

A field of sunflowers with a grey sky in the background. The sunflowers are in various stages of bloom, with some showing dark brown centers and bright yellow petals. The overall tone is muted and professional.

# FARM PLAN UPDATE

Paseo del Norte Open Space

Village of Los Ranchos

Board of Trustees Meeting

Presented by Jacobo Sanchez

06/08/2022

## TONIGHT'S TOPICS

- Update on the 2022 Fallowing Program
- Actions to date by VLR Farm Team
- Overview of SW Soil Health Farm Plan
- MRGCD Conservation Loan Program
- Next steps



WHY  
MRGCD'S  
FOLLOWING  
PROGRAM  
FIT FOR 2022

## POOR IRRIGATION SEASON FORECAST

Given the lower-than-normal snowpack and no storage at El Vado due to construction, MRGCD forecasted a shortened irrigation season for farmers. In April, the irrigation season began in the ABQ Division with water deliveries only estimated until mid-June.

## LETTING SOILS REST IS REGENERATIVE AG

Allowing fields to rest after 15+ years of use and production is a form of regenerative ag practiced by farmers large and small for centuries.

## CONSIDERABLE IRRIGATION INFRASTRUCTURE DEFICIENCIES IDENTIFIED

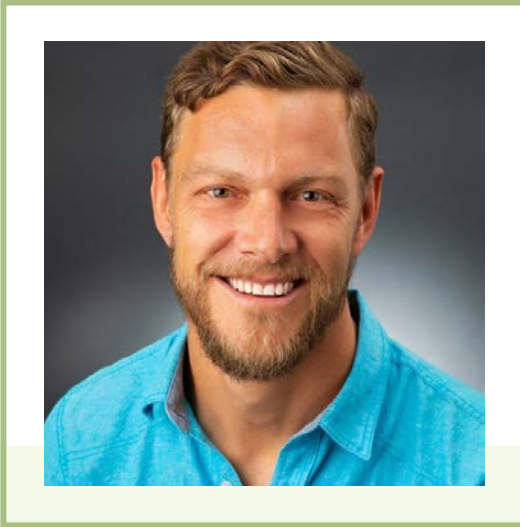
On May 5<sup>th</sup>, the VLR Farm Team and MRGCD staff toured the property and identified several instances of inefficient water use per MRGCD's Water Distribution Policy.

# MEET THE VLR FARM TEAM



JACOBO SANCHEZ

Farmer/SW Soil Health  
LLC



JOSHUA  
O'HALLORAN

VLR Agricultural Program  
Manager



KEEN HEINZELMAN

Public Facilities Manager



ANN SIMON

VLR Administrator





# PHOTOS FROM MAY 5<sup>TH</sup> WALK-THROUGH

9:00 am – 10:30 am  
In Attendance: VLR Farm Team, MRGCD  
ISOs, and Conservation Program Staff

8/22/2022



# PHOTOS FROM MAY 5<sup>TH</sup> WALK-THROUGH

9:00 am – 10:30 am

In Attendance: VLR Farm Team, MRGCD  
ISOs, and Conservation Program Staff

## PESTS

- Alfalfa weevil along Western end of Exhibit 2
- Mistletoe infestation throughout overstocked Siberian elm canopy
- Salt cedars in Exhibit 4



## FAILED STRUCTURES

- Undersized turnouts and eroded earthen ditches
- Failed CMP/culverts leading to head cuts on fields and wildlife areas



## OPPORTUNITIES FOR IMPROVEMENT

- Reduce soil and water erosion events
- Remove failed structures and safety hazards
- Improve irrigation efficiency for improved soil, crop, and cottonwood health







## ACTIONS TO DATE

### ENROLLED IN MRGCD'S EMERGENCY FALLOWING PROGRAM

Given property conditions and irrigation forecast, the VLR opted to fallow this irrigation season, leveraging fallow payment for on-farm improvements.

### ATTEMPTED TO PLANT 2 AC. FIELD

San Isidro weekend, 1 ac. of sunflower planted, only  $\frac{3}{4}$  ac watered in 12 hrs. ABQ Main currently running 10% of normal CFS. Field improvements are needed.

### FUNDING FOR INFRASTRUCTURE IMPROVEMENTS SECURED

Pursuing MRGCD Conservation Loan Program to address irrigation efficiency improvements.

### CREATED COTTONWOOD TREE MANAGEMENT PLAN

Weekly visits to monitor cottonwoods with backup watering plan established for any cottonwoods that experience stress during prolonged drought.



# OUR VISION

## Paseo del Norte Open Space Farm Plan and Timeline-SW Soil Health

Updated plan to include 2022 Following Year and 5 year lease from January 2023 to December 2027

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Year 1 Activity & Outcomes	Year 2 Activity & Outcomes	Year 3 Activity & Outcomes	Year 4 Activity & Outcomes	Year 5 Activity & Outcomes	Year 6 Activity & Outcomes
List of activities	List of activities	List of activities	List of activities	List of activities	List of activities
Coordinate planning with Village on infrastructure needs, facilities improvements, debris removal, and estimated costs and timelines.	Maintain coordination and communication with the Village on farm plan activities. Installation of new irrigation infrastructure complete.	Assess farm plan practices and effectiveness of infrastructure improvements.	Work with Village on developing educational materials and fact sheets on the progress of the farm plan during years 1-3.	Work with Village on developing educational materials and fact sheets on the progress of the farm plan during year 4 and 5. Evaluate the plan.	Work with Village on developing educational materials and fact sheets on the progress of the farm plan during year 4 and 5. Evaluate the plan.
Communicate with MRGCD ISO to identify fields that are not meeting 1 ac/hour water delivery requirement prior to irrigation season. Pursue cost-share funding opportunities to improve on-farm efficiencies.	Install and equip properties with soil-moisture and crop production equipment to monitor improvement.	Re-set and re-seeding of irrigated croplands to support the integration of livestock for reduced tillage and residue management.	Establish rotational grazing plan for fields that were re-seeded with grass in year 3. Begin hay production.	Continue hay production and livestock grazing rotations.	Continue h livestock
Signage installation of new farm management plan and activities on properties.	Identify community service learning projects that support farm plan activities. Implement projects with partner and community involvement.	Identify community service learning projects that support farm plan activities. Implement projects with partner and community involvement.	Identify community service learning projects that support farm plan activities. Implement projects with partner and community involvement.	Identify community service learning projects that support farm plan activities. Implement projects with partner and community involvement.	Identify comm projects tha activities. Imp partner and co
Soil rest and regeneration via fallowing	Utilize upgraded irrigation infrastructure and soil-moisture monitoring system to demonstrate soil regeneration via interseeding, cover cropping, incorporating green matter into soil, reduced-tillage, and residue management of farmed lands.	Establish cover crop and forage crop demonstration trials and research.	Harvest 50% of seeded grass fields for hay production. Donate 1 cow to community for meat to low-income families.	Rotate livestock into fields with cover crops and graze to terminate. Remove cows and re-seed those fields into grass. Harvest 50% of seeded grass fields for hay production. Donate 2 cows to community for meat to low-income families.	Rotate livestock crops and graz cows and re-grass. Harvest fields for hay i cows to comm inco
Wildlife habitat assessment and inventory. Address stormwater/irrigation runoff and easement maintenance along wildlife corridors. Cottonwood inventory and monitoring.	Monitor stormwater/irrigation runoff structures and easement maintenance along wildlife corridors.	Integrate small ungulates, temporary grazing paddocks to forage grass and weeds in wildlife areas. Broadcast native grasses and forbs that support pollinators.	Continue farming for wildlife and pollinator practices.	Continue farming for wildlife and pollinator practices and evaluate effectiveness.	Continue far pollinator pra effi

Year 1 Outcomes Title	Year 2 Outcomes Title	Year 3 Outcomes Title	Year 4 Outcomes Title	Year 5 Outcomes Title	Year 5 Outcomes Title
List of Outcomes	List of Outcomes	List of Outcomes	List of Outcomes	List of Outcomes	List of Outcomes
Spring 2022, coordinated planning with Village on infrastructure needs, facilities improvements, debris removal, and estimated costs and timelines. Previous tenant vacated property after April 1st deadline, delaying start to farm management and operations.	Maintain clear lines of communication and expectations of the properties.	Maintain clear lines of communication and expectations of the properties. Provides opportunity for adaptive management.	Develops educational materials that help beginning farmers understand the inputs, timelines and planning required for soil restoration and production ag in urban settings.	Develops educational materials that help beginning farmers understand the inputs, timelines and planning required for soil restoration and production ag in urban settings.	Evaluate and compile progress, experiences, and data for years 1-5 of the plan into a case study for urban agriculture and wildlife management in the Middle Valley.
Spring 2022, walked fields with MRGCD ISOs and Conservation Program Staff to identify fields several fields not meeting 1 ac/hour water delivery requirement. Safety hazards and sources of extreme erosion and scouring identified throughout property.	Integration of measurement to inform sustainable management.	Intentional soil regeneration and rest prior to implementation of hay and livestock production. Conduct on-farm research with forage specialists.	Inform BMPs of rotational grazing of irrigated pasture in the Middle Valley. Conduct on-farm research with forage specialists.	Inform BMPs of rotational grazing of irrigated pasture in the Middle Valley. Conduct on-farm research with forage specialists.	Calculate inputs, both economic and environmental, to determine production yielded from hay and livestock for years 4 and 5.
Utilized MRGCD's Emergency Fallowing Program to allow for fields to rest after years of continuous production and poor water forecast. Funds from fallowing program used towards identified irrigation infrastructure and maintenance needs. Secured funding opportunities to improve on-farm efficiencies through MRGCD's low-interest loan program. Underground irrigation pipeline scheduled for Winter 2022 installation to support cover crop demonstration trials and seed collection.	Provide annual opportunities for community learning and development.	Provide annual opportunities for community learning and development.	Provides annual opportunities for community learning and development.	Provides annual opportunities for community learning and development.	Evaluate educational workshops and community service learning projects to inform future partnerships.
Working with VLR Agriculture Farm Manager on supplemental cottonwood water monitoring. Planted 2ac. of sunflowers to support wildlife.	Monitor water management and conservation on the properties that supports wildlife and ag production.	Implements adaptive wildlife management planning into agroecosystems.	Implements adaptive wildlife management planning into agroecosystems.	Implements adaptive wildlife management planning into agroecosystems.	Evaluate years 1-5 of the wildlife management plan.



# ELEMENTS OF SW SOIL HEALTH'S PASEO DEL NORTE FARM PLAN



## COOPERATION

Between VLR,  
MRGCD, and  
easement partners to  
achieve shared goals



## RESTORATION

Of existing  
cottonwood/wildlife  
areas and irrigation  
systems through  
measured planning  
and implementation



## CONSERVATION

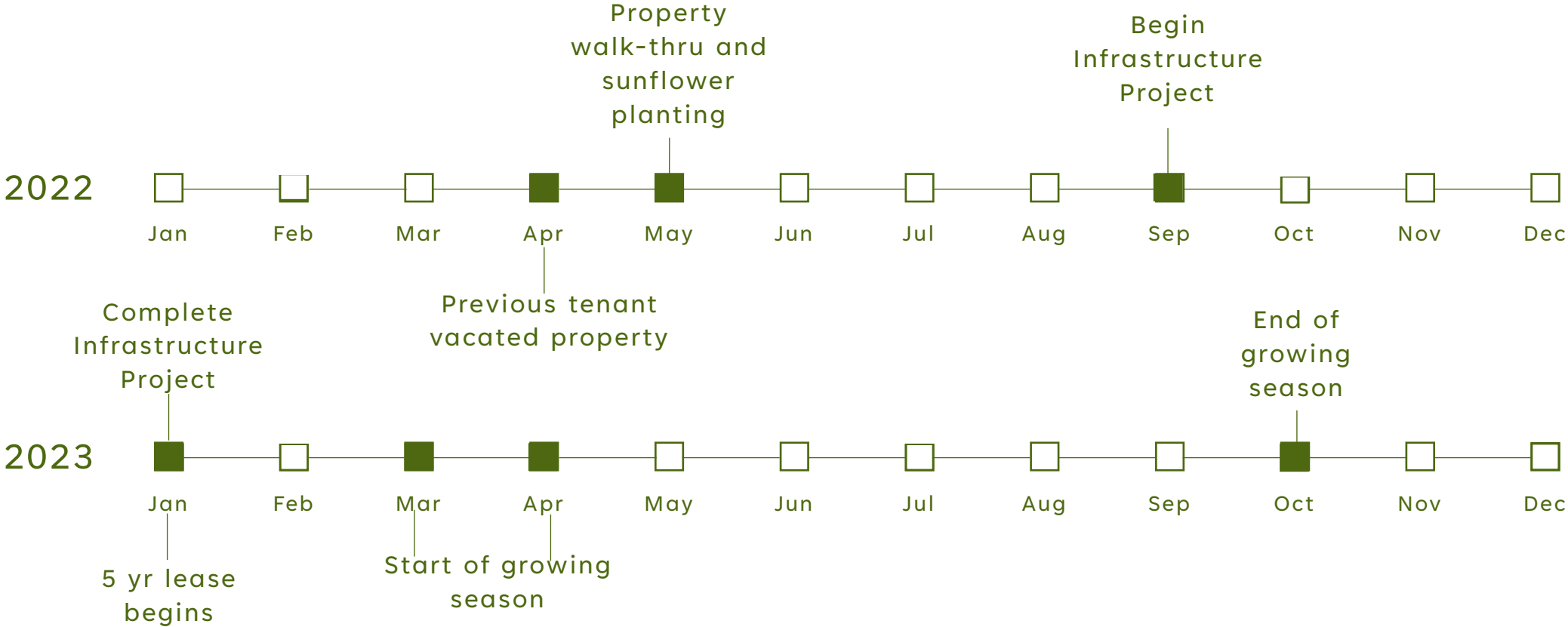
Of Village natural  
resources and  
agricultural legacy



## EDUCATION

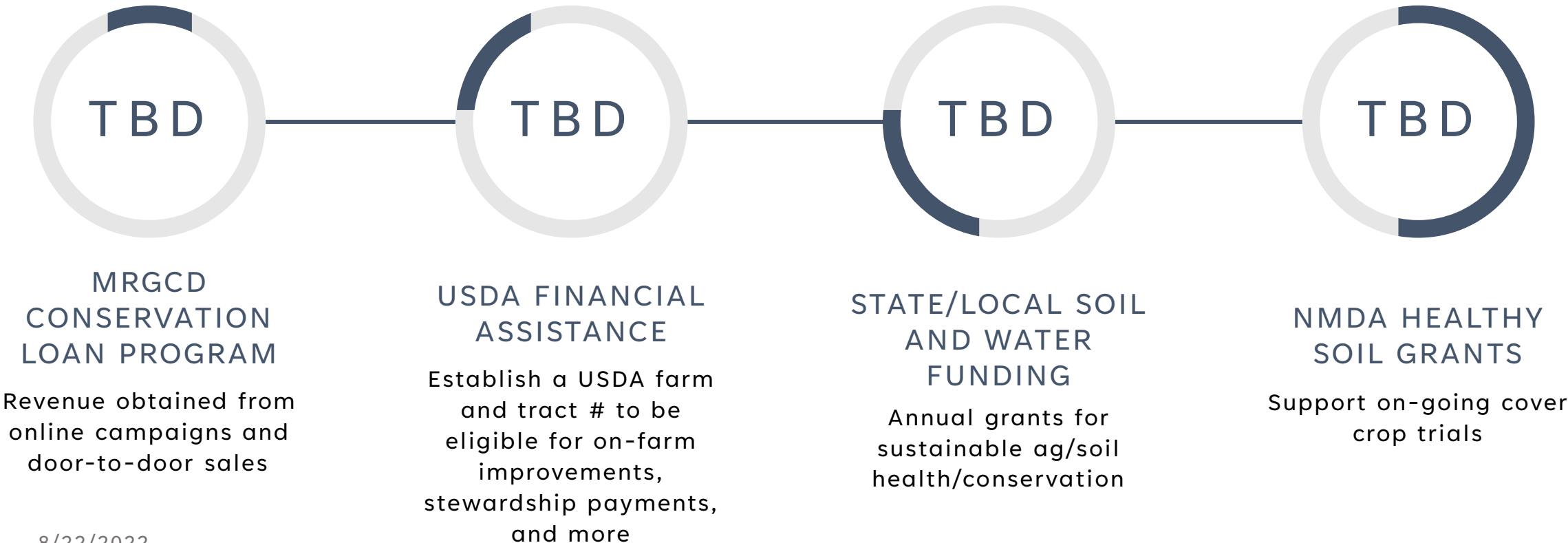
And on-farm  
demonstrations of  
proven practices for  
healthy soils, plants,  
animals, and  
communities

# 2-YEAR ACTION PLAN





# POTENTIAL FUNDING OPPORTUNITIES FOR INFRASTRUCTURE AND CONSERVATION





A dirt path leads through a wooded area. On the left, there is a stone wall. In the center, a large pipe is visible. The background is filled with dense green trees under a clear blue sky.

# MRGCD LOAN PROGRAM OVERVIEW





## PILOT PROGRAM

MRGCD is currently piloting a new loan program to help irrigators with conservation projects.

## LOW INTEREST

Interest rates dependent on borrower and loan amount. Most projects estimated to be <5% for 20 years.

## PRACTICES THIS LOAN WILL COVER

- Turnouts
- Stormwater catchments/ bioswales
- Land leveling
- Irrigation pipeline
- Invasive tree removal
- Concrete removal
- Fencing for rotational grazing
- Soil moisture sensor installation



# IRRIGATION INFRASTRUCTURE LAYOUTS






Current: 20 hrs

Exhibit 1

Proposed: 16 hrs



Legend:

-  Turnout
-  Irrigation pipeline
-  Alfalfa valve
-  Livestock drinker
-  Dirt access road










# IRRIGATION INFRASTRUCTURE LAYOUTS

Current infrastructure

Current

Exhibit 1

Legend:

-  Turnout
-  Irrigation pipeline
-  Alfalfa valve
-  Livestock drinker
-  Dirt access road



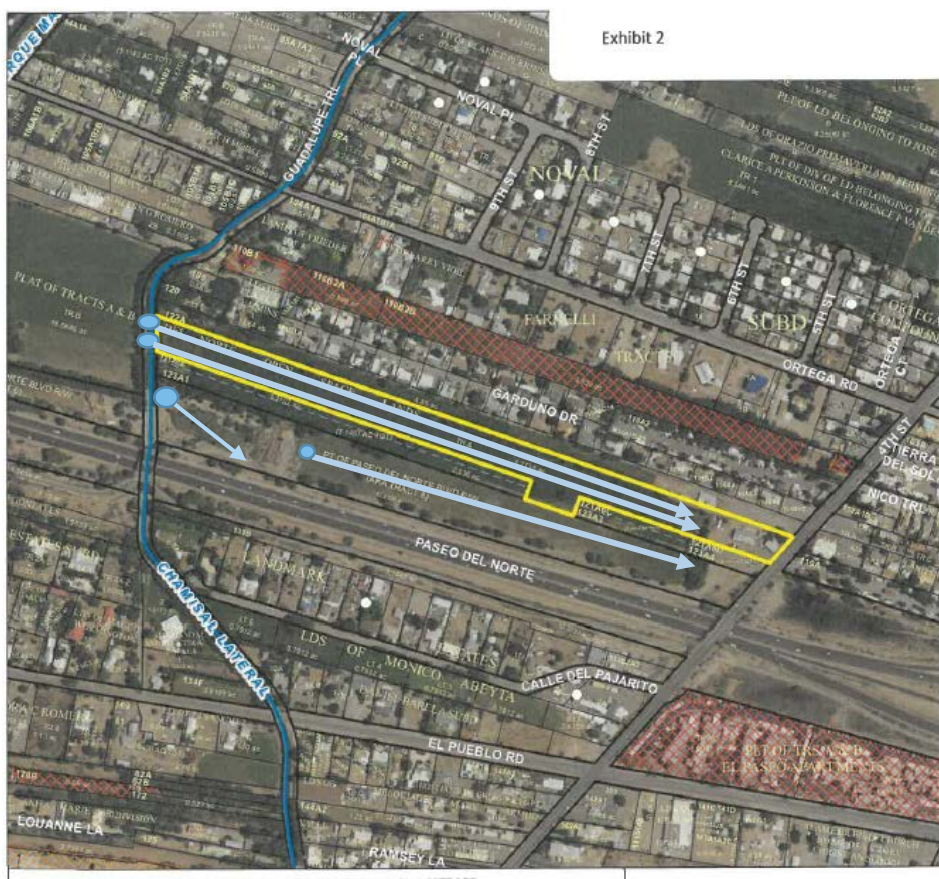


# IRRIGATION INFRASTRUCTURE LAYOUTS

Current: 48+ hrs

Exhibits 2, 4, 5, & 6

Proposed: 24 hrs



Legend:



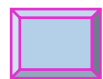
Turnout



Irrigation pipeline



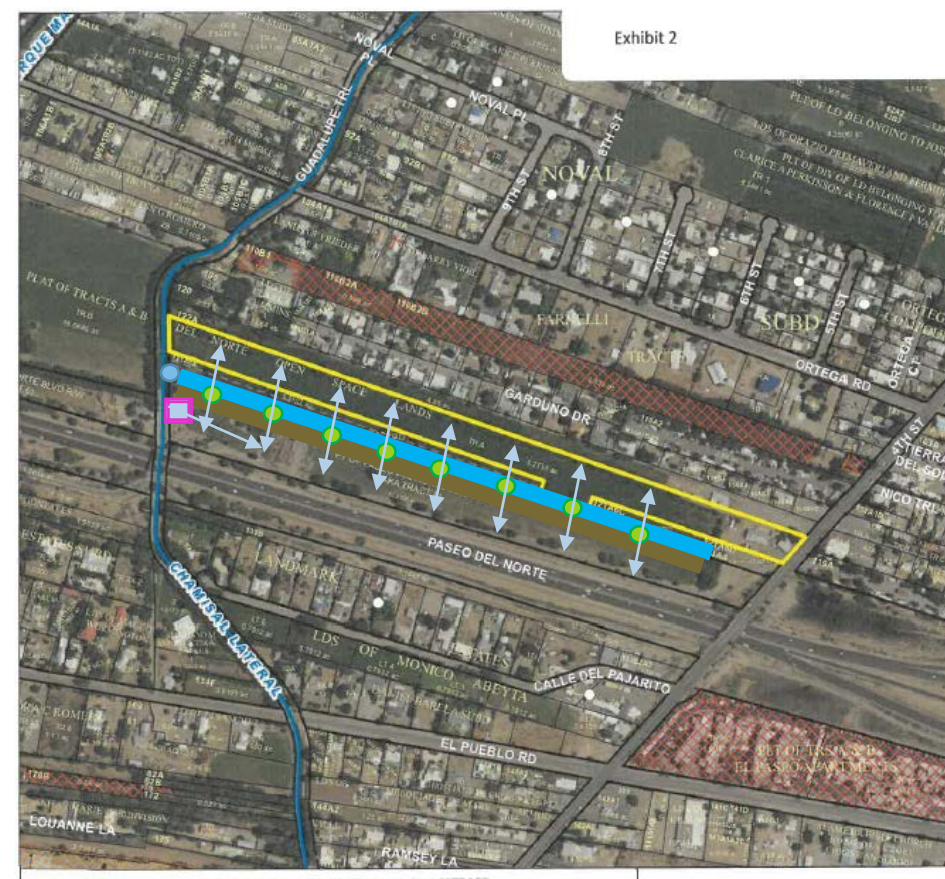
Alfalfa valve



Stormwater structure/  
bioswale, wildlife habitat



Dirt access road





# IRRIGATION INFRASTRUCTURE LAYOUTS

Current: 48+ hrs

Exhibits 2, 4, 5, & 6

Current



Legend:



Turnout



Irrigation pipeline



Alfalfa valve



Stormwater structure/  
bioswale, wildlife habitat



Dirt access road





# IRRIGATION INFRASTRUCTURE LAYOUTS

Current: 8-12 hrs

Exhibit 3

Proposed: 3 hrs



Legend:



Turnout



Irrigation pipeline



Alfalfa valve



Re-set turnout for farm delivery pad/irrigation pipeline



Dirt access road





# IRRIGATION INFRASTRUCTURE LAYOUTS

Current

Exhibits 2, 4, 5, & 6

Current



### Legend:



Turnout



Irrigation pipeline



Alfalfa valve



Stormwater structure/  
bioswale, wildlife habitat



Dirt access road



# ACRES AND CONSERVATION PRACTICES IMPLEMENTED THROUGH PROPOSED INFRASTRUCTURE IMPROVEMENTS IN THE FIRST 5 YEARS

26.9 AC.

(9) 2-ac. cover crop plots for soil regeneration, research, and seed production

Exhibit: 2, 4, 5, & 6

3.6 AC.

Wildlife/Stormwater Mgmt

Exhibits: 3 & 4

16 AC.

Rotational grazing, cover crops, and forage production

Exhibits: 1





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## SUMMARY

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Through a collaborative approach to conservation, SW Soil Health LLC and the Village of Los Ranchos are developing water-smart planning and implementation strategies to ensure the continued production and agricultural legacy of the Paseo del Norte Open Space for generations to come.





THANK YOU

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8/22/2022

