La Cienega-La Cieneguilla-El Canon Integrated Water Planning project meeting July 24, 2025



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July 24, 2025 IWP project meeting agenda

1. Welcome and introductions
2. Recap project purpose
3. Update on other water projects and studies
4. Summary of additional project site visits
   - 6/9/2025
   - 7/2/2025
5. System utility information obtained
6. Community concerns expressed to date
7. Potential projects activity

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La Cienega-La Cieneguilla-El Canon Integrated Water Planning project

- Project purpose:
  - ❖ "Prepare a PER related to the protection of the traditional water resources of the LCLC communities."
  - ❖ "Identify impairments to aquifer health and determine the most cost-effective solutions for protecting sensitive resources (e.g., springs), building resilience, protecting water quality, conserving water, and improving access to sustainable and ecologically healthy water and sewer services."

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- Update on other water projects and studies (Nate)

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Site visit 4, June 9, 2025

- Santa Fe Girls' School
  - Property history (involvement since 2000, owned since 2011)
  - Removed junk and invasive species in 2000
  - 9-acre property used for experiential education for 6-8th grade students
  - Water level and water quality data to be provided (11 piezometers, no wells)
  - Beavers present last 3-4 years (also 8-10 years ago), actively diverting LSF River water

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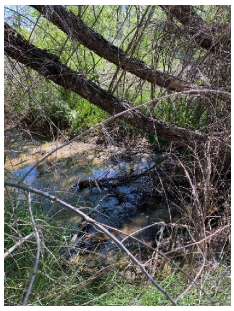
Santa Fe Girls' School



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Site visit 4, June 9, 2025

- J Christie and Kelsey Kolar property
  - Purchased the property 3.5 years ago
  - 50 acres, 30-35 acres is wetlanded/marshy
  - Property includes a 16-17 acre alfalfa field
  - 2 DOM wells, 2 IRR wells, 3 windmills, 4 spring-fed ponds, and an acequia
  - They irrigate from two of the ponds
  - Historically 20-25 springs along the property, seeps abound
  - Invasive species removal
  - Presence of wildlife
  - E. coli levels (noted improvements) and PFAS contamination

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J Christie and Kelsey Kolar property

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Site visit 5, July 2, 2025

- Leonora Curtin Wetland Preserve
  - Owned since 1932 and part of Las Golondrinas contiguous property (500 acres, originally 800 acres)
  - Monitor well, NMBGMR measures water levels semi-annually
  - Spring fed ponds, same source as Guicu
  - Acequia de Los Bacas on old maps
  - Irrigate 6-8 acre Morado field (cover crop, oats)
  - Large invasive species removal effort about 10 years ago
  - Over 900 species have been identified at the wetlands and preserve
  - Flow discharged from ponds goes to La Cienega Creek/acequia

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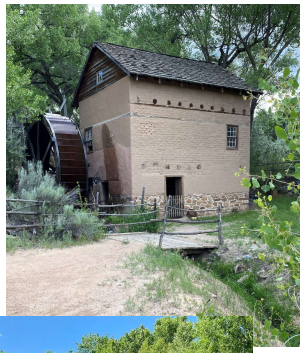
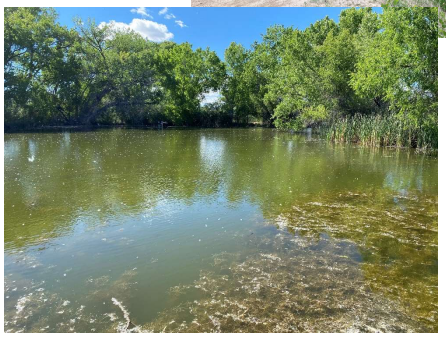
Leonora Curtin Wetland Preserve





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Site visit 5, July 2, 2025

- Simon's Ranch
  - Simon family purchased the ranch about 30 years ago, formerly Bennett Ranch
  - Large spring fed ponds, springs along hillside
  - Wildlife includes coyotes, bobcats, birds, bats
  - Perform pond maintenance every few years (i.e., to address algae)
  - Irrigate fields as horse pasture
  - Pond overflow goes to La Cienega acequia

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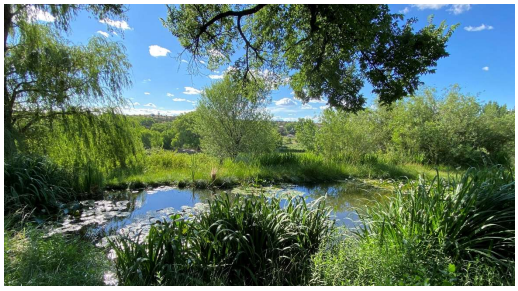
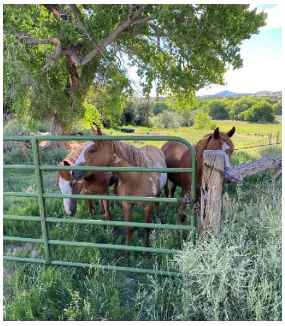
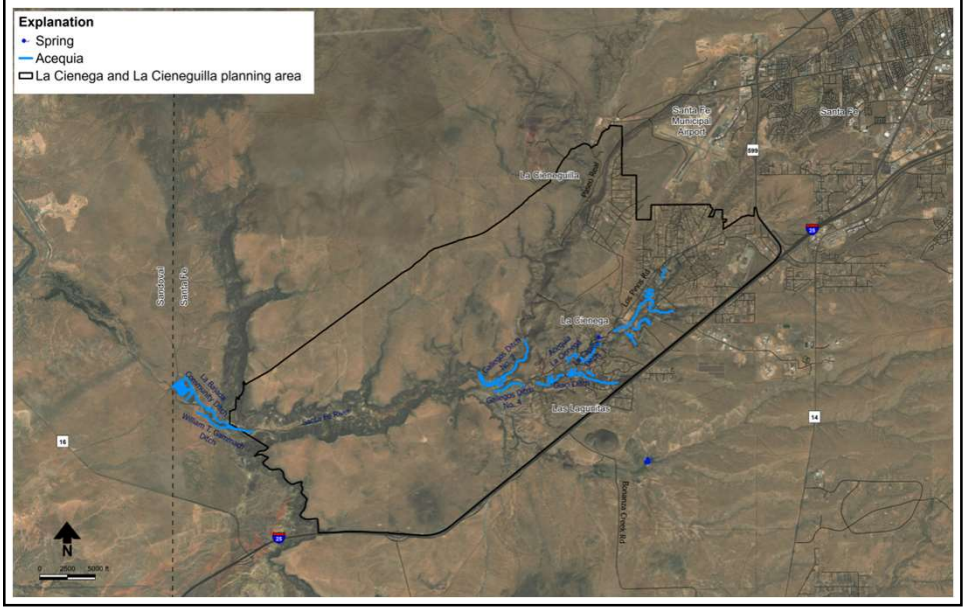
Simon's Ranch

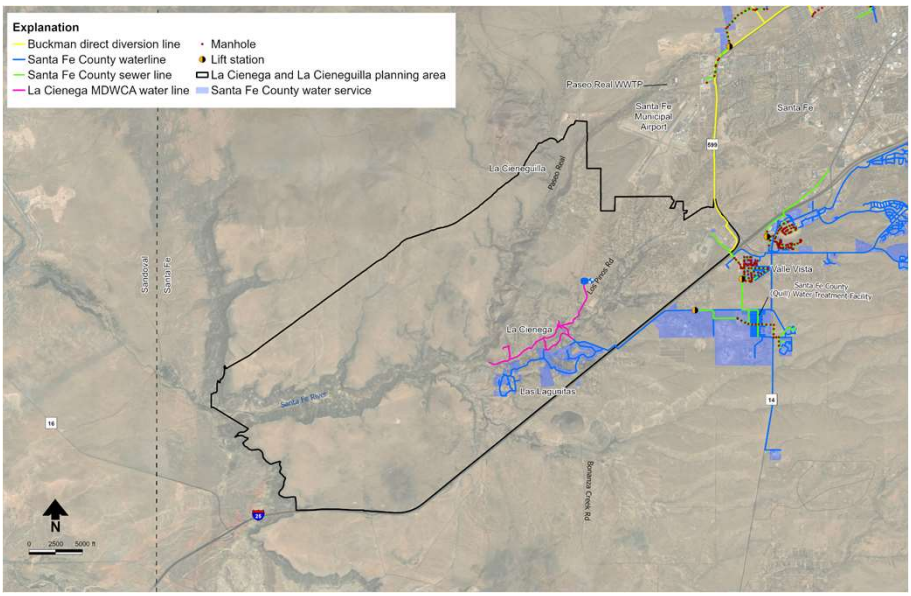




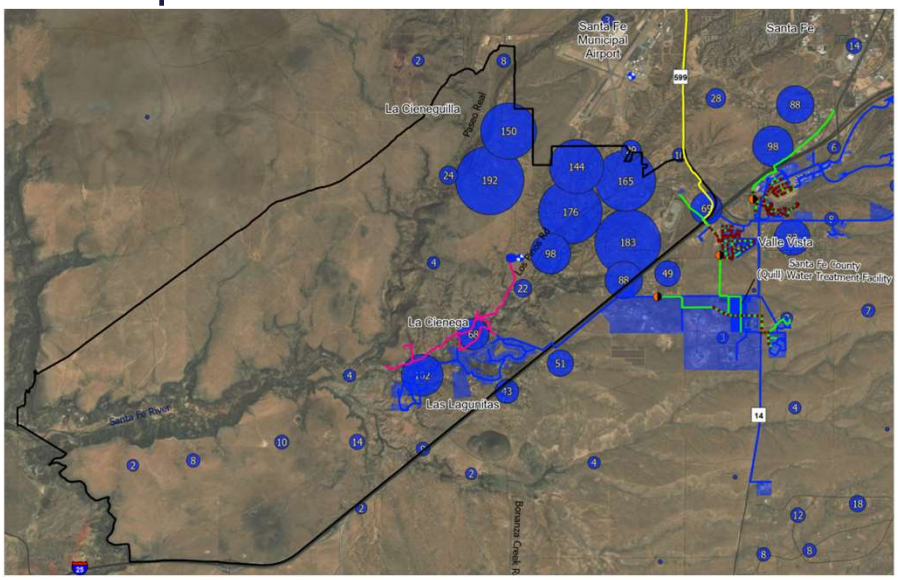
Acequias



System Utility Information



Grouped Domestic Wells



Community Concerns

- Desire to preserve and enhance the area's rural character, preserve agriculture and ranching
- Reduction in surface and groundwater resources
  - Inadequate water supply for area acequias
  - Decrease in spring flow, springs going dry
  - Pumping of Ancha-Tesuque Formations upgradient (e.g., EAWSD, others)
- Growth and development, increased water demands
  - County requirements to connect to County water that apply to some well owners but are not enforced
  - County's approval of new development to be served by domestic wells
  - Proliferation of trailer parks along Los Pinos Road
  - Desire for Eagle Ridge/former Santa Fe Downs redevelopment to be served by the County

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Community Concerns (continued)

- PFAS contamination
- Invasive species, increase in riparian vegetation
- City of Santa Fe's Paseo Real Wastewater Reclamation Facility (PRWRF)
  - Adequacy of treatment, future project to rehabilitate/replace
  - Potential for the City to decrease the volume of treated wastewater discharged to the Santa Fe River with construction of the San Juan-Chama Return Flow Pipeline

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Creating Hydrologic Resilience

- Johnson et al. (2016) list the following possible solutions to reduce groundwater depletions in the Ancha Formation and support a positive water balance:
  - Eliminate groundwater withdrawals from areas near the ancestral Santa Fe River and El Dorado buried valleys
  - Manage the timing and location of groundwater withdrawals from the Ancha Formation saturation zone to eliminate or reverse further losses to the Ancha aquifer near the wetlands
  - Utilize the natural recharge capabilities of buried-valley aquifers in the Ancha saturation zone and develop effective aquifer storage projects where opportunities exist
  - Manage overgrowth of unwanted invasive vegetation in the wetland riparian zones to minimize summer losses to evapotranspiration

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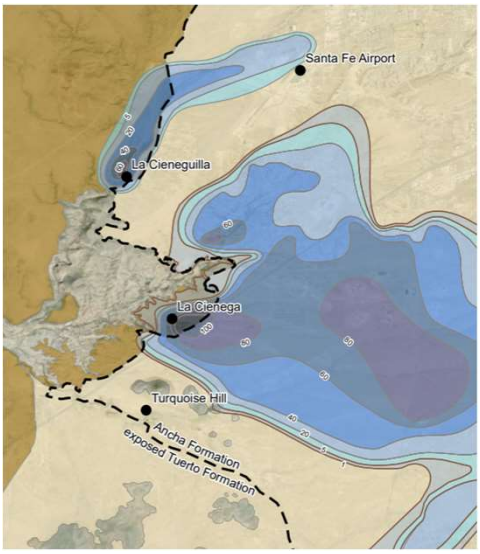
Extent of Ancha Formation saturation



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Potential Project Identification

- Looking to identify the alternatives that will be formally evaluated in the project's preliminary engineering report (PER)
- Future meeting: the project team will solicit input on the criteria to be used to evaluate the alternatives
  - Capital costs
  - O&M costs
  - Environmental

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Potential Project Types

1. Vegetation management
2. Stormwater management
3. Reduce groundwater demand
4. Recharge and reuse projects

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Potential Projects

1. Vegetation management
   - Targeted removal of non-native trees and vegetation (e.g., Siberian elm, Russian olive),
   - Potentially seek NRCS invasive species funding from Santa Fe–Pojoaque SWCD
   - Enhance wetland areas (e.g., potentially approaching the Las Lagunitas subdivision to encourage their participation)
2. Stormwater management
   - Consider implementing stormwater projects in the City or County that would retain runoff for up to 72 hours, slowing down flows and allowing for more infiltration (also reducing damage caused by high flows)
   - Implement a comprehensive community-wide water conservation and water harvesting program to include stormwater management and flood control

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Potential Projects (continued)

3. Reduce local/upgradient groundwater demand
   - Connect more domestic well users to County water (e.g., trailer parks or other areas with high density of population/wells)
   - Connect any Pojoaque Pueblo Eagle Ridge development (formerly Downs at Santa Fe) to County water
   - Stop approving developments that would be supplied by domestic wells
   - Coordinate with the Eldorado Area Water & Sanitation District (EAWSD) regarding taking their Ancha/Tesuque wells offline

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Potential Projects (continued)

4. Recharge and reuse
   - Recharge treated wastewater from the County's Quill Wastewater Treatment Facility upgradient of area springs
   - Potential recharge project locations include on the State Penitentiary property/in the Valle Vista area
   - Increase the reuse of treated effluent (e.g., for irrigation)
   - Connect more septic system users to the County sewer system, increasing the volume of wastewater that is collected and treated (and potentially reused)

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Activity & Discussion

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