

**Draft Environmental Assessment:
Allowing Avian Hunting in Designated Areas along the Rio
Grande Canalization Project,
Sierra and Doña Ana Counties, New Mexico**



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This Draft Environmental Assessment analyzes the potential impacts of allowing certain types of game bird hunting within designated areas on USIBWC property in Sierra and Doña Ana Counties, New Mexico, along the Rio Grande Canalization Project from Percha Dam near Arrey, New Mexico downstream to American Dam in El Paso, Texas.

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Acronyms and Abbreviations

AQCR	Air Quality Control Region
EA	environmental assessment
EIS	environmental impact statement
ESA	Endangered Species Act
flycatcher	Southwestern Willow Flycatcher
IBWC	International Boundary and Water Commission, United States and Mexico
MBTA	Migratory Bird Treaty Act
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NMED	New Mexico Environment Department
NMDGF	New Mexico Department of Game and Fish
NMHPD	New Mexico Historic Preservation Division
NMSP	New Mexico State Parks
OSHA	Occupational Safety and Health Administration
RGCP	Rio Grande Canalization Project
ROD	Record of Decision
ROW	right-of-way
T&E	threatened and endangered
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USIBWC	United States Section, International Boundary and Water Commission
USBP	United States Border Patrol

1. Purpose and Need for the Proposed Action

1.1 Introduction

The Rio Grande Canalization Project (RGCP) (Figure 1), located in Doña Ana and Sierra Counties in New Mexico and El Paso County, Texas, extends for 105.6 miles (169.9 kilometers) along the Rio Grande from Percha Diversion Dam in New Mexico, to the American Diversion Dam where the Rio Grande begins to form the international boundary at El Paso, Texas and Ciudad Juárez, Chihuahua. The RGCP provides flood protection against a 100-year flood and assures releases of waters to Mexico and U.S. users from the upstream reservoirs in accordance with the 1906 Convention between the United States and Mexico. The U.S. Section of the International Boundary and Water Commission (USIBWC) was granted authority to construct, operate, and maintain the project through the Act of June 4, 1936, 49 Stat. 1463, Public Law No.648.

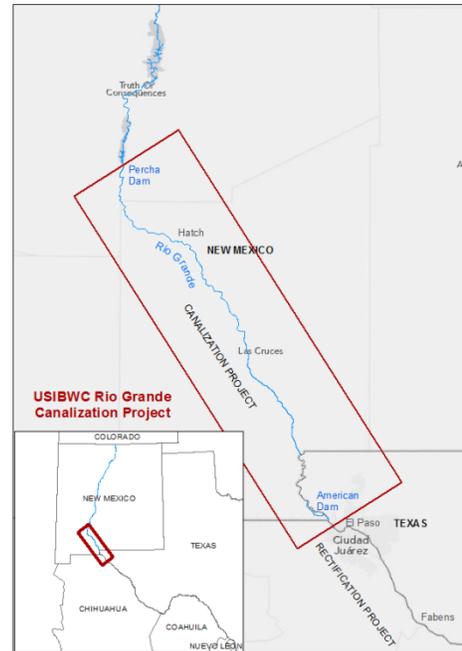


Figure 1 Rio Grande Canalization Overview Map

In August 2010, the USIBWC allowed dove hunting on designated USIBWC land along the international stretch of the Rio Grande along the USIBWC Rio Grande Rectification Project in El Paso and Hudspeth Counties, Texas. USIBWC consulted with Texas Parks and Wildlife and the U.S. Department of Homeland Security, U.S. Border Patrol (USBP) to establish the designated hunting areas. Areas within the city limits of El Paso, Texas were not allowed, and border fence markers were used to delineate allowed and restricted areas. The USIBWC made this information available to the public via a press release on August 31, 2010. Hunting is currently prohibited along the RGCP.

1.2 Purpose and Need

In 2012, local hunting groups approached the New Mexico Department of Game and Fish (NMDGF) to request permission to hunt game birds along the Rio Grande corridor upstream of the USIBWC Rio Grande Rectification Project. In the fall of 2012, NMDGF approached the USIBWC with the request to open up USIBWC lands for hunting. USIBWC coordinated with representatives from NMDGF, USBP, U.S. Fish and Wildlife Service (USFWS), and New Mexico State Parks (NMSP) in order to discuss the action. Shells on the ground and bullet holes on federal signs indicate that people are already using USIBWC lands to hunt or shoot firearms, regardless of current prohibitions, and stakeholders felt it would be better to formalize the areas where hunting could be allowed and where hunting should not be allowed. Representatives, through collaborative meetings, collectively identified the potential areas where hunting could be allowed and omitted areas which were not advisable. The consensus areas are shown in Figure 2 and form the basis for the Allowed Hunting Alternative. Because USIBWC allows hunting on other portions of the Rio Grande in the region, and because USIBWC has received the request to permit

hunting in the RGCP, the USIBWC is pursuing this environmental assessment to evaluate impacts of allowing hunting in the designated areas outlined in Figure 2.

1.3 Scope of the Environmental Review

Federal agencies are required to take into consideration the environmental consequences of proposed and alternative actions in the decision-making process under the National Environmental Policy Act (NEPA) of 1969, as amended. The USIBWC regulations for implementing NEPA are specified in *Operational Procedures for Implementing Section 102 of the National Environmental Policy Act of 1969, Other Laws Pertaining to Specifics Aspects of the Environment and Applicable Executive Orders* (46 FR 44083, September 2, 1981). These federal regulations establish both the administrative process and substantive scope of the environmental impact evaluation designed to ensure that deciding authorities have a proper understanding of the potential environmental consequences of a contemplated course of action (USIBWC 2007).

This EA identifies and evaluates the potential environmental consequences that may result from implementation of either the Proposed Action or the No Action alternatives. The following resource areas are analyzed for potential environmental consequences:

- biological resources;
- cultural resources;
- water resources;
- land use;
- community resources (socioeconomics, environmental justice); and
- environmental health issues (air quality, noise).

During the coordination meetings, law enforcement, security, and natural resource stakeholders expressed the need to specifically address the following issues:

- recreational areas (river trails);
- populated areas (cities of Las Cruces, NM and El Paso, TX);
- local and state regulations for hunting;
- environmental regulations (Migratory Bird Treaty Act (MBTA), Endangered Species Act (ESA)), which will be evaluated in biological resources;
- impacts to the floodplain, which is evaluated in land use;
- enforcement for the proposed action, which is evaluated in community resources; and
- providing signs and trash receptacles at targeted locations to reduce debris left by hunters, which is evaluated in land use.

Analyses of environmental resources for the affected environment and environmental consequences are based on a potential impact corridor between the river channel and the existing levee system, on USIBWC lands. Analyses of environmental consequences also include potential indirect impacts to the riparian corridor and the region, depending on the resource and its relationship to the proposed action and alternatives.

2. Alternatives

The USIBWC has identified two alternatives for analysis in this document. The first is the No Action Alternative, where USIBWC would not open up hunting areas in Canalization. The second is the Allowed Hunting Alternative, which would allow the USIBWC to permit game bird hunting in specific designated areas during certain times of the year.

2.1 No Action Alternative

The No Action Alternative would leave current practices as they are, meaning the agency would continue to prohibit hunting on any USIBWC land along the RGCP. The signs indicating "No Hunting!" will remain posted.

Because USIBWC does not have the authority or staff to conduct law enforcement on USIBWC lands, the agency currently has granted jurisdiction of enforcement to the El Paso and Doña Ana County Sheriff. USIBWC currently has no enforcement agreements with the Sierra County Sheriff.

2.2 Allowed Hunting Alternative (Proposed Action)

The Allowed Hunting Alternative would allow hunting on approximately 55 linear miles of river corridor of USIBWC land in 3 designated hunting areas from below Percha Dam to Anthony, New Mexico. The 3 designated areas are listed in Table 1 and shown in Figure 2. The designated areas are shown in greater detail in Appendix A: Maps of Proposed Designated Hunting Areas for the Allowed Hunting Alternative.

Table 1. Designated Hunting Areas

Hunting Area #	Start Landmark	Start Landmark Location Description	End Landmark	End Landmark Location Description	Miles
1.	Tumbleweed Road Bridge	about 1 mile downstream of Percha Dam State Park	State Road 393	Off of Kit Carson Road near the start of Seldon Canyon, about 4 miles downstream of Rincon Bridge. Near Rincon Drain.	About 30 miles
2.	NM 185 Bridge	About 1 mile downstream of Leasburg Dam	Shalem Colony Trail Bridge	County Road 52 in Doña Ana	About 10 miles
3.	Mesilla Dam	At County Road B10 in Mesilla, NM	Hwy 226	West Berino Road about 5 miles north of Anthony, NM	About 15 miles

This EA does not analyze allowing hunting on lands for which USIBWC does not own. This includes state park property (Percha Dam, Leasburg Dam, Broad Canyon, or Mesilla Valley Bosque State Parks). USIBWC does not own, or have Right of Way (ROW) on lands upstream of Percha Dam State Park. Therefore, the hunting zones will be marked starting from the southern tip of Percha Dam State Park and continue downstream. USIBWC does not own, or have ROW, on lands in Leasburg Dam State Park or within Broad Canyon State Park, and these areas are not considered in this EA. USIBWC does have minimal ROW in Mesilla Valley Bosque State Park, but this area is also not considered in this EA. Lastly,

USIBWC does not own, or have ROW, on contiguous land within Seldon Canyon; therefore, hunting within Seldon Canyon is not considered for analysis as part of this EA. USIBWC does not have authority to permit or prohibit hunting within this stretch of river, as most of this land is private or is owned by other federal agencies.

The proposed allowed hunting would be for game birds only. Hunting seasons are published by the USFWS in the Federal Register every August, and the Proposed Regulations Frameworks for 2013-2014 Early Hunting Seasons on Certain Migratory Game Birds was published in the Federal Register on June 28, 2013, with the final expected to be published in August 2013 for the early seasons and in September for the late seasons (NMFGD). Table 2 lists examples of allowable hunting and the estimated corresponding season, but this table is subject to the final regulations published by USFWS, as well as modifications by USIBWC. All USFWS hunting regulations are applicable on USIBWC lands, including bag limits and season dates. In addition, hunters should not leave carcasses on USIBWC property.

Table 2. Avian Types and 2011-2012 Hunting Season¹

Animal Type	Hunting Season
Dove	September 1 - October 9; December 1 - December 31
Teal	September 15 - 23
Duck and American coot	October 24-January 27
Common moorhen	September 29 - December 7
Virginia rail and sora	September - November 23
Common snipe	October 13 - January 27
Dark and light goose	October 13 - January 27

Big game (such as antelope and deer) hunting as well as turkey hunting will not be authorized. Big game and turkey are not expected to be present in the river corridor under existing habitat conditions and limited range.

Hunters must follow appropriate state, local and federal laws. For example, municipal code says that firearms cannot be discharged within city limits. There can also be no hunting within 150 yards from a dwelling or building (NMSA 30-7-4). The pertinent regulations are listed in Appendix B.

USIBWC will post new signs to clearly mark the start and end of each hunting area. Areas with no hunting allowed will retain the currently posted signs prohibiting firearms and hunting on the premise. Hunting signs should include the following text:

- "Please hunt ethically and responsibly"
- "Keep a safe shooting distance from other hunters and government personnel"
- "No hunting within 150 yards of buildings"
- "Pick up spent shells and trash"

¹ 2013 migratory bird hunting season dates will be published by the USFWS in the Federal Register in August 2013 for early seasons and in September for the late seasons.

- "Do not block access on levee roads or floodways"
- "Hunt at your own risk"
- "For more information contact Sheryl Franklin, IBWC O&M Division Engineer, at (915) 832-4741"

USIBWC will also install trash receptacles at accessible locations, such as at bridges. USIBWC field staff will periodically empty the trash and dispose of it at the local landfill.

The Allowed Hunting Alternative will not change any other existing USIBWC regulations. For example, vehicular access to the floodplain and gated levee roads will remain restricted, and vehicles are not allowed to drive up and down the levee slopes. Hunters will hunt at their own risk. Hunters should stay a safe distance away from Government personnel and equipment. Hunters should not block access to levee roads, ramps or the floodway.

In order to enforce the new hunting designated areas and hunting regulations, USIBWC will also develop strong enforcement partnerships in order to enforce the hunting areas and restrictions. The USIBWC enforcement plan will consist of the following actions:

- USIBWC will send an annual letter to Doña Ana and Sierra County Sheriff Departments, or the appropriate enforcement entity, authorizing that department to enforce trespassing/no hunting areas under the Allowed Hunting Alternative, as well as to enforce hunting regulations;
- Annual meetings with Sheriff, NMDGF, USFWS, NMSP, and USBP to review issues which may have arisen the previous year, how to best address the issues, and review areas in which to allow hunting; and
- Approved hunting areas will be posted on the USIBWC website to inform the public.

If USIBWC chooses the Allowed Hunting Alternative, USIBWC proposes to begin the allowed hunting for late seasons in 2013, after this EA is final. The target date for the action to be implemented is November 2013. USIBWC will evaluate the policy as needed and can discontinue the designated hunting areas within the USIBWC ROW if necessary.

2.3 Summary of Environmental Consequences of the Alternatives

Environmental impacts are discussed in detail in Section 3. Table 3 summarizes potential environmental consequences of the No Action and the Allowed Hunting Alternatives.

<i>Table 3. Summary of Environmental Resources Affected by Alternatives</i>		
Environmental Resource	Effects of No Action Alternative	Effects of Allowed Hunting Alternative
Biological Resources A. Wildlife	Not Affected	Hunted Species: Potentially Adversely Affected Non-Hunted Species: Potentially Adversely Affected
B. Threatened & Endangered Species	Not Affected	Not Affected
C. Vegetation	Not Affected	Not Significantly Affected
Cultural Resources	Not Affected	Not Affected

Water Resources		
A. Flood Control & Water Deliveries	Not Affected	Not Affected
B. Water Quality	Not Affected	Not Significantly Affected
Land Use		
A. USIBWC Floodplain	Not Affected	Potentially Adversely Affected
B. Recreation Areas	Not Affected	Official Areas - Not Affected Unofficial Areas - Adversely Affected
Community Resources		
A. Environmental Justice	Not Affected	Not Affected
B. Law Enforcement	Not Affected	Not Significantly Affected
Environmental Health Issues		
A. Air Quality	Not Affected	Not Significantly Affected
B. Noise Pollution	Not Affected	Adversely Affected

2.4 Environmentally Preferable Alternative

The USIBWC recognizes that the alternative with the least potential for environmental impacts is the No Action Alternative.

2.5 Preferred Alternative

At the time of the writing of this draft Environmental Assessment, USIBWC has not selected a preferred alternative. USIBWC decision will be based after public comments are received.

2.6 Alternatives Considered but Not Evaluated

USIBWC considered a third alternative to add the river channel in Seldon Canyon as a fourth designated hunting area. USIBWC does not own or have right of way through Seldon Canyon. USIBWC understands that lands within Seldon Canyon are prime hunting areas for water fowl in the winter. However, this option was not evaluated because of the following reasons: 1) USIBWC is investigating its Statutory Right of Way through Seldon Canyon; 2) If Seldon Canyon were included, it would have to be as a third Alternative because it will likely have impacts to aquatic life since this area provides one of the few winter wet areas during drought. Adding another alternative would require significant rewrite not allow the EA to be finalized before hunting season in 2013. 3) USIBWC would need to work with local landowners on this alternative, because USIBWC would need to ensure that local landowners are in agreement with allowing access through their private property. 4) Enforcement would be extremely difficult in this stretch.

This may be addressed in 2014 as a supplemental environmental assessment if there is sufficient interest to expand the hunting areas.

2.7 Environmental Impact Statement

An environmental impact statement will not be prepared unless additional information which may affect this decision is brought to our attention during the 30-day public comment period.

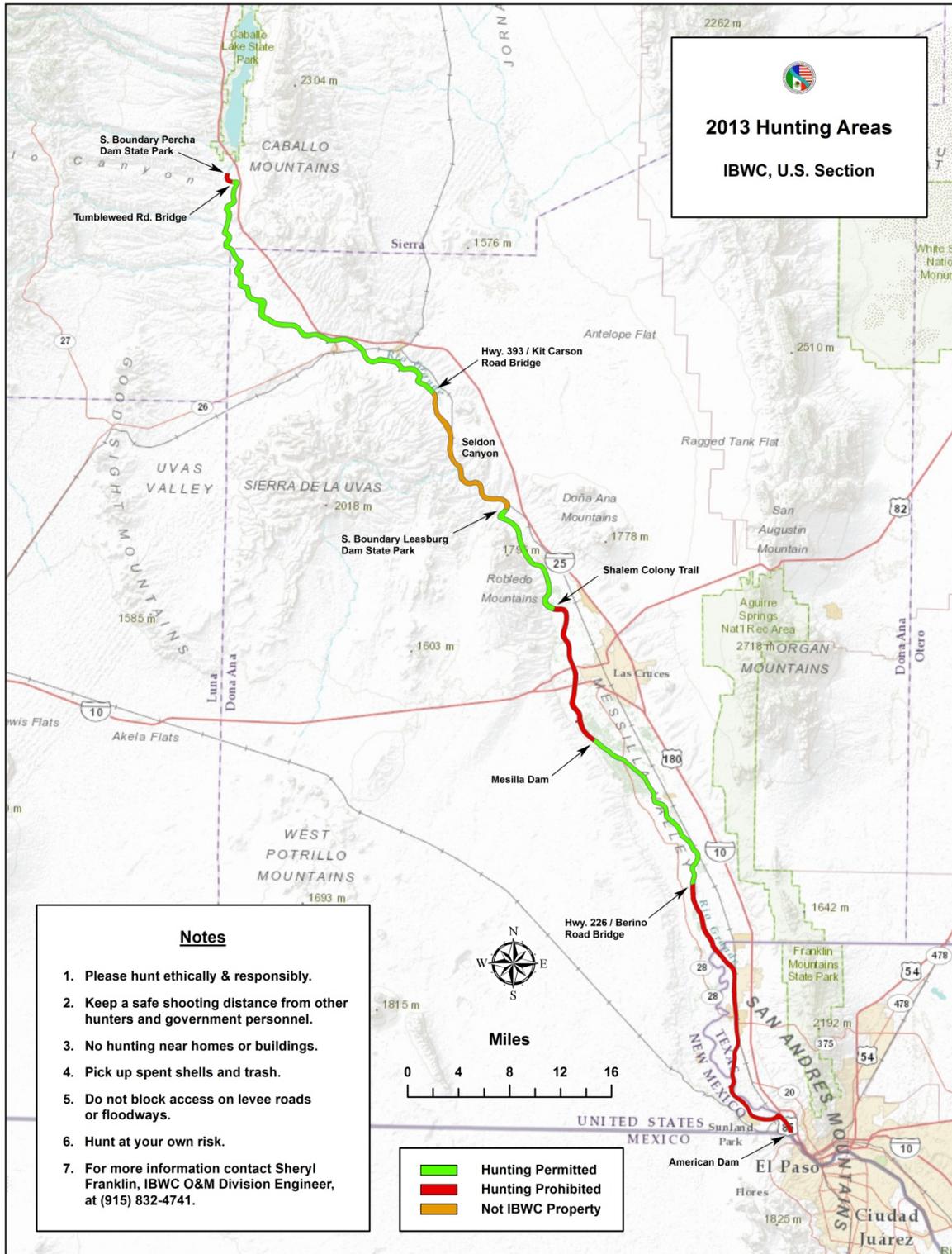


Figure 2 Proposed Designated Hunting Areas for the Allowed Hunting Alternative

3. Current Conditions and Environmental Consequences

This chapter describes the existing environment and the environmental consequences for both alternatives if they were implemented. This chapter is organized by resource, as listed in Section 1.

3.1 Biological Resources

The proposed action must comply with environmental regulations, specifically the Migratory Bird Treaty Act (MBTA) and the Endangered Species Act of 1973, as amended (ESA).

3.1.1 Wildlife

Typical wildlife that could inhabit the project area include black-tailed jackrabbit, desert cottontail, cotton rat, ground squirrels, mourning dove, meadowlark, kestrel, red-tail hawk, mule deer, skunks, burrowing owls, several species of waterfowl, and other non-game animals (USIBWC 2007).

The MBTA protects migratory birds, their parts, nests, and eggs thereof during their nesting season. USFWS has determined that the nesting season for the region including the RGCP area is March 1 through August 15, and may be extended to September 1 if birds are still nesting.

In drought years, such as 2011-2013, the Rio Grande has run mostly dry in winter months when irrigation flows are retained in reservoirs in New Mexico. The dry conditions may limit the wildlife that frequent the river corridor.

No Action Alternative

With the No Action Alternative, management practices will not change, and no impacts to wildlife are anticipated with the No Action Alternative.

Allowed Hunting Alternative

Because the hunting season is during the winter, no impacts are expected for nesting migratory birds protected by the MBTA with the Allowed Hunting Alternative.

Impacts to wildlife from the Allowed Hunting Alternative are anticipated. Hunted species (game birds) will be affected during hunting season. However, the regulations published by USFWS for migratory bird hunting are intended to not adversely affect the species populations. Hunters must abide by the regulations for season dates and bag limits. A properly managed hunting program will not adversely affect wildlife populations. There is the potential for adverse impacts if hunters do not abide by the USFWS regulations.

During dry years, the target species for hunting may not be available in large quantities. Therefore, hunting activities will likely be reduced during drought.

There may be adverse impacts to non-hunted species in the form of noise from fired weapons, which may disrupt other wildlife, such as mammals, that use the river corridor for habitat or foraging.

Non-hunted species should not be adversely impacted with respect to killings because they are not targeted, unless they are killed by accident, by stray bullets, or by improper conduct. However, non-hunted species may be adversely impacted with respect to contamination, since lead is commonly used

in ammunition for hunting game birds (Lahner and Franson 2009; Minnesota DNR 2008). Wildlife may be negatively impacted by lead in bullets. "Wild birds, such as mourning doves, bald eagles, California condors, and loons, can die from the ingestion of one lead shot, bullet fragment, or sinker" (Lahner and Franson 2009).

3.1.2 Threatened and Endangered Species

The ESA protects federally listed species and their habitats. The southwestern willow flycatcher (flycatcher), the least tern, and the yellow-billed cuckoo are breeding residents in the RGCP area during the summer months. The flycatcher nests in the RGCP area from May 15 through approximately mid-August. By the end of August, all of the breeding residents are expected to have migrated south. The Sprague's pipit may live in the RGCP area during the winter months and breeds in the northern U.S. The aplomado falcon may live in the RGCP area all year round. The RGCP "does not support any of the preferred habitat of the aplomado falcon" (SWCA 2011), although the presence of an aplomado falcon was documented in Mesilla Valley Bosque State Park in 2010.

Table 3 lists the federally listed species which are classified as "known to occur" or "may occur" (SWCA 2011). Species classified as "unlikely to occur" were not included in this EA. Additional information about these species can be found in the "Final Biological Assessment: Integrated Land Management for Long-Term River Management of the Rio Grande Canalization Project" (SWCA 2011).

Common Name (Species Name)	Status	County where listing Applies	Range or Habitat Requirements	Potential for Occurrence in RGCP	Potential timeframe for Occurrence
Southwestern Willow Flycatcher	E	Sierra and Doña Ana counties, El Paso County	Associated with moist riparian areas throughout the year. Documented on some RGCP restoration sites.	Known to occur	Breeding resident May 15 to August 15; migrates to tropics
Aplomado falcon (<i>Falco femoralis septentrionalis</i>)	E	Sierra and Doña Ana counties, El Paso County	Documented at Mesilla Valley Bosque State Park in 2010. Associated with open grassland or savannah with scattered trees or shrubs. Experimental population in NM.	Known to occur	Nests March to June. Non-migratory
Least tern (<i>Sterna antillarum</i>)	E	Sierra and Doña Ana counties	Migratory species occurring in North America during the breeding season, when it is associated with water (e.g. lakes, reservoirs, rivers) Documented in the RGCP including at Mesilla	Known to occur	Possible breeding resident May to mid-August
Yellow-billed Cuckoo (<i>Coccyzus americanus</i>)	C	Sierra and Doña Ana counties, El Paso County	Western subspecies nests preferentially in large patches of moist cottonwood-willow woodland, where it prefers high canopy closure for nesting. Documented on some proposed RGCP restoration sites	Known to occur	Breeding resident June to September
Sprague's pipit (<i>Anthus spragueii</i>)	C	Sierra County	Within NM migrates in the northeast and winters in the southwest and occasionally in the southwest. Uses	May occur/ Known to occur	Non-breeding resident in RGCP area September

			grasslands of intermediate height and sparse to intermediate vegetation density; prefers native prairies. Can use pastures and weedy fields or grassy agricultural fields. May have been documented along the RGCP including Mesilla Valley Bosque State Park.		to April
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C - candidate species; E - listed endangered; T - listed threatened

The flycatcher is documented throughout the RGCP, including in the Sunland Park area, but most birds are concentrated between Leasburg Dam upstream to Percha Dam. In August 2012, USFWS issued the USIBWC a Biological and Conference Opinion (USFWS 2012) on potential impacts to the flycatcher by the USIBWC restoration projects and the implementation of the 2009 *Record of Decision (ROD) for River Management Alternatives for the RGCP* (USIBWC 2009). USIBWC is committed to protecting the flycatcher and may consider revising hunting areas and timeframes to protect the flycatcher.

USFWS Ecological Services Division in Albuquerque has determined that areas within the vicinity (1/4 mile) of a nesting territory of the flycatcher should be avoided until after nesting birds and fledglings have dispersed from the area, which depends on the local region, but could be as late as September 15. Nest data from the Middle Rio Grande indicate that only 5% of nests monitored are still in use during the first weeks in August, and only 0.6% are in use by August 17 (USBR 2009). Because flycatchers appear to be dispersed from the area by the end of August, USIBWC has informally consulted with USFWS to adjust the September 15 date to September 1, pending the updated nest monitoring results from the 2013 nesting season in the RGCP. If 2013 nesting data shows that the flycatcher has not dispersed the area after September 1, USIBWC will adjust the timeframe for hunting and will not implement hunting on USIBWC lands until after September 15.

No Action Alternative

With the No Action Alternative, management practices will not change, and no impacts to threatened and endangered species are anticipated with the No Action Alternative.

Allowed Hunting Alternative

The Allowed Hunting Alternative will have no effect on the least tern or the yellow-billed Cuckoo, because these species are only present during the non-hunting season. The flycatcher will also not be affected; however, if 2013 nesting season data show that the flycatcher has not dispersed the region by the end of August, the USIBWC may adjust the beginning of hunting on USIBWC lands to begin after September 15 in order to protect flycatchers which may remain in their breeding areas until that time, as mentioned above.

The Allowed Hunting Alternative may affect, but not likely to adversely affect, the aplomado falcon, because habitat may not be present sufficiently for substantial populations, and because this is not the targeted species for allowed hunting. The Allowed Hunting Alternative also may affect, but not likely to adversely affect, the Sprague's pipit, despite being a winter resident, since this is also not a targeted species for allowed hunting, and because it is a small bird that is not a desirable target for bird hunters.

3.1.2 Vegetation

The RGCP is located in the northern Trans-Pecos region of the Chihuahuan Desert. Climatic conditions throughout the study area are classified as semi-arid continental, characterized by fairly hot summers, mild winters, and short temperate spring and fall seasons (USIBWC 2007). The Trans-Pecos region of the Chihuahuan Desert is historically a mosaic of grasslands and desert shrublands (McMahan, Frye, and Brown 1984). Most of the project area, adjacent to the levees, consists of mixed grass-forblands.

Existing vegetation along the river corridor depends on management practices in that area:

- **Mowed areas:** Much of the levee system floodplain is mowed regularly to ensure design flood capacity. These areas have little vegetation, and what does grow is of poor quality for habitat purposes, limited to non-native plants that grow quickly in disturbed areas.
- **Restoration sites:** In 2010, USIBWC began to set aside areas designated for habitat restoration which would not be mowed, in accordance with the USIBWC's 2009 *Record of Decision (ROD) for River Management Alternatives for the RGCP* (USIBWC 2009). Vegetation in the un-mowed restoration sites is a mix of exotic plants such as saltcedar, Russian thistle, kochia, and bermuda grass, as well as native plants to include native grasses (such as alkali sacaton, saltgrass, and chusa grass), mesquite (honey mesquite and screwbean mesquite), and herbaceous shrubs (such as baccharus, wolfberry, arrowweed, fourwinged saltbush, three-leaf sumac and false indigo). Some areas have yerba mansa, New Mexico Olive, and bulrush. USIBWC has 5 active restoration sites (Crow Canyon A & B upstream of Hatch, Broad Canyon Arroyo in Seldon Canyon, Leasburg Extension Lateral Wasteway #8 in Las Cruces, and Mesilla East across from Mesilla Valley Bosque State Park). Vegetation in the active restoration sites includes tree plantings of coyote willows, Goodding's willows, and cottonwoods.
- **No-Mow Areas:** In 2012, the USIBWC stopped mowing on almost 2,000 additional acres of floodplain targeted for managed grasslands, in accordance with the ROD. Vegetation on these un-mowed areas is much of the same as the un-mowed restoration sites.
- **Areas outside of Levees:** USIBWC owns or has right-of-way on the land adjacent to the river corridor from Percha Dam downstream to the Doña Ana County/Sierra County boundary line, where no levee exists on the east bank. In addition, no levee exists on the west bank from Percha Dam downstream to the Hatch Siphon. USIBWC does not mow these areas which do not have levees, and they have not been mowed in decades. These areas have larger trees, mixed native (cottonwoods, velvet ash trees, and willows) and non-native (Siberian elm, saltcedar, and Russian olive). In addition, these areas have mixed native and non-native vegetation similar to the un-mowed restoration sites and No-Mow Areas.

No Action Alternative

With the No Action Alternative, management practices will not change, and no impacts related to the action are anticipated. Current impacts to vegetation are from existing pedestrian and vehicular traffic in the floodplain, which will not change with the No Action Alternative.

Allowed Hunting Alternative

The Allowed Hunting Alternative may have increased foot traffic and increased vehicular traffic. However, there will be limited ground disturbance other than minimal pedestrian traffic. Vehicular traffic will likely be limited to bridges and other easy access points where the ground is already highly disturbed.

Some people may disregard signs for no vehicles and take their vehicles throughout the floodplain. This is particularly damaging to USIBWC restoration sites, where vehicle traffic may disrupt native plant succession and compact the soil. USIBWC restoration sites are marked with signs with the USIBWC logo that read "Environmental Stewardship Program: Habitat Restoration Area Under Construction" or smaller orange markers that read "Habitat Restoration Area Under Construction." Under this alternative, there will be minimal impacts to USIBWC restoration areas only if hunters respect the designated USIBWC restoration areas and not drive vehicles through these areas.

3.2 Cultural Resources

The USIBWC has conducted extensive evaluations of cultural resources in the RGCP, including evaluations for levee construction work and for habitat restoration work. An extensive archaeological investigation of the RGCP was completed in June 2009, and an architectural report was completed in July 2009, in advance of major improvements to the RGCP flood control features, including proposed new floodwalls and levee construction. Additional cultural resource investigations were conducted for specific construction areas. In addition, in October 2011, TRC completed cultural resource investigations for lands designated as potential habitat restoration sites.

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative will not impact cultural resources.

Allowed Hunting Alternative

USIBWC anticipates that there will be little to no impact on any archaeological, architectural or other cultural resources from the Allowed Hunting Alternative. There will be no ground disturbance other than minimal pedestrian traffic. Pedestrian traffic will likely be limited to bridges and other easy access points where the ground is already highly disturbed. Many of the cultural resources include historical drains, which will not be disturbed with this action.

3.3 Water resources

3.3.1 Flood Control and Water Deliveries

The RGCP was constructed to facilitate compliance with the 1906 Convention between the U.S. and Mexico on the equitable distribution of waters of the Rio Grande, as well as to maintain flood control for Rincon and Mesilla Valleys of New Mexico and the El Paso Valley in Texas.

Project water is stored primarily in Elephant Butte Reservoir. Caballo Reservoir, immediately downstream, is used for flood control and seasonal water storage (SWCA 2011). The normal annual release from the reservoirs, including Mexico's 60,000 acre-foot allotment, totals 790,000 acre-feet. The

regulated flows in the Rio Grande downstream of Elephant Butte Reservoir modify the historical natural hydrograph following a pattern of sustained moderately high irrigation flows during late spring and summer and low flows during fall and winter months, with additional high flows from summer thunderstorms. An average annual hydrograph (U.S. Geological Survey [USGS] Gage at Station 08362500) for the river below Caballo Dam shows that the seasonal peak releases usually occur in June and July. Average monthly discharges range from approximately 48 to 1,895 cfs. The average winter base flow of approximately 107 cfs usually persists from November through February, and average flows during the irrigation season (March–October) are typically 1,318 cfs (SWCA 2011). In a drought year, irrigators receive reductions in their allotments.

The RGCP flood control system was designed to provide protection from a storm of large magnitude with a very low probability of occurrence, the 100-year storm. The flood control levees extend for 57 miles along the west side of the RGCP and 74 miles on the east side, for a combined total of 131 miles. Naturally elevated bluffs and canyon walls contain flood flows along portions of the RGCP that do not have levees. The levees are positioned on average about 750 to 800 feet apart north of Mesilla Dam and 600 feet apart south of Mesilla Dam. The floodway between the levees is generally level or uniformly sloped toward the channel (USIBWC 2007). The levees are in the process of being rehabilitated to meet federal requirements to meet design flood capacity with 3 feet of freeboard.

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative will not impact flood control or water deliveries in the RGCP.

Allowed Hunting Alternative

The Allowed Hunting Alternative does not change management practices regarding flood control and water deliveries, therefore there will be no impact.

3.3.2 Water Quality

Water quality along the RGCP is defined by New Mexico on the basis of individual reaches for which designated uses have been defined. As required by the Clean Water Act Section 303b, states regularly submit to the USEPA an integrated surface water quality report, which provides a summary for each reach, use attainment, and identifies any potential concerns in terms of water quality (USIBWC 2007).

The RGCP segment in New Mexico is contained entirely within Water Quality Standard Assessment Unit NM-2101 (20.6.4.101), that covers the 107-mile main stem reach of the Rio Grande, from one mile below Percha Dam to the international boundary with Mexico. In June 2007, USEPA approved a TMDL for Bacteria within the main stem of the Rio Grande from the international boundary with Mexico upstream to Elephant Butte Dam (USIBWC 2007; NMED 2013). State designated uses for the RGCP reach include: Irrigation, Marginal Warmwater Aquatic Life, Livestock Watering, Wildlife Habitat, Primary Contact and Secondary Contact (NMED 2013; NMAC 2000). In the 2012-2014 surface water quality assessment, the Rio Grande Assessment Unit NM-2101 from one mile below Percha Dam to the International boundary is "Not Supporting" the designated use for primary contact (NMED 2013).

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative will not affect water quality.

Allowed Hunting Alternative

The Allowed Hunting Alternative does not change management practices regarding water use or water resources, therefore no impact to water quality is anticipated. It is unknown if spent shell casings could cause water contamination as they may contain residual lead particles, and the bullets and lead fragments may disperse up to two feet (Minnesota DNR 2008); however, minimal pollutants could be introduced from shell casings or stray bullets, but the quantity would likely not be substantial enough to impact water quality in the Rio Grande, nor reduce the river's ability to meet the designated uses.

3.4 Land use

3.4.1 USIBWC Land Use and Surrounding Lands

Current land use adjacent to the RGCP levee system corridor consists primarily of agriculture (farmlands, orchards, livestock). Some urban centers of commerce and residential areas are predominant in the El Paso and Las Cruces regions (USIBWC 2007). Smaller urban centers in New Mexico include Salem, Hatch, Rincon, Radium Springs, Doña Ana, Vado, Berino, Anthony, Sunland Park and Santa Teresa. Smaller urban centers in Texas include Canutillo, Vinton, and Anthony.

The majority of the USIBWC levee system corridor is currently off limits for public use, with the exception of hike and bike trails, state parks, and other uses from local traffic for accessing farms and residential facilities at specific locations.

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative will not impact land use of the floodway or adjacent lands.

Allowed Hunting Alternative

The Allowed Hunting Alternative does not allow hunting near major municipal areas such as El Paso and Las Cruces. The designated areas are more rural and should not impact smaller urban centers throughout the RGCP. In addition, hunters are required to follow state and municipal hunting regulations, which prohibit firing a weapon within 150 yards of a building or dwelling.

Allowing hunting will increase the trash left behind, principally shell casings. Shell casings are usually harmless and can be made of brass alloys, plastic, or heavy cardboard. It is unknown if the shell casings remaining on the ground for extended periods of time will leave behind contamination. Shells from lead bullets may contain residual lead particles (Lahner and Franson 2009; Minnesota DNR 2008).

Allowing hunting may also increase the foot traffic and vehicular traffic in the designated hunting areas. Hunters are likely to park vehicles in accessible areas and walk to their hunting area so as not to scare the birds away.

Allowing hunting will also allow sport shooters to fire weapons in the area. Sport shooters will likely leave more shells than hunters. Sport shooters will not be concerned about scaring the wildlife and may drive throughout the floodplain. However, sport shooters appear to currently use the floodplain, as is evident with shell casings in certain areas of the project, and it is not expected that the Allowed Hunting Alternative will increase the presence of sport shooters significantly more than those who are currently illegally using USIBWC lands.

However, the Allowed Hunting Alternative Plan includes signage to remind hunters to remove all trash and debris they bring into the area, and USIBWC will supply trash receptacles and periodically empty the receptacles to remove trash and place it in an approved landfill. Hunters should also remove and properly dispose of all parts of hunted species, including feathers and entrails.

3.4.2 Recreational Areas

The USIBWC currently leases about 358 acres of floodway to municipalities, counties, or state government for official recreational areas.

As discussed in Section 2.2, state parks (Leasburg Dam, Percha Dam, Broad Canyon, and Mesilla Valley Bosque State Parks) have been removed from consideration for permissible hunting locations. In addition, all areas with hike and bike trails have also been removed from consideration for permissible hunting locations. These include leases to the City of Las Cruces for La Llorona Park, Anthony Country Club recreational area, El Paso City and County's hike and bike trails, and the City of Sunland Park recreational area.

Other areas throughout the RGCP which are not officially designated as recreational areas still have recreational users such as walkers/joggers, horseback riders, and bikers. Currently, camping and all-terrain vehicle use are prohibited throughout the project.

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative will not impact land use of recreational areas.

Allowed Hunting Alternative

All official recreation areas with leases through the USIBWC have been removed from consideration for permissible hunting locations, therefore there is no impact to these recreational areas from the Allowed Hunting Alternative.

However, areas not officially designated as recreational areas may be adversely impacted. Visitors with concerns about firearms will have to heed the signs indicating which areas are designated hunting areas. The hunting designation may limit recreational users frequenting these areas, particularly during the winter hunting season.

USIBWC, through the ROD, is working on establishing restoration sites, and four of the conceptual sites fall under official recreation areas. USIBWC will work with leasing entities to enhance recreation areas with additional tree plantings and trails. The effects on recreational users on unofficial recreation areas may be mitigated through increased efforts at official recreation areas.

The Allowed Hunting Alternative would allow for other kinds of recreation for hunting and sport shooting. Bird hunting is very popular in the area and would generate different opportunities for recreation along the river.

3.5 Community resources

3.5.1 Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued by President Clinton on February 11, 1994 (USIBWC 2007). The Executive Order requires a federal agency to make "...achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." As such, a proposed action must be evaluated in terms of an adverse effect that:

- Is predominantly borne by a minority population and/or low-income population; or
- Would be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low income population.

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative does not affect environmental justice.

Allowed Hunting Alternative

Large populated areas, including the cities of Las Cruces, NM and El Paso, TX, have been excluded from consideration for permissible hunting locations. Areas designated as hunting areas in the Allowed Hunting Alternative were chosen because they were away from official recreation areas and away from urban areas. Allowed hunting areas are rural in nature. No decision was made based on race or income.

3.5.2 Law Enforcement

USIBWC has created an enforcement plan for the proposed action, as detailed in Section 2.2. All local and state regulations for hunting should be followed.

No Action Alternative

As discussed in Section 1, USIBWC currently has granted enforcement jurisdiction along USIBWC land within Doña Ana County to the Sheriff's Department. There will be no change to current management practices, therefore the No Action Alternative will not impact law enforcement resources.

Allowed Hunting Alternative

The Allowed Hunting Alternative will rely on external law enforcement to a greater extent. These resources are already spread thin within county and municipal areas. The action may have indirect impacts to the availability of law enforcement officers in other needed areas of law enforcement.

3.6 Environmental Health Issues

3.6.1 Air Quality

The Clean Air Act, Title 42, Section 7407 of the U.S. Code, states that Air Quality Control Regions (AQCR) shall be designated in interstate and major intrastate areas as deemed necessary or appropriate by a federal administrator for attainment and maintenance of concentration-based standards called National Ambient Air Quality Standards (NAAQS). The RGCP levee transgresses through AQCR 153. This AQCR includes Doña Ana, Lincoln, Sierra, and Otero Counties in New Mexico, and Brewster, Culbertson, El Paso, Hudspeth, Jeff Davis, and Presidio Counties in Texas (USIBWC 2007). NAAQS standards exist for six criteria pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution, and sulfur dioxide.

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative will not impact air quality.

Allowed Hunting Alternative

Shooting a firearm using ammunition with lead-containing primers or unjacketed lead bullets generates lead dust and fumes. Shooters and anyone else nearby are exposed to these dusts and fumes (DLI 2000). There is limited data available on the measurable quantity of lead dust generated by a shot. There is some literature that indicates that shooting instructors, with high exposure to fired weapons, at outdoor shooting ranges have shown lead exposure via elevated blood lead levels, and that areas with significant firing may have increased air lead levels (Goldberg et al. 1991). However, shooting of firearms at the rate and frequency for significant exposure, such as at firing ranges, is not expected with bird hunting or even sport shooting along the RGCP. The shooter is the most at risk for inhaling the airborne particles. The lead will likely disperse into the atmosphere prior to adversely impacting air quality. Therefore, no significant adverse impacts of air quality are anticipated with the Allowed Hunting Alternative.

3.6.2 Noise Pollution

Noise pollution is defined as unwanted or disturbing sound that either interferes with normal activities such as sleeping, conversation, or disrupts or diminishes one's quality of life (USEPA 2013). Typical outdoor noise sources near the RGCP river corridor include highways, local streets, agriculture equipment, residential and commercial areas (USIBWC 2007).

In 1981, the Occupational Safety and Health Administration (OSHA) implemented rules to require workers to wear hearing protection where workers are exposed to a time weighted average noise level of 85 decibels (dB) or higher over an 8 hour work shift (OSHA 2013). The threshold of pain is considered to be over 140 dB (OSHA 2013).

No Action Alternative

There will be no change to current management practices, therefore the No Action Alternative will not create noise pollution.

Allowed Hunting Alternative

The Allowed Hunting Alternative is expected to generate some noise pollution from the firing of weapons. When fired, firearms, including shotguns, rifles, and pistols, produce noise that ranges from 150 to 170 dB (FreeHearingTest 2013), which is higher than the threshold of pain. This noise pollution may be adverse for nearby residents and livestock. However, because the designated hunting areas are in remote rural areas away from major urban areas and from recreational areas, the overall expected noise pollution will be minimal.

3.7 Unavoidable Adverse Impacts, and Irreversible and Irrecoverable Commitments of Resources

A commitment of resources is irreversible when its direct or indirect impacts limit the future availability of a resource. An irretrievable commitment refers to the use or consumption of resources that is neither renewable nor recoverable for later use by future generations. The commitment of resources refers primarily to the use of nonrenewable resources such as fossil fuels, water, labor, and electricity.

There are no anticipated irreversible and irretrievable commitments of resources in the Allowed Hunting Alternative.

Unavoidable adverse impacts include the minimal noise pollution that would be generated by the Allowed Hunting Alternative. In addition, the public who previously used the proposed designated hunting areas for recreation may now feel unsafe or uncomfortable with the new policy and will no longer recreate in this area. This may be an unavoidable adverse impact.

3.8. Cumulative Impacts

USIBWC has several other projects in the RGCP. The first is the habitat restoration work under the 2009 ROD (USIBWC 2009). Restoration work will include a variety of approaches to land management, including cessation of mowing in designated areas, elimination of grazing leases throughout the project, and habitat restoration activities such as salt cedar extraction, chemical treatment of salt cedar, construction of groundwater monitoring wells, possible construction of irrigation infrastructure, and planting of native trees.

The 2009 ROD also required the USIBWC to prepare an updated River Management Plan for the RGCP. This document is under way and will establish the procedures and management protocols for operating and maintaining the river channel and river floodplain.

Additionally, the USIBWC is completing construction of levee rehabilitation throughout the RGCP (USIBWC 2007). Several projects for levee floodwalls and levees are still in the design phase and construction may not begin until fiscal year 2014; these remaining areas are in Canutillo, Texas, Sunland Park, New Mexico and El Paso, Texas above American Dam. All these areas are south of the proposed hunting areas.

USIBWC does not anticipate any cumulative impacts related to these projects in conjunction with the Allowed Hunting Alternative.

5. Mitigation Measures

The proposed action would not cause significant, adverse, environmental impacts. However, to minimize other minor impacts, the USIBWC would ensure that clear and legible signs are posted as appropriate indicating the extent of designated hunting areas, as discussed in Section 2.2. USIBWC will install trash receptacles and periodically remove the trash. In addition, the USIBWC will ensure proper enforcement with a strong collaborative partnership with local law enforcement entities.

6. List of Preparers and Reviewers

6.1 List of Preparers and Reviewers at USIBWC

Name	Title/Division	Degree	Years Experience	Contributions
Elizabeth Verdecchia	Natural Resources Specialist, Environmental Management Division	M.A.G Applied Geography; B.A. Environmental Science & Engineering	13	Principal author
Sheryl Franklin	Division Chief, Operations and Management Division	M.S. Civil Engineering; B.S. Civil Engineering	20+	Agency coordination, reviews
Erin Baker	Civil Engineer, Operations and Management Division	M.S, Civil Engineering; B.S. Civil Engineering	2	Agency coordination, reviews
Larry Krieger	GIS Specialist, Planning Division	M.S. in GIS	10	Maps
Gilbert Anaya	Division Chief, Environmental Management Division	M.S. Environmental Science	20+	Reviews

6.2 List of Collaborating Entity Reviewers:

- Ray Aaltonen, Captain SW Area Operations, NMDGF, Las Cruces, NM
- Delivan Roper, Special Agent, Office of Law Enforcement, USFWS, Las Cruces, NM
- Cal Baca, Chief, Wildlife Management Division, NMDGF, Santa Fe, NM
- Jan Kirwan, Superintendent, Mesilla Valley Bosque State Park, Mesilla, NM

7. List of Agencies, Organizations, and Persons on Distribution List

Federal Government

Natural Resource Conservation Service
U.S. Army Corps of Engineers - Las Cruces Office
U.S. Bureau of Land Management
U.S. Bureau of Reclamation - El Paso Field Office
U.S. Bureau of Reclamation - Elephant Butte Dam
U.S. Customs and Border Protection - U.S. Border Patrol Santa Teresa Sector
U.S. Environmental Protection Agency - El Paso office
U.S. Fish & Wildlife Service - San Andres National Wildlife Refuge
U.S. Fish & Wildlife Service - New Mexico Ecological Services Division

State Government

New Mexico Department of Cultural Affairs - Historic Preservation Division
New Mexico Department of Game and Fish
New Mexico Department of Transportation
New Mexico Energy, Minerals and Natural Resources Division
New Mexico Environment Department
New Mexico Farm and Livestock Bureau
New Mexico State Parks Division
Interstate Stream Commission
Mesilla Valley Bosque State Park

Local Government

City of Las Cruces
Doña Ana County
Doña Ana County Sheriff
Sierra County
Sierra County Sheriff
Town of Mesilla
Village of Hatch New Mexico

Organizations

Audubon New Mexico
Borderlands Bird Dog Club
Chihuahuan Desert Wildlife Rescue
Citizens Task Force for Open Space
Dona Ana Co. Farm Bureau
Elephant Butte Irrigation District
El Paso County Water Improvement District No. 1
Mesilla Valley Audubon
Native Plant Society of New Mexico
New Mexico Wilderness Alliance
Paso del Norte Watershed Council

Sierra Club

Southwest Environmental Center

World Wildlife Fund

Private or Business

Fletcher Farms, Inc.

Harvey Farms

Kit Carson Farms

Lack Farms Inc.

USIBWC Rio Grande Citizens Forum Board members

Several private citizens who have contacted USIBWC on this issue (names protected)

Elected Officials

Office of Senator Tom Udall

Office of Senator Martin Heinrich

Office of Senator Jose Rodriguez

Media

El Paso Times

The Citizen Newspaper of Hatch

Las Cruces Bulletin

Las Cruces Sun News

Sierra County Sentinel

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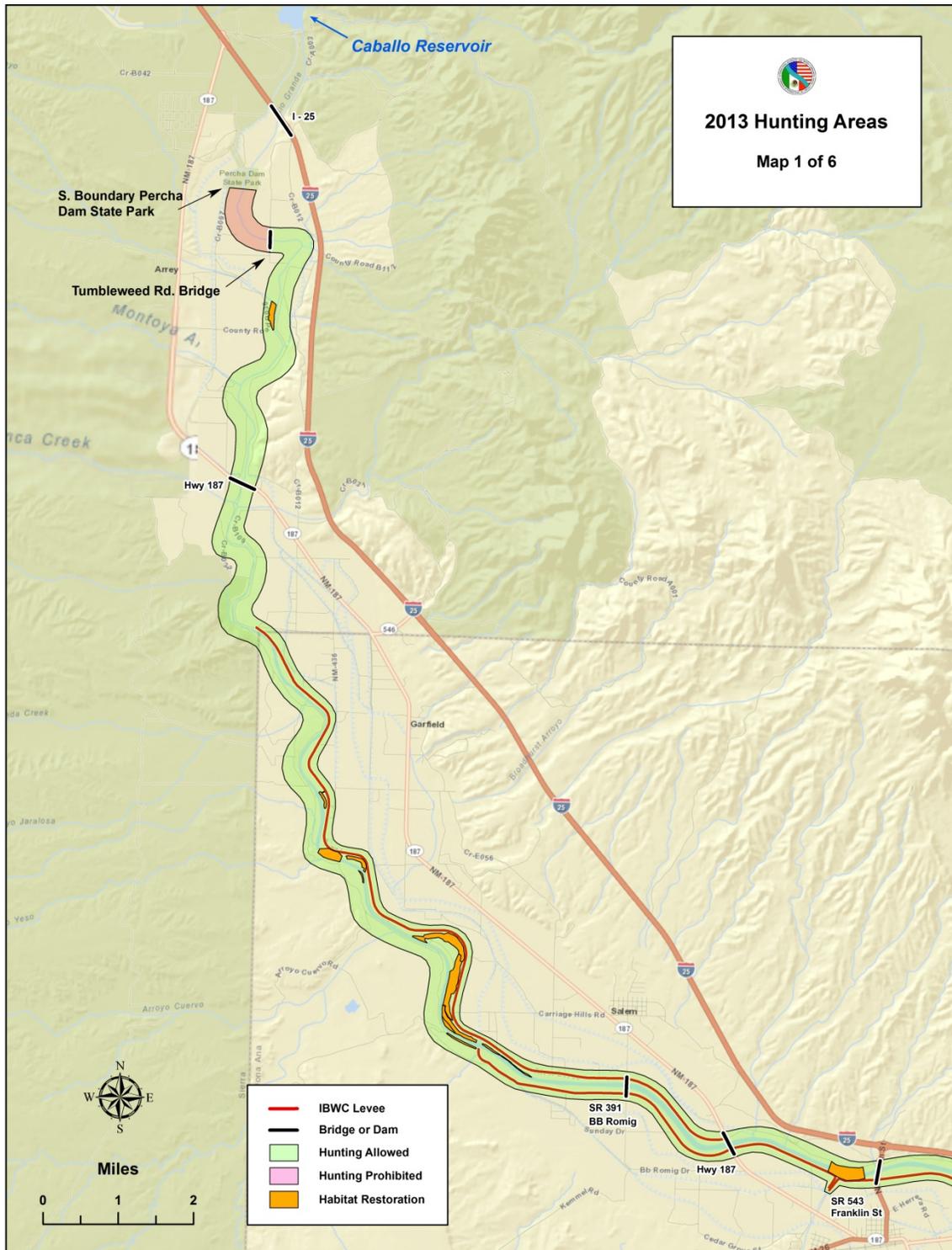
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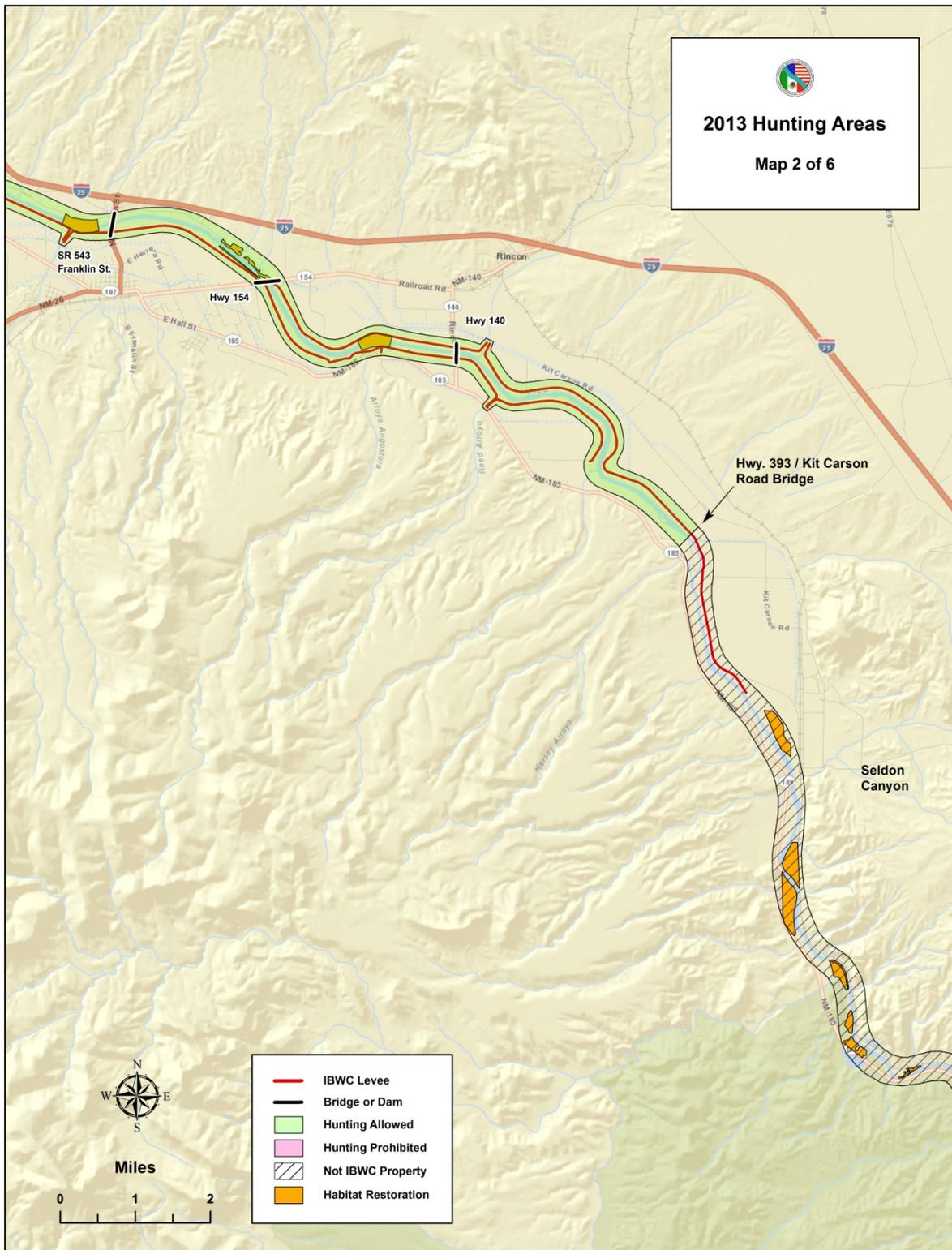
9. Appendices

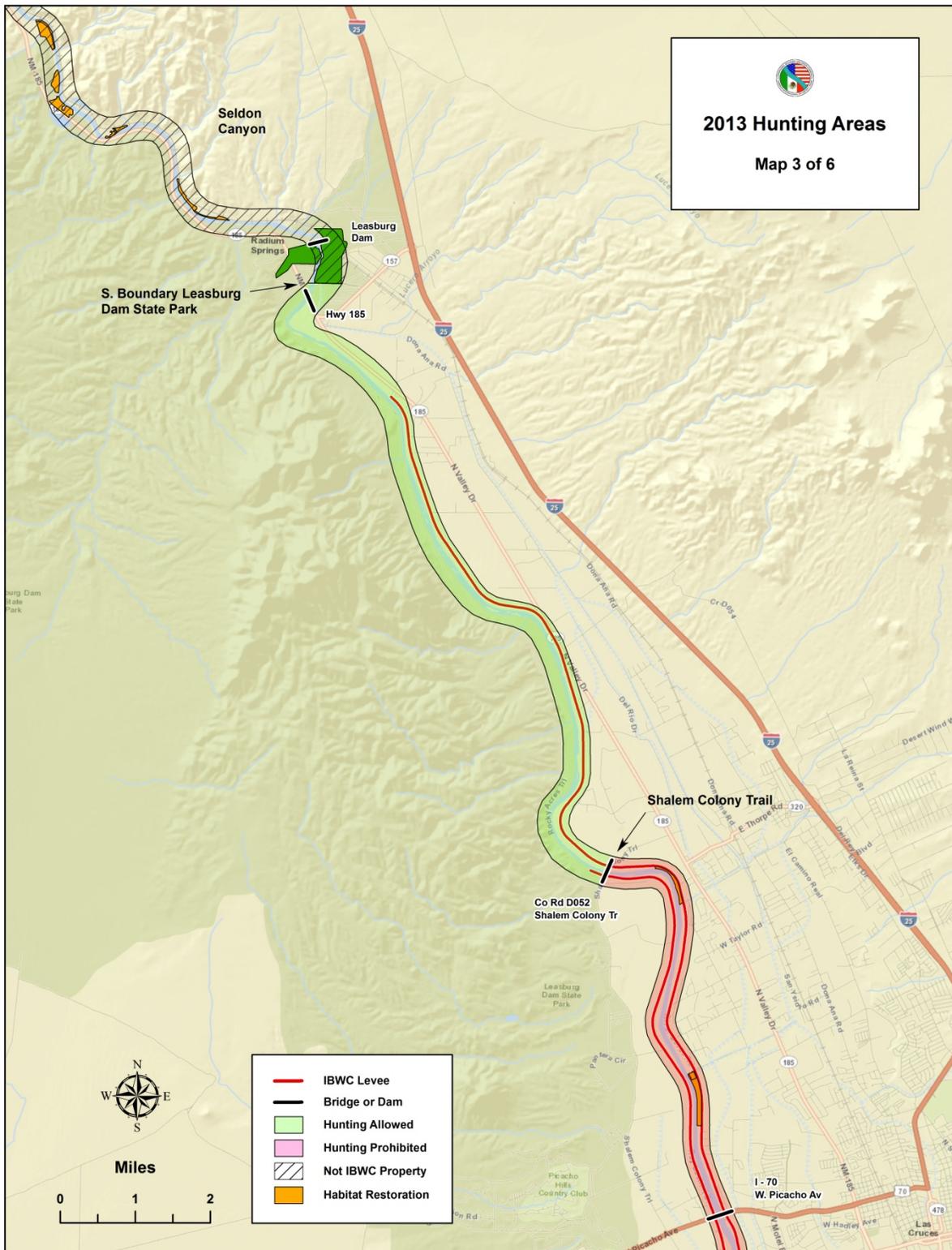
Appendix A: Maps of Proposed Designated Hunting Areas for the Allowed Hunting Alternative

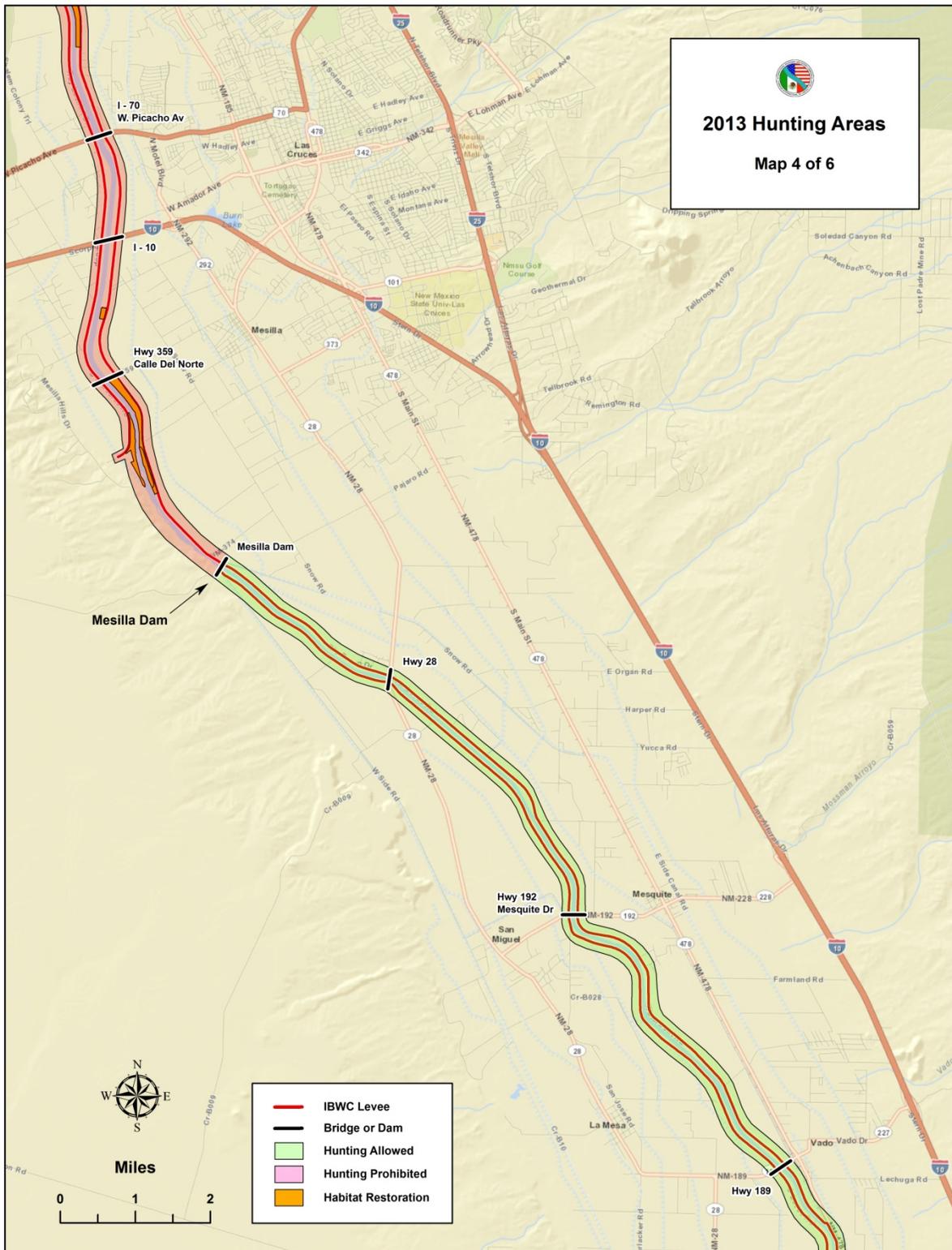
Appendix B: Applicable Local, State, and Federal Hunting Regulations

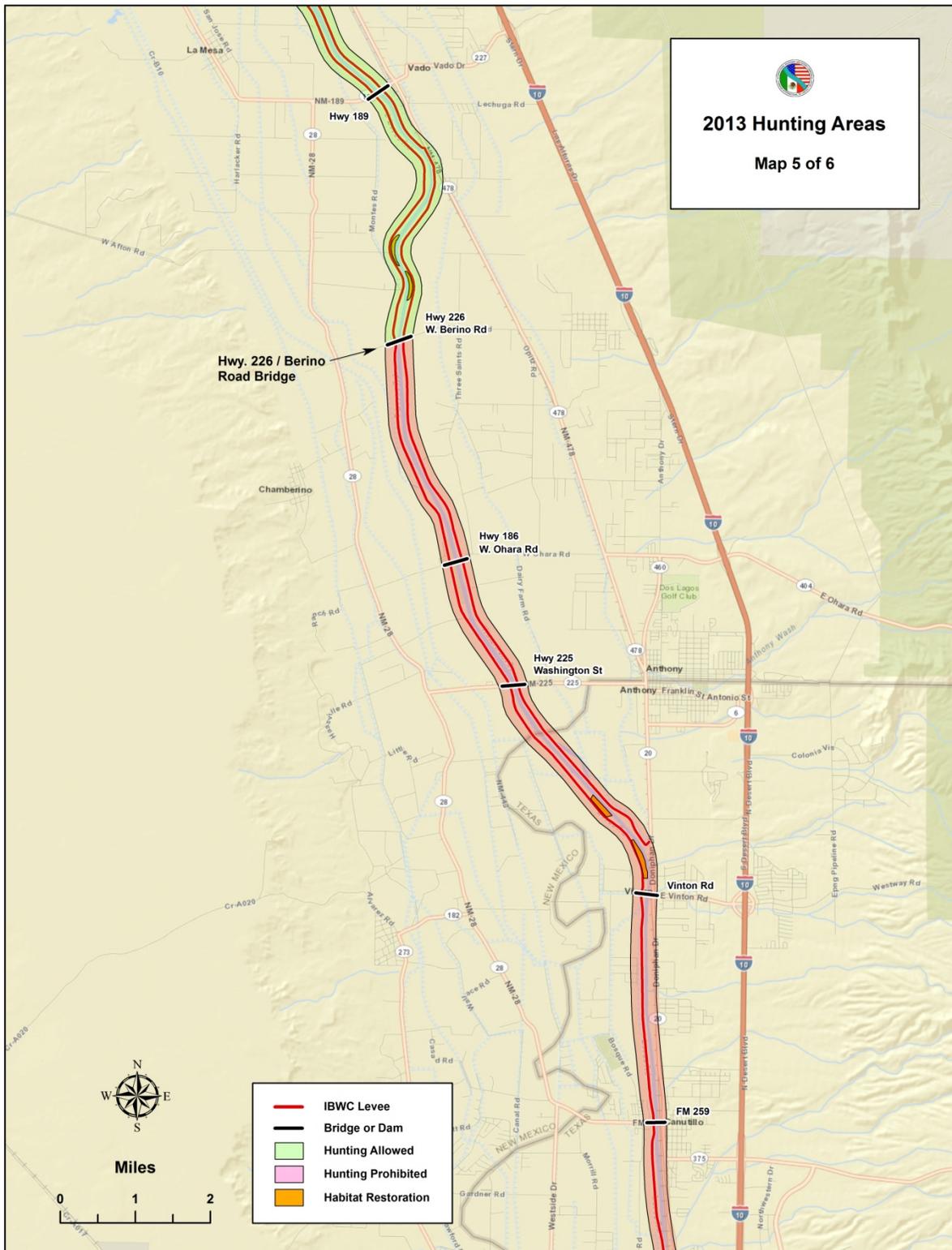
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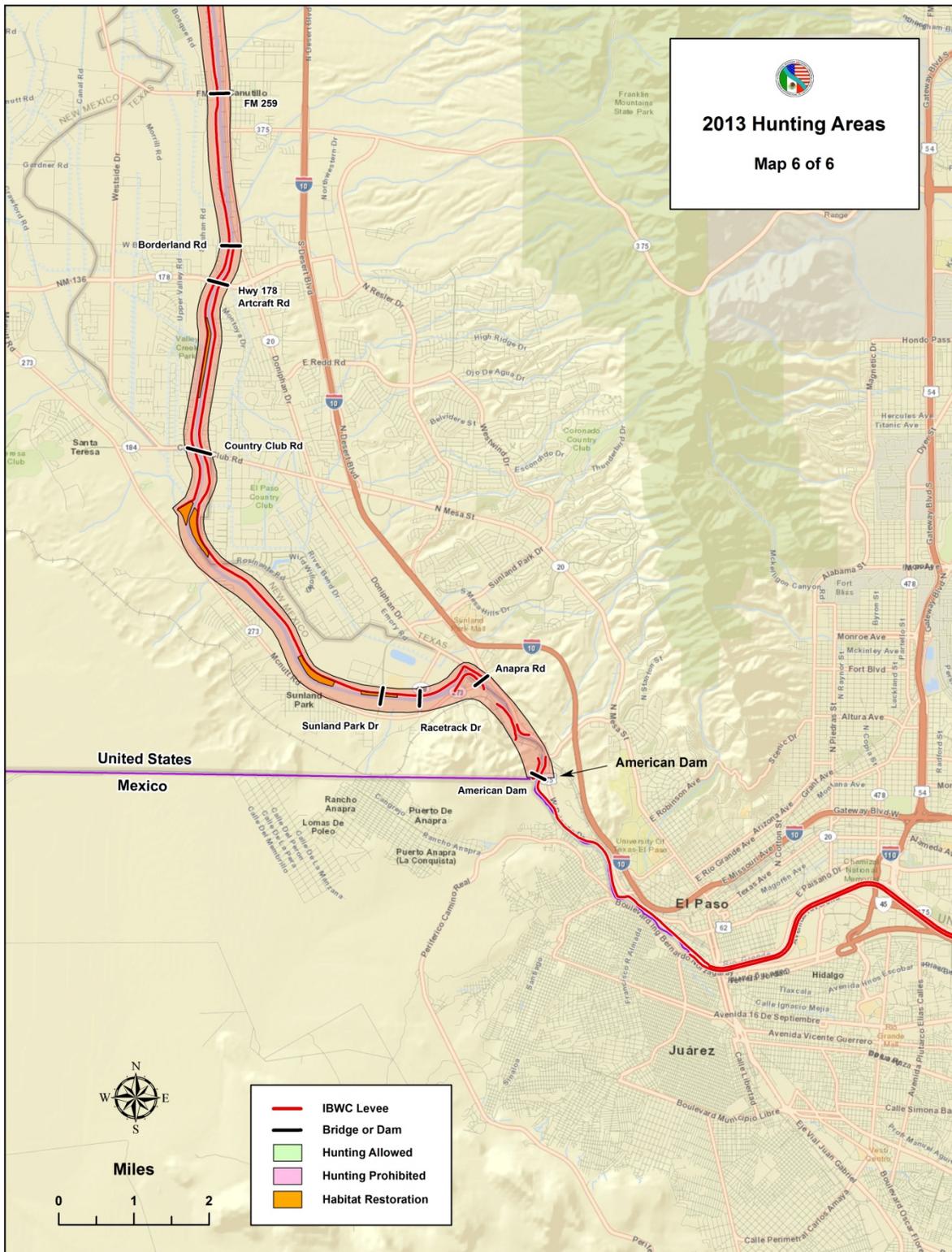












Appendix B: Applicable Local, State, and Federal Hunting Regulations

2012 -2013 Migratory Game Bird Regulations

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.031.0006.htm>

Proposed Rule Migratory Bird Hunting; Supplemental Proposals for Migratory Game Bird Hunting Regulations for the 2013-14 Hunting Season; Notice of Meetings (Federal Register June 14, 2013)

<https://www.federalregister.gov/articles/2013/06/14/2013-14070/migratory-bird-hunting-supplemental-proposals-for-migratory-game-bird-hunting-regulations-for-the>

Manner and Method of Taking

<http://www.nmcpr.state.nm.us/nmac/parts/title19/19.031.0010.htm>

2012 Small Game Rules and Information Booklet

http://issuu.com/nmdgf/docs/2012-13_small_game_rib

New Mexico Statute 30-7-4. Negligent use of a deadly weapon. (1993)

A. Negligent use of a deadly weapon consists of:

- (1) discharging a firearm into any building or vehicle or so as to knowingly endanger a person or his property;
- (2) carrying a firearm while under the influence of an intoxicant or narcotic;
- (3) endangering the safety of another by handling or using a firearm or other deadly weapon in a negligent manner; or
- (4) discharging a firearm within one hundred fifty yards of a dwelling or building, not including abandoned or vacated buildings on public lands during hunting seasons, without the permission of the owner or lessees thereof.

B. The provisions of Paragraphs (1), (3) and (4) of Subsection A of this section shall not apply to a peace officer or other public employee who is required or authorized by law to carry or use a firearm in the course of his employment and who carries, handles, uses or discharges a firearm while lawfully engaged in carrying out the duties of his office or employment.

C. The exceptions from criminal liability provided for in Subsection B of this section shall not preclude or affect civil liability for the same conduct.

Whoever commits negligent use of a deadly weapon is guilty of a petty misdemeanor.

History: 1953 Comp., § 40A-7-3, enacted by Laws 1963, ch. 303, § 7-3; 1977, ch. 266, § 1; 1979, ch. 79, § 1; 1993, ch. 139, § 1.