2024 End of Year Report

City of Albuquerque-Open Space Division

Los Poblanos Fields

Field # 5 (25 ac.)

Submitted by: Southwest Soil Health, LLC

- Report on whether you followed or modified the crop plan, and if so, how and why.
 - No changes were made to the crop plan this year. However, strategic adaptations were implemented in response to unstable water delivery from MRGCD.
 Alternative land management practices were employed to uphold and prioritize soil health principles.
- Specify how you achieved the following goals (refer to the attached Request for Expressions of Interest for more information on each of these goals):
 - Regenerative Agriculture
 - Ecologic: Applied out-of-the-box management strategies to address adaptive management of the LPF Field 5.
 - Tall fescue and alfalfa were no-till drilled at LPF in a bisectional pattern, with alfalfa in one seed bin and fescue in the other, to create alternating forage across the field. In contrast, last year the field was rototilled and primarily seeded with a Brillion seeder. This year's no-till approach, however, was unable to outcompete invasive johnsongrass and bindweed due to the lack of soil disturbance in the heavy clay soils. As a result, the fescue and alfalfa failed to germinate, and the field was outcompeted by weeds.
 - The Wildlife Field was no-till drilled with yellow pea and buckwheat.
 - Compounding these challenges were limited water availability and a poorly functioning irrigation ditch. To manage the situation, the field was mowed throughout the growing season to suppress weeds while allowing the soil to rest during a critically hot and dry

- period. Consequently, no conventional hay was cut, baled, or sold this year due to the poor germination.
- These outcomes highlight the need for more intensive field preparation, including ripping, discing, leveling, and ditch improvements, to support successful crop establishment in future growing seasons.
- Economic: Provided over 155 hours of work to the active farm management of LPF5 and \$14,950 in agricultural workforce development to implement a practical soil health management program for a 1-year lease agreement
- Community support: Assisted with irrigation scheduling and communication with other LPF irrigators and MRGCD.
 - Provided assistance to RGCF with the repair of their on-farm weather station. I transported a powerline bucket truck to assist the Executive Director, Farm Manager and Volunteers, with lifting tools and materials roughly 25ft. In the air to address a failed component.
- Soil Health and Restoration
 - Integrated all 5 soil health principles during the implementation of the 2024 Crop Plan
 - Collected field data during the growing season to support adaptive management planning efforts.
 - Spring 2024 soil samples were collected-both Routine Soil Tests and Soil Health Analysis.
 - Soil health trends over the past 2 years indicate high organic matter but phosphorus is limited.
 - Steps will be taken Spring 25 to address nutrient deficiencies using cover crop planting through the NMDA Healthy Soil Grant program.
- Drought-tolerant and wildlife crops
 - Planted 20 ac. of alfalfa/fescue hay, a drought tolerant grass, on LPF5 into an aging alfalfa stand. The wildlife field was no-till drilled with yellow pea and buckwheat.
- Integrative Pest Management
 - Conducted a visual weed survey on LPF fields. Prevalent weeds are plantain, Johnson grass and bindweed.
 - In the absence of chemical interventions, invasive species will need to be addressed via tillage. For the past 2 seasons I have no-tilled into existing stands of alfalfa and invasive species, with the invasives outcompeting every year.

Programming

- · Report on community/education engagement including numbers of people and youth served during education events.
 - Organized a farm day field trip with three classes from Alvarado Elementary. There were 62 students and 25 parents and teachers in attendance for the 6-hour trip. The group was greeted at Big Jims Farms off Rio Grande to pick up pumpkins donated to the students. They then traveled to the Village of Los Ranchos Agri-Nature Center where they learned about compost, worms, bees, seeds, and soil.
 - Financial report on how much you spent at the farm and how much you gained from crops or other commercial operations. Also, report on any grants you received.
 - No grants were received during this year.
 - Beginning in FY25, NMDA's Healthy Soil Program will be extending the length of projects from 9 months to 1.5 years. With this news, I intend to apply for funds to support the ongoing cover crop trials planted across the OSD leased fields.
 - After 2 seasons irrigating off of the deteriorating concrete ditch at LPF5, I will pursue irrigation efficiency funding through the MRGCD and Ciudad SWCD.

Please see the attached financial reports and photos for the LPF5.

					SW SOIL HEALTH LLC			
LOS PO			EOY	REPORT 2024				
TOTAL HOURS	TOTAL EXPENSES	TOTAL INCO	OME					
155	16,705.00	0						
DATE(S)	ACTIVITY	LOCATION	HOURS	ACRES	RATE	TOTAL		
Mar-24	DITCH CLEANING	LPF F5	10		\$40.00	\$400.00		
4/29/24	PLANTING (NO-TILL)	LPF F5		25	\$100.00	\$2,500.00		
5/2/24	IRRIGATION	LPF F5	25		\$15.00	\$375.00		
5/25/24	IRRIGATION	LPF F5	25		\$15.00	\$375.00		
6/24/25	MOWING/RESIDUE MGMT	LPF F5		25	\$125.00	\$3,125.00		
6/25/24	IRRIGATION	LPF F5	25		\$15.00	\$375.00		
Jul-24	DITCH CLEANING	LPF F5	10		\$40.00	\$400.00		
8/1/24	MOWING/RESIDUE MGMT	LPF F5		25	\$125.00	\$3,125.00		
8/12/24	IRRIGATION	LPF F5	25		\$15.00	\$375.00		
10/8/24	IRRIGATION	LPF F5	25		\$15.00	\$375.00		
Dec-24	MOWING/RESIDUE MGMT	LPF F5		25	\$125.00	\$3,125.00		
12/1/24	DITCH CLEANING	LPF F5	10		\$40.00	\$400.00		
LABOR			155			\$14,950.00		
PURCHASES/SEE	D					\$1,755.00		
	BUCKWHEAT	LPF F5	25% WILDLIF	2.5		\$195.00		
	YELLOW PEA	LPF F5	25% WILDLIF	2.5		\$112.50		
	TALL FESCUE	LPF F5		10		\$275.00		
	ALFALFA	LPF F5		10		\$1,172.50		
INCOME	1ST CUT	NO-TILL ALFALFA/GRASS				\$0.00		
	2ND CUT	NO-TILL ALF	FALFA/GRASS			\$0.00		

3RD CUT	NO-TILL ALFA	ALFA/GRASS		\$0.00	
4TH CUT	NO-TILL ALFALFA/GRASS			\$0.00	

View from SW corner of Field 5 with flood irrigation.





Mowing fields spring and summer to manage residue and weeds.



View from SW field corner in August after mowing.

Mowing field edges along walking paths.



Hay and cover crop seeds were no-till drilled in the spring and summer.

