

Candelaria Nature Preserve

2024 Annual Report

January 2025



OVERVIEW

The City of Albuquerque purchased Candelaria Nature Preserve (CNP) in 1977. CNP became part of the City of Albuquerque's inventory of lands designated as Major Public Open Space. The Parks and Recreation Department/Open Space Division (OSD) manages this property in partnership with New Mexico State Parks. In 2021, following a three-year community-driven planning process, OSD completed a Resource Management Plan (RMP) that was formally adopted by the City Council. The RMP outlines a bold new vision to restore the traditional farmed fields to a mosaic of native habitat that supports a diversity of wildlife. The adaptive management plan is a 20-year endeavor.



Hummingbird hunting at the Candelaria Pond

The CNP is ideally situated in the middle of Albuquerque, where the research and successful restoration efforts can help inform other projects on private and public lands throughout the Rio Grande Valley. The CNP is programmatically connected to similar areas, such as Valle de Oro National Wildlife Refuge, Whitefield Wildlife Conservation Area, and Bernardo Wildlife Area. This is especially important in the time of climatic changes and other related pressures to our natural areas. The implications of this project are significant, far-reaching, and community-supported.



River Xchange students on a nature walk



Sandhill cranes in field 1E

- ◆ Ciudad Soils and Water Conservation District
- ◆ Rio Grande Return
- ◆ Friends of Candelaria Nature Preserve
- ◆ Rocky Mountain Youth Corps
- ◆ Bird Alliance of Central New Mexico
- ◆ Rio Grande Nature Center State Park



Ranger Dylan with a snapping turtle



Rio Grande Return hosting wildlife drinker workshop

Major Accomplishments

The City of Albuquerque has made great strides in implementing the vision outlined in the Resource Management Plan. The RMP focuses on three major areas, including restoration of the farm fields to support a mosaic of habitat, monitoring to inform an adaptive management approach, and supporting outdoor low-impact recreation and education opportunities tied to the goals of the CNP. The Parks and Recreation Department/Open Space Division made the following major accomplishments in 2024

- ◆ OSD continued to contract with Ciudad Soil and Water Conservation District (CSWCD) and Rio Grande Returns to oversee restoration efforts. Active restoration has been initiated on seven new acres for a total of 19 acres that have been restored since 2021. CIUDAD secured a \$71,228 grant from the New Mexico Department of Agriculture Healthy Soils Program that funded work from 2024-2025. Additionally, CIUDAD submitted a Land and Water Conservation Fund grant for \$788,000 (that includes a 1:1 match from the city) in 2023 that has moved to the final award process. If awarded, funds from this grant are expected in June of 2025.
- ◆ Public access continues through guided monthly tours, student field experiences, and volunteer opportunities. 227 community volunteer contributed 569 hours, and 210 student volunteers contributed 705 hours this year.
- ◆ OSD is managing 50 acres under a wildlife crop farming approach to restore soil health.
- ◆ The City and partners lead a comprehensive tour of community stakeholders for the completion of the Wetlands Action Plan.
- ◆ Friends of Candelaria Nature Preserve (FCNP) now has 125 members, an increase of 20 people. The leadership team has contributed 448 hours of volunteer time that includes leading monthly tours, hosting a Speakers Series that had over 300 attendees, and working with the City to develop an interpretive plan that will further enhance visitors' experience and understanding of the CNP.
- ◆ Installation of new fencing and gate at Arbor Road entrance to secure property and offer extra protection to wildlife.
- ◆ Completed 100% construction documents for the Tree Nursery Tract
- ◆ Completed 100% construction documents for the pedestrian bridge.



Learn to Birdwatch guided hike

Wildlife Habitat Restoration

Open Space Division staff are working alongside CSWCD and Rio Grande Return on this major restoration undertaking. In 2024, 680 native perennials were planted, including hedgerows. Previously started restoration continues on another 12 acres, including maintenance of propagation cells, expanded planting of a wet soil habitat, soil health interventions. Nursery plants are also being grown for future efforts. Conservation fallow has been implemented on 13 acres to mitigate weed pressure. Wildlife farming is being managed on 50 acres where no-till drill methods are employed, and the use of diverse native seed mixes is being propagated. An integrated management approach is being incorporated to mitigate weed pressure, including utilizing cover crops, fallowing fields, and mulching. Annual crop plans can be found on the CNP website.



Fields 2B (bottom) and 2C (top) prior to construction by OSD staff.

Active restoration was initiated on seven acres of fields 2B and 2C. Construction took place in the winter of 2024. Based on the sandbar habitat designated in the RMP, both fields were sloped to convey water from the ditch on the east boundary to the west edge. Channels, to mimic arroyos, and sandbars were created to increase diversity in soil moisture and support plant communities of varying water needs. The tree snags along the center line are a popular hunting habitat for raptors, adding to the importance of increasing ground cover for an increase in prey availability during the critical breeding season.



Fields 2B (top) and 2C (bottom) after construction of water conveyance slope and arroyo channel.

Ecological Monitoring Methods

Ecological models are being utilized to better anticipate better and plan restoration outcomes. CSWCD is using a *Society for Ecological Restoration Recovery Wheel* to track progress over time, which is an internationally accepted method for restoration projects. Additional monitoring practices include seed bank analysis, soil testing, photo points, aerial imaging, and vegetation transects. Community science is also underway with programs like e-Bird, bird banding, iNaturalist, and Nature's Notebook.

Soil sampling for analysis took place in October in all 17 fields. OSD Agricultural Coordinator set up sampling plots that will facilitate consistent historical collections for comparison over time.

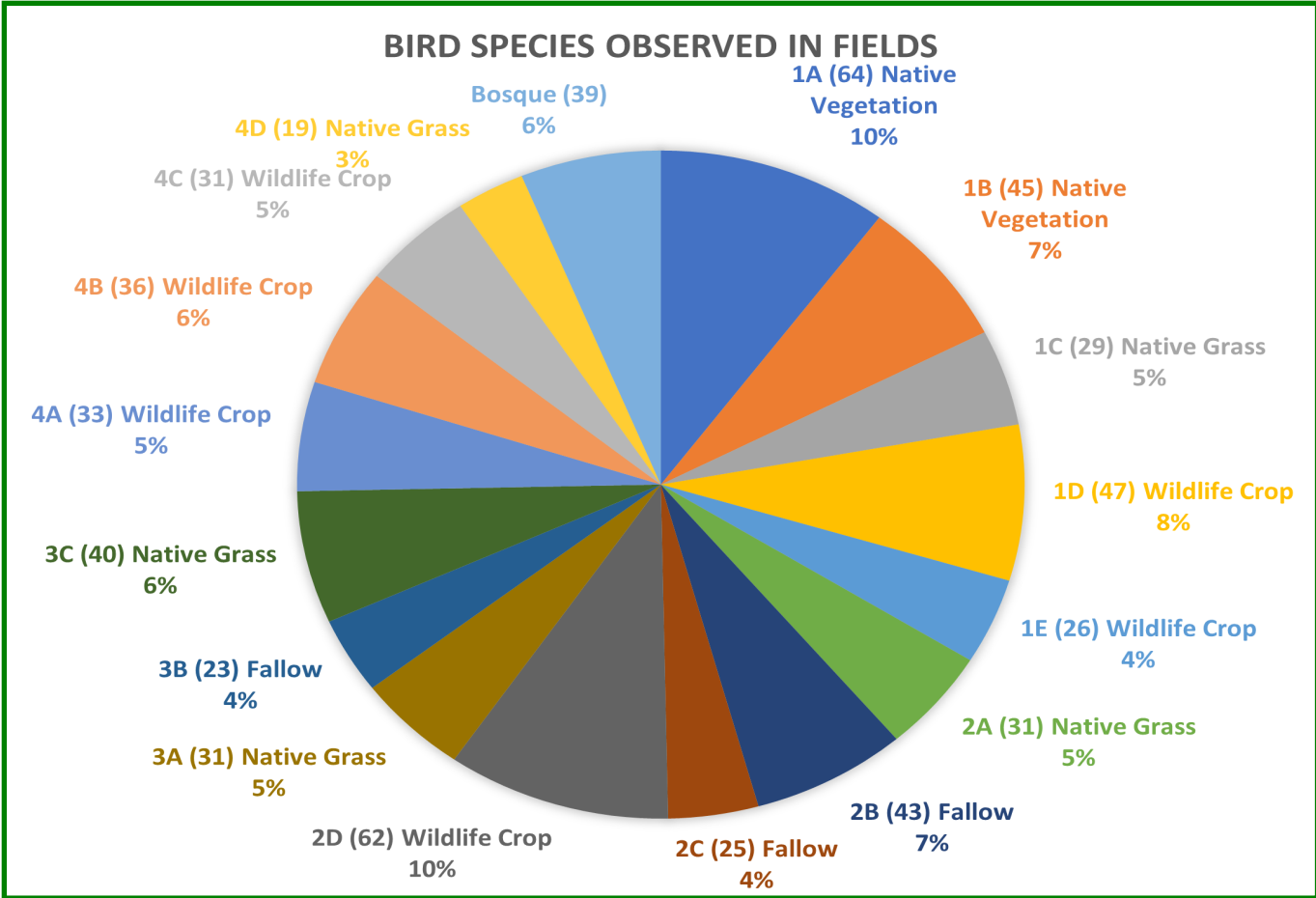
Friends of the Rio Grande Nature Center volunteers conduct weekly bird surveys of the North Tract fields and wetlands. Tracking species diversity in each field will help assess wildlife usage as vegetation is established. Volunteers identified a rare Vermillion Flycatcher nesting on the property. Though the nest failed, the attempt is a sign that new species are moving into the Albuquerque reach and CNP is providing critical habitat. CNP also hosted a successful Swainson's hawk nest that fledged two healthy juveniles. Both could be seen learning to fly and hunt before their migration to South America for the winter. Other rare species include Scissor-tailed Flycatcher, Brown Creeper, Northern Mockingbird, Red-naped Sapsucker, Dickcissel, Prairie Merlin, and Loggerhead Shrike. A total of 148 unique species were documented.



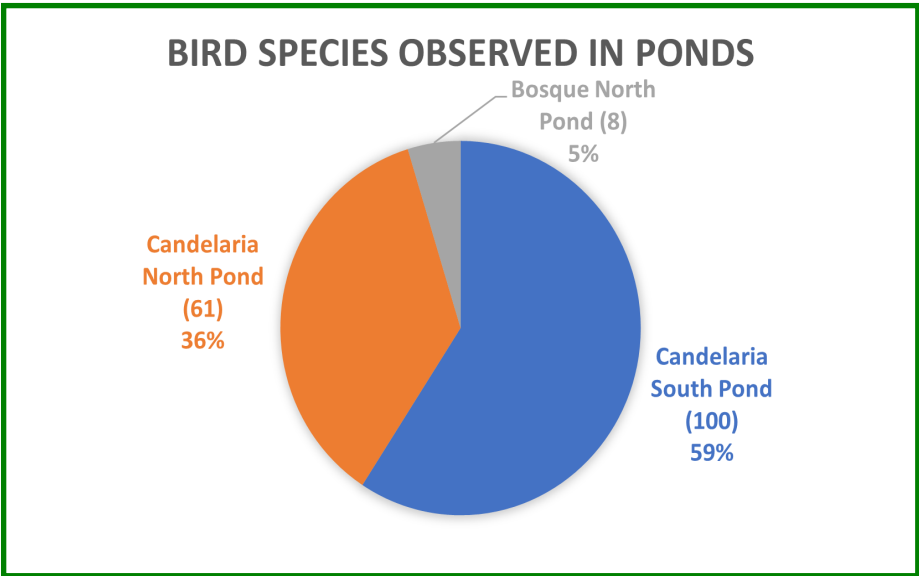
Juvenile Swainson's hawk, hatched on property, hunting for bugs.



Female Vermillion Flycatcher in nest tree.



Total bird species recorded for 2024 in the 17 individual CNP fields. Each field number indicates (number of species observed during survey), field vegetation, and percent of property usage.



Total bird species recorded for 2024 in the three ponds on CNP. Each pond indicates (number of species observed during survey), and percent of property usage

Outdoor Recreation, Public Access and Education Efforts

Per the RMP, public access is carefully managed to protect wildlife and integrate restoration management. Public access is mainly supported through wildlife viewing areas and guided tours. Access from two public trails offers visitors the opportunity to enjoy seated birding and wildlife observations at their leisure. Monthly guided tours are held for the general public on the last Friday of every month. Ongoing education work days take place with local groups, including River Xchange fifth grade classes, Cottonwood Gulch Expeditions, Holy Ghost Catholic School, SOL Forest School, Rocky Mountain Youth Corps and volunteers with the FCNP. A total of 437 volunteers contributed a total of 1,274 hours. The Friends of CNP



SOL Forest School pre-K .

continue to development an interpretive plan with partner supports including Open Space Division, that will further enhance visitor experience and understanding of the CNP.



Nature at Night guided hike.

Public events included a continuation of the partnership with the Bird Alliance of Central New Mexico for the annual birding bio-blitz Wing in the New Year and six Learn to Birdwatch guided hikes. City Nature Challenge added another bio-blitz where the community documented all the diverse plants and wildlife that reside on this changing property. Two new programs were introduced this year. Nature at Night is a partnership with the Rio Grande Nature Center State Park that included a hike through both properties to introduce guests to birding and wildlife behaviors at night. Learn to

Photograph Wildlife is an introduction to photography out in nature. Lead by OSD staff, guests learn about the basics of photography as well as how to responsibly document wildlife from a safe distance and without disturbing sensitive habitat.

Candelaria Nature Preserve Investments up to 2024

Year	Amount	Balance	Description
Capital Improvement Funds (State Capital Outlay Grants)			
2019	\$300,000	\$0	Wetland design and improvements, design of wildlife viewing areas. Construct west wildlife blind
2019	\$110,000	\$0	Construct west wildlife blind
2020	\$275,000	\$0	Tree Nursery Tract and Duranes bridge planning, construct east wildlife blind
2021	\$550,000	\$0	Construct east and west wildlife blind, TNT site planning, TNT site plan phase 1 construction
2022	\$250,000	\$0	TNT site plan phase 1 construction & irrigation improvements
2023	\$310,000	\$0	TNT site plan phase 1 implementation
2024	\$300,000	\$300,000	Duranes Lateral Bridge construction
Total	\$1,795,000 allocated	\$740,000 available	
City Funds (General Fund 4 Fiscal Years)			
FY20	\$108,000		Technician, supplies and equipment budget
FY21	\$341,000		Added a biologist position, supplies and equipment budget
FY23	\$341,000		Staff = \$145,000; supplies and equipment = \$196,000
FY24	\$341,000		Staff = \$145,000; supplies and equipment = \$196,000
FY25	\$331,000		Staff = \$145,000; supplies and equipment = \$186,000
Total	\$1,462,000		The current annual operating budget is \$331,000

Looking Ahead

The City and partners are moving full steam ahead and will be working on the following in 2025:

- ◆ Begin the construction of the TNT site plan, starting with the irrigation ditch relocation and construction of parking area.
- ◆ Identify funding and partnership opportunities to secure additional capital funds for irrigation upgrades in fields 1A and 1C, Tree Nursery site implementation, plant propagation facility, and South Tract improvements.
- ◆ Continue and expand restoration on Candelaria North Tract.
- ◆ Complete the interpretive signage plan.
- ◆ Approval of the Integrative Pest Management plan.
- ◆ Continue ecological monitoring and community.
- ◆ Systematic vegetation monitoring

CAPITAL FUNDING NEEDS 2025-2026	
Tree Nursery Tract- site plan implementation	\$700,000
Duranes Bridge Construction	\$300,000
Irrigation upgrades, ditch improvements, and water rights allocation	\$400,000
Candelaria South Tract- wildlife platform & viewing area	\$400,000
Total	\$1,800,000



