PUBLIC NOTICE

US Army Corps of Engineers®
Albuquerque District

Application Number: SPA-2012-00367-ABQ
Date: December 16, 2013
Comments Due: January 6, 2014

SUBJECT: The U.S. Army Corps of Engineers, Albuquerque District, (Corps) is evaluating a permit application to construct the Bureau of Reclamation (BOR) Santo Domingo Priority Site RM 223.9 Project in Sandoval County, New Mexico, which would result in permanent impacts of 1.66 acres to waters of the United States and/or navigable waters of the United States in or adjacent to the Rio Grande. In addition, 0.23 acres of wetlands will be permanently impacted by the proposed project. This notice is to inform interested parties of the proposed activity and to solicit comments.

AUTHORITY: This application is being evaluated under Section 404 of the Clean Water Act for the discharge of dredged or fill material in waters of the United States (U.S.).

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LOCATION: The proposed project is located within and along the Rio Grande at Santo Domingo Pueblo (the Pueblo) in Sandoval County, New Mexico. It is situated on the west bank of the river, about one-half mile downstream from the Bureau of Indian Affairs Route 88 bridge. The project would occur between river miles (RM) 223.8 and 223.9 (Latitude 35.521957° N, Longitude -106.379671° W).

PROJECT DESCRIPTION: The proposed undertaking consists of removing vegetation, creating a new main channel by realigning the middle channel, plugging the northern channel, installing riprap bank protection and placing longitudinal stone toe protection with bioengineering.

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Middle Channel Realignment

The realignment of the middle channel is intended to redirect main flows in the Rio Grande to reduce erosion along the west bank, which occurs as flows in the current main channel approach the bank at an angle of 45 degrees. Therefore, the northern channel will be plugged and the middle channel realigned. The realignment will be accomplished by excavating a new channel through the larger of the two islands on the site and filling in the old channel.

The newly aligned channel will be initially constructed as a rough trapezoid with a 100 foot bottom width and a depth of approximately 5 feet (see Riprap Bank Protection section below). The western bank will have riprap bank protection to help maintain the alignment and avoid flanking of the northern channel plug. The eastern bank will not have erosion protection so as to allow the river to move east if necessary. The western bank will have a constructed side slope of approximately 2 Height (H):1Vertical (V). The Eastern bank will have a side slope of 4H:1V.

Riprap Bank Protection

The western bank of the realigned middle channel will have riprap bank protection up to the 2-year return flow. This will help stabilize the realignment and prevent flanking of the northern channel plug. The riprap bank protection is designed to account for an additional 5 feet of scour at the placed location as shown in figure 1 below. This additional rock may be installed by excavation below the bed, as possible, or by extending the footprint width to allow for self-launching. Approximately 1,500 cubic yards (cy) will be used to provide the bank protection.

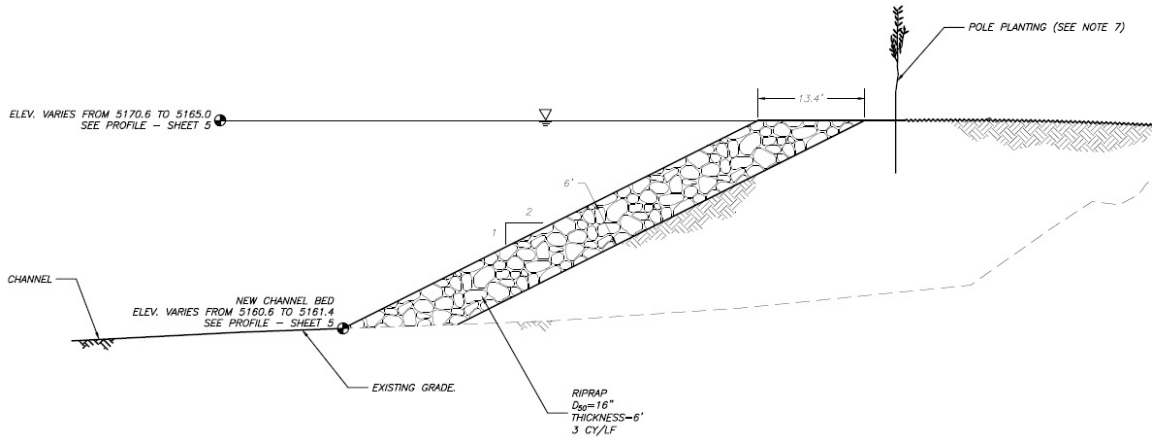

Figure 1: Riprap Bank Protection (approximate dimensions)

Northern Channel Plug

An earthen and riprap plug will be constructed across the northern channel. Earthen material will be placed in the water in a trapezoidal shape with the riprap bank protection installed on the channel side of the plug (figure 2). Material from the excavation of the

middle channel realignment as well as the material from the temporary stockpiles will be used to backfill behind the plug.

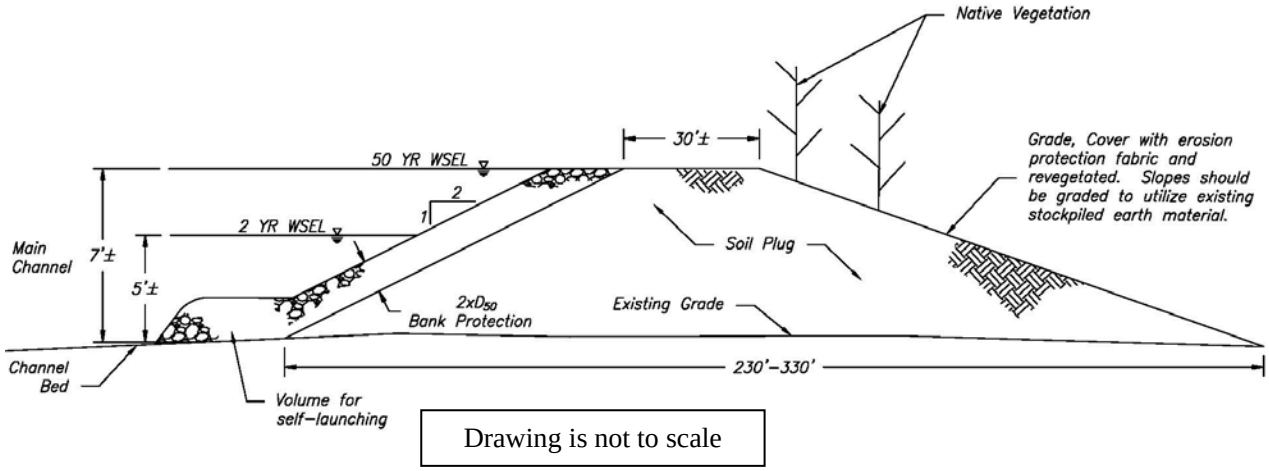

Figure 2: Channel Plug Section (approximate dimensions)

The trapezoidal plug will be placed with 2H:1V side slopes with the riprap bank protection installed along the main channel side of the plug. Because this section of bankline may be more vulnerable during high flows, earthen material and riprap will extend to the 13,300 cubic feet per second (cfs) water surface elevation. Downstream of the plugged channel, the riprap in the plug will transition to the riprap bank protection, which provides protection for flows up to the 2-year flood event. The final design will have a 10 to 15 foot top width. Approximately 8,700 cy of material and 2400 cy of riprap will be used to construct the plug. Once the backfill has been placed and erosion control has been provided, the channel plug will be reseeded. The plug backfill may also be planted with native shrubs and/or poles appropriate to the hydrologic regime. The fill that makes up the plug will be sloped back to existing ground at a 60H:1V.

The construction of the northern channel plug results in the creation of a backwater area along the west channel. Backwater conditions are expected to dominate in this channel most of the year; however, the west channel begins near the Bureau of Indian Affairs (BIA) Route 88 Bridge and experiences flows intermittently in the spring and summer. These intermittent flows are transmitted during spring runoff and summer monsoon events when mainstream flows are 4,000 cfs or greater. During the portion of the year when the west channel acts as a backwater, it provides an area with reduced velocities, which may serve as an environmental enhancement.

Longitudinal Stone Toe with Bioengineering

The western channel contains water when the flows are at 4,000 cfs or greater in the main channel, and enter upstream at the BIA Route 88 Bridge. Hydraulic modeling indicates that this western channel could receive as much as 2,000 to 3,000 cfs when the Rio Grande is at or above 10,000 cfs. The western channel also receives runoff from an arroyo with a watershed area of approximately 2 square miles. This could produce flows of similar magnitude during a storm. Thus, both a storm event and flows in the Rio Grande above 4,000 cfs may result in flow in the western channel.

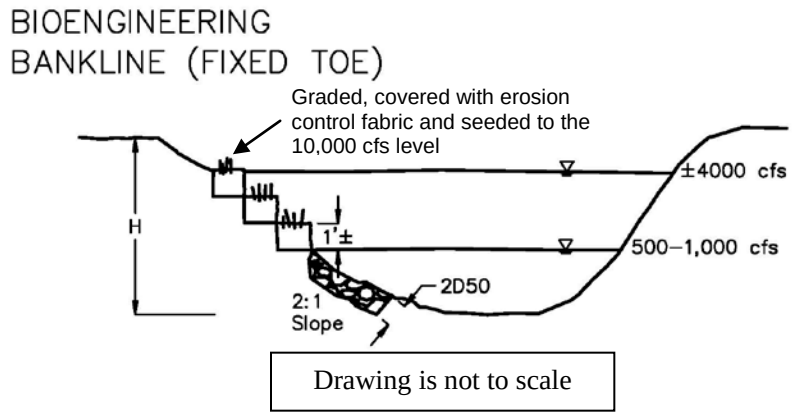

Figure 2: Bioengineered Bankline (approximate dimensions)

In order to provide protection to the western bank during these flow events, a longitudinal stone toe with bioengineering bankline will be constructed along the western bank and a portion of the eastern bank of the western channel, which will measure a total of approximately 650 lineal feet. The bankline will consist of a longitudinal stone toe of 16-inch rock with three lifts of biodegradable erosion control fabric. The longitudinal stone toe is designed to accommodate an additional 5 feet of scour at the placement location. This additional rock may be placed by excavation below the bed, if possible, or by extending the footprint width to allow for self-launch. Riprap will extend upwards to the modeled water surface elevation of 1,000 cfs. The riprap for the stone toe will be placed at a 2H:1V slope. Approximately 1,200 cy of riprap will be required to construct the bioengineered banklines.

Coyote willows will be planted along the top of the riprap toe and in between the lifts of biodegradable erosion control fabric with one pole planted every two feet. The lifts are intended to increase the ability of the bank to resist erosion temporarily, while the vegetation is establishing a root system. Once vegetation is established, the root systems will add tensile strength to the bank, thus providing erosion protection. The lifts will be placed up to approximately the 4,000 cfs water level. Above the 4,000 cfs water level to the 10,000 cfs (or approximately 7 feet above the bed), the bank will be graded at a 3H:1V slope, covered with erosion control fabric, and seeded. Approximately 7,500 square yards of erosion control fabric will be used.

The longitudinal stone toe with bioengineering also provides a second line of defense should the channel plug be damaged from extreme high flows associated with extreme flood events.

Santo Domingo Low Flow Habitat Channel

A criterion of this river maintenance project was to protect the levee while not causing adverse effects to the Santo Domingo low flow habitat channel. The low flow habitat channel was created in 2007 by excavating the inlet area to an old high flow side channel.

This area had aggraded over the years, causing the inlet to fill in and cutting the side channel off from the main stem. With the inlet open, river flows naturally divert from the main channel. In March of 2009, some aggradation, or sediment accumulation, was observed at the downstream end of the habitat channel, where it ties back into the Rio Grande.

The location for the middle channel realignment was chosen to help reduce continued erosion of the western bank, but also to protect the low flow habitat channel. If one main channel was created and placed adjacent to the low flow habitat channel, there was a higher possibility of impact to the low flow habitat channel. It is expected that the eastern channel will receive more of the flow split at the bars than it currently experiences. The realigned middle channel and the eastern channel will share the flow split, facilitating protection the low flow habitat channel. The additional flow in the eastern side channel should also benefit the low flow habitat channel by removing debris that otherwise may have formed at its mouth.

Access

Access to the RM 223.9 project area will be via existing roads that are within the Pueblo of Santo Domingo. Access into the Pueblo will be via State Highway 22 and BIA Route 88. Additionally, a river crossing will facilitate the movement of construction equipment from the east side of the river to the west side of the project site during mobilization/ demobilization and the transfer of materials (soil and rock). Treaded equipment will be mobilized/demobilized to site daily. The wetted river channel crossing will be placed, where possible, in a riffle. Riffle crossings are preferable as the shortest distance across the river, and often contain shallower water. Crossing locations will be located to minimize impact of existing bank vegetation and to avoid areas of vertical slopes. The ramps would be approximately 20 feet wide. Crossing distance of the eastern channel is 100 feet in the wet. The expected amount of round trips is 210, with a maximum of 600. Crossings of the northern and middle channel will be continual during construction.

If necessary to ensure safe and convenient access, road improvements may be made to the dirt roads (e.g. clearing, mowing and trimming, blading, widening, gravel cap placement, etc.). Clearing involves the removal of vegetation within the roadway with some amount of subsurface disturbances of the vegetation roots. This is typically undertaken with new or minimally used access routes. A typical impact range for clearing is 20 to 30 feet per linear foot of access road. Mowing is the process of cutting vegetation in and to the sides of the access route to provide line-of-site and safe conditions for access, including increasing the reaction time to respond to wildlife and livestock within the access road corridor.

Horizontal clearance also provides the ability for equipment to drive without hitting and damaging equipment. The total range of horizontal clearing would be 5-10 feet on each side, for a total impact of 10 to 20 feet wider per linear foot of access roads.

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Staging

Three temporary stockpile sites will be used to temporarily store construction materials and equipment. Preparation of these temporary stockpile sites was conducted as part of a previously executed project. The temporary stockpile sites will be reseeded at the completion of this project.

Dust Abatement

Dust abatement typically occurs on access routes and in project areas during implementation when there is not sufficient moisture in the soil to inhibit the formation of dust. Dust abatement involves the distribution of water onto an earthen surface. If dust becomes a safety concern at the site, or while hauling riprap from the stockpile areas to the priority site area, roads will be wetted with water pumped from the Rio Grande or from one of the nearby drains. The Lower West Side Santo Domingo Riverside Drain would be used for dust abatement during irrigation season (March to October) and the Rio Grande from November to February. If it is not practicable (not enough flow volume) to utilize the Drain during irrigation season, Reclamation may pump water from another nearby irrigation facility or the Rio Grande.

When pumping from the Rio Grande, the pump setup will utilize a 0.25 inch mesh screen at the opening to the intake hose to minimize entrainment of aquatic organisms. For areas where the depth to a water surface is too much for the pump setup, an intermediate area will be leveled to create a temporary house for the pump. Water is typically distributed using a truck-based water unit that allows for a controlled and uniform spraying of the desired surface.

Vegetation Removal

The expected area of disturbance (land) is 6.5 acres and would be within the maximum distribution limits. Vegetation is minimal at this project site except for vegetation on the bars. The location of the staging area and ramps will also be cleared of vegetation.

Vegetation within the project area consists almost exclusively of Russian olives and mature cottonwoods, with Russian olives dominating at the bankline. The exotic species on the bank will be mulched to clear the site and allow access for construction. Some large native trees may need to be removed for safety issues. Large trees, if removed, may be used for large wooded debris (LWD) or tree snags within the project area. Cottonwoods will only be removed if absolutely necessary, but Russian olives at the bank will be removed.

Vegetation Planting

All disturbed project areas will be reseeded with a seed mix selected by BOR biologists and approved by the Pueblo of Santo Domingo at the next appropriate season following the conclusion of activity at these areas. Preference for vegetation planting areas will be give to areas along the Rio Grande corridor that are managed by the Pueblo and have a protective fence. BOR biologists, in consultation with the Pueblo, will select plantings

appropriate for the hydrologic regime of a given location. If necessary, large mature trees will be replaced at a ratio of 10:1 with pole cuttings of a similar tree species. Other pole cuttings may also be used. Smaller native trees or upland shrubs may also be replaced as agreed upon by the BOR and the Pueblo.

Construction Operations

To facilitate construction at this site, the following steps are expected, although maybe not in the exact sequence as listed below.

1. Create a ramp into the river channel on the east bank and west bank for construction equipment to access the project site.

2. Remove vegetation from the north and south bars.

   Steps 3-4 may be executed concurrently:

3. Excavate for the middle channel realignment.

4. Install a temporary berm across the middle channel.

   Steps 5-6 may be executed concurrently:

5. Install riprap bank protection along west bank of middle channel.

6. Fill in old middle channel with earthen material from on-site excavation or from temporary stockpiles sites.

7. Remove the temporary berm and install a new plug across the northern channel.

8. Use excess material from on-site excavations or from temporary stockpiles to fill behind the riprap plug.

9. Install the longitudinal stone toe with bioengineering.

10. Revegetate the disturbed construction areas.

Placement of the riprap plug and temporary berm will be conducted in flowing water, but will act to diver the water once each is completed.

Material will be pushed into the existing middle channel and then the northern channel as it is excavated, simultaneously opening up the middle channel realignment and closing off the northern and existing middle channels. Material from the temporary stockpiles will also be used as fill material. Riprap for the project components may come from temporary riprap stockpile on site as well as from a stockpile site located in Bernalillo.

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The following Best Management Practices (BMPs) would be used at the site.

General BMPs:

The BOR will implement the following BMPs during implementation of the proposed undertaking.

1. *Management of water runoff* - Dirt berms, straw bales, silt fences, silt curtains or other appropriate material will be placed at strategic locations to manage water runoff at the site in accordance with the NPDES storm water permit and plan.

2. *Minimize impact of hydrocarbons* - To minimize the potential for spills into or contamination of the aquatic habitat:

    a. Hydraulic lines will be checked each morning for leaks and periodically throughout each work day.

    b. All fueling will take place outside the active floodplain. Fuel may be stored on site overnight, but not near the river or any location where a spill could affect the river.

    c. All equipment will be subjected to high-pressure spray cleaning and inspection prior to utilization in the project area.

    d. Equipment will be parked at pre-determined locations on high ground away from the project area overnight, on weekends, and holidays.

    e. Spill protection kits will be onsite, and operators will be trained in the correct deployment of the kits.

3. *Visual monitoring of water quality* - BOR personnel will visually monitor for water quality at locations downstream of the project area before and during the work day.

4. *Clean material* - Riprap, and other materials, to be placed in the water will be cleaned to the maximum extent possible. If there are large clumps of soil bigger than 1 foot within the material, those clumps will be set aside during the loading or placing operations.

5. *Implementation of waste* - All spoils and waste will be disposed of offsite at approved locations. All river maintenance projects will have a contract in place for the rental of portable toilet facilities during the duration of the project.

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6. *Water work warning* - To allow fish time to leave the area before implementation activities begins, the first piece of equipment (in the case of articulated trucks, dozers, front end loaders, scrapers, etc.) should initially enter the water slowly at the start of each work sequence in the river. When work involves placing rock or other material in the river channel from a platform, an object should be lowered and raised slowly into the water before placing the material (the "object" is typically the bucket of an excavator or similar piece of construction equipment). This should be done at the start of each work sequence in the river.

7. *Water work duration* – In-water work should be fairly continuous during work days, so that fish are less likely to return to the area once work has begun. River maintenance work in the river during spring runoff or monsoonal events greater than 1,000 cfs should not be conducted unless a river diversion is constructed.

8. *Material removal* - Sediment, jetty jacks, and woody debris will be removed in a consistent manner to help avoid the formation of isolated pools or channels. If stranding of fish occurs, BOR will coordinate with the Service to perform rescue procedures.

Site-Specific BMPs:

1. *River diversion* – A berm will be constructed across a portion of the river channel to divert the river flow away from the project site and allow construction equipment to work in relatively still water, which will minimize downstream turbidity. This permanent diversion will relocate the river into a new channel. Material for the backfill of the berm will include excavated sediment from the channel realignment and will be stockpiled in a suitable location prior to implementing this project component. The diversion berm will extend from one side of the river to the other to minimize the formation of isolated pools.

2. *River reconnection* – This BMP includes procedures to minimize the amount of time construction equipment needs to work in the wet. Excavation will proceed from downstream to upstream, which allows the established separation to act as a diversion berm. As such, the majority of this technique will allow for the project to be constructed in the dry, with only the last removal phase requiring equipment to be executed in the wet. Typically, this strategy will result in less than one week of work in the wet.

MITIGATION: Compensatory mitigation will be required for the permanent impacts to the wetlands. The permittee will also be required to monitor the mitigation site annually for the years 1 through 5 after construction to ensure success and submit annual monitoring reports to the Corps. However, it should be noted that the determination of success of the mitigation rests solely with the Corps.

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OTHER AUTHORIZATIONS:

State Water Quality Certification: The applicant is required to obtain water quality certification, under Section 401 of the Clean Water Act, from the U.S Environmental Protection Agency, Region 6, Dallas, Texas. Section 401 requires that any applicant for an individual Section 404 permit provide proof of water quality certification to the Corps of Engineers prior to permit issuance. For any proposed activity on Tribal land that is subject to Section 404 jurisdiction, where the tribe does not have water quality certifying authority, the applicant will be required to obtain water quality certification from the U.S. Environmental Protection Agency.

ADDITIONAL INFORMATION:

Environmental Setting. The proposed project is located within and along the Rio Grande within the boundaries of the Pueblo of Santo Domingo. The Rio Grande is the major drainage of the Albuquerque Basin. The Albuquerque Basin is part of the Rio Grande Rift, which formed in conjunction with the uplifting of the Sandia and Manzano Mountains during the Tertiary Period. The project area falls within the Mexican Highland Section of the Basin and Range Physiographic Province.

More specifically, the project area is located within the Middle Rio Grande (MRG), an elongated valley along the Rio Grande Rift and alluvial sub-basins defined by normally faulted mountain ranges. Historically, the Rio Grande has continuously reworked valley deposits on the active floodplain. However, in the twentieth and twenty-first centuries, floodway construction and channel stabilization projects have confined the natural course of the river.

At this site, the Rio Grande splits around two mid-channel bars to form three channels. All three channels see flow most of the time. The majority of the flow, however, is forced into the northern channel, where it approaches the bank at about 45 degrees. Flows on this side channel have eroded the west bank, which is now about 130 feet from the spoil levee adjacent to the Lower West Side Santo Domingo Riverside Drain. Under current conditions, sustained high flows have the potential to further erode the bank, and bank failure would result in damage to the spoil levee, drain, road, and agricultural fields.

The Rio Grande has been identified by the Federal Emergency Management Agency (FEMA) as a Special Flood Hazard Area Inundated by 100-Year Flood Events (Flood Insurance Rate Map, Map No. 35043C1893D; revised date: March 18, 2008).

The soils of the Rio Grande valley floor are generally derived from recent alluvial and arroyo deposits. A wide range of soil textures can be observed, but most are characterized by sand, silt, loamy sand, or sandy loam. Also, these soils range from slightly saline to strongly saline and are moderately alkali affected.

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The riverine ecosystems found in and along the main channel of the Rio Grande consist of sand/gravel bars, riverbank areas with herbaceous and shrubby vegetation, and seasonally saturated or inundated areas characterized by a variety of flora. Russian olive (*Elaeagnus angustifolia*) and saltcedar (*Tamarix spp.*) dominate the project area along with mature Rio Grande cottonwoods (Populus fremontii var. wislizenii) and coyote willow (*Salix exigua*). Open sand bar areas are subject to frequent disturbance from flood events and these disturbances inhibit vegetation establishment. Sparse growth on sand/gravel bars of young cottonwood, coyote willow, saltcedar, and a variety of herbaceous vegetation is found following reduced river flows, but because these areas are prone to frequent disturbance during moderate- and high-flow events, the vegetation typically does not have the opportunity to mature.

Herbaceous and shrubby vegetation is common along the riverbank in areas where the river channel has become deeply incised. Riverbank vegetation has successfully established in these locations because of a lack of scouring, displacement, and removal of substrate immediately adjacent to the riverbank, all common processes seen during overbank flooding. With the erosion occurring at this priority site, however, vertical banks are present that do not provide an area for vegetation establishment.

Wildlife in the project area is typical for the Middle Rio Grande Valley. The habitat is similar to areas to the north and south in which extensive bird surveys have been conducted. In some areas of similar size and habitat composition, more than 60 bird species have been identified. In addition, numerous species of mammals, reptiles, and amphibians may be present.

The climate is semi-arid with mild summers and moderate winters. The average annual rainfall is 7 to 10 inches, approximately half of which results from thunderstorms and monsoonal rains during July through September, and the average frost-free season is 190 days.

Alternatives. A total of six alternatives plus the No Action alternative were evaluated for the proposed undertaking. All alternatives were rated and given a score based on the following factors: engineering effectiveness, ecosystem function, ability to achieve compliance, cost, and tribal preference. Each factor was evaluated on a scale from one to ten, with ten being the highest possible score. Some factors also contain variables that were summed together to provide the overall score. Finally, the scores for all factors were summed together on a weighted basis and multiplied by a factor of ten to help separate out the alternative scoring differences. During this review, numerous potential actions were eliminated and the proposed alternative was determined by the BOR project team and the Pueblo's environmental staff.

Below are descriptions of the various alternatives evaluated for the proposed undertaking (excluding the No Action Alternative):

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Realign Middle Channel, Plug Western Channel, and Backwater Creation

This alternative would involve the partial removal of gravel deposits along the middle channel, making this the "new" main channel through the area. The newly aligned channel would be initially constructed as a rough trapezoid with a ten foot bottom width and a depth ranging between three to nine feet. The western bank would have riprap bank protection to help maintain the alignment and avoid flanking of the northern channel plug. The eastern bank would not have erosion protection so to as allow the river to move east if necessary. The western bank would have a constructed side slope of approximately 2H: 1V. The western bank of the realigned middle channel would have riprap bank protection up to the 100-year return flow (or approximately 13,000 cfs). This will help stabilize the realignment and protect flanking of the northern channel plug. The riprap bank protection is designed to account for an additional five feet of scour at the placed location. This additional rock may be placed by excavation below the bed, as possible, or by extending the footprint width to allow for self-launching. Approximately 1,500 cy would be used to provide bank protection. The eastern bank would have a side slope of 4H:1V. The current main channel (or western channel) would be plugged and the portion downstream of the plug would become a backwater area. The plug would consist of a dike measuring approximately 320 linear feet, with an earthen core and riprap lining that key into the existing channel banks. The backside of the plug would be sloped and protected with a turf reinforcement mat to help enhance soil stability. The backwater area would be planted with native vegetation and jetty jacks would be removed as part of this alternative.

Realign to Single Channel, Plug Other Channels, and Backwater Creation

Excavate a new main channel (east channel) through the eastern side of the island. The east side channel would be widened to match the geometry of the river cross sections above and below the priority site. The east channel would have an approximate bottom width of 100 feet and constructed side slopes of 4H:1V. The east channel would be lined with a riprap toe and have bioengineered bank protection on the west side to stabilize the new alignment. The two west side channels would be plugged and the portion downstream of the plug would become a backwater area. The top of the riprap plug would be bioengineered. A bench on the western bank would be planted. The plug would create a backwater area in the abandoned side channels at flows below 4,000 cfs. Hydraulic modeling indicates that at 4,000 cfs and above, the side channel west of the island and upstream of the priority site would start having significant amounts of flow. This alternative includes burying 225 feet of riprap to provide additional protection to the area currently being eroded. The buried riprap would be set back from the erosion area and a planting bench would be created between the riprap and the backwater area. This bench would be planted with native vegetation to provide additional stability. Riprap for all features would be constructed using 16-inch nominal riprap.

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Self Launching Riprap

This alternative would construct a riprap erosion barrier approximately 800 feet in length set back from the eroding bankline. This alternative would provide an opportunity for the bankline to continue to erode until it hits the riprap erosion barrier. At this point, the bank erosion would cause the riprap barrier to launch into the river, creating a riprap revetment. It is expected that 16-inch nominal riprap would be used for this alternative. This option would require monitoring to ensure that riprap launching is uniform and avoid flanking of the structure.

Bioengineering and Self Launching Riprap

This alternative includes bioengineered bankline stabilization along the existing west bankline and constructing a riprap erosion barrier set back from the eroding bankline. If the bioengineered stabilization was unsuccessful at stopping bankline erosion, then the riprap barrier would stop erosion before reaching the levee. The riprap erosion barrier (approximately 450 feet in length) would place riprap on the east face of the levee. An area would be excavated in preparation for the riprap placement, and the riprap covered with earth material. The riprap would only be exposed if the river continues to migrate toward the levee. At this point, the bank erosion would cause the riprap barrier to launch into the river, creating a riprap revetment. It is expected that 16-inch nominal riprap would be used for this barrier. Monitoring would be required if the riprap erosion barrier started to self-launch to ensure that riprap launching is uniform. To avoid flanking, riprap keys would be installed as well. The bioengineering bank stabilization would measure approximately 800 feet in length and consist of reshaping and fabric encapsulated soil lifts, and then planting the lifts with native vegetation.

Riprap Revetment

This alternative includes four sub options – one with a bioengineered bench, two with a bioengineered top of 450 feet and 800 feet respectively, and one with a bioengineered top of 800 feet and additional bioengineered bank protection on the upstream island. It is expected that 16-inch nominal riprap would be used for the rock requirement for each sub-option. All sub options would include the removal of jetty jacks at the site. Below are brief descriptions of the four sub options.

1) Riprap revetment with bioengineered bench: This sub-option provides protection of the existing bankline with 800 feet of riprap toe and bioengineered bench. The riprap toe would be placed up to the 2-year water surface and provide additional rock to counter an additional five feet of toe scour. The upper bank would consist of a buried rock revetment that extends protection to the 25-year peak flow event (or at approximately 10,000 cfs). This rock revetment would be overlain by a soil filled trench covered by a biodegradable coir fabric and planted with native vegetation. This trench would create a floodplain surface for about 40 feet above the 2-year water surface.

2) Riprap revetment with bioengineered top, 450 linear feet: This sub-option provides protection with riprap and bioengineering of the existing bankline for the

area of direct concern (or approximately 450 feet). The riprap would be placed from the channel bed about six to eight feet or roughly the bankfull discharge. The remainder of the bank protection would be provided by fabric encapsulated soils lifts covered with native vegetation. Woody debris may be added to enhance the stream bank habitat.

3) Riprap revetment with bioengineering top, 450 linear feet: This sub-option provides the same protection sub-option 2 above, plus extending the riprap and bioengineering bank protection another 350 feet downstream. The additional riprap and bioengineering would reduce the amount of riprap loading and only place riprap to the normal water surface (approximately 1,000 cfs) with fabric encapsulated soil lifts and vegetation placed above this point.

4) Riprap revetment with bioengineered top and additional bioengineered bank protection on an island: This sup-option provides the same protection as described for sub-option 3 above, and adds an additional 150 feet of riprap and bioengineered bank on the southern tip of the island north of the priority site. The additional riprap and bioengineering work would be constructed similarly to that described in sub option 3.

Spur Dikes

This alternative consists of the construction of seven spur dikes along approximately 500 linear feet of the west bankline of the existing main channel, plus four additional dikes extending approximately 300 linear feet along the west side channel that joins the river at the priority site. The spur dikes would be constructed with a bank height at the 25-year flow event (10,000 cfs). The top of the dike would have a 5 percent slope to the tip of the dike. The tip of the dike would have a height equal to the 2-year water surface elevation. The spur dikes would range from 20 to 30 feet in length. Additional rock is accounted for in the spur dike design provide flanking protection to the spur dikes. This alternative also includes a continuous riprap revetment between spur dikes three and six (numbered from north to south) to provide additional alignment protection.

** Alternative description information is from the Santo Domingo Priority Site Alternative Analysis Report (Reclamation 2012). Alternatives are not listed in order of final scores.*

EVALUATION FACTORS: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the described activity, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the described activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy

needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people. The activity's impact on the public interest will include application of the Section 404(b)(1) guidelines promulgated by the Administrator, Environmental Protection Agency (40 CFR Part 230).

The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

HISTORIC PROPERTIES: The project is located in the active floodplain and the area has been surveyed for historic properties. No cultural remains were found and the Pueblo has informed BOR that there are no Traditional Cultural Properties in the project area. Based upon these findings, BOR has completed its Section 106 process.

Should evidence of possible scientific, prehistoric, historic, or archaeological data be discovered during the course of this action, work shall cease at that location and Reclamation's Albuquerque Area Office Archaeologist shall be notified by telephone immediately with the location and nature of the findings.

Care shall be exercised so as not to disturb or damage artifacts or fossils uncovered during operations, and the Pueblo shall provide such cooperation and assistance as may be necessary to preserve the findings for removal or other disposition by the government.

ENDANGERED SPECIES: BOR completed a Biological Assessment (July, 2013) for the proposed projects pursuant to Section 7 of the Endangered Species Act of 1973 and received a signed Biological Opinion on September, 10, 2013 (Consultation Number 02ENNM00-2013-F-0061 0).

FLOODPLAIN MANAGEMENT: The Corps is sending a copy of this public notice to the local floodplain administrator. In accordance with 44 CFR part 60 (Flood Plain Management Regulations Criteria for Land Management and Use), the floodplain administrators of participating communities are required to review all proposed development to determine if a floodplain development permit is required and maintain records of such review.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before **January 6, 2013,** which is the close of the comment period. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. If no comments are received by that date,

it will be considered that there are no objections. Anyone may request, in writing, that a public hearing be held to consider this application. Requests shall specifically state, with particularity, the reason(s) for holding a public hearing. If the Corps determines that the information received in response to this notice is inadequate for thorough evaluation, a public hearing may be warranted. If a public hearing is warranted, interested parties will be notified of the time, date, and location. Comments and requests for additional information should be submitted to:

Chris Parrish
Project Manager
US Army Corps of Engineers, Albuquerque District
4101 Jefferson Plaza NE
Albuquerque, NM 87109-3435
505-342-3374
FAX 505-344-1514
E-mail: Christopher.M.Parrish@usace.army.mil

Please note that names and addresses of those who submit comments in response to this public notice may be made publicly available through the Freedom of Information Act.

DISTRICT ENGINEER
ALBUQUERQUE DISTRICT
CORPS OF ENGINEERS

Enclosures

Figure 1: Project Vicinity Map
Figure 2: Project Location Map
Figure 3: Aerial Photograph of the Santo Domingo Priority Site RM 223.9
Figure 4: Proposed Action at the Santo Domingo Priority Site RM 223.9
Figure 5: Access, Temporary Staging, and Temporary Stockpile Areas

News Release

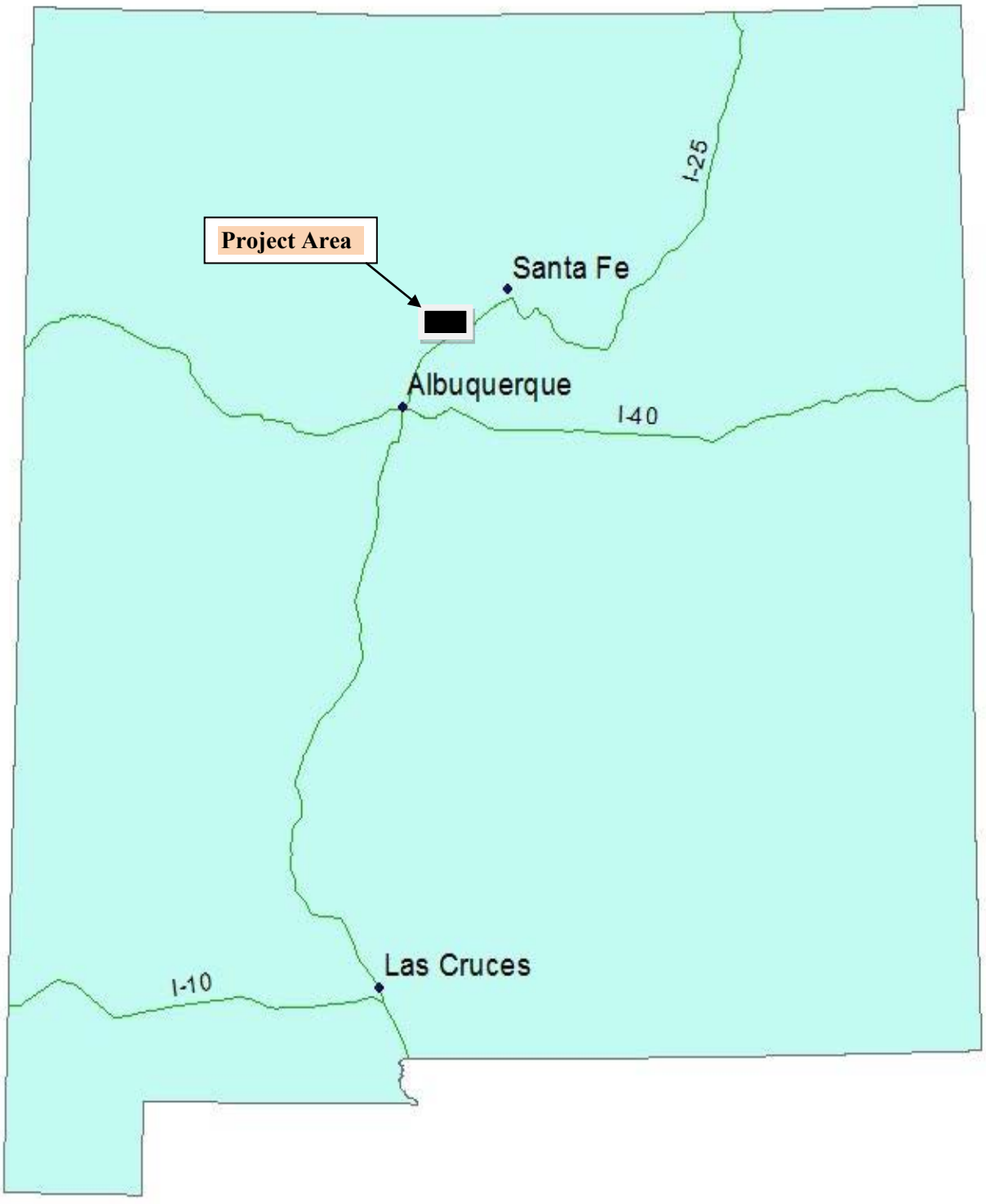

Figure 1: Project Vicinity Map

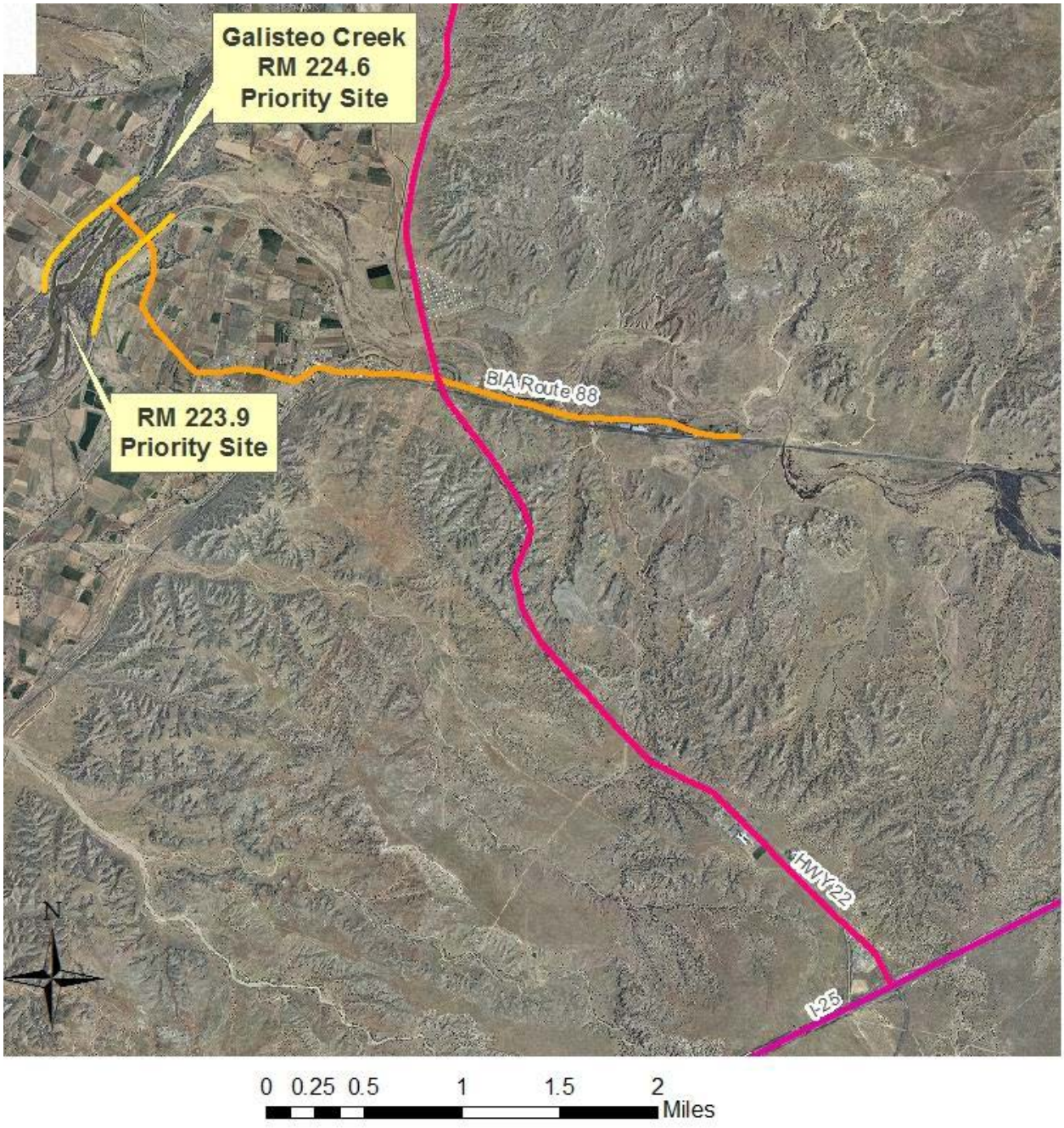

Figure 2: Project Location Map

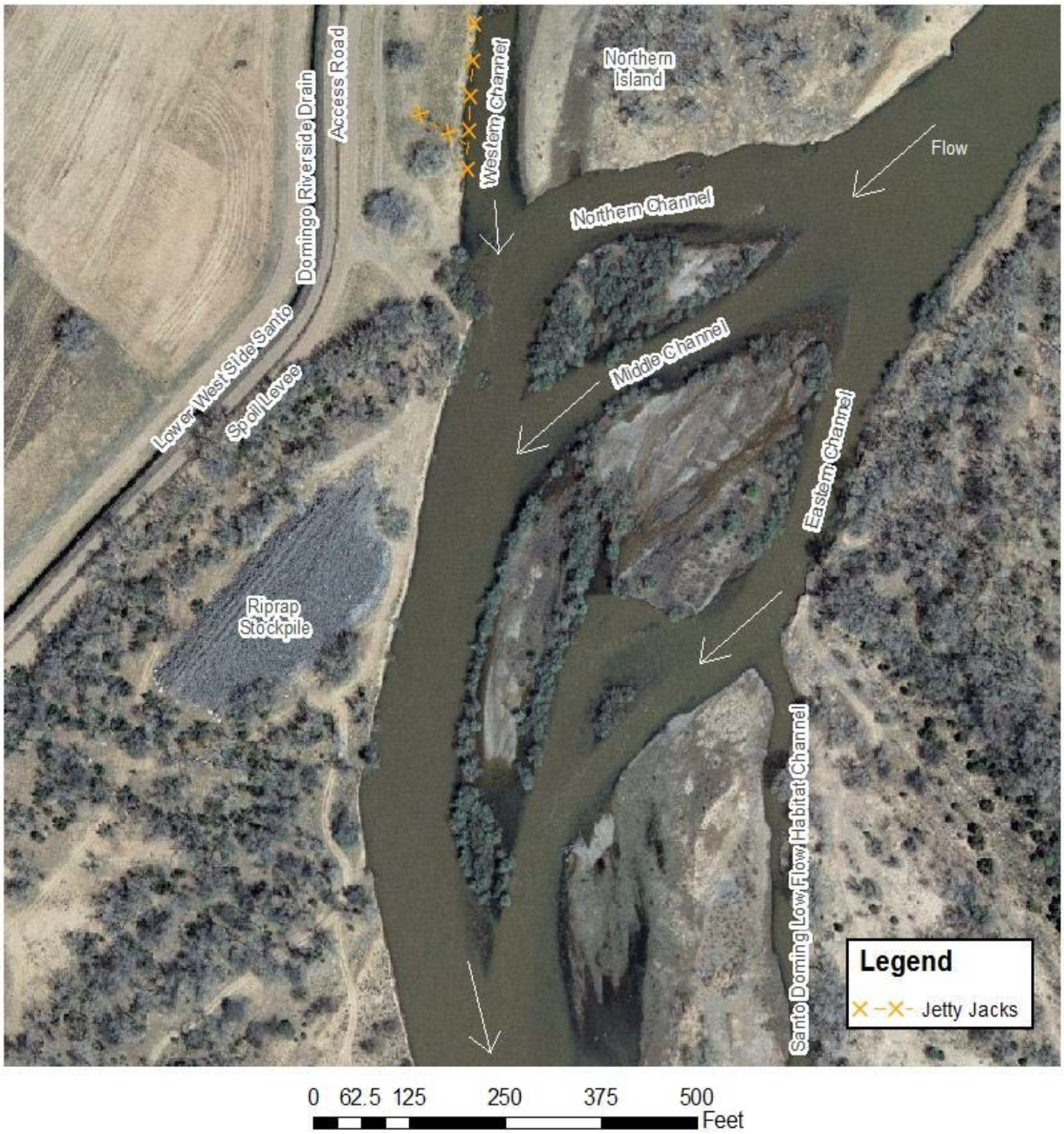

Figure 3: Aerial Photograph of Santo Domingo Priority Site RM 223.9

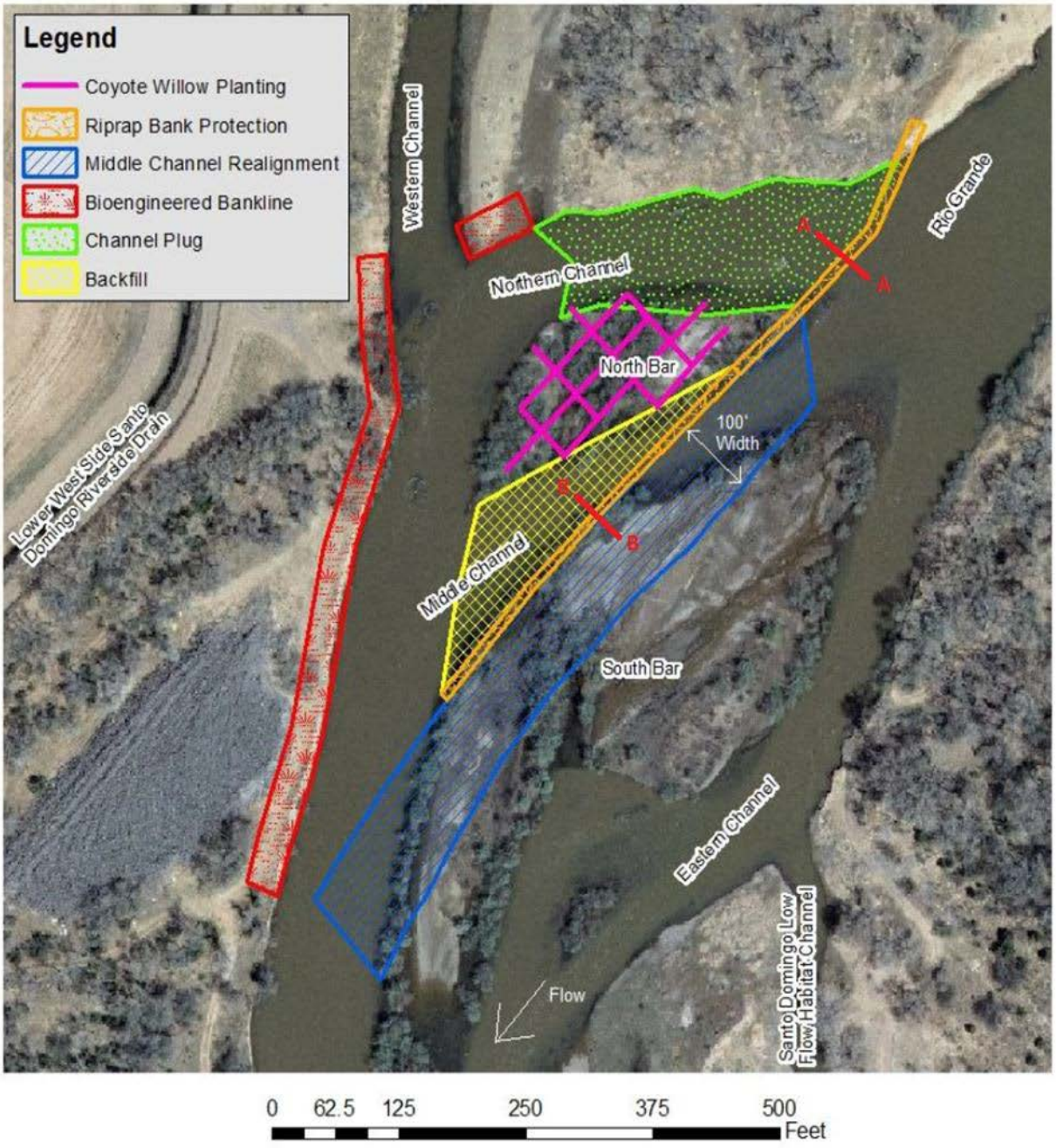

Figure 4: Proposed Action at Santo Domingo Priority Site RM 223.9

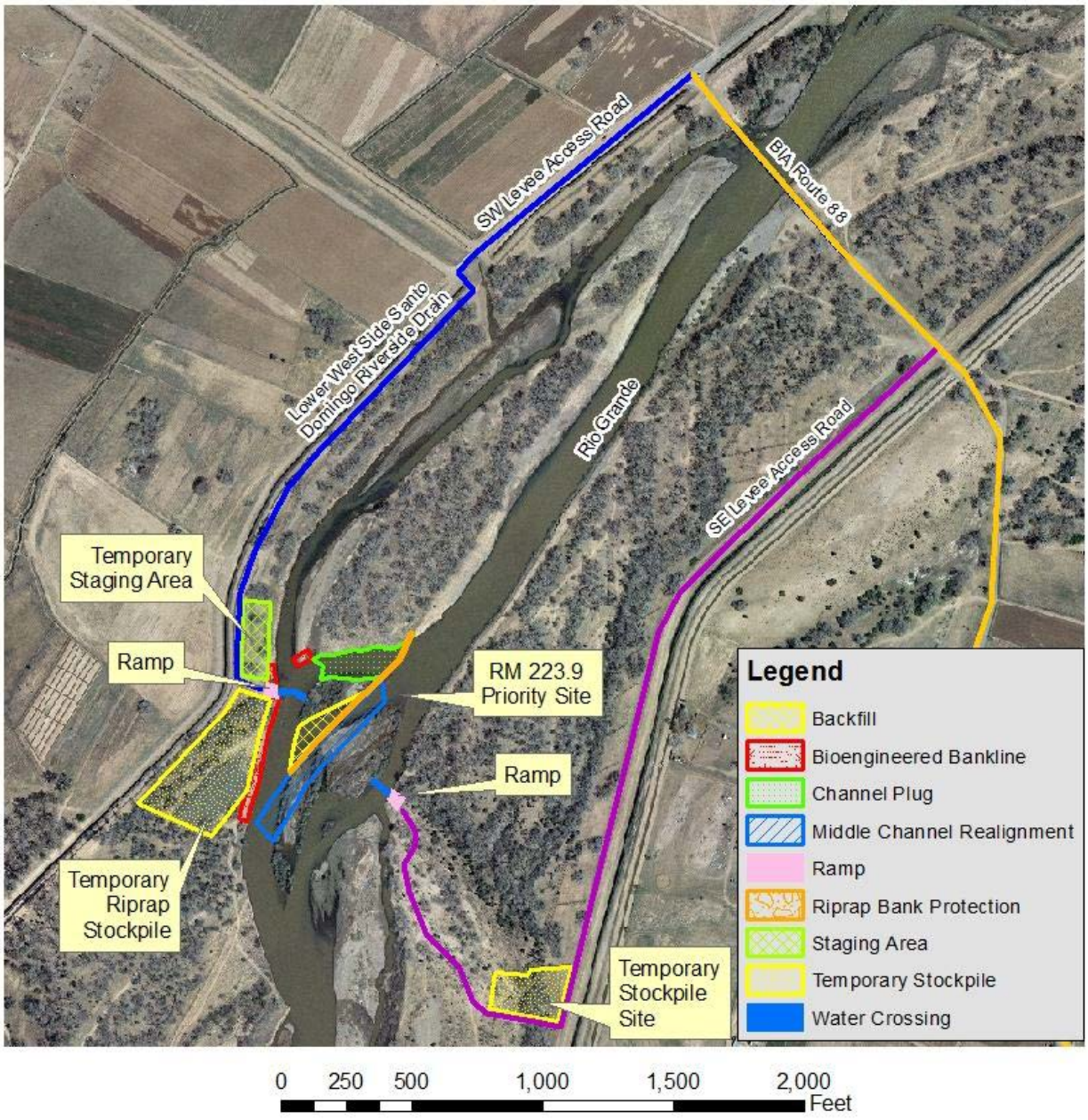

Figure 5: Access, temporary staging, and temporary stockpile areas