valle de Oro NWR. I support the inclusion of this recreational trail which would extend the Paseo del Bosque recreational trail and would serve to connect the Refuge with other educational and community resources along the Trail as well as provide alternative visitor access to the Refuge.

*USACE response:* After meeting with the Valle del Oro Refuge staff and other stakeholders, the MRGCD will consider designating an unimproved trail utilizing maintenance access roads within the new levee footprint from the South Diversion Channel to Valle del Oro Refuge. This trail would be shared use access with occasional maintenance and management activities. An improved trail would require separation from maintenance and management access. This would require widening the levee footprint from the proposed alternatives and be cost prohibitive. As part of the Second Street SW improvements, Bernalillo County is planning to construct a pedestrian bridge over the South Diversion channel and a paved trail connection from the Paseo del Bosque trail following South Second Street to the Valle del Oro Refuge.

- 3) It is my understanding that 10% of the levee project funds may be allocated to recreation, which would accommodate the incorporation of a recreational trail, an extension of the Paseo del Bosque trail from the South Diversion Channel to the southwest corner of Valle de Oro NWR, as outlined in #1 above. This 10% allocated to recreation should be mentioned in the report.

*USACE response:* There are no funds in the Bernalillo to Belen Levee Project allocated for recreation improvements. The current project cost is estimated at \$250,000,000. The letter of support for Bernalillo County's "2nd Street Complete Corridor Phase II" funding request to the Federal Lands Access Program recognized that "paving and further development of the recreational trail will be done by other stakeholders who will also coordinate maintenance of the trail with the MRGCD."

4) Reference the recreational trail mentioned above, I would like it to be located on the west side of the levee, or on top of the levee, if possible, to optimize the Bosque view and recreational experience that users of this trail will have.

*USACE response:* The public will be able to use unimproved maintenance access roads on the top, east and west sides of the levee as informal trails from the South Diversion Channel to the Valle del Oro Refuge. Any designated trail would have to be managed by a local entity with potential impacts to management activities, access, neighboring properties, environmental and cultural resources factored into the location.

5) I understand that the recently constructed bridge at the southwest corner of Valle de Oro National Wildlife Refuge/west end of Salida Sandia which spans the Riverside Drain will be eliminated during this levee project. The access to the Bosque that this bridge provides is important as an extension of the Valle de Oro NWR experience; the Refuge is projected to eventually attract more than 75,000 visitors annually. In addition, that bridge provides emergency vehicle access to the Bosque for the Mountain View community, in the case of fires, etc., as well as a crossover for recreationists using the Paseo del Bosque trail (when extended to the Refuge), and its rebuild should be part of this levee project and included in the plan.

*USACE response:* The crossing will be maintained throughout construction for vehicle access. Public access shall be coordinated with Valle de Oro NWR and managed during construction.

Sent from my iPhone



**BikeABQ**  
**PO Box 4119**  
Albuquerque NM 87196-4119  
email: board@bikeabq.org



"Supporting, Educating, and Advocating for a Bike-Friendly Albuquerque."

November 6, 2017

U.S. Army Corps of Engineers  
Albuquerque District Environment Resources Section  
Attn: CESPAL-LE  
Bernalillo to Belen Levee GRR/SEIS  
4101 Jefferson Plaza NE  
Albuquerque, NM 87109-3435 Dear

Mr. Michael Porter;

Teri Jillson of the Friends of the Valle de Oro NWR alerted the Board of BikeABQ that inclusion of a recreational trail, essentially a 3 mile Paseo del Bosque Trail extension from the South Diversion Channel southward to Valle de Oro National Wildlife Refuge, is not indicated in the US Army Corps of Engineers levee plan, *Middle Rio Grande Flood Protection Bernalillo to Belen, NM: Mountain View, Is/eta and Belen Units Integrated General Reevaluation Report and Supplemental Environmental Impact Statement*, that has just come out for comment.

The Board of Directors of BikeABQ is in support of building this extension. While there will be improvements to Second Street, including a paved trail separated by a few feet from the road, many cyclists feel much safer on a trail that is well separated from vehicle traffic. This is especially the case when children are part of a group that would be cycling on the Bosque Trail to Valle de Oro.

*USACE response:* After meeting with the Valle del Oro Refuge staff and other stakeholders, the MRGCD will consider designating an unimproved trail utilizing maintenance access roads within the new levee footprint from the South Diversion Channel to Valle del Oro Refuge. This trail would be shared use access with occasional maintenance and management activities. An improved trail would require separation from maintenance and management access. This would require widening the levee footprint from the proposed alternatives and be cost prohibitive. As part of the Second Street SW improvements, Bernalillo County is planning to construct a pedestrian bridge over the South Diversion channel and a paved trail connection from the Paseo del Bosque trail following South Second Street to the Valle del Oro Refuge.

This extension would be very welcome and well-used. It would connect Valle de Oro to other educational and community resources that are along the trail now. Visitors to Albuquerque would enjoy cycling along this trail in a beautiful area, much like trails in other big cities in other states. These trails show that cities encourage residents and visitors to see the flora and fauna of some of their prettiest natural areas.

*USACE response:* Thank you for your comment.

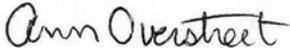
It is BikeABQ's understanding that 10% of the future Riverside Drain levee project funds may be allocated to recreation. A 10' recreational trail has already been included in the plan drawings, but not in the plan itself. We would like to see the recreational trail mentioned in the plan and become reality when the plan is executed.

*USACE response:* There are no funds in the Bernalillo to Belen Levee Project allocated for recreation improvements. The current project cost is estimated at \$250,000,000. The letter of support for Bernalillo County's "2nd Street Complete Corridor Phase II" funding request to the Federal Lands Access Program recognized that "paving and further development of the recreational trail will be done by other stakeholders who will also coordinate maintenance of the trail with the MRGCD."

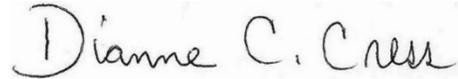
BikeABQ also understands that the recently constructed bridge at the SW corner of the Valle de Oro NWR/west end of the Salida Sandia which spans the Riverside drain may be eliminated during the proposed levee project. The access to the Bosque that this bridge provides is as important as an extension of the Valle de Oro NWR experience. In addition, that bridge provides emergency vehicle access to the Bosque for the Mountain View community in case of fires, etc, and also would be a crossover for people using the Paseo de! Bosque Trail if it is extended to the Refuge. Rather than being eliminated, we encourage rebuilding the bridge as part of the future levee project and including it in the plan.

*USACE response:* The crossing will be used for levee access by construction vehicles. Public access shall be coordinated with Valle de Oro NWR and managed during construction.

The Board of Directors of BikeABQ thanks you for your consideration of these comments.  
Sincerely,



Ann Overstreet BikeABQ President



Dianne Cress, BikeABQ Board of Directors and member Friends of Valle de Oro



**DEPARTMENT OF THE ARMY**  
ALBUQUERQUE DISTRICT, CORPS OF  
ENGINEERS 4101 JEFFERSON PLAZA NE  
ALBUQUERQUE, NM 87109-3435

September 30, 2015

Civil Works Projects Management Branch

Ms. Morgan Malley, Transportation Planner  
Central Federal Lands Highway Division  
12300 West Dakota Ave, Suite 380-B  
Lakewood, Colorado 80228

Dear Ms. Malley,

I am writing to express support for the Bernalillo County's "2nd Street Complete Corridor Phase II" funding request for the Federal Lands Access Program. This phase is a continuation of a plan to provide public transportation access to Valle de Oro National Wildlife Refuge (NWR) and connect the Refuge to the Paseo del Bosque Trail by building a pedestrian/bicycle bridge across the South Diversion Channel.

The U.S. Army Corps of Engineers (Corps) has partnered with the Middle Rio Grande Conservancy District (MRGCD) on a project to rebuild the levees along the Rio Grande south of Albuquerque as part of the Middle Rio Grande Flood Protection Project Bernalillo to Belen. As Part of this project, the Mountain View Reach from the South Diversion Channel to the Isleta Pueblo will have an earthen compacted levee maintenance road along the bottom of the levee between the levee and the diversion channel. This maintenance road will be wide enough to accommodate a recreational trail from the South Diversion Channel to the Valla de Oro NWR. The paving and further development of the recreational trail will be done by other stakeholders who will also coordinate maintenance of the trail with the MRGCD. An important condition for the trail is a connection to the Paseo del Bosque Trail with a bridge over the South Diversion Channel, which is the purpose of the Bernalillo County's funding request.

We support Bernalillo County's application and we ask that you give it your thorough consideration. If you have additional questions please contact me at 505-343-6262 or e-mail [michael.p.martinez@usace.army.mil](mailto:michael.p.martinez@usace.army.mil).

*USACE response:* Letter expresses agency support for Bernalillo County's application requesting funds to build a bridge for the Paseo del Bosque Trail.

Sincerely,

A handwritten signature in black ink, appearing to read "M. P. Martinez".

Michael P. Martinez, P.E.  
Project Manager

**Middle Rio Grande Flood Protection Bernalillo  
to Belen, NM, GRR/SEIS Public Review**

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**PUBLIC MEETING**

**D** Mountain View Community Center, October 4, 2017

Isleta Community Center, October 5, 2017

**D** Los Lunas Transportation Center, October 10, 2017

Name / Representing: Jessica Tracy, Water Resources Director  
Pueblo of Isleta (POI)

Address [Optional -see p.2\*]: PO Box 1270, Isleta, NM 87022

Email [Optional -see p.2\*]: poi36001@isletapueblo.com

**COMMENTS:**

**1) Levee Footprint**

15' wide top with 3:1 slope is mentioned throughout the document, as well as height references. The EIS states that where levees are to increase in height, the overall cross-section and footprint will increase. In order to understand what that means in relation to what is existing, detailed plans and profiles for width and height overlaid on existing dimension is needed, especially as it relates to the width of the levees at ground level.

This overlay should include the 15' vegetation management zone from the toe of the levee.

*USACE response:* USACE shall coordinate with the Pueblo of Isleta on pre-construction design to communicate detailed plans.

**2) Habitat Mitigation**

More detail is needed for terrace lowering and habitat plans for bosque/river side of the levee. How will those decisions be made? How will consultation be handled? Will the funding be available at the time of levee construction or shortly thereafter to ensure prompt restoration? Will that funding be managed by ACE, or in some cases, such as with POI, could that funding be routed to and managed by the Pueblo? If existing habitat projects are negatively impacted by this work, how might that be addressed by ACE?

What additional environmental compliance might be needed for this work, if any? (See next page for more comments)

*USACE response:* USACE shall consult with the Pueblo of Isleta on possible mitigation on pueblo lands. The Pueblo will decide if, when, and where mitigation will be located through consultation with USACE. Mitigation is funded concurrently with levee construction, and managed by USACE. Effects to existing habitat project sites shall be mitigated by USACE. The Pueblo of Isleta shall be consulted for all mitigation on the pueblo.

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Please return your completed form before you leave, or mail to:

U.S. Army Corps of Engineers  
Albuquerque District  
4101 Jefferson Plaza NE  
Albuquerque, New Mexico 87109-3435  
ATIN: Environmental Resources Section

You can also e-mail your comments to:  
[SUBJECT: Bernalillo to Belen Levee GRR/SEIS]  
Michael.D.Porter@usace.army.mil

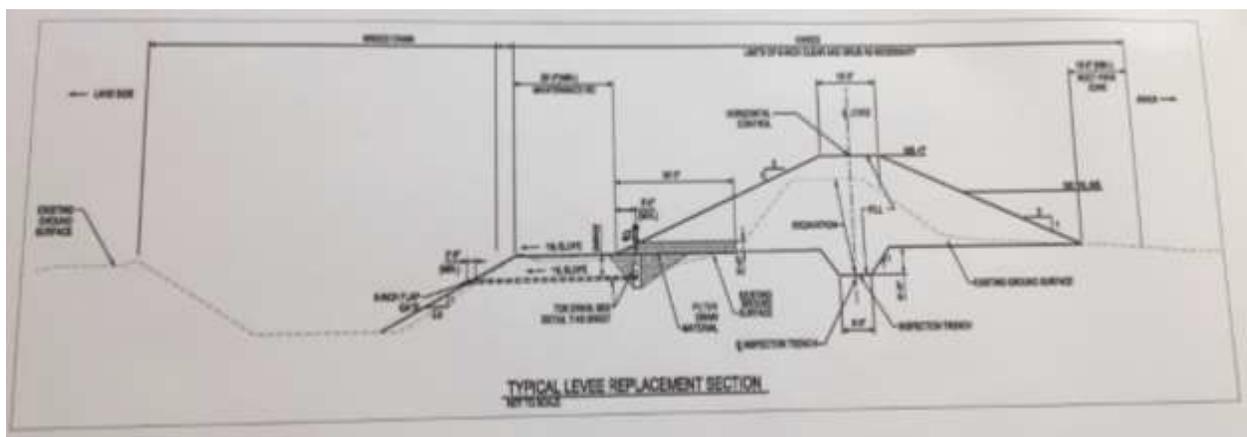


Comments on the MRG Bernalillo to Belen levee replacement  
November 6, 2017

**Note:** Comments submitted by the Pueblo of Isleta Environment Division are not the official position of the Pueblo of Isleta and are not intended to contradict Tribal Council's support of the Project (Resolution No. 2013-090)

### Typical levee replacement section

Refer to the following poster diagram available at the October 2017 meeting



1. Perspective drawings to-scale, even three-dimensional renderings, are needed to help Isleta community members visualize the proposed levee and give careful consideration to the project footprint
  - a. There should be no loss or disturbance of existing forested land between the River and the proposed levee

*USACE response:* USACE has estimated the construction effects on the riparian forest area and proposed measures to mitigate the acreage for the levee footprint and vegetation free zone.

- b. Will the sum of the required parts fit within MRGCD's existing easement? The minimum width of the required root-free zone, i.e., where woody vegetation is not allowed to grow to more than 1-inch diameter, is 15 feet. The top of the levee is 15 feet. The minimum width of the maintenance road is 20 feet. The width of the sloped area on each side of the levee is not indicated and cannot be reliably estimated since the diagram provided at the public meeting is not to scale. The sum of all required minimum widths plus the MRGCD drain requires a considerable amount of land.

*USACE response:* USACE has estimated the acreages required beyond the current spoil bank footprint. MRCGD is responsible for acquiring easements with the Pueblo. .

- c. The Army Corps should explain the extent to which its engineering and design guidelines are always followed. How much flexibility would be allowed in the Isleta Unit with respect to general technical specifications the Army Corps typically follows? And would the Pueblo of Isleta be asked to approve levee design or maintenance plans due to site-specific considerations?

See: [http://www.publications.usace.army.mil/Portals/76/Publications/EngineerTechnicalLetters/ETL\\_1110-2-583.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerTechnicalLetters/ETL_1110-2-583.pdf)

*USACE response:* Thank you for your comment.

- d. What is the total footprint of the levee and its required features for the entire lengths on the east and west sides of the River?

*USACE response:* The total construction footprint for 47.8 miles of levee is 178.3 acres in addition to the existing spoil bank, and an additional 87.5 acres for the vegetation-free zone.

### **Maintenance of the required root free zone**

2. Only hand tools or treatment by small machines should ever be used to maintain vegetation in the root-free zone.

*USACE response: Your comment will be considered for the maintenance manual.*

3. No herbicides should be used to control vegetation within the levee footprint

*USACE response: Your comment will be considered for the maintenance manual.*

4. On the potentially positive side, maintenance of the levee could be a source of jobs for tribal members

*USACE response: Thank you for your comment.*

### **Other considerations**

5. Any material requiring disposal should not be placed temporarily for longer than 30 days nor permanently on tribal land without the Pueblo's express authorization

*USACE response: All disposal locations and conditions for use must be authorized by the land owners.*

6. If the levee is designed to be in service for 50 years, the community needs to give careful thought to potential changes within its serviceable life whether changes in flood regime are likely and if there could be a need for subsurface boring under the proposed levee

*USACE response: Thank you for your comment.*

7. Is wildlife passage a feature of the levee within the Isleta reach?

*USACE response: The levee doesn't create a barrier to wildlife. No specific features are necessary for passage.*

8. The Army Corps of Engineers should give the Isleta community a careful explanation of the project, i.e., an in-person presentation or series of presentations, using language the general public can understand, about the purpose of the levee replacement. It can be difficult to discern internal consistency in the Integrated General Reevaluation Report and Supplemental Environmental Impact Statement for Isleta East, Isleta West, and Isleta Unit – West (no East?), e.g., see the third page of the Executive Summary (unnumbered, DRAFT of September 2017).

*USACE response: Thank you for your comment.*

9. What is the rationale for replacing the levee from north to south or upstream to downstream? If part of the Bernalillo segment is already complete, what segment is next and why?

*USACE response: Levee construction is generally in the downstream direction because flow attenuation results in a decreasing water surface elevation as water moves downstream. Either the Mountain View or Isleta West units are next because they can be completed quickly.*

10. To what extent and when would flooding the Pueblo needs protection from be caused by the failure of Cochiti Dam?

*USACE response: Regularly scheduled dam safety evaluations should identify issues to support maintenance and avoid dam failure. Thank you for your comment.*

11. Did the Army Corps notice for its public meeting in Isleta held October 5, 2017 meet Federal requirements for advance notice?

*USACE response: Yes.*

GOVERNOR  
Susana Martinez



DIRECTOR AND SECRETARY  
TO THE COMMISSION  
Alexandra Sandoval

DEPUTY DIRECTOR  
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Las Cruces

BOB RICKLEFS  
Cimarron

ELIZABETH A. RYAN  
Roswell

THOMAS "DICK" SALOPEK  
Las Cruces

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22 September 2017

Dr. Michael Porter  
Environmental Resources Section  
USAGE, Albuquerque District 4101  
Jefferson Plaza NE Albuquerque, NM  
87109  
[Michael.D.Porter@usace.army.mil](mailto:Michael.D.Porter@usace.army.mil)

*RE: SEIS for Bernalillo to Belen Levees; NMDGF No. 18034*

Dear Dr. Porter:

The Department of Game and Fish (Department) has reviewed your request for information regarding the above referenced project, and provides the following recommendations.

The Department recommends sourcing borrow materials from mitigation sites rather than commercial sources outside the project area. This would enable floodplain lowering to improve connectivity to groundwater for future riparian plantings.

*USACE response: USACE will evaluate the use of available mitigation site materials to reduce costs.*

Mitigation sites should be chosen to maximize the area suitable for revegetation with native woody plants, particularly cottonwoods and willows. Further, the area and depth of excavations should maximize the area suitable for native riparian vegetation. For example, it may be more beneficial to excavate a smaller area to a greater depth than to excavate a larger area to a shallower depth. The total area and density of woody native riparian plantings should equal or exceed the total area and density of woody vegetation (both native and non-native) that is removed from the project site.

*USACE response: Mitigation sites for flycatcher habitat will have target excavation depth criteria for native riparian vegetation, and acreage required for mitigation.*

The SEIS states that mitigation sites may range from 5 to 25 acres in size. We recommend prioritizing larger sites over smaller sites. Thus, a smaller number of large sites is preferred over a greater number of small sites.

*USACE response: USACE will coordinate with action agencies, including the Department, to identify mitigation sites.*

Finally, the Corps of Engineers should explore opportunities to salvage native woody vegetation from the existing levees prior to vegetation removal and construction activities. These materials could be used by a variety of entities for planting at restoration sites throughout the Middle Rio Grande.

*USACE response: USACE will coordinate with action agencies, including the Department, to identify uses for native plant materials.*

Thank you for the opportunity to review and comment on the proposed project. If you have any questions, please contact Malia Volke, Aquatic and Riparian Habitat Specialist at (505) 476-8160 or [malia.volke@state.nm.us](mailto:malia.volke@state.nm.us).

Matt Wunder, Ph.D.  
Chief, Ecological and Environmental Planning Division

cc: USFWS NMES Field Office  
Chuck Schultz, NMDGF Northwest Habitat Specialist

**From:** Stageman, Chris, OSE <chris.stageman@state.nm.us>  
**Sent:** Thursday, November 02, 2017 10:54 AM  
**To:** Porter, Michael DCIV USARMY CESP (US)  
**Subject:** [EXTERNAL] Comments: Bernalillo to Belen Flood Protection, U.S. Army Corps of Engineers General Reevaluation Report and Supplemental Environmental Impact Statement

Dr. Porter,

Regarding the U.S. Army Corps of Engineers General Reevaluation Report and Supplemental Environmental Impact Statement (GRR/SEIS); Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units.

\* In the Rio Grande basin, the ISC performs numerous activities, some of which may be affected by the proposed project. Those activities include, but are not limited to, monitoring water operations of the U.S. Army Corps of Engineers (Corps) and Reclamation, conducting annual accounting of native Rio Grande and San Juan Chama Project (SJC) water, assessing and determining Rio Grande Compact compliance, and addressing federal natural resource policy issues that may impact the river system. With these activities in mind, we reviewed the GRR/SEIS for the Proposed Project. Based on that review the ISC provide the following written comments.

\* The ISC is interested in the Proposed Project because it is statutorily mandated to ensure compliance with the interstate river compacts to which New Mexico is a party, and to develop, conserve, and protect New Mexico's water and stream systems. NMSA 1978, § 72-14-3 (1953).

\* While the NMISC encourages the creation of spawning and rearing habitat for the Rio Grande silvery minnow, the mitigation measures and enhanced riparian features (terrace lowering, channels, and swales) of the recommended plan could increase depletions from the river system. For example, the planned terrace lowering would lower the floodplain surface and increase open water evaporation at more frequent spring flows. Any increase in depletions has the potential to jeopardize the ability of the State of New Mexico to meet its downstream delivery obligations. Therefore, the ISC requires that new projects demonstrate that they will not result in any increases in net water depletions, or that any increases are offset by purchased or leased water rights, or bulk water from another source.

*USACE response: USACE will coordinate with NMISC, MRGCD, and other action agencies on mitigation measures to address depletions.*

Best Regards,

Chris Stageman, P.G.  
Hydrogeologist

Rio Grande Bureau, NMISC 5550  
San Antonio, NE Albuquerque, NM  
87109

505-383-4055

chris.stageman@state.nm.us

**From:** [Stageman, Chris, OSE](#)  
**To:** [Porter, Michael D CIV USARMY CESPA \(USA\)](#)  
**Cc:** [Pegram, Page L., OSE](#)  
**Subject:** [Non-DoD Source] FW: Bernalillo to Belen Levee SEIS - Agency Review  
**Date:** Friday, January 17, 2020 3:18:08 PM

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Dr. Porter,

The New Mexico Interstate Stream Commission (NMISC) has reviewed the recommended alternative for the 2019 Bernalillo to Belen Levee Project GRR/SEIS. The NMISC reiterates the comments submitted to USACE on November 2, 2017 related to the recommended alternative in the 2017 GRR/SEIS for the Bernalillo to Belen Flood Protection Project. A copy of those comments is reproduced in Appendix K of the USACE GRR/SEIS, Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico, Integrated General Reevaluation Report and Supplemental Environmental Impact Statement, July 2019.

Sincerely,

Chris Stageman, P.G.

Hydrogeologist

New Mexico Interstate Stream Commission

5550 San Antonio, Dr., NE

Albuquerque, NM 87109

505-383-4055



July 23, 2018

*Via Electronic Mail*

Michael Porter  
Albuquerque District  
U.S. Army Corps of Engineers  
4101 Jefferson Plaza NE  
Albuquerque, NM 87199  
[Michael.D.Porter@usace.army.mil](mailto:Michael.D.Porter@usace.army.mil)  
505-342-3264

**RE: Comments of WildEarth Guardians on the Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units; Integrated General Reevaluation Report and Supplemental Environmental Impact Statement**

Dear Michael:

This letter is submitted by WildEarth Guardians (“Guardians”) to provide the U.S. Army Corps of Engineers (“Corps”) with comments on the *Middle Rio Grande Flood Protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units; Integrated General Reevaluation Report and Supplemental Environmental Impact Statement* dated May 2018 (“2018 GRR/SEIS”).

WildEarth Guardians is a regional nonprofit environmental advocacy organization working to protect and restore the wildlife, wild places, wild rivers, and health of the American West. For more than two decades, Guardians has worked to safeguard flows in the Rio Grande and restore the health of the riparian ecosystem in the Upper Rio Grande Basin. With members throughout the region, Guardians is interested in ensuring that the Corps evaluate a full range of alternatives that meet the underlying purpose and need of the project. The Corps is responsible for “promoting efforts which will prevent or eliminate damage to the environment” as well as ensuring “productive and enjoyable harmony between man and his environment.”

The Corps 2018 GRR/SEIS is the newest iteration in a series of studies and reports dating back nearly 40 years. Congress authorized these studies in the 1941 Flood Control Act (Pub. L. 228). In 1979, the Corps completed a Feasibility Report recommending levee construction in all units and compensation for impacts to fish and wildlife (e.g. 75 acres of wetlands and 200 acres of woodland

acquired in fee or easement). Since that time, however, significant legal and physical changes have occurred in the region including: listing of three threatened or endangered species (e.g. Rio Grande silvery minnow, Southwestern willow flycatcher, and yellow-billed cuckoo), reduction of flows due to climate change, additional pertinent hydrological data recorded and made available for analysis, new levee design criteria implemented, and “significant changes in national, USACE, and Department of Defense policy regarding interactions with Native American Tribes.” (USACE 2018a, p.168). Despite this evolution of conditions in the region, the Corps states in its 2018 GRR/SEIS that its recommended plan “has not changed significantly from the authorized plan in the 1979 Feasibility Report” and no additional analysis as to other less damaging alternatives to the environment.

The Corps recommended plan (“Alternative E”) proposes “replacing approximately 48 miles of spoil banks with engineered levees” (USACE 2018a) across a total of four units: Mountain View, Isleta West, Belen East, and Belen West in order to “best meet flood risk reduction needs” (USACE 2018a, p.3) within the project area in the Middle Rio Grande. The project area consists of approximately 110 square miles of drainage area that includes the Isleta Pueblo and multiple small rural communities including but not limited to: Los Lentos, Los Lunas, Los Chavez, Belen, Bacaville, Jarales, Pueblitos, Mountain View, Bosque Farms, Peralata, Valencia, Tome, Adelino, La Constancia, Madrone, and Pueblos of Isleta. (USACE 2018a). Further, “the project will affect public access from Valle de Oro National Wildlife Refuge to the Rio Grande,” and “the floodplain area within the [Mountain View] levee is part of the Rio Grande Valley State Park.” (USFWS 2017, p.2). In addition, the Corps has not committed to mitigation sites as a part of this analysis and in so doing excludes the public from weighing in on the extent or adequacy of the mitigation proposed.

The Rio Grande is “one of the top ten endangered rivers in the world.” (Wong et al., 2007). Structural water resource projects designed to control floods have drastically altered and manipulated river systems across the country causing significant and irreparable ecological harm to the surrounding biomes. The Rio Grande exemplifies such detrimental effects, as acknowledged by the Corps in the 2018 GRR/SEIS, which states:

Regulation of water in the Rio Grande has changed the mosaic of vegetation types once present in the valley. The wetlands were greatly reduced by construction of irrigation infrastructure in the 1930s, and the cottonwood trees are dying as they reach the end of their lifespan. From 1935 to 1989, surface area covered by wet meadows, marshes, and ponds declined by 73% along the Middle Rio Grande floodplain (Scurlock 1998).

(USACE 2018a, p.114).

In conjunction with these threats, the Middle Rio Grande continues to be invaluable habitat for aquatic species, wildlife, plant, and bird species alike. Specifically, as noted by Hink and Ohmart, Finch et al., and Carton et al, “[the proposed project area] of the Middle Rio Grande has a diverse biotic community and some of the best riparian habitat on the Rio Grande. (as cited in USFWS 2017, p.3).

The environmental review by the Corps does not meet the requirements of the National Environmental Policy Act (“NEPA”). The Corps’ purpose and need for the project is too narrow, it failed to evaluate a reasonable range of alternatives, used an improper baseline, and failed to properly evaluate the environmental impacts on the community, the refuge, endangered species and climate change. The Corps failed to comprehensively analyze non-structural alternatives to the Bernalillo to Belen levees and draft a proposed action that harmoniously integrates the environmental concerns with the project goals. Such non-structural flood control would not only meet the purpose and need of the proposed action but also allow the ecosystem to thrive. As a result, the project would be faithful to the Council on Environmental Policy (CEQ) guidance, in compliance with federal law, and would not unnecessarily and irreversibly negatively affect the Middle Rio Grande environment.

## **I. Introduction**

In 1970, NEPA was passed with the stated purposes of:

Declare[ing] a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.

(42 U.S.C.A. § 432).

Additionally, section 102(2)(C) of NEPA establishes an “action-forcing” mechanism to ensure “that environmental concerns will be integrated into the very process of agency decision-making.” *Andrus v. Sierra Club*, 442 U.S. 347, 350 (1979). As such, “all agencies of the Federal Government shall ... include in every recommendation or report on ... major Federal actions significantly affecting the quality of the human environment, a detailed statement” known as an environmental impact statement (“EIS”) addressing “the environmental impact of the proposed action, any adverse environmental impacts which cannot be avoided . . . , alternatives to the proposed action,” and other environmental issues. (42 U.S.C. § 4332). NEPA requires federal agencies take a “hard look at [the] environmental consequences” of their proposed actions. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (internal quotation omitted).

## **II. The Purpose and Need is Too Narrow**

The stated purpose and need in the 2018 GRR/SEIS is too narrow and therefore does not allow for a reasonable range of alternatives to be considered. The purpose and need for the *Middle Rio Grande Flood Protection Project from Bernalillo to Belen, New Mexico* has evolved over the years. In 1979, the purpose of the project was described as follows:

*USACE response: The purpose of the GRR is the same as 1979.*

The purpose of the project would be to provide a higher degree of flood protection to already highly developed and developing areas in the Rio Grande flood plain than that currently afforded by existing levees and bank protection works.

(USACE 1979, p. I-1).

Such a purpose could be met by a broad range of alternatives, including but not limited to a combination of non-structural levees, green infrastructure, and increased habitat and restoration. Additionally, the 1979 stated purpose provides space for the Corps to consider options that do not detrimentally and unnecessarily harm the Middle Rio Grande ecosystem. In fact, as a result, the Corps did consider nonstructural alternatives in its environmental review (USACE 1979, p. VI-1 to VI-21).

In 1995, the subsequent Corps' analysis focused on a 10-mile stretch of the river and its designated purpose and need was as follows:

The purpose of the planned action is to provide an enhanced level of flood protection to the community in the 10.6-mile-long reach of the Rio Grande floodplain that comprises the Corrales Unit.

(USACE 1995, p.3). The Corrales Unit was constructed in 1997 addressing the area with the lowest level of flood protection of the reaches included in the 1979 study area. Again, this purpose and need was broad enough not to limit the alternatives to engineered levees as the only option for meeting the stated purpose and need to reduce flood risk to the region.

Unlike the purposes set forth in prior analysis by the Corps of this same project, the purpose and need as described in the 2018 GRR/SEIS is as follows:

The purpose of the *proposed engineered levee system* is to reduce flood risk along approximately 32 river miles of the Rio Grande in the communities between Albuquerque and Belen, NM.

(USACE 2018a, p.3) (Emphasis added).

It is clear that the purpose and need for the 2018 GRR/SEIS is narrowly tailored to limit the options the Corps must evaluate in its environmental review to only structural alternatives. The purpose and need, if consistent with past statements, would facilitate a reasonable range of alternatives that could encompass either non-structural or structural alternatives or a combination thereof. Because the purpose and need specifies a need for an “engineered levee system,” the project does not allow for a reasonable range of non- structural or a combination of non-structural and structural alternatives to be considered in order to avoid detrimental environmental impacts associated with the project.

Furthermore, as stated in the 2018 GRR/SEIS:

This draft GRR/SEIS supplements the 1979 EIS and has been prepared, in part, to evaluate the potential environmental impacts of the alternatives that were considered in the 1979 as well as any new alternatives proposed during the current study.

(USACE 2018a, p.2).

The Corps admits that since 1979 (over the past 40 years) circumstances have changed in the Middle Rio Grande including changes in design criteria, hydrologic modeling, and the listing of three endangered species. (USACE 2018a, p. 2). These changes not only warrant an evaluation of the impacts to the newly listed species, but more importantly and consistent with the letter and spirit of NEPA, require a new or revisited review of all reasonable alternatives. Alternatives should include those identified in the 1979 report and any additional alternatives that could still accomplish (individually or in combination with other alternatives) the given purpose and need of the project while limiting environmental impacts to the species as well as their critical habitat. The Corps improperly limited the purpose and need in the 2018 GRR/SEIS to an engineered levee system.

### III. Failure to Evaluate Reasonable Range of Alternatives

The Corps failed to evaluate a reasonable range of alternatives. NEPA requires the action agency consider alternatives to the proposed action. (42 U.S.C.A. § 4332). Such alternatives are known as the “heart of the environmental impact statement.” (40 C.F.R. § 1502.14). In order to fulfill the alternatives requirement, the action agency “shall rigorously explore and objectively evaluate *all reasonable alternatives*, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” (40 C.F.R. § 1502.14 (A), emphasis added). Here, the Corps failed to evaluate a reasonable range of alternatives that could meet the designated purpose and need of the project.

a. The Corps 1979 analysis of non-structural alternatives is not adequate in 2018 GRR/SEIS

*USACE response:* Non-structural measures do not provide an effective solution to reduce flood risk in the Bernalillo to Belen Project. Section 3.3.1 details the analysis of various non-structural alternatives.

Non-structural measures do not reduce flood damages to scattered homes, irrigation and transportation infra-structure (Tables 5-11). The analysis performed demonstrates that flood-proofing and relocation measures are uneconomical on a structure-by-structure basis in the study area. For these reasons, flood-proofing and relocation measures are deemed not reasonable for further detailed analysis. Flood warning systems do not significantly reduce flood damages in the study area; however, they may decrease the life safety risk, with or without a Federal Project (Section 3.3.1.2 Flood Warning System). Since there is a residual risk for flooding in the study area even with the proposed levee alternative, a flood warning system could act to mitigate that risk as well as lower remaining life safety risks. The Corps is pursuing the addition of a flood warning system to facilitate timely evacuation of people, pets, and livestock from the floodplain in the event of exceedance or failure of the proposed levee.

A description of non-structural measures including Emergency Preparedness, Flood Forecast and Warning System, Wet Floodproofing, Dry Floodproofing, Raising Structures in Place, and Acquisition and/or Relocation of Structures are presented in Section 3.3.1 of the GRR/SEIS. A concise analysis of each non-structural measure is provided in Table 2 of Section 3.3.3 Measures Eliminated or Carried Forward.

The future condition of the Bernalillo to Belen Project regardless of implementation of any alternative considered in this GRR/SEIS, would remain essentially unchanged with regard to land use. Similarly, Section 6.5.3, Future Land Use Without-Project Conditions, states: “Without the project, future land use is expected to remain similar to current trends.”

As discussed above, the Corps 2018 GRR/SEIS fails to fully analyze all reasonable alternatives for the proposed project and relied on a dated analysis from 1979 for any non-structural alternatives. While the

Corps 1979 EIS did consider a number of both structural and non-structural alternatives, the analysis is extremely dated and does not take into account changed conditions and technological advances. Out of the ten measures analyzed in the 1979 Feasibility Report only one measure was carried forward to 2018 for detailed evaluation: “Flood Warning Systems and Evacuation Planning.” (USACE 2018a).

The following nine measures were eliminated: Dry Flood Proofing (to include the waterproofing of walls) or Wet Flood Proofing”, “Relocation or Permanent Evacuation”, “Tributary Detention Reservoirs Only”, “Channel Excavation Only”, “Reservoir on Tonque Arroyo with Engineers levees”, “Channel Excavation with Engineered levees”, “Jetty Jacks as Levee Protection Works”, “Setback Levee.” (USACE 2018a, p. 28-31). According to the 2018 GRR/SEIS, the majority of the abovementioned alternatives were eliminated due to economic infeasibility. (USACE 2018a).

Further, the Corps failed to analyze the eliminated measures in conjunction with other feasible measures. A combination of measures could potentially result in an alternative that met the purpose and need of the project while protecting the surrounding environment. The Corps acknowledged that the eliminated measures alone would not meet the purpose and need of the project. (USACE 2018a, p.29)

b. The Corps failed to consider a combination of structural and non-structural alternatives to meet the purpose and need of the project

*USACE response:* A concise analysis of structural and non-structural measures is provided in Table 2 of Section 3.3.3 Measures Eliminated or Carried Forward. Note that the detention reservoirs and channel excavation structural measures would have adverse effects on endangered species habitat in addition to being economically infeasible.

The Corps failed to consider the combination of structural and non-structural measures as a reasonable alternative even though the Corps acknowledged in the 2018 GRR/SEIS that such combination could be used to meet the purpose and need of the project:

While other non-structural measures were shown to be incomplete, inefficient and/or ineffective as stand-alone measures, these measures could be used on a limited basis to provide flood risk management in combination with levees.

(USACE 2018a, p.32)

Instead, the Corps analyzed five alternatives, including the required no-action alternative. (USACE 2018a). All alternatives (except the no-action alternative) require re-engineering of the levees and the only variant is the height of the levees. No alternatives included non-structural flood control options (e.g. green infrastructure), evaluation of relocating development in the floodplain, restoration of the historic channel to slow and distribute flows and sediment across the floodplain, relocation of engineered levees outside the existing footprint to create more floodplain habitat, waiver of the vegetation requirement to reduce habitat destruction, and/or other similar non- structural options. The Corps failed to consider all reasonable and feasible alternatives that would meet the purpose and need of the proposed project including a combination of structural and non- structural alternatives and efforts to reduce flood risk while maintaining key ecosystem functions within the floodplain. The Corps should have considered non-structural alternatives as a feasible alternative to be evaluated as a part of this process that played out over the past four decades.

Notably, the only non-structural measures considered were the following:

[F]loodproofing, raising structures, permanent evacuation within the floodplain, floodplain management, and flood forecasting/temporary evacuation.

(USACE 2018a, p.21)

Additionally, such non-structural measures were not incorporated into the final alternatives analysis and therefore were never analyzed to meet the purpose and need of the project. As stated in the 2018 GRR/SEIS, “non-structural alternatives were considered in the initial screening of measures.” (USACE 2018a, p.26). The Corps should have analyzed non-structural alternatives alone or in combination with structural measures in order to meet the purpose and need of the proposed levee project.

- c. The Corps failed to consider green infrastructure as alternative to meet the purpose and need of the project despite urging by U.S. Fish and Wildlife Service

*USACE response:* The ‘green infrastructure’ concept is inherent in the Bernalillo to Belen Project. The baseline levee alignment defining the floodway with the river channel and adjacent floodplain is consistent with example in The Nature Conservancy (TNC) report. The Rio Grande green infrastructure was established by and has been shielded from encroachment by the original spoil piles since the 1930’s. The TNC uses term ‘channel capacity’ as ‘bankful river channel’, while USACE defines ‘safe channel capacity’ as safe conveyance of flood flows in the floodway, including the floodplain between the levees. This is consistent with how green infrastructure functions to convey floodwater in the TNC report. The regulated flood flows on 1 June 2005 further illustrate how green infrastructure has been implemented on the Rio Grande. The TNC citation has been added to the References Section, and the concept referenced in the Project Area (1.2.1), Riparian Forest (5.3.1 and 7.3.1) sections to inform the public and stakeholders.

According to the Environmental Protection Agency, green infrastructure is a “cost-effective, resilient approach to managing wet weather impacts that provides many community benefits.” Specifically related to flood control, “green infrastructure projects have great potential to reduce flood risks for people while maintaining or restoring the diverse benefits that river-floodplain systems provide.” (The Natural Conservancy 2014, p.22). There are numerous benefits to green infrastructure. If implemented in the proposed project area, the Middle Rio Grande would experience less negative effects to ecosystems and water quality in conjunction with an overall reduction in costs due to less required maintenance. “Working with natural processes can allow nature to do some of the work and reduce long-term maintenance...flood- management methods that promote these natural processes can produce a much broader array of benefits than can methods that prevent natural processes,” (The Natural Conservancy 2014, p.22), such as Alternative E.

In the Fish and Wildlife Coordination Act §2b report (Consultation No. 02ENNM00-2013-CPA-0059), the U.S. Fish and Wildlife Service (the “Service”) recommended the Corps incorporate green infrastructure processes into their levee construction. In response to the Corps’ request for review of the proposed project, the Service stated the “primary impact to fish and wildlife is the expansion of the spoil bank base to make it an engineered levee.” (USFWS 2017, p.2). The Service went on to state:

Better flood protection does not eliminate the risk of flooding but will encourage further development in the floodable area outside the levees making maintenance and enhancement of the remaining riparian habitat within the levees essential to a functioning floodplain

(American Rivers 2012).

(USFWS 2017, p.2).

Thus, in order to alleviate impacts to fish and wildlife in addition to supporting vegetation on the floodplain, the Service detailed their support of green infrastructure in relation to the maintenance of riparian habitat in the Middle Rio Grande and the levee itself:

“While current USACE specification call for a low to minimal vegetation component (USACE 2014) recent studies have shown the levees can support a diverse structural plant community without compromising levee safety (Kabir and Bean 2011; Corcoran 2012). **We believe that in this reach of the Rio Grande it is essential to do the utmost to maintain the greatest areal extent and diversity of riparian habitat to insure the long-term persistence of the biological diversity that occurs here. This includes enhanced management effort on levee vegetation.**”

(USFWS 2017, p.4).

A green infrastructure alternative would be cost efficient, require less long-term maintenance, support the invaluable ecosystems present in the Middle Rio Grande and meet the purpose and need of the project. Thus, a green infrastructure alternative or a middle ground (combination of green and gray infrastructure) is reasonable and should have been considered by the Corps.

#### **IV. Improper Without-Project (Baseline) Analysis**

The Corps used an improper baseline when conducting the analysis for the levee project. NEPA emphasize(s) that “establishing appropriate baseline conditions is critical to any NEPA analysis.” *Great Basin Res. Watch v. Bureau of Land Mgmt.*, 844 F.3d 1095, 1101 (9th Cir. 2016). Although Corps acknowledged the importance of evaluating the project with a proper baseline, referred to as “without-project conditions”, the agency did not use the current existing conditions. The current existing conditions include the Middle Rio Grande Conservancy District (“District”) performing maintenance and repair in the spoil banks as needed. (USACE 2018a p.20). However, the Corps uniformly assumed that the existing spoil banks would fail throughout their analysis and did not take into consideration the Districts responsibility of maintenance:

It is necessary to evaluate the without-project conditions in order to meet USACE requirements for feasibility level evaluation...**It is assumed that the spoil banks, which are not engineered levees, will uniformly fail throughout the area.**

(USACE 2018a, p.101) (Emphasis added).

*USACE response:* MRGCD documented damage to riverside irrigation infrastructure during the 1 June 2005 event, and again in 2017 at a lower flow. The spoil piles were created from sediment excavated from the drains, and it expected to have the same characteristics

An improper baseline undermines the Corps analysis. Notably, “without establishing the baseline conditions which exist ... before [a project] begins, there is simply no way to determine what effect the [project] will have on the environment and, consequently, no way to comply with NEPA.” *Great Basin*

*Res. Watch v. Bureau of Land Mgmt.*, 844 F.3d 1095, 1101 (9th Cir. 2016) citing *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988). Here, the Corps has failed to properly analyze the baseline which includes the current conditions of the existing spoil banks and the Districts responsibility to maintain and repair any damages to the existing spoil banks as needed. Thus, without a proper baseline analysis, the Corps is unable to determine the true impacts the proposed levee project will have on the environment.

## V. Failure to Evaluate Environmental Impacts of the Project

The Corps failed to properly evaluate the environmental impacts of the proposed project in the 2018 GRR/SEIS. Pursuant to section 4332 of NEPA, the action agency is required to prepare a detailed statement that includes analysis of both “the environmental impact of the proposed action,” and “any adverse environmental effects which cannot be avoided should the proposal be implemented.” (42 U.S.C.A §4332 (C)(i)-(ii)). Such analysis “shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration.” (40 C.F.R. § 1502.15).

The Corps failed to evaluate indirect, direct and cumulative impacts of the proposed project on the surrounding communities and wildlife refuge, and present federally listed species. An environmental impact statement must include an analysis of three types of impacts: (1) direct, (2) indirect, and (2) cumulative. (40 C.F.R. § 1508.25). Indirect effects may include “growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.” (40 C.F.R. § 1508.8). Additionally, impacts may include “aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.” (40 C.F.R. § 1508.8). Cumulative impacts are defined as:

[T]he 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

(40 C.F.R. § 1508.7).

- a. The Corps failed to analyze the direct, indirect, and cumulative impacts of the project on the local community

*USACE response:* Sections 5.4, 5.5, 6.4, 6.5, 7.4, 7.5, and 7.7 evaluate effects on local communities.

According to the Fish and Wildlife Coordination Act §2b report (Consultation No. 02ENNM00-2013-CPA-0059), dated December 4, 2017, “the Project will affect public access from Valle de Oro National Wildlife Refuge to the Rio Grande.” (USFWS 2017, p.2). The direct and indirect impacts to the community resulting from loss of accessibility goes unmentioned on the 2018 GRR/SEIS. Rather, the Corps details the significance of Valle de Oro National Wildlife Refuge but makes no mention of the projects interference with the community’s ability to access and enjoy the Refuge:

The Valle de Oro National Wildlife Refuge (Refuge) is adjacent to the Mountain View Unit of the project. The 570 acre refuge is unique in its location adjacent to a major metropolitan area. The refuge is managed to create wildlife habitat from former agricultural fields. The refuge offers environmental education and recreation while preserving open space.

(USACE 2018a, p.120).

Additionally, the Corps failed to properly assess the indirect, direct, and cumulative impacts on the public resulting from construction. According to the 2018 GRR/SEIS, “construction staging and access for equipment and materials would take place within the landside project easements where practical, on publically owned lands.” (USACE 2018a, p.78). The Corps went on to state that “local recreation may temporarily have limited access during construction.” (USACE 2018a, p.153).

The project construction is predicted to be completed in 2036. (USACE 2018a, p.83). The Corps failed to analyze the impacts of eighteen years of construction on the community including the noise, the ability of people to recreate on public lands, and their accessibility to the river that is the heart of their community.

b. The Corps failed to analyze the direct, indirect, and cumulative impacts of the project on the local wildlife refuge

*USACE response:* The Valle de Oro NWR is outside the construction footprint and floodway adjacent to the project area. USACE will continue coordination with the refuge through construction in the Mountain View Unit. The SEIS has been revised with maps and text to clarify the location of the refuge adjacent to the project area.

The 2018 GRR/SEIS does not evaluate the impacts of the project on the Valle de Oro National Wildlife Refuge. The Corps recognizes that “the Rio Grande is a major migratory corridor for songbirds (Young and Finchs, 2002), waterfowl, and shorebirds” (USACE 2018b, p.8), and that riparian areas “support the highest bird densities and species numbers.” (USACE 2018b, p.8). Further, DeSante and George reported “loss of riparian habitat in the region is believed to be related to Service noted “the effects of floodplain dysfunction may be first evident in loss of bird species richness and abundance.” (USFWS 2017, p.4). Despite these discussions, the Corps fails to assess how the project will impact such bird species.

The 2018 GRR/SEIS acknowledges that

Vegetation removal and clearing and grubbing activities for the Vegetation-Free Zone – and for all proposed construction – would occur between August 15 and April 15 to avoid disturbance of nesting migratory birds. Vegetation removal outside of that period would only be performed after a survey by a biologist has confirmed that disturbance to nesting migratory bird species can be avoided.

(USACE 2018a, p.80). The Corps assumes that so long as the construction is not during this time frame that no other impacts will occur. Vegetation management in itself removes critical components of bird and wildlife habitat. The Corps fails to consider both the short and long-term impacts of vegetation removal in the project area.

The GRR/SEIS does not adequately assess the environmental impacts associated with the Middle

Rio Grande migratory bird population. The Corps must analyze the foreseeable direct, indirect and cumulative impacts of the proposed project on bird populations. Without such analysis, the Corps is in violation of NEPA. For example, sandhill cranes travel between the agricultural fields in Valle de Oro National Wildlife Refuge and other locations along the river to the islands of the Rio Grande to spend the night. The levee construction will occur between these two locations and the Corps does not analyze the short and long-term impacts of the construction activity or propose any mitigation from disturbing this frequent bird movement.

c. The Corps failed to analyze the direct, indirect, and cumulative impacts of the project on federally listed species

*USACE response:* Chapter 5 in the Biological Assessment (Appendix E) evaluates the effects of levee construction, altered floodplain inundations, and change in floodway area on the flycatcher, cuckoo, and silvery minnow.

The Corps levee project (Alternative E) will have direct, indirect, and cumulative impacts on the Rio Grande silvery minnow, the yellow-billed cuckoo, the Southwestern willow flycatcher, and their designated critical habitat in the Middle Rio Grande. The stated impacts to the Rio Grande silvery minnow (*Hybognathus amarus*) in the 2018 GRR/SEIS are as follows:

The proposed construction would reduce the risk of silvery minnow stranding outside of the floodway, and retain higher flows in the floodway for creating complex aquatic and floodplain habitat (USACE 2017). **Levee construction is not likely to adversely affect the minnow.** Mitigation measures for the flycatcher may affect the silvery minnow. The recommended plan would result in the loss of 149 acres of minnow critical habitat along the toe of the spoil bank (USACE 2017).

Mitigation measures in the recommended plan would increase floodplain connectivity and nursery habitat for the minnow. [Alternative E] would not increase nursery habitat for the minnow.

(USACE 2018a, p.149) (emphasis added).

However, in direct opposition is a statement made by the Corps in the February 2018 Biological Assessment, **“the proposed action may affect, likely to adversely affect the silvery minnow in a small area of the construction zone,”** (USACE 2018c, p.54) (emphasis added) and “the proposed action may affect, likely to adversely affect silvery minnow critical habitat.” (USACE 2018c, p.54). Such discrepancy results in the failure of the Corps to properly analyze the direct, indirect and cumulative effects of the proposed action on the Rio Grande silvery minnow.

The Corps offers the following reasons for the decline of the Southwestern willow flycatcher (*Empidonax traillii extimus*) in the Middle Rio Grande:

[P]ast and present Federal, State, and private activities that potentially may affect the flycatcher include urban and agricultural development, river maintenance, flood control, dam operation, water storage and diversion, and downstream Rio Grande Compact deliveries. (USACE 2018c, p.31).

Additionally, in the February 2018 Biological Assessment the Corps went on to acknowledge that “it is assumed that flycatchers may be present throughout the action area during both spring and fall

migration periods.” (USACE 2018c, p.31). However, even with such admission, in the 2018 GRR/SEIS the Corps claimed the species is not likely to be adversely affected. The stated impacts to the Southwestern willow flycatcher (*Empidonax traillii eximius*) are as follows:

Based on the distribution of nesting flycatchers and the incorporation of conservation measures, levee construction is not likely to adversely affect the flycatcher. The recommended plan would result in the loss of 45 acres of flycatcher habitat, which may adversely affect critical habitat (USACE 2017). Mitigation under the recommended plan includes 236 acres of vegetation management and terrace lowering up to 45 acres. [The preferred alternative] would affect 45 acres of flycatcher habitat, and mitigate 191 acres with no terrace lowering.

(USACE 2018a, p. 149).

Similar to the flycatcher, the Corps cited the Service’s Final Rule determination of threatened status for the western distinct population segment of the cuckoo in the February 2018 Biological Assessment noting, “the decline of the cuckoo is primarily the result of riparian habitat loss and degradation.” (as cited in USACE 2018c, p.37). According to the Service’s Final Rule determination of threatened status for the western distinct population segment of the cuckoo in 2014, such habitat loss is the result of multiple factors, including but not limited to: “construction of dams, alternations to the hydrology from water operations, [and] surface water diversions.” (as cited in USACE 2018c, p.37). However, in the 2018 GRR/SEIS the Corps stated that the proposed levee construction is not likely to adversely affect the species. The stated impacts to the yellow-billed cuckoo (*Coccyzus americanus occidentalis*) are as follows:

Based on the cuckoo’s nesting patterns, home range size, and the incorporation of conservation measures, levee construction is not likely to adversely affect the cuckoo. The loss of habitat for cuckoo is 212.5 acres, which may adversely affect its critical habitat (USACE 2017). Mitigation under the recommended plan includes 236 acres of vegetation management and an unknown area of terrace lowering. Alternative E would affect 133 acres of cuckoo habitat, and mitigate 191 acres with no terrace lowering.

(USACE 2018a, p.149).

The Corps failed to properly analyze the indirect and cumulative impacts of the preferred alternative on the Rio Grande silvery minnow, the yellow-billed cuckoo and the flycatcher. According to the 2018 GRR/SEIS “Future with Project Conditions” calculation for sedimentation states:

The aggradational reach downstream of Isleta Diversion dam is fairly consistent, with rates ranging from just under 0.01 feet/year up to 0.025 feet/year. Recommend future conditions models incorporate 0.02 feet/year aggradation for this reach. This would result in total aggradation of 1 foot through this reach over a 50-year period.

Aggradation is “the deposition of material by a river, stream, or current” (English Oxford Living Dictionaries 2018), and results in the river channel being raised due to the increase sediment accumulation inside the levees. As the channel rises, the depth to groundwater increases limiting the amount of riparian vegetation that can grow. Therefore, the preferred alternative increases

aggradation, which lessens the amount of riparian habitat resulting in potential habitat loss for the Rio Grande silvery minnow, the yellow-billed cuckoo and the flycatcher. The Corps, in failing to analyze the impacts that aggradation will have on the three listed species and the surrounding habitat, has negated their duty to properly analyze indirect, direct, and cumulative impacts. Thus, the Corps' has failed to analyze the environmental effects on the endangered and listed species present as required by the NEPA analysis.

Finally, the Corps fails to discuss the direct, indirect, and cumulative impacts of construction as well as long term impacts of hardening separation of the floodplain as required in this environmental impact statement. In regards to construction, the Corps stated the following:

The construction footprint of the recommended plan would extend beyond the riverward toe of the existing spoil bank throughout the project area, removing approximately 236 acres of vegetation in the floodway.

(USACE 2018a, p.73)

In regards to construction for staging, the Corps stated:

For the purposes of evaluating impacts, it was estimated that approximately one acre of staging area would be required for every mile of levee construction.

(USACE 2018a, p.78)

In the 2018 GRR/SEIS, the Corps failed to properly analyze the impacts project construction will have on the Middle Rio Grande, the surrounding ecosystems, and the fish, wildlife, and plant species that inhabit the ecosystems.

d. The Corps failed to analyze the direct, indirect, and cumulative impacts of climate change on the proposed project

*USACE response:* The NEPA process properly analyzed the effects of the project on climate change. In addition, a Climate Trends section (7.8) has been added to describe how climate change may affect the project area.

According to the 2018 GRR/SEIS the existing conditions pertaining to climate change are as follows:

Precipitation and snow fall in the study area show little in the way of significant trends over the period of analysis. Therefore, climate change is not expected to change plan selection or design development.

(USACE 2018a, p.93). However, climate models clearly predict substantial warming over the life of the levees and therefore the Corps cannot claim that no climate change will occur in the short term and thus evade its responsibility to analyze the indirect, direct, and cumulative impacts of climate change on the proposed project. Although the Corps analyzed a 50-year period, the proposed re-engineered levees and their reasonably foreseeable effects on the Middle Rio Grande Basin, specifically the flows and dynamisms of the river will undoubtedly exist far beyond the 50-year period. The current *earthen* spoil banks were constructed over 70 years ago in 1930 to 1935. (USACE 2018a). Given that the earthen spoil banks are still

enacted today, it is reasonable to assume the engineered levees life-span will be far beyond the 50-year analysis period and thus, impacts should be accordingly assessed.

According to a 2013 report prepared by Dagmar Llewellyn and Seshu Vaddey in conjunction with the U.S. Bureau of Reclamation (“Reclamation”), the increase in extreme temperatures will only increase in “year-to-year variability in all aspects of our climate and hydrology.” (p. S-vi). The report went on to detail the effects of infrastructure on climate change, stating:

[A]ll of the changes in our water supply that are projected to result from climate change would be compounded by the numerous other changes we have made to our landscape and our water supply and distribution.

(Llewellyn and Vaddey 2013, p. S-vii).

Additionally, the Rio Grande silvery minnow is “vulnerable to climate change in the Middle Rio Grande, especially in the project area.” (USACE 2018a, p.116). The Corps was incorrect in stating that climate change will not change plan selection or design development. When analyzing expected future without-project conditions, the 2018 GRR/SEIS goes on to state:

Climate models project substantial warming of 5-7°F over the 21st century as compared to late 20th century averages. Modeled warming by as much as 8.5 to 10°F may occur by 2100 under plausible high emissions (large radiative forcing) scenarios (Melillo et al. 2014). **Even with no net changes in precipitation, such warming will exert profound effects on regional hydrology by altering snowpack, reducing spring runoff and increasing evaporation rates.”**

(USACE 2018a, p. 123) (Emphasis added).

Such findings are supported and reiterated in the 2016 SECURE report prepared by the Reclamation and the 2013 report prepared by Dagmar Llewellyn and Seshu Vaddey. However, here, climate change is not analyzed for future with-project conditions. Rather, the 2018 GRR/SEIS simply states:

There is no difference with respect to climate change between the future with- project and future without-project condition. Construction of this project will have no significant effect on future climate in the project area, and will result in no significant changes to greenhouse gas sources or sinks.

(USACE 2018a, p.134).

The Corps must analyze the climate change effects resulting from the construction of Alternative E in conjunction with the climate change models and environmental impacts. Although alone, the construction of the project may not have significant effects on future climate in the project area, the Corps must analyze such construction in conjunction with other factors to determine cumulative impacts. Pursuant to 40 C.F.R. § 1508.7, “cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” (40 C.F.R. § 1508.7). The Corps must analyze the foreseeable future impacts the engineered levees will have on climate change and the surrounding environment, including but not limited to the immediate project area.

## VI. Conclusion

We appreciate your consideration of our comments. We understand that the Corps is still consulting with the U.S. Fish and Wildlife Service over the effects of the project on the several threatened and endangered species in the project area. We request notice and a copy of the biological opinion issued regarding this project. Once released, we plan to review the opinion and provide supplemental comments to the Corps. The opinion constitutes “significant new [] information relevant to environmental concerns and bearing on the proposed action or its impacts.” (40 C.F.R. §1502.9 (c)(1)(ii)). We also reserve the right to supplement these comments upon receiving a response to our Freedom of Information Act request to the Corps regarding this project (FP-18-022112/FA-18-0019). We expect the FOIA response on August 2, 2018.

Sincerely,



Corinne  
Milinovich Legal  
Intern  
cmilinovich@wildearthguardians.org

A handwritten signature in black ink, appearing to read 'Jen Pelz', with a long horizontal flourish extending to the right.

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## Literature Cited

- Askins, R. A. Declining birds of southwestern floodplains. Pages 184-207 in Restoring North America's birds, R.A. Askins, editor. Yale University Press, New Haven, CT.
- Cartron, J-L.E. et al. (2008). A field guide to the plants and animals of the Middle Rio Grande Bosque. University of New Mexico, Albuquerque, NM.
- DeSante, D.F., and T.L. George. (1994). Population trends in the landbirds of western North America. *Studies in Avian Biology* 15:173-190.
- English Oxford Living Dictionaries. (2018). Definition of aggradation in English. <https://en.oxforddictionaries.com/definition/aggradation>
- Environmental Protection Agency. What is green infrastructure? <https://www.epa.gov/green-infrastructure/what-green-infrastructure>
- Finch, D.M. et al. (1999). Rio Grande ecosystems: linking land, water, and people. RMRS-P-7. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Center, Ogden, UT. [http://www.fs.fed.us/rm/pubs/rmrs\\_p007.pdf](http://www.fs.fed.us/rm/pubs/rmrs_p007.pdf).
- Hink, V.C., and R.D. Ohmart. (1984). Middle Rio Grande Biological Survey. Final Report to U.S. Army Corps of Engineers. Center for Environmental Studies, Arizona State University, Tempe, AZ.
- Llewellyn, D., S. Vaddey, J. Roach, and A. Pinson. (2013). West-wide climate risk assessment: U.S. Bureau of Reclamation Upper Rio Grande Impact Assessment. Executive Summary. USBR, Washington, D.C.
- The Nature Conservancy. (2014) A flood of benefits: using green infrastructure to reduce flood risks. Arlington, VA. Article can be found at: <https://www.conservationgateway.org/ConservationPractices/Freshwater/HabitatProtectionandRestoration/Documents/A%20Flood%20of%20Benefits%20-%20J.Opperman%20-%20May%202014.pdf>
- U.S. Army Corps of Engineers. (1979) Final environmental statement, Middle Rio Grande flood protection Bernalillo to Belen, New Mexico. Albuquerque, New Mexico.
- U.S. Army Corps of Engineers. (1995) Final environmental statement, Middle Rio Grande flood protection Bernalillo to Belen, New Mexico. Albuquerque, New Mexico.
- U.S. Army Corps of Engineers. (2018a). Middle Rio Grande flood protection Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen units; integrated general reevaluation report and supplemental environmental impact statement. Albuquerque, New Mexico.
- U.S. Army Corps of Engineers. (2018b). Middle Rio Grande flood protection Bernalillo to Belen, New Mexico: Mountain View, Isleta, and Belen units, appendix E environmental resources. New Mexico.

- U.S. Army Corps of Engineers. (2018c). Programmatic biological assessment of U.S. Army Corps of Engineers Middle Rio Grande Flood Protection, Bernalillo to Belen, New Mexico: Mountain View, Isleta and Belen Units. Albuquerque, New Mexico.
- U.S. Department of the Interior Bureau of Reclamation. Llewellyn, D., Vaddey, S. (2013). West-wide climate risk assessment: upper Rio Grande Impact Assessment. Denver, Colorado.
- U.S. Department of the Interior Bureau of Reclamation. (2016). SECURE water act section 9503(c) report to congress, chapter 7: Rio Grande basin. Prepared for United States Congress. Denver, Colorado: Bureau of Reclamation, Policy and Administration
- U.S. Department of the Interior Fish and Wildlife Service. (2017). Consultation No. 02ENNM00-2013- CPA-0059. Albuquerque, New Mexico.
- U.S. Fish and Wildlife Service. (2014a). 50 CFR Part 17 Endangered and threatened wildlife and plants: Determination of threatened status for the western distinct population segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Final Rule. Federal Register 79(192):59992-60038.
- Wong, CM, Williams, CE, Pittock, J, Collier, U and P Schelle. (2007). World's top 10 rivers at risk. WWF International. Gland, Switzerland.
- Yong, W. and D.M. Finch. 2002. Stopover Ecology of Landbirds Migrating along the Middle Rio Grande in Spring and Fall. General Technical Report RMES-GTR-99. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Albuquerque, New Mexico.



**FEMA**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
REGION 6  
MITIGATION DIVISION

**RE: Middle Rio Grande, Bernalillo to Belen, New Mexico, Flood Risk Management Project.**

**NOTICE REVIEW/ENVIRONMENTAL CONSULTATION**

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We have no comments to offer.  We offer the following comments:

**WE WOULD REQUEST THAT THE COMMUNITY FLOODPLAIN ADMINISTRATOR BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD REQUEST PROJECT TO BE IN COMPLIANCE WITH EO 11988 & EO 11990.**

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It is your responsibility to contact other city/counties if involved in the project. If you have any questions, please contact me at (940) 383-7257.

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REVIEWER:

*Colleen Sciano*  
Floodplain Management and Insurance Branch  
Mitigation Division  
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DATE: January 10, 2020