

## IMPORTANT BIRD AREAS IN NEW MEXICO NOMINATION FORM

### GENERAL INFORMATION

**Site Name:** Corrales Bosque Preserve

**Approx. size:** 662.4 acres

**Nearest town:** Corrales

**County:** Sandoval

**North End: Latitude** 35° 16' 51.39" **Longitude** 106° 35' 56.03"

**South End: Latitude** 35° 11' 53.99" **Longitude** 106° 38' 37.50"

**Approx. elevation (feet):** 5003-5051

**General description of the site:** The Corrales Bosque Preserve (Preserve) is located on the west side of the Rio Grande within the territorial limits of the Village of Corrales. See Appendix A: Map of Corrales and Corrales Bosque Preserve. It is a narrow strip of relatively natural riparian habitat bounded by the Corrales Siphon on the north, the Alameda Boulevard bridge on the south, the western low water line of the Rio Grande on the east, and on the west by, 1) the western right of way line for the Sandoval Lateral Canal wherever the canal runs parallel to the Corrales Riverside Drain, and 2) the western right of way line for the Corrales Riverside Drain wherever the Sandoval Lateral Canal does not run parallel to the Corrales Riverside Drain (Corrales Village Code, Section 11-3). The Corrales Riverside Drain (known as the Clear Ditch) runs the entire length of the Preserve, whereas the Sandoval Lateral Canal enters the Preserve just south of the Romero Road entrance at its north end and departs close to Bernaval Road and Coroval Road at its south end.

Forested riparian habitats that predominate in the Preserve, include: (1) Rio Grande cottonwood (*Populus fremontii* var. *wislizenii*)/coyote willow (*Salix exigua*); (2) Rio Grande cottonwood/New Mexico olive (*Forestiera neomexicana*); (3) Rio Grande cottonwood/Russian olive (*Elaeagnus angustifolia*); and (4) Rio Grande cottonwood/salt cedar (*Tamarix chinensis*). In addition to those mentioned above, the canopy and understory includes Goodding's willow (*Salix gooddingii*), silver buffaloberry (*Shepherdia argentea*), and indigo bush (*Amorpha fruticosa*). The Bosque Restoration project currently being conducted by the U.S. Army Corps of Engineers (USACE) involves the creation of several willow swales and stands in the southern part of the Preserve (just over 11 acres) which, when completed will increase the representation of what could be classified as Rio Grande scrub-shrub wetlands, which in a few other places dominate sandy bars and in-filled channels. The willow swales plantings include coyote willow, Goodding's willow, and *Bacharis* species. Although it does not represent a large component in the present Preserve, there may also be Rio Grande herbaceous wetland communities that elsewhere in the Middle Rio Grande are dominated by common spikerush (*Eleocharis palustris*), water sedge (*Carex aquatilis*), or broad-leaf cattail (*Typha latifolia*).

The Corrales Bosque Preserve also includes substantial shrubby edge habitat located along the edge of the forested habitat by the river or the levee, in forest openings within the Preserve, and along the levee road, the Corrales Riverside Drain and the Sandoval Lateral Canal.

## IBA CRITERIA (check all that apply)

☒ 1. New Mexico Endangered and Threatened Species

☒ 2. Other Partners in Flight Priority Species

☒ 3. Rare, Unique, or Representative Habitat

☐ 4. Significant Concentrations

☐ 2000+ Waterfowl

☐ 2000+ Raptors

☐ 100+ Shorebirds

☐ 25+ Long-legged Waders

☒ Landbirds

☒ Single-species Concentrations

☒ 5. Long-term research and/or monitoring

## ORNITHOLOGICAL IMPORTANCE

List the species for which this site is important, the season(s) for which the site is important, average or maximum numbers (rough estimates are okay), the years on which the count or estimate is based, and sources of information.

Riparian habitat is particularly important for avian communities in the arid Southwest. Although it comprises less than 1% of the landscape, it provides habitat for more bird species at some time during the year than all other vegetation types combined. It provides habitat for breeding species, as well as stopover habitat for migrants, and habitat for winter resident and winter migrant species. The Corrales Bosque Preserve, although certainly not a pristine site, is an excellent example of relatively undisturbed riparian habitat when compared with other nearby riparian habitats along the Rio Grande. The avian community is arguably the largest and most diverse group of terrestrial vertebrates in the bosque, both in terms of numbers of species, and abundance and density of individuals. The Corrales Bosque Preserve Habitat Management Plan (Corrales Bosque Advisory Commission 2009), data from bird point counts conducted by David Krueper (U.S. Fish and Wildlife Service) in the northern portion of the Corrales Bosque Preserve (north of the Harvey Jones Channel), New Mexico Ornithological Society (NMOS) Field Notes database, Hawks Aloft (2011), and other personal observations describe the avian community as follows.

Some of the most abundant birds of interest in the breeding season in mature stands of cottonwood include Black-chinned Hummingbird (*Archilochus alexandri*), Yellow-breasted Chat (*Icteria virens*), and Spotted Towhee (*Pipilo maculatus*), followed in abundance by other species including Bewick's Wren (*Thryomanes bewickii*), Black-headed Grosbeak (*Pheucticus melanocephalus*), Blue Grosbeak (*Passerina caerulea*), and Lesser Goldfinch (*Carduelis psaltria*). Additional common breeding species of interest include Mourning Dove (*Zenaida macroura*), Western Wood-Pewee (*Contopus sordidulus*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Gray Catbird (*Dumetella carolinensis*), Common Yellowthroat (*Geothlypis trichas*), and Summer Tanager (*Piranga rubra*) (see Table 1 at the end of the document for survey details on most of the above-mentioned species). Of the above, Mourning Dove, Bewick's Wren, Spotted Towhee, and Lesser Goldfinch are year-round residents; additional

year-round residents include Mallard (*Anas platyrhynchos*), White-winged Dove (*Zenaida asiatica*), Ladder-backed Woodpecker (*Picoides scalaris*), Downy Woodpecker (*P. pubescens*), Northern Flicker (*Colaptes auratus*), Black Phoebe (*Sayornis nigricans*), Black-capped Chickadee (*Poecile atricapillus*), Bushtit (*Psaltiriparus minimus*), White-breasted Nuthatch (*Sitta carolinensis*), and House Finch (*Carpodacus mexicanus*). The Preserve also supports the highest documented density of nesting Cooper's Hawks (*Accipiter cooperii*) in North America. In open areas, typical nesting species include the Western Kingbird (*Tyrannus verticalis*) and in wetlands, Red-winged Blackbirds (*Agelaius phoeniceus*).

In winter, Canada Goose (*Branta canadensis*), Sandhill Crane (*Grus canadensis*), and American Crow (*Corvus brachyrhynchos*) occur in high numbers in ponds, wetlands, the river channel, the bosque, and farm fields near the bosque. In bosque edge habitat or along ditches and drains in winter Song Sparrow (*Melospiza melodia*), White-crowned Sparrow (*Zonotrichia leucophrys*), Dark-eyed Junco (*Junco hyemalis*), Pine Siskin (*Spinus pinus*), and American Goldfinch (*S. tristis*) are abundant; in some winters American Robin (*Turdus migratorius*), and Cedar Waxwing (*Bombycilla cedrorum*) can be found in large flocks feeding on New Mexican olive and Russian olive fruits. In most years, both Western (*Sialia mexicana*) and Eastern (*Sialia sialis*) Bluebirds can be found wintering at the edge of the bosque, with the Eastern Bluebirds being recent breeding colonizers. Rarer winter species recorded in the same edge habitats include Pacific Wren (*Troglodytes pacificus*), Winter Wren (*T. hiemalis*), American Tree Sparrow (*Spizella arborea*), Field Sparrow (*S. pusilla*), Fox Sparrow (*Passerella iliaca*), White-throated Sparrow (*Zonotrichia albicollis*), Harris's Sparrow (*Z. querula*), and Golden-crowned Sparrow (*Z. atricapilla*) (NMOS Field Notes database).

The Corrales Bosque Preserve is also an important stopover habitat for many migrants that pass through on their ways south and north. Some of the more abundant spring and/or fall migrants include Warbling Vireo (*Vireo gilvus*), Blue-gray Gnatcatcher (*Polioptila caerulea*), Hermit Thrush (*Catharus guttatus*), Orange-crowned Warbler (*Oreothlypis celata*), Virginia's Warbler (*O. virginiae*), MacGillivray's Warbler (*Geothlypis tolmiei*), Yellow-rumped Warbler (*Setophaga coronata*), Wilson's Warbler (*Cardellina pusilla*), and Western Tanager (*Piranga ludoviciana*) (see separate Table 1 for survey details about most of the above-mentioned migrants). In addition, the following migrant species are recorded commonly in lower numbers: Broad-tailed Hummingbird (*Selasphorus platycercus*), Rufous Hummingbird (*S. rufus*), Olive-sided Flycatcher (*Contopus cooperi*), Willow Flycatcher (*Empidonax traillii*), Hammond's Flycatcher (*E. hammondi*), Gray Flycatcher (*E. wrightii*), Dusky Flycatcher (*E. oberholseri*), Cordilleran Flycatcher (*E. occidentalis*), Plumbeous Vireo (*Vireo plumbeus*), House Wren (*Troglodytes aedon*), Nashville Warbler (*Oreothlypis luciae*), Yellow Warbler (*Setophaga petechia*), Green-tailed Towhee (*Pipilo chlorurus*), Chipping Sparrow (*Spizella passerina*), and Lark Sparrow (*Chondestes grammacus*). In addition to these common migrants, the Corrales Bosque Preserve provides migration stopover habitat for a wide range of much rarer species, many of them eastern migrants rarely found as far west as the Rio Grande, including Eastern Phoebe (*Sayornis phoebe*), Eastern Kingbird (*Tyrannus tyrannus*), White-eyed Vireo (*Vireo griseus*), Yellow-throated Vireo (*V. flavifrons*), Philadelphia Vireo (*V. philadelphicus*), Red-eyed Vireo (*V. olivaceus*), Golden-winged Warbler (*Vermivora chrysoptera*), Prothonotary Warbler (*Protonotaria citrea*), Tennessee Warbler (*Oreothlypis peregrina*), Kentucky Warbler (*Geothlypis formosa*), Hooded Warbler (*Setophaga citrina*), Northern Parula (*S. americana*),

Chestnut-sided Warbler (*S. pennsylvanica*), Blackpoll Warbler (*S. striata*), and Rose-breasted Grosbeak (*Pheucticus ludovicianus*) (NMOS Field Notes database).

Although the value of the Corrales Bosque Preserve for New Mexico Threatened and Endangered species is not the strongest argument for its designation as an IBA, it does provide habitat for wintering Bald Eagles (*Haliaeetus leucocephalus*) (New Mexico Threatened) that roost in trees along the Rio Grande and have been observed along Corrales riverbank habitat. In addition, the restoration of willow swales in the preserve should provide available habitat for Southwestern Willow Flycatchers (*Empidonax traillii extimus*) (U.S. and New Mexico Endangered), at the very least during migration and possibly for breeding. A migrant Willow Flycatcher was detected during spring 2011 Hawks Aloft surveys (G. Garber, pers. com.). Migrant Willow Flycatchers have been recorded every year in the northern portion of the preserve during Dave Krueper's point count surveys: single migrants were detected on 17 May 2009, 9 May 2010, and 16 May 2010; two migrants were detected on 8 May 2011 and two on 15 May 2011; three individuals were detected on 18 May 2008 (D. Krueper, unpub. data).

See Table 2 at the end of the document for additional information about many of the species mentioned above.

There is, in fact, scientific evidence of the uniqueness of and biodiversity supported by the Corrales Bosque Preserve. Hawks Aloft, Inc. has been conducting a study along the 79 mile stretch of the Middle Rio Grande bosque between the Bernalillo Bridge and the La Joya Game Management Area. Surveys are conducted on lands managed by the Middle Rio Grande Conservancy District (MRGCD), City of Albuquerque Open Space Division, the Village of Corrales (the Corrales Bosque Preserve), the City of Rio Rancho, and the New Mexico Department of Game and Fish (NMDGF). Preliminary analyses of bird data from 2004-2010 demonstrates the value of the Corrales Bosque Preserve to birds compared with other Middle Rio Grande bosque sites (Fetz 2011; Hawks Aloft 2011). Fetz and Hawks Aloft looked at two measures during both summer and winter – cumulative avian density and avian species richness – comparing values from sites under different management. They suggest that the management strategy used in the Corrales Bosque Preserve is the most beneficial to avifauna of all the management types they studied (Hawks Aloft 2011). During summer the Preserve supported significantly higher densities (858 birds per 100 acres) than all other areas, and significantly higher species richness (22.2 species per transect) than lands managed by NMDGF and the City of Albuquerque. In winter the Corrales Bosque Preserve supported significantly higher species richness (16.7 species per transect) than all other similar management areas studied, and significantly higher densities (778 birds per 100 acres) than all other areas except those managed by NMDGF. NOTE: the reason that the NMDGF lands showed higher densities is that it included marsh habitat and the species found there; the Corrales Bosque Preserve does not contain any significant marsh habitat. Fetz noted that in addition to differences in management strategies, vegetation composition and structure have a significant impact on bird communities and varies substantially among their study sites.



**Table 3. (from Fetz 2011; Hawks Aloft 2011). Comparison of avian densities and species richness by land management unit, 2004-2010**

Land Manager	# Transects	Mean # birds per 100 acres	Species richness
<b>Winter</b>			
Corrales	18	778 <sup>A</sup>	16.7 <sup>A</sup>
NMGF	7	678 <sup>AB</sup>	9.6 <sup>C</sup>
MRGCD	20	556 <sup>B</sup>	13.1 <sup>B</sup>
Albuquerque	16	439 <sup>C</sup>	10.4 <sup>C</sup>
Rio Rancho	3	304 <sup>C</sup>	10.2 <sup>BC</sup>
<b>Summer</b>			
Corrales	18	858 <sup>A</sup>	22.2 <sup>A</sup>
Albuquerque	16	725 <sup>B</sup>	19.3 <sup>B</sup>
MRGCD	20	662 <sup>C</sup>	20.8 <sup>AB</sup>
Rio Rancho	3	552 <sup>D</sup>	19.6 <sup>ABC</sup>
NMGF	7	465 <sup>D</sup>	15.7 <sup>C</sup>
Letters behind numbers indicate Tukey-Kramer test comparisons; values with the same letter are not significantly different; values with different letters are significantly different.			

Another Hawks Aloft project maps and monitors raptor nests in the Middle Rio Grande bosque, from Bernalillo south to Belen. The dominant stick nest builder, and the most numerous nesting raptor in the bosque is the Cooper's Hawk. The study has already shown that the Corrales Bosque Preserve supports nearly twice the number of active Cooper's Hawk nests as other areas in the study. This nesting density is higher than that reported anywhere else in North America.

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**Audubon Chapter or Other Affiliation:** Corrales Bosque Advisory Commission; New Mexico Ornithological Society; Central New Mexico Audubon Society

## **HABITAT AND LAND USE**

**Major Habitat Types:** Please indicate by % of the total area, or with P for Primary (>50%) and S for Secondary (<50%).

☐ Chihuahuan Desert Grassland

☐ Plains and Mesa Grassland

☐ Wet Meadow

☐ Alpine Tundra

☒ Southwest Riparian Woodland

- ☐ Middle Elevation Riparian Woodland  
☐ High Elevation Riparian Woodland  
☐ Non-riparian Wetlands (Ponds, Marshes, Playas)  
☐ Chihuahuan Desert Shrub\*  
☐ Plains-Mesa Sand Shrub\*  
☐ Great Basin Desert Shrub\*  
☐ Montane Shrub (contains arroyo/dry wash areas)  
☐ Madrean Pine-Oak Woodland  
☐ Pinyon-Juniper Woodland  
☐ Ponderosa Pine Forest  
☐ Mixed Conifer Forest  
☐ Spruce-Fir Forest  
☐ Cliff/Rock/Cave  
☐ Urban/Agriculture  
☐ S Other(specify) As described elsewhere, willow swales, grassy openings, and riparian scrub/shrub within riparian area

**Major Land Uses:** Please indicate by % of total usage, or with P for Primary (>50%) and S for secondary (<50%)

- ☐ P Nature and Wildlife Conservation  
☐ S\* Hunting/Fishing (\* *Fishing only, no hunting*)  
☐ S Other Recreation or Tourism  
☐ S\*\*Agriculture (\*\* *There is no agriculture within the Preserve, but the Clear Ditch, the Sandoval Lateral, and the levee are within the boundaries of the Preserve and these irrigation ditches provide flood control, drainage, and irrigation water to agriculture in the surrounding area.*)  
☐ Forestry  
☐ Water Supply  
☐ Utility/Right-of-way  
☐ Suburban/Residential  
☐ Urban/Commercial  
☐ S Research  
☐ S Undeveloped  
☐ Other(specify) \_\_\_\_\_

**Land Ownership/Management:** check all that apply:

☒ State ☐ Federal ☒ Municipal ☐ Private

The Middle Rio Grande Conservancy District (MRGCD) has ultimate management authority over the land, and maintains the levees, ditches, and drains in the Corrales Bosque Preserve. The Village of Corrales is responsible for the management of the Corrales Bosque Preserve as a wildlife sanctuary pursuant to the 1997 Joint Powers Resolution between the Village and MRGCD. Consistent with that Resolution, the Village must not interfere with MRGCD's maintenance and operation of the irrigation ditches and flood control drains within the Preserve, and should avoid actions that could negatively impact the flood control functions of the levees

and drains. The USACE also has responsibility for flood control on the Rio Grande, especially the construction of the levees. The levees in Corrales have been greatly improved since the 1930's, especially over the past decade. The USACE also helps frequently with maintenance issues within the Bosque.

## CONSERVATION AND OTHER

Primary Conservation Issues: Please note Serious (S), Minor (M), and Potential (P) threats to the site

S Invasive or Non-native Plants

     Introduced Animals

     Cowbird Parasitism

     Predators

     Pollution

S Habitat Conservation

     Development

M Disturbance to Birds or Habitat

S Hydrologic Changes

S Other(specify): Fire Prevention/Fire Control/Fuel Reduction

S Other(specify): Habitat Restoration

S Other (specify): Monitoring

Describe primary conservation issues, their seriousness, and any steps being taken to address them:

**Invasive/Non-native Plants** – As mentioned above, several exotic plant species are found in various concentrations throughout the Corrales Bosque Preserve – Russian olive, salt cedar, Siberian elm (*Ulmus pumila*), tree of heaven (*Ailanthus altissima*), ravenna grass (*Saccharum ravennae*), etc. Among the management strategies in the Habitat Management Plan are (1) Control of Russian olive, recognizing however that this species provides valuable food for animals and birds, particularly during the winter months (Hawks Aloft 2011); and (2) Containment and control of other non-native plant species such as Siberian elm, salt cedar, and ravenna grass. Over the years since the establishment of the Preserve, there have been various efforts to control Russian olive and salt cedar, primarily by cutting and treating with herbicide. A major component of the current restoration project being conducted by USACE is the re-cutting and retreatment of these exotic species in the southern part of the Preserve. This is part of larger efforts to establish several willow swales and reestablish native trees, shrubs and grasses in the same portion of the Preserve. In addition, the project has removed a large concentration of ravenna grass that is to be replaced by another willow stand. The Village also works with the NM State Forestry program to accomplish re-cutting and retreatment with herbicides of exotics in other parts of the Preserve, and acknowledges that, in collaboration with MRGCD, it is responsible for long-term maintenance of the exotic retreatment program.

**Habitat Conservation** – The Village of Corrales declared the Corrales Bosque a Protected Area in 1978, passing an ordinance banning unauthorized vehicle use in the bosque in 1979. In 1980 the Village adopted a Resolution declaring the Corrales Bosque a wildlife preserve, and

established the Corrales Bosque Advisory Commission (CBAC) to advise the Village Council. The Bosque Ecosystem Preservation Contract that the Village signed with The Nature Conservancy in 1984 was instrumental in securing the boundaries and entrances of the Preserve against vehicular access and other unlawful activities such as wood-cutting. The Village committed its local police powers to enforce regulations in the Bosque. The Nature Conservancy undertook a fundraising campaign that established an interest-bearing account that provides funds each year that have historically been used for the maintenance of gates and signage. In 1985 the Village adopted the Corrales Bosque Preserve Protection Plan, 1985, and villagers established The Friends of the Corrales Bosque. The Corrales Bosque Preserve was dedicated in 1986. The mission of the Preserve is to “*preserve and protect the natural and native conditions, habitat, and wildlife in the Preserve in order to assure that an increasing human population does not adversely affect or otherwise change the Rio Grande bosque within the village, leaving no areas preserved and protected in their natural condition*”. Over the years the Village of Corrales has adopted numerous Resolutions establishing policy about appropriate and inappropriate activities in the Preserve. In 1997 the Village adopted the Joint Powers Resolution between the Village of Corrales and the Middle Rio Grande Conservancy District (MRGCD). The Joint Powers Resolution recognizes that the MRGCD has ultimate management authority over the land, and the Village of Corrales is responsible for the management of the Corrales Bosque Preserve as a wildlife sanctuary. Most recently, the CBAC has written a Corrales Bosque Preserve Habitat Management Plan [Management Plan]– April 2009 – that has been approved by the Village Council and presented to MRGCD. The Management Plan (Corrales Bosque Advisory Commission 2009) provides the guidance for managing the Corrales Bosque Preserve.

**Hydrologic Changes:** This is listed as a serious conservation issue in a historical context. Prior to substantial human alteration, the riparian floodplain in this region was characterized by a braided river that meandered laterally within the 4-6 km wide floodplain. It was bordered by a mixture of cottonwood and willow stands interspersed with grassy meadows, ponds, small lakes, and marshes. Historically, the Middle Rio Grande flooded as a result of spring snowmelt in the northern mountains and late summer monsoons. In a natural riparian system, flood flows are an important factor in affecting the geography of the river (through deposit and removal of sediment, floodplain, bank, and river bottom scouring, and channel realignment) as well as biological processes, plant and animal distribution, and community composition. Natural cyclical hydrological disturbances were important drivers of riparian and floodplain processes and determined the riparian ecosystems that were found in the floodplain. Historical overbank flooding, scouring flows, and the movement of the river channel maintained a dynamic floodplain ecosystem that supported high biodiversity in dynamic balance – a patchwork of forest, open meadows, wetlands, and river channels that changed every few years or decades. These hydrologic dynamics were particularly important for cottonwood and willow recruitment. The fluvial action of the river continuously disturbed flow channels, created wetlands, cleared out forest debris and leaf litter or buried it under new layers of sediment, recharged groundwater across the floodplain, and facilitated the reestablishment of young cottonwoods. Historical human impacts were associated with clearing of floodplain vegetation for agriculture, fuel and building materials, diversion of water for irrigation, and grazing by domestic livestock. Much more intensive human impacts in the 20th century included: (1) flood control structures such as Cochiti Dam, and the levees, and jetty jacks; (2) draining of wetlands for both agriculture and flood control through methods such as drainage canals; and (3) introduction of exotic plants for

ornamental and erosion control purposes. All of these human activities have contributed to substantial changes in the Middle Rio Grande bosque and the Corrales Bosque Preserve. The Preserve has not experienced the dynamics of a natural river system for many decades. The fragility of the remaining cottonwood forest is due to increasing control over flooding of the Rio Grande, which has resulted in channelized flow at all seasons of the year and prevention of overbank flooding. Although the river periodically floods the area between the levees and occasionally produces some overbank flooding, the level of water release is restricted so as to protect the integrity of the levees and therefore the magnitude, as well as timing and duration, are not suitable for germination and establishment of native seedlings. For the most part, these larger changes are not within the control of the Village of Corrales. However, the Management Plan does encourage the exploration of creative ways to get more water back into the bosque (e.g., through overbank flooding, diversions of other water sources, etc.).

**Fire Prevention/Fire Control/Fuel Reduction** – High intensity fires and severe fire effects threaten both the Corrales Bosque Preserve and the homes of Corraleños located in and near the bosque. Over the last three years, several wildfires have occurred in the Preserve but fortunately have been contained by the fire department. For this reason, fire prevention and control, and fuel reduction activities are an important conservation issue. Addressing these issues in the context of a nature preserve involves communication among the Village government, the Corrales Bosque Advisory Commission, the police and fire departments, the citizens of Corrales, and experts in riparian ecology and fire ecology. In the past, fuel reduction efforts in the Preserve, involving removal of dead and down wood and native and exotic thickets have not always been conducted as the Village had hoped. The current Management Plan recommends that fuel reduction projects be informed by scientific experts on fire ecology and effects on wildlife. Monitoring and research being conducted by Hawks Aloft (Hawks Aloft 2011; Brand et al. 2013) is providing valuable information about the positive and negative effects of fire and of activities such as forest thinning associated with fuel reduction on the avian community in the bosque. During times of high fire risk (e.g., high winds, 4<sup>th</sup> of July, extended drought), the Preserve is closed to public access by the authority of the Corrales Fire Chief and the Mayor, in consultation with the CBAC and MRGCD. During these closures, the CBAC and the Fire Department have established volunteer teams of Corrales citizens who patrol the bosque, along with the fire and police departments, to increase presence in the Preserve. As part of the Corrales Bosque Preserve Habitat Management Plan, the CBAC, in collaboration with the Corrales Fire Department, has developed a draft Corrales Bosque Wildfire Risk Mitigation Comprehensive Strategy that will develop and map access points and shaded fuel breaks, and develop strategies, contingencies, and public awareness efforts regarding suppression of fires in the Preserve under different weather and environmental conditions. Initiated in 2011, a series of shaded fuel breaks are being created in the bosque; a shaded fuel break retains a cottonwood overstory but removes much of the understory ladder fuels, providing fuel breaks required by fire fighters. Consultation between the Village Council and CBAC, as well as Hawks Aloft and other interested parties, continues regarding these fuel breaks. See Appendix B: Maps of Shaded Fuel Break locations (existing and planned).

**Habitat Restoration** – The Corrales Bosque, although a relatively unique example of cottonwood gallery forest on the Middle Rio Grande, has not experienced the dynamics of a natural riparian floodplain for many decades. The Corrales Bosque Preserve Habitat

Management Plan recognizes that some restoration of the Preserve is required (e.g. removing non-native species and some of the dead and down wood). Certain habitat types also present opportunities for restoration, most notably cottonwood forest regeneration along with native shrubs and grass, and the re-creation of wetlands.

The most current habitat restoration in the Preserve is associated with a larger restoration project being conducted by the USACE. USACE has initiated a project to restore 916 acres of the Middle Rio Grande bosque by (1) improving hydrologic function by constructing high-flow channels, back water channels, willow swales, and wetlands, and (2) restoring native vegetation and habitat by removing jetty jacks, exotic species, reducing fuel loads, and restoring riparian gallery forest (bosque). The Proposed Action Area includes the Corrales Bosque Preserve, with efforts focused in the southern part of the Preserve. The main focuses of the project in the Preserve have been on directed re-thinning and re-treatment of exotic plants, creation of willow stands and swales, treatment and removal of ravenna grass infestation, and planting of native trees, shrubs, and grasses. See Appendix C: Maps of USACE restoration sites. In addition to the potential habitat for Southwest Willow Flycatcher mentioned above, it is expected that when vegetation in the restored area has matured, this will also provide valuable habitat to other wetland obligate species. Hawks Aloft surveys in 2012 detected probable breeding of Spotted Sandpiper (*Actitis macularius*) within one of the new willow swales. The Corrales Village Council, the CBAC, and other interested Corrales citizens have been actively involved in the USACE planning and assessment process. The CBAC has established the Bosque Restoration Project Monitors, made up of Corrales volunteers who assist in monitoring the project's progress in the bosque and making sure that what we want done happens, and what we don't want to happen does not. The restoration activities are to be conducted in a way that is consistent with our Corrales Bosque Preserve Habitat Management Plan.

**Monitoring:** The Preserve Management Plan emphasizes the importance of surveying, mapping and monitoring vegetation, wildlife, and groundwater within the Preserve to inform management decisions. The most comprehensive historical data on the avian community can be found in Hink and Ohmart (1984), which surveyed the entire middle reach of the Rio Grande, including the Corrales Bosque Preserve. The detailed bird census data from the original Hink and Ohmart work is being compiled and analyzed with funding support from the USACE, for comparison with recent data. These data analyses/comparisons are expected to be available in the near future. When they are, the information will be valuable in informing Preserve management activities. With funding from USACE since 2004, Hawks Aloft has established ongoing, long-term monitoring in the Middle Rio Grande, including the Corrales Bosque Preserve, which is the first comprehensive replication of the avian and vegetative portions of the Hink and Ohmart study; ongoing funding is committed at least through 2016. The project is sampling avian abundance (total number of individual birds) and species richness (total number of bird species) relative to vegetation community and structure types within the Middle Rio Grande. These long-term data will document changes in vegetation and avian communities over the length of the study, and provide baseline data for comparisons with future studies. The data will also be used to document changes since the early 1980's when the Hink and Ohmart study was conducted. Of the 64 transects established within this reach of the Rio Grande, 18 transects are located in the Corrales Bosque Preserve. See Appendix D: Maps of Hawks Aloft survey transect locations.

Some of the preliminary results from this long-term study are presented above in Table 3 (Fetz 2011; Hawks Aloft 2011).

**Disturbance to birds or habitats:** The primary means of addressing issues related to habitat or bird disturbance is in the designation of this site as a nature preserve. Unauthorized motorized vehicles are not permitted, and dogs were required to be on leash in the preserve. In addition, the Corrales Bosque Advisory Commission works with all entities conducting work or maintenance in the preserve to ensure that the requirements of the Migratory Bird Treaty Act are met, precluding disturbing activities in the preserve during the avian breeding season.

**Other Resources:** In addition to, and because it is a nature preserve, the Corrales Bosque Preserve offers many non-consumptive recreational values. It is a place for hiking, jogging, bicycling, horseback riding, birding, fishing, photography, and nature study and appreciation.

**LOCAL GROUPS WITH AN INTEREST IN THIS SITE WHO HAVE EXPRESSED SUPPORT FOR THE IBA NOMINATION:**

Corrales Bosque Advisory Commission  
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Middle Grande Conservancy District  
Subhas Shah, Chief Engineer  
Yasmeen Najmi, Planning Specialist  
Adrian Oglesby, Vice-Chair, MRGCD Board of Directors  
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Albuquerque, NM 87103  
505-247-0234  
[yasmeen@mrgcd.us](mailto:yasmeen@mrgcd.us)

#### **Land Owner/Manager Contacts:**

**Name/Group:** Village of Corrales, Mayor Phil Gasteyer and Village Council  
**Address:** 4324 Corrales Road  
**City:** Corrales **State:** NM **Zip** 87048  
**Phone:** 505-897-0502  
Presented to Corrales Village Council 18 June 2013  
Approved by Corrales Village Council 23 July 2013  
See Appendix E: Corrales Village Council Minutes (pages regarding approval of IBA nomination)  
Permission? YES



**Name/Group:** Middle Rio Grande Conservancy District, Subhas Shah, Chief Engineer

**Address:** P.O. Box 581

**City:** Albuquerque **State:** NM **Zip:** 87103

**Phone:** 505-247-0234

Presented to MRGCD Board of Directors 23 September 2013

Resolution supporting the Corrales Bosque Preserve IBA nomination approved 14 October 2013

See Appendix F: MRGCD Resolution in support of IBA nomination

Permission? YES

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Table 1. Dave Krueper Point Count Surveys (2008-2011) Corrales Bosque Preserve - North End *				
Species	Avg # Recorded/Point	Calculation Month(s)	Explanation	Conservation Status**
<b>Year-round Residents</b>	The month(s) selected for calculating numbers of these resident species depends on their natural history and when they are most detectable; the range throughout this table represents the range in maximum average number/point across years for the range of months indicated			
Cooper's Hawk	0.27 - 0.36	April - early May	Because this species nests early, late May records may already include young of the year; NOTE: these surveys do not represent this species as well as the indepth raptor surveys conducted by Hawks Aloft	
Ladder-backed Woodpecker	0.09 - 0.82	April		
Downy Woodpecker	0.18 - 0.82	April		
Black Phoebe	0.09 - 0.36	June	NOTE: these values are for the breeding season; although this species is a year-round resident, not all individuals stay in the winter (so those numbers are lower), and there are sometimes more in spring/fall as birds migrate through to go further north	
White-breasted Nuthatch	0.91 - 1.36	April		
Bewick's Wren	1.09 - 2.18	April - May		
Spotted Towhee	3.00 - 4.18	April - May		
Lesser Goldfinch	2.55 - 2.64	July - early Sept	NOTE: This species breeds very late (Aug - Oct) and therefore later times were used for numbers; BUT there are only 2 years with July and Sept data (2008 and 2009) and one year with August data (2008)	
<b>Summer Breeders (Migrants)</b>	With one exception, summer breeder numbers were taken from June when any migrants moving through to go further north have left, and before numbers increase with possible young of the year from local breeders; maximum avg/pt is used when there are two dates in the reference month.			
Black-chinned Hummingbird	3.36 - 3.82	June		NMACP priority SC2
Western Wood-Pewee	0.18 - 0.91	June		
Ash-throated Flycatcher	0.73 - 1.18	May	This species is very vocal when it first arrives but as soon as it is nesting, it becomes VERY quiet and difficult to detect.	
Gray Catbird	0.09 - 0.64	June		
Common Yellowthroat	0.45 - 0.82	June		
Yellow-breasted Chat	2.45 - 3.55	June		

Species	Avg # Recorded/Point	Calculation Month(s)	Explanation	Conservation Status**
Summer Tanager	0.27 - 0.64	June		NMACP priority BC2
Black-headed Grosbeak	1.82 - 2.18	June		
Blue Grosbeak	0.27 - 1.18	June		
<b>Migrants (through in spring/fall)</b>	For many migrant species the date that they passed through the area varied among years, so the maximum avg number/pt for each year was selected for the time period indicated; unless designated otherwise (e.g. "late April") the maximum avg number/pt for a month was used when there were two dates for that month; there were only 2 years with fall data (2008-2009) and in some cases birds were detected in fall migration as well (indicated following a double hash mark //)			
Warbling Vireo	0.45 - 1.36	late May		IWJV - NM priority sp.; NMACP priority SC2;
Blue-gray Gnatcatcher	0.09 - 0.73	late April - May		
Hermit Thrush	0.27 - 1.64	April	NOTE: this species is present in low numbers throughout the winter as well	
Orange-crowned Warbler	0.36 - 0.73 // 0.36	April - May // September		
Virginia's Warbler	0.18 - 0.82 // 0.18 - 0.45	April - May // August - September	NOTE: the August/Sept data may be either post-fledging dispersal or migration	PIF National WatchList sp.; IWJV - NM priority sp.;
Yellow-rumped Warbler	3.00 - 7.00 // 0.18 - 2.45	April - May // September		
Wilson's Warbler	0.82 - 1.91 // 0.91 - 2.55	April - May // September		IWJV - NM priority sp.; NMACP priority BC2
<b>Winter (Migrants)</b>	This survey is not ideal for winter sparrows because the survey points are located within the bosque and not in edge habitat along the ditches which they prefer; other sources like Christmas Bird Count data are better resources, but this gives some indication (a lower bound on estimates)			
White-crowned Sparrow	0.91 - 1.73	April		
Dark-eyed Junco	0.09 - 0.27	April - early May		

*\* Dave Krueper conducted bird point count surveys from 2008 - 2011 at the north end of the Corrales Bosque Preserve (north of the Harvey Jones Channel); 11 points were located along existing trails and surveyed consistently; points were 200 m apart; this stretch of the bosque is approximately 1.5 miles long. All birds seen or heard within 100 m were recorded for 5 minutes. In 2008 and 2009, surveys were conducted from April - September; in 2010 and 2011 surveys were only conducted from April - June.*

**\*\*PIF Watchlist** source is Rich et al. (2004); **NMACP** = New Mexico Avian Conservation Partners (former NM Partners in Flight); **Priority Source** is New Mexico Partners in Flight (2007); **Priority SC2** = Species Conservation Level 2; **Priority BC2** = Biodiversity Conservation Level 2 // **IWJV** = Intermountain West Joint Venture; **IWJV NM priority species** source was New Mexico Steering Committee (2005).

Table 2. Other Bird Species of Conservation Priority or Interest for which there are not standardized survey data available at this time*				
Species	Season	Information/Records	Source**	Status*
<b>Species with some Conservation Priority Status</b>				
Snowy Egret	Su (Br colony near)	This species forages in the Corrales Bosque Preserve; there is a breeding colony in the South Valley near Isleta	Personal observation (D Krueper)	NMACP priority BC2;
Mississippi Kite	Su (Br)	This species is known to breed in the Village of Corrales, and possibly the Corrales Bosque Preserve where it forages	NMOS Field Notes database; and personal observation (J Ruth and D Krueper)	PIF National Stewardship species (Prairie biome); NMACP priority SC2
Bald Eagle	W and Migr (S & F)	This uncommon, but regular species is seen foraging along the Rio Grande, perching in trees in the Corrales Bosque Preserve and across the river during these seasons	NMOS Field Notes database; and personal observation (J Ruth and D Krueper)	PIF National Stewardship sp. (Pacific biome); USFWS R2 BCC; USFWS BCR 16 BCC; IWJV - NM priority sp.; NM Threatened; NMACP priority BC2; USFWS BCC Region 2; NM SGCN.
Wilson's Snipe	W and Migr (S & F)	This uncommon species is seen irregularly, foraging along the Rio Grande and the irrigation and clear ditches during these seasons	NMOS Field Notes database; Christmas Bird Count; and personal observation (J Ruth and D Krueper)	IWJV - NM priority sp.
Western Yellow-billed Cuckoo	Su (Br)	This species is an extremely uncommon breeder along the Rio Grande; it has been recorded in the Corrales Bosque Preserve on a few occasions in spring/summer/fall	NMOS Field Notes database; personal observation (D Krueper); Hawks Aloft (2011)	U.S. ESA - Candidate - Western US DPS; USFWS national & R2 BCC; USFWS BCR 16 BCC; IWJV - NM priority sp.; NMACP priority BC1; NM SGCN.
Belted Kingfisher	W and Migr (S & F); possible yr-round (Br)	A few individuals are regularly recorded in the Corrales Bosque Preserve during migration and in winter; there have been records in June, July and August from 2008 to the present that suggest the possibility (unconfirmed) of breeding	NMOS Field Notes database; Christmas Bird Count; and personal observation (J Ruth and D Krueper)	IWJV - NM priority sp.; NMACP priority BC2
Olive-sided Flycatcher	Migr (S & F)	This is an uncommon but regular migrant through the Corrales Bosque Preserve in spring and fall	NMOS Field Notes database; personal observation (D Krueper)	IUCN Near Threatened; PIF National WatchList sp.; USFWS natinal BCC list; IWJV - NM priority sp.; NMACP priority BC2; NM SGCN.

Species	Season	Information/Records	Source**	Status*
Southwest Willow Flycatcher	* future Su (Br)	The Willow Flycatcher as a species is an uncommon, irregular migrant through the Preserve in spring and fall	NMOS Field Notes database; Hawks Aloft (2011); personal observation (D Krueper and G Garber)	U.S.ESA - SW subs Endangered; PIF National WatchList sp.; IWJV - NM priority sp.; NM listed - Endangered; NMACP priority SC1; NM SGCN.
Dusky Flycatcher	Migr (S & F)	This is an uncommon, regular migrant through the Preserve in spring and fall	NMOS Field Notes database; personal observation (D Krueper); Hawks Aloft (2011)	PIF National Stewardship sp. (InterMountain West biome);
Cassin's Kingbird	Su (Br)	This is an uncommon species in summer and during spring/fall migration in the Preserve; may breed in Corrales	NMOS Field Notes database; personal observation (D Krueper and J Ruth)	NMACP priority SC2
Violet-green Swallow	Migr (S & F)	Fairly common migrant through the Preserve in spring and fall.	NMOS Field Notes database; personal observation (D Krueper and J Ruth)	IWJV - NM priority sp.
Bank Swallow	Su (Br)	Uncommon to fairly common, regular migrant through the Preserve; is also known to nest in dirt and sand banks in Corrales and in the surrounding area	NMOS Field Notes database; personal observation (D Krueper and J Ruth)	NMACP priority BC1; NM SGCN.
Western Bluebird	W and Migr (S & F)	Fairly common, regular migrant in spring and fall; also winter resident	Personal observation (D Krueper and J Ruth)	NMACP priority SC2;
Mountain Bluebird	W	Uncommon, irregular migrant through Preserve; also winter resident	Christmas Bird Count; personal observation (D Krueper)	PIF National Stewardship sp. (Intermountain West biome); IWJV - NM priority sp.; NMACP priority SC2;
Green-tailed Towhee	Migr (S & F)	This is a fairly common, regular migrant through the Preserve in spring and fall	NMOS Field Notes database; personal observation (D Krueper and J Ruth)	PIF National Stewardships sp. (InterMt West and Southwest biomes)
Canyon Towhee	Res (Br)	Fairly uncommon, irregular migrant through Preserve	Personal observation (D Krueper)	PIF National Stewardship sp. (Southwest biome)

Species	Season	Information/Records	Source**	Status*
Bullock's Oriole	Su (Br)	Common and regular through Preserve in migration; uncommon summer breeder	NMOS Field Notes database; personal observation (D Krueper and J Ruth)	IWJV - NM priority sp.; NMACP priority SC2
<b>Additional Year-round Residents</b>				
Canada Goose	Resident	Fairly common year-round residents; becomes abundant in winter and migration in the Preserve; known to nest in the Preserve	NMOS Field Notes database; personal observation (D Krueper and J Ruth)	
Mallard	Resident	Common year-round resident in Preserve; known to nest in Preserve.	Personal observation (D Krueper and J Ruth)	
Great Blue Heron	Resident	Uncommon year-round resident that forages in Preserve; closest known nesting colony is in the South Valley	Personal communication (D Krueper)	
Killdeer	Resident	Uncommon year-round resident in Preserve; becomes fairly common in migration and winter.	Personal observation (D Krueper and J Ruth)	
White-winged Dove	Resident	Fairly common year-round resident in Preserve; known to nest in Preserve	Personal observation (D Krueper and J Ruth)	
Mourning Dove	Resident	Common year-round resident in Preserve; known to nest in Preserve.	Personal observation (D Krueper and J Ruth); Hawks Aloft (2011)	NM SGCN
Great Horned Owl	Resident	Uncommon year-round resident in Preserve; known to nest in Preserve	eBird; Personal observation (D Krueper, J Ruth, and G Garber)	
Western Screech-Owl	Resident	Uncommon year-round resident in Preserve; known to nest in Preserve	Personal observation (D Krueper, J Ruth and G Garber)	
Northern Flicker	Resident	Fairly common, regular year-round resident in Preserve; known to nest in Preserve	Personal observation (D Krueper and J Ruth)	

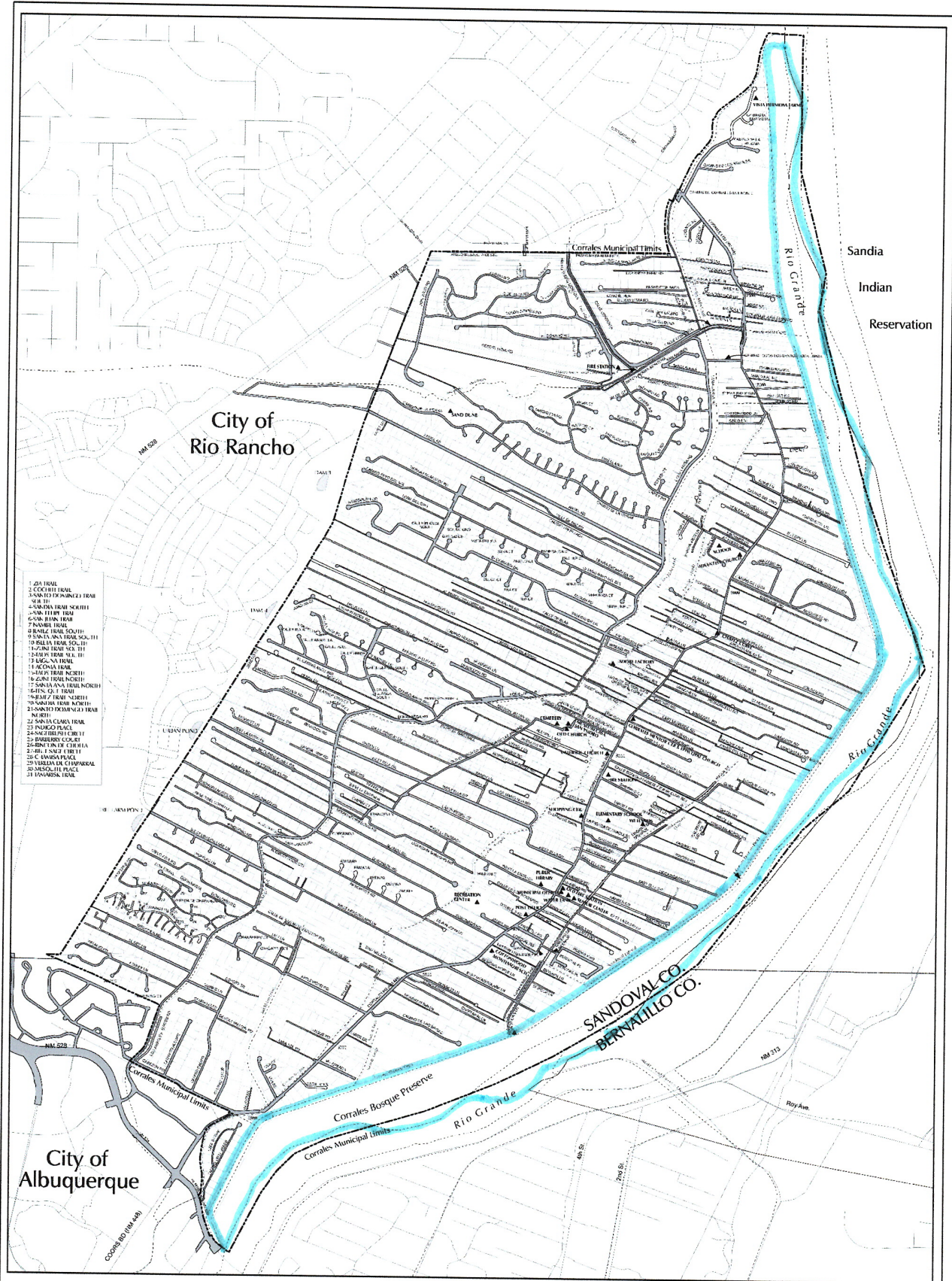
Species	Season	Information/Records	Source**	Status*
Black-capped Chickadee	Resident	Fairly common and regular year-round resident in Preserve; known to nest in Preserve	Personal observation (D Krueper and J Ruth)	
Bushtit	Resident	Fairly common, regular year-round resident in Preserve; known to nest in Preserve	Personal observation (D Krueper and J Ruth); Hawks Aloft (2011)	
House Finch	Resident	Common year-round resident in Preserve; known to nest in Preserve.	Personal observation (D Krueper and J Ruth)	
<b>Additional Summer Breeders</b>				
Cliff Swallow	Migr & Su (Br)	Common migrant and summerbreeder in Preserve; known to nest in/near Preserve (e.g., Alameda Bridge)	Personal observation (D Krueper and J Ruth)	
Spotted Sandpiper	Migr & Su (Br)	Uncommon summer breeder and common in migration through the Preserve; possibly breeds in the Preserve	Personal observation (D Krueper, J Ruth and G Garber)	
Western Kingbird	Migr & Su (Br)	Common and regular migrant and summer breeder in Corrales; known to nest in Corrales	Personal observation (D Krueper and J Ruth)	
Chipping Sparrow	Migr & Su (Br)	Fairly common in migration; rare breeder in summer; known to nest in Preserve	NMOS Field Notes database; Personal observation (D Krueper)	
<b>Additional in Winter</b>				
Sandhill Crane	Migr & W	Common, regular in migration and winter in Preserve	Personal observation (D Krueper and J Ruth)	
Ring-billed Gull	Migr & W	Fairly common to common in migration and winter; roosts in large flocks on sandbars in the Rio Grande	Personal observation (D Krueper and J Ruth)	
American Crow	Migr & W	Abundant in migration and winter in Preserve	Personal observation (D Krueper and J Ruth)	



Species	Season	Information/Records	Source**	Status*
Ruby-crowned Kinglet	Migr & W	Fairly common in migration and winter in Preserve	Personal observation (D Krueper and J Ruth)	
American Robin	Migr & W	Uncommon to abundant in migration and winter in Preserve; irregularly in very large numbers in winter	Personal observation (D Krueper and J Ruth)	
Cedar Waxwing	Migr & W	Uncommon to common in migration and winter in Preserve; irregularly in large numbers in winter	Personal observation (D Krueper and J Ruth); Hawks Aloft (2011)	
Song Sparrow	Migr & W	Common, regular in migration and winter in Preserve	Personal observation (D Krueper and J Ruth)	
White-crowned Sparrow	Migr & W	Common to abundant, regular in migration and winter in Preserve	Personal observation (D Krueper and J Ruth)	
American Tree, Field, Fox, White-throated, Harris's and Golden-crowned sparrows	Migr & W	Rare in migration and winter in Preserve	NMOS Field Notes databaes; Personal observation (D Krueper and J Ruth)	
Dark-eyed Junco	Migr & W	Common, regular in migration and winter in Preserve	Personal observation (D Krueper and J Ruth); Hawks Aloft (2011)	
Pine Siskin	Migr & W	Common, regular in migration and winter in Preserve	Personal observation (D Krueper and J Ruth)	
American Goldfinch	Migr & W	Common, regular in migration and winter in Preserve	Personal observation (D Krueper and J Ruth)	
<b>Additional in Migration</b>				
Hammond's, Gray, and Cordilleran flycatchers	Migr (S & F)	Rare to uncommon in migration through the Preserve	Personal observation (D Krueper); Hawks Aloft (2011)	

Species	Season	Information/Records	Source**	Status*
MacGillivray's and Yellow warblers	Migr (S & F)	Fairly common, regular in migration through the Preserve	Personal observation (D Krueper and J Ruth); Hawks Aloft (2011)	Yellow Warbler - NM SGCN.
Nashville, Chestnut-sided, Black-throated Gray, Black-throated Green, Townsend's, Grace's, Black-and-White, and Hooded warblers, Northern Parula, American Redstart, Ovenbird, Northern Waterthrush	Migr (S & F)	Rare in migration through the Preserve	NMOS Field Notes database; Personal observation (D Krueper and J Ruth); Hawks Aloft (2011)	Black-throated Gray Warbler - NM SGCN
Western Tanager	Migr (S & F)	Fairly common, regular in migration through the Preserve	NMOS Field Notes database; Personal observation (D Krueper and J Ruth)	
White-eyed, Yellow-throated, Philadelphia, and Red-eyed vireos	Migr (S & F)	Very rare to uncommon in migration through the Preserve	NMOS Field Notes database; Personal observation (D Krueper and J Ruth)	
*U.S. ESA = U.S. Endangered Species Act // PIF National Stewardship species source is Rich et al. (2004) // USFWS BCC = U.S. Fish and Wildlife Service Birds of Conservation Concern; USFWS BCC source is USFWS (2008) // NMACP = New Mexico Avian Conservation Partners (former NM Partners in Flight); Priority Source is New Mexico Partners in Flight (2007); Priority SC2 = Species Conservation Level 2; Priority BC2 = Biodiversity Conservation Level 2 // IWJV = Intermountain West Joint Venture; IWJV NM priority species source was New Mexico Steering Committee (2005)// NM SGCN = New Mexico Species of Greatest Conservation Need (BISON-M 2011).				
** Where "personal observation" is listed as a source, we recognize that many other observers and sources could be listed but have relied on our eas				

APPENDIX A: Map of the Village of Corrales and the Corrales Bosque Preserve  
(from Village of Corrales website with highlighting added to estimate the  
boundaries of the preserve)



This map was developed with assistance from the Village of Corrales Planning Department, Fire Department, Police Department and Public Works Department. Feature locations are approximate. MRCOG and the Village of Corrales are not responsible for map errors or omissions.

Private roads within the Village limits are shown with no gray shading.



## APPENDIX B: Maps of Shaded Fuel Break Locations (existing and planned)

(a) Northern portion of Corrales Bosque Preserve (north at top of page)





(b) Southern Portion of the Corrales Bosque Preserve (Alameda Bridge at the bottom right)



APPENDIX C: Maps of U.S. Army Corps of Engineers (USACE) restoration sites (IE and IG)  
within the Corrales Bosque Preserve (southern end)  
(created by contractor – Parametrix – for meeting of Corrales Bosque Advisory  
Commission)



Site 1E



**Willow Bankline Area  
Current Condition**



**Willow Bankline Likely  
Post-Construction Condition**



**Willow Swale Area  
Current Condition**



**Willow Swale  
Post-Construction**



**Legend**

- |   |  |
|---|--|
|  Burn Rehabilitation (14-Acres) |  Constructed Willow Swale |
|  Constructed Backwater          |  Retreat and Revegetate   |
|  Constructed Willow Bankline    |  |

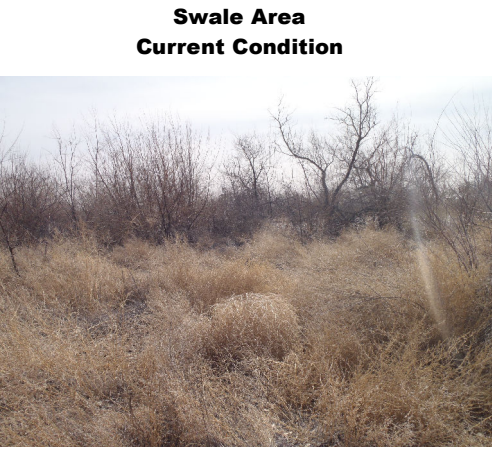
Grid Projection = UTM, NAD 1983, Aone 13N, meters

0 250 500 1,000  
Feet





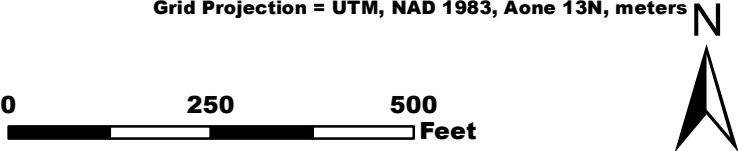
Site 1G



Legend

- |  |  |
|--|--|
|  Constructed Backwater       |  Constructed Willow Swale |
|  Constructed Willow Bankline |  Retreat and Revegetate   |

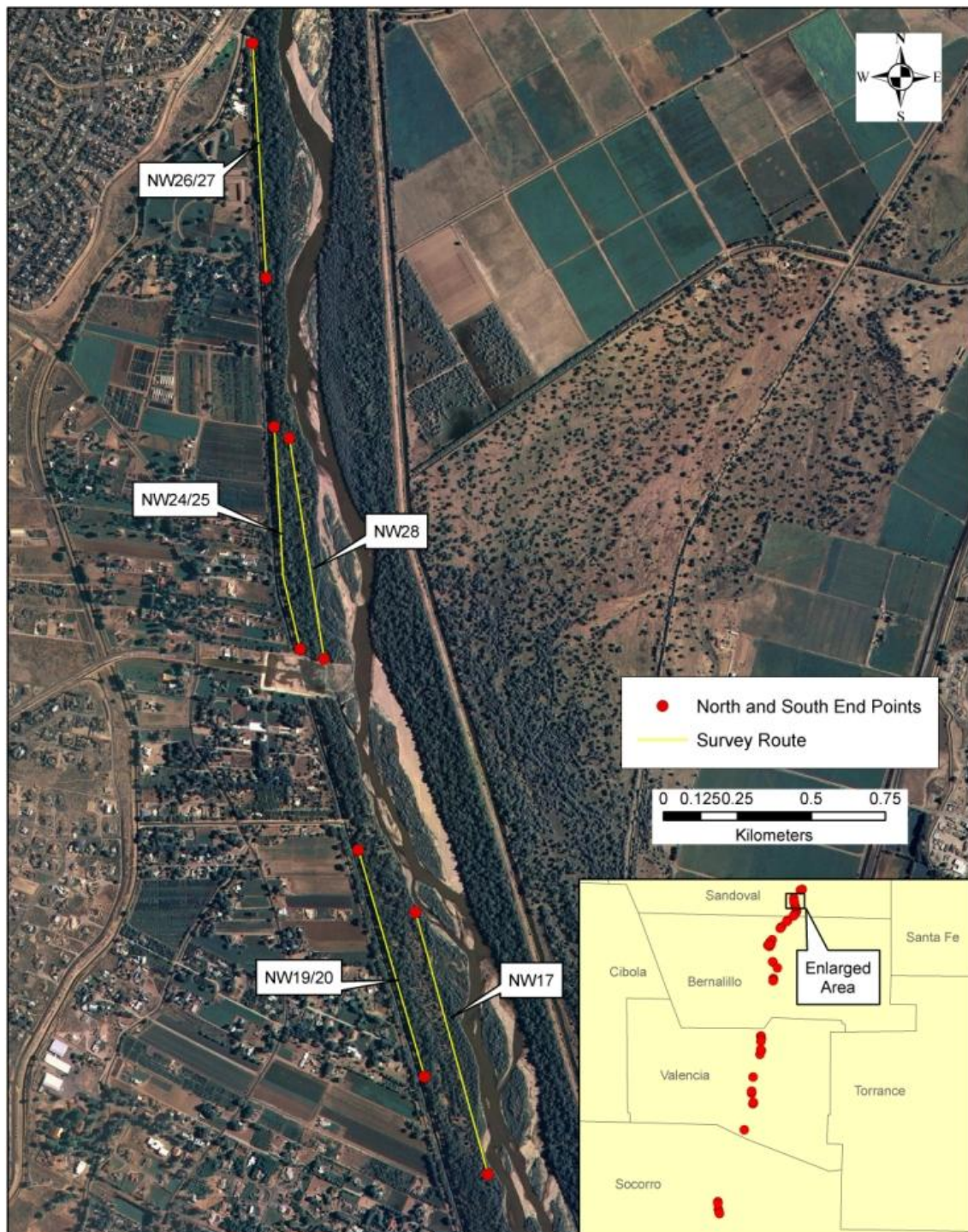
Grid Projection = UTM, NAD 1983, Aone 13N, meters





APPENDIX D: Maps of Hawks Aloft survey transect locations in Corrales Bosque Preserve

(a) Northern portion of Corrales Bosque Preserve



Hawks Aloft (2011)



(b) Middle portion of Corrales Bosque Preserve





(c) Southern portion of Corrales Bosque Preserve (and Alameda)





APPENDIX E: Corrales Village Council Minutes - Approval of IBA Nomination  
(only front page and those pages discussing the IBA)



**VILLAGE OF CORRALES  
GOVERNING BODY**

**MINUTES FINAL**

**July 23, 2013**

**6:30 p.m.**

**COUNCIL/MUNICIPAL COURT CHAMBERS**

---

**Governing Body Present:**

Mayor Gasteyer, Councilor Clauser, Councilor Alsobrook, Councilor Harper, Councilor Fahey, Councilor Hart, Councilor Garcia-Miera

**Village staff present:**

Administrator John Avila; Deputy Clerk Allyson E Smith; Police Captain Victor Mangiacapra; Fire Chief Anthony Martinez; Public Works Supervisor Tony Tafoya; Library Director Carla Spencer.

**I. CALL TO ORDER AND PLEDGE OF ALLEGIANCE**

Mayor Gasteyer called the meeting to order at 6:33 pm. Mayor Gasteyer then led the Pledge of Allegiance in both English and Spanish.

**II. APPROVAL OF AGENDA**

Mayor Gasteyer stated the personnel recommendation fell through so item 6 is not going to be on the agenda tonight. When we get to item 17 he would like to have the discussion of the resolution approving the fourth quarter financial report; however some fixes have to be made to it. We did receive a letter from our budget analyst that indicates that you can turn it in after July 31 so we will postpone the vote until our next meeting.

**Motion:** Move to approve the Agenda of the July 23<sup>rd</sup>, 2013 Council Meeting as amended, **Action:** Approve, **Moved by** Councilor Fahey, **Seconded by** Councilor Harper. **Vote:** Motion carried by unanimous vote (**summary:** Yes = 6). **Yes:** Councilor Garcia-Miera, Councilor Clauser, Councilor Fahey, Councilor Harper, Councilor Alsobrook, Councilor Hart.

**III. APPROVAL OF MINUTES**

1. May 14, 2013 Council minutes  
May 28, 2013 Council minutes  
June 11, 2013 Council minutes

**Motion:** Move to approve the minutes of the May 14<sup>th</sup>, 2013 Council Meeting, **Action:** Approve, **Moved by** Councilor Clauser, **Seconded by** Councilor Fahey. **Vote:** Motion carried by unanimous vote (**summary:** Yes = 6). **Yes:** Councilor Garcia-Miera, Councilor Clauser, Councilor Fahey, Councilor Harper, Councilor Alsobrook, Councilor Hart.

**Motion:** Move to approve the minutes of the May 28<sup>th</sup>, 2013 Council Meeting, **Action:** Approve, **Moved by** Councilor Fahey, **Seconded by** Councilor Harper. **Vote:** Motion carried by unanimous vote (**summary:** Yes = 6). **Yes:** Councilor Garcia-Miera, Councilor Clauser, Councilor Fahey, Councilor Harper, Councilor Alsobrook, Councilor Hart.

11. Discussion and consideration of Findings and Conclusions in the Matter of the Appeal to the Governing Body of the Village of Corrales from Denial by the Planning & Zoning Commission of an application for Special Use Permit in Conjunction with Site Development Plan Amendment and Variance from Height Limit for a telecommunications facility on Tract B2, Lands of Margaret Lecklider, at 325 Academy Drive in the Village of Corrales.

Councilor Alsobrook stated he wanted to commend Mr. Appel for his particular choice of wording in the finding of facts number 28, “the bald assertion”. It was very appropriate.

**Motion:** Move to approve Findings and Conclusions in the Matter of the Appeal to the Governing Body of the Village of Corrales from Denial by the Planning & Zoning Commission of an application for Special Use Permit in Conjunction with Site Development Plan Amendment and Variance from Height Limit for a telecommunications facility on Tract B2, Lands of Margaret Lecklider, at 325 Academy Drive in the Village of Corrales. **Action:** Approve, **Moved by** Councilor Harper, **Seconded by** Councilor Fahey. **Vote:** Motion carried by unanimous vote (**summary:** Yes = 6). **Yes:** Councilor Garcia-Miera, Councilor Clauser, Councilor Fahey, Councilor Harper, Councilor Alsobrook, Councilor Hart.

### **XIII. NEW BUSINESS:**

#### **12. FUTURE AGENDA ITEMS**

- Third Reading of the Sprinkler restrictions Ordinance
- Third Reading of the Anti-graffiti Ordinance
- Discussion of the ICIP
- The West Meadowlark Charrette report
- Possible movement on a participation agreement for the EPA MS4 permitting.
- Special disperser permit for the Starry Night Fundraiser and the Harvest Festival Wine Fair
- August 27<sup>th</sup> we will possibly discuss shaded fuel breaks at Dixon Lane and East Alary Lane
- Memorialization of the landscaping work by the Sandoval County Master Gardeners and a possible granite plaque for the individuals involved in creating the group
- Agreement for the Safe Routes to School funding
- Consideration of an RFP for a contractor to perform all of the installations for the buildings along the Phase 1 wastewater area

13. Discussion and instruction to the Mayor regarding nomination to designate the Corrales Bosque Nature Preserve as an “Audubon Important Bird Area.”

Mr. Mark Kaib stated the latest news is that the MRGCD suggested that Janet presented the nomination to the board of directors at her earliest convenience, in about 6 weeks. They have talked to several on the board of directors there and they said if you put forth to the Council for approval, they will be one of the signatories to the nomination. We could see some increase in ecotourism, there will be increased scrutiny of future work in the Bosque regarding this nomination, but that pros are the same as the cons. He thinks that the IBA designation is a more worthy designation for our wildlife preserve. It is not likely to change the way we manage it in the future.

Councilor Clauser stated she thought the application was extremely well done and it seems superb to her.

Dr. Jim Finley stated he has a lot of things he could say about this, but they may not all be totally supportive that this is a worthy place for a special bird area. Our Corrales Bosque Preserve has pretty much always been an exceptional area for this part of the world because it had water and large trees that created shade and conditions for other kinds of woodland vegetation to be happy. Those things together did promote the high diversity of bird species that we do have. One of the things that always has been important about the woodland in the Bosque is that it has vegetation at all of the different levels, up to the tops of the canopies of the cottonwood trees. There are shrubs of different kinds. There are shrubs of different kinds and different heights. The thickness and height diversity promotes the bird population diversity. If you remove that foliage, you remove the attractiveness for birds. He realizes there is a tradeoff here, you have a fire break, you have not diluted the landscape, but you have altered it such that it is easier to fight fires or to get the appropriate equipment.

Mr. Mark Kaib stated the IBA designation is not about the birds. It is about what the designation represents all of the greater values and diversity of our wildlife preserve and also to help manage it better in the future.

**Motion:** Move to instruct Mayor regarding nomination to designate the Corrales Bosque Nature Preserve as an “Audubon Important Bird Area.” **Action:** Approve, **Moved by** Councilor Clauser, **Seconded by** Councilor Garcia-Miera. **Vote:** Motion carried by unanimous vote (**summary:** Yes = 6). **Yes:** Councilor Garcia-Miera, Councilor Clauser, Councilor Fahey, Councilor Harper, Councilor Alsobrook, Councilor Hart.

14. Discussion and instruction to the Mayor regarding the Kitchen Garden and Coop Tour and authorization for use of the Gonzales Farmland.

Bonnie Gonzales stated the Juan Gonzales Heritage Farm is intuitive in the COOP Tour. The COOP Tour is put on by Homegrown New Mexico which is an organization that promotes Homeowners to take an active role in their own food security and in using their own property to that. The Gonzales property of course is an opportunity for us as a community to support small agriculture. She has spoken with the YCC group and they are on board with this. We have a public trail on the property.

Mayor Gasteyer asked if Homegrown New Mexico is primarily an educational nonprofit? Ms. Gonzales stated it is a 501-C3, primarily educational and primarily focused on food security and the ability of families and individuals to interact with their own food security. Mayor Gasteyer asked if they were here in the Albuquerque area? Ms. Gonzales stated they are out of Santa Fe, but they have offices in the Albuquerque area.

Councilor Fahey asked if they just got their 501-C3? Ms. Gonzales stated they have been doing these tours for several years, she believes. Councilor Fahey stated they are not a 501-C3 according to their website and according to their application. The issue he has with this is that they are going to use Village property to raise funds and they are outside of the Village. He is concerned that this violates the Anti-Donation Clause. Mr. Appel stated without knowing more details he cannot say whether or not it violates the Anti-Donation Clause. The mere use of Village property for an event that may produce revenue for the entity that is using it, whether it be a 501-C3 or not, does not necessarily implicate the Anti-Donation Clause. The Anti-Donation Clause in strict terms says that the Village will not extend the credit of the Village or the Village revenues for the benefit of a private entity or individual. We do have a few events that take place in La Entrada Park and a few other places that are hopefully generating revenue for those who participate in those events. Councilor Fahey stated those are Corrales Village projected run by Corralenos. The Village of Corrales does have a garden tour and they raise funds for our economic development arm that is the Corrales MainStreet. This is in direct competition of that. This application was done basically three weeks



APPENDIX F: Middle Rio Grande Conservancy District (MRGCD) Resolution approving IBA  
Nomination

**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE MIDDLE RIO GRANDE CONSERVANCY DISTRICT  
SUPPORTING AN AUDUBON SOCIETY IMPORTANT BIRD AREA (IBA) NOMINATION  
FOR THE CORRALES BOSQUE PRESERVE**

**M-10-14-13-132**

**WHEREAS**, the Village of Corrales through the Corrales Bosque Commission presented the MRGCD with a draft IBA nomination in February 2013; and

**WHEREAS**, the MRGCD is the owner of the Corrales Bosque Preserve and the IBA nomination requires that landowner/managers be contacted and provide written permission for the nomination; and

**WHEREAS**, the MRGCD and Village of Corrales signed a Joint Powers Resolution in 1997 permitting the Village of Corrales to manage the Corrales Bosque as a Preserve without impairing or impeding the work of MRGCD employees and agents to manage, operate, maintain or improve its lands and facilities, and requiring MRGCD Board of Directors approval for any ordinances, resolutions, regulations and third party agreements governing the Preserve; and

**WHEREAS**, according to bird monitoring data collected within the Corrales Bosque Preserve by various parties, the Preserve has among the highest bird densities and species richness (diversity) in the Middle Rio Grande Bosque, including several New Mexico Endangered and Threatened Species and Partners in Flight Priority Species; and

**WHEREAS**, the Corrales Bosque Preserve provides rare and important habitats for breeding and migrating birds and is part of the Rio Grande Flyway; and

**WHEREAS**, The Village of Corrales's IBA nomination lists invasive plants, hydrologic changes, wildfires, habitat restoration and monitoring as serious conservation issues; and

**WHEREAS**, the IBA Program is a global effort that seeks to identify, protect and conserve a network of sites important for the long-term viability of naturally occurring bird populations across their geographical range for which site-based conservation is appropriate; and

**WHEREAS**, the IBA designation does not carry any binding, legal mandates for landowners or managers but may increase the availability of resources to aid conservation efforts or other economic benefits; and

**NOW, THEREFORE, BE IT RESOLVED**, the Middle Rio Grande Conservancy District Board of Directors hereby approves a resolution to support the Village of Corrales's Important Bird Area Nomination for the Corrales Bosque Preserve subject to the 1997 Joint Powers Resolution with the Village of Corrales; and

**FURTHER RESOLVED**, that an IBA designation will be utilized to address, where feasible, the conservation issues listed in the nomination form. An IBA designation shall not impact MRGCD operations and maintenance of its lands and facilities.

**DATED AND RESOLVED** this 14th day of October 2013.

**MIDDLE RIO GRANDE CONSERVANCY DISTRICT**

  
Derrick J. Lente, Chairman

**ATTEST:**



Steven L. Houser, Secretary/Treasurer