

Valencia Soil and Water Conservation District



HOW TO RESPOND TO THE BIG HOLE WILDFIRE?



MRGESCP Science Symposium

February 13th, 2024

**Andrew Hautzinger, VSWCD District
Director**



MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM:



On 1/28/2024 the MRGESCP Executive Committee approved VSWCD becoming the Collaborative Program's 17th signatory





How to Respond to the Big Hole Fire? –Talk Overview:

- VSWCD: Who We Are
- Wildfire Recap: April 11th, 2022 Big Hole Fire
- Strategy Review: MRG managers, practitioners and citizens are seeking applied, practical guidance to address three key needs:
 - i. How to respond effectively after severe wildfires;
 - ii. How to identify a diverse plant pallet with native species that are better adapted to future climatic conditions; and
 - iii. How to develop and implement strategies that will reduce the severity and impacts of future wildfire occurrences?

Valencia Soil and Water Conservation District Mission, Board of Supervisors & Staff

Providing resource conservation for a quality environment demonstrated through active leadership, cooperation, and partnership

VSWCD Board of Supervisors:

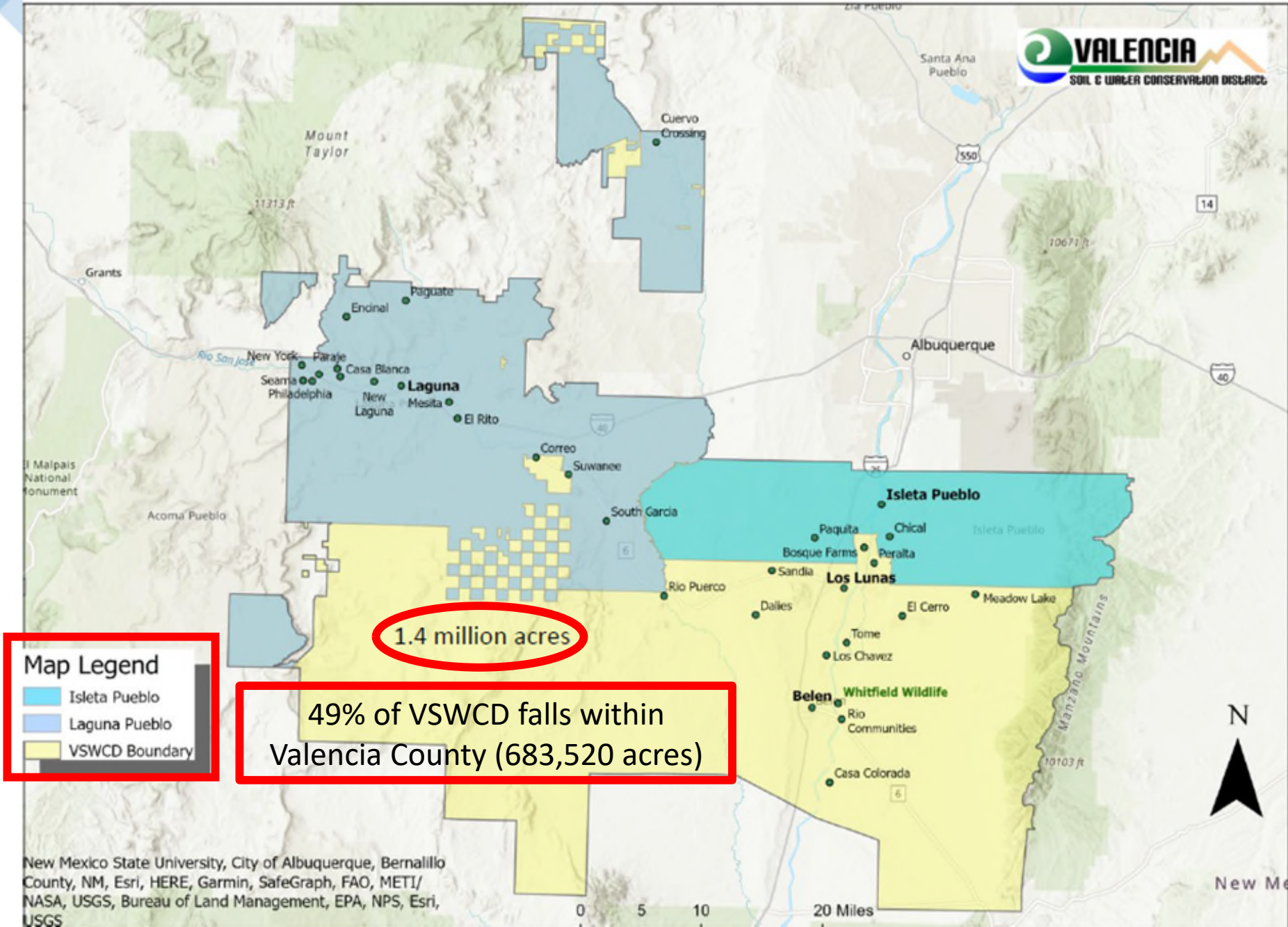
- Abel Camarena, Chair
- Teresa Smith de Cherif, Vice Chair
- Pamela Cordova, Treasurer
- Richard Bonine, Board Supervisor (Laguna Pueblo)
- Priscilla Abeita, Board Supervisor (Isleta Pueblo)
- James Fischer, Board Supervisor
- Nick Baca , Board Supervisor

VSWCD Staff:

- Andrew Hautzinger, District Director
- Johnny Chavez, Conservation Program Manager
- Megan McCready, Business Manager
- Laura McCann, Environmental Education Manager



Valencia SWCD: District Boundary

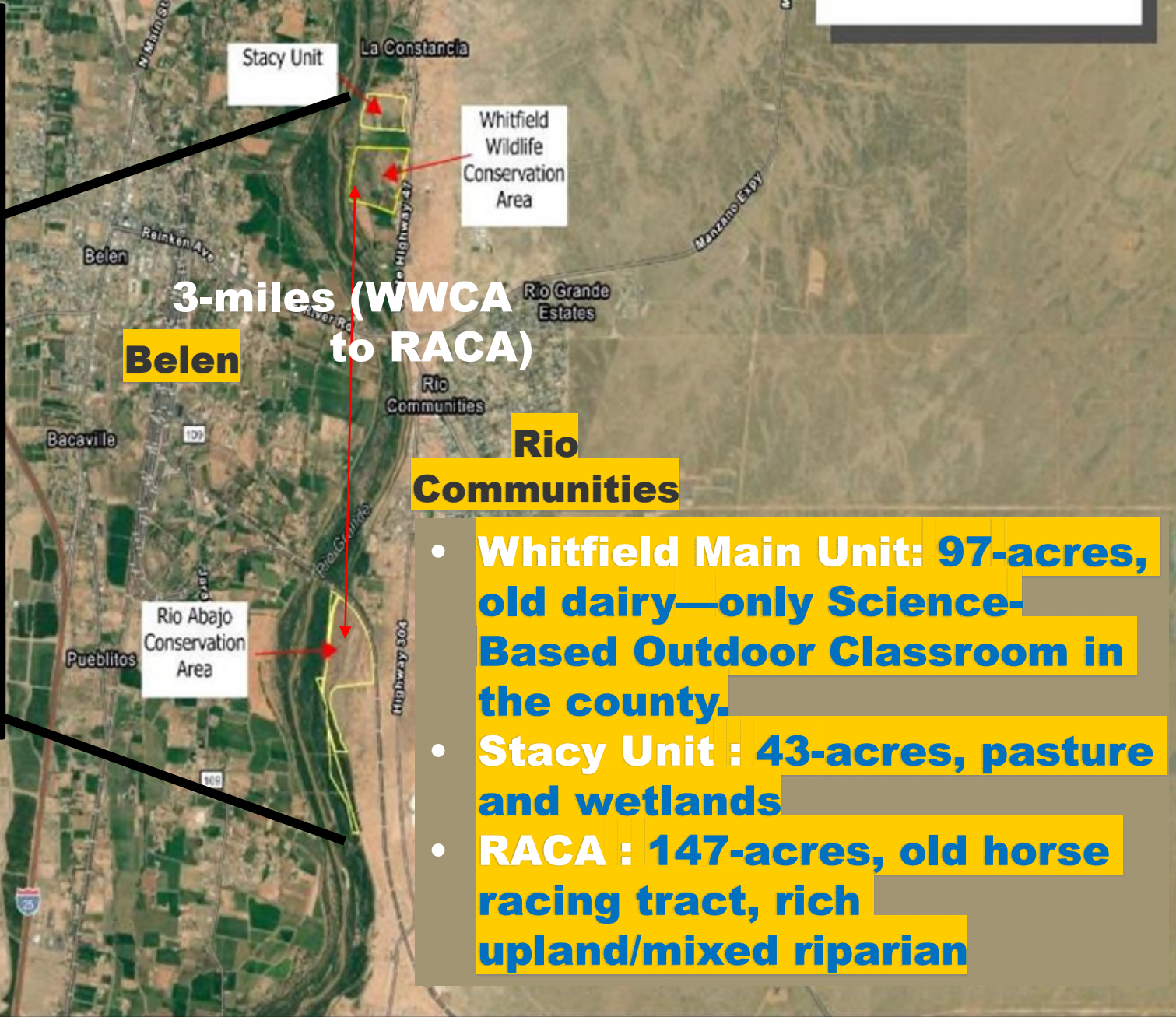
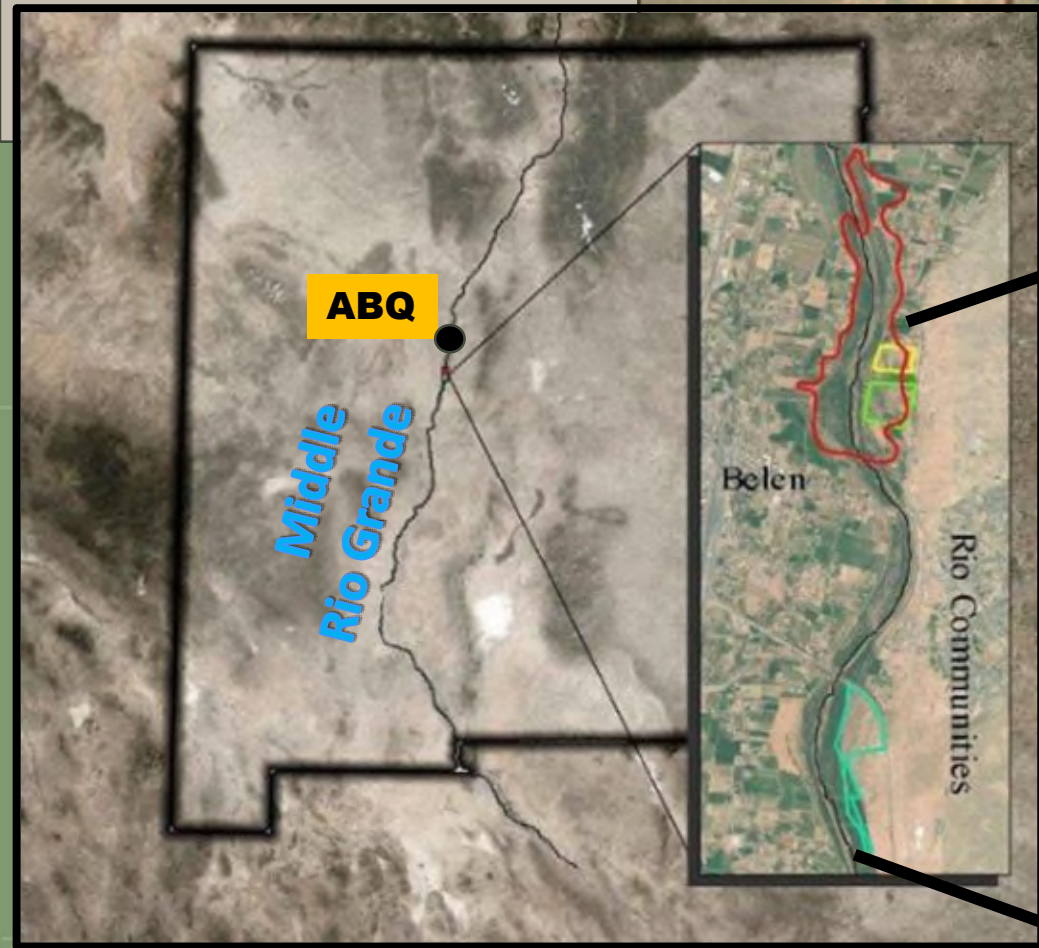


Valencia SWCD: Community-Focused Conservation & Education Programs

1. Environmental Education Program (only one in Valencia County & Pueblos)
2. Whitfield Conservation Area Complex: Premier Wildlife Viewing Location in Valencia County
3. Outdoor Laboratory to address key management questions
4. Financial Assistance Program for citizen conservation proj's
5. East Valencia Urban Gardens Program—8th year! →
6. Striving to be a Leader in Conservation Priorities
(e.g., bosque management with climate- & fire-adaptations)



Whitfield Conservation Area Complex:



- **Whitfield Main Unit: 97-acres, old dairy—only Science-Based Outdoor Classroom in the county.**
- **Stacy Unit : 43-acres, pasture and wetlands**
- **RACA : 147-acres, old horse racing tract, rich upland/mixed riparian**

BIG HOLE FIRE --April 11th, 2022-- +800 Acres

Valencia County's biggest bosque fire

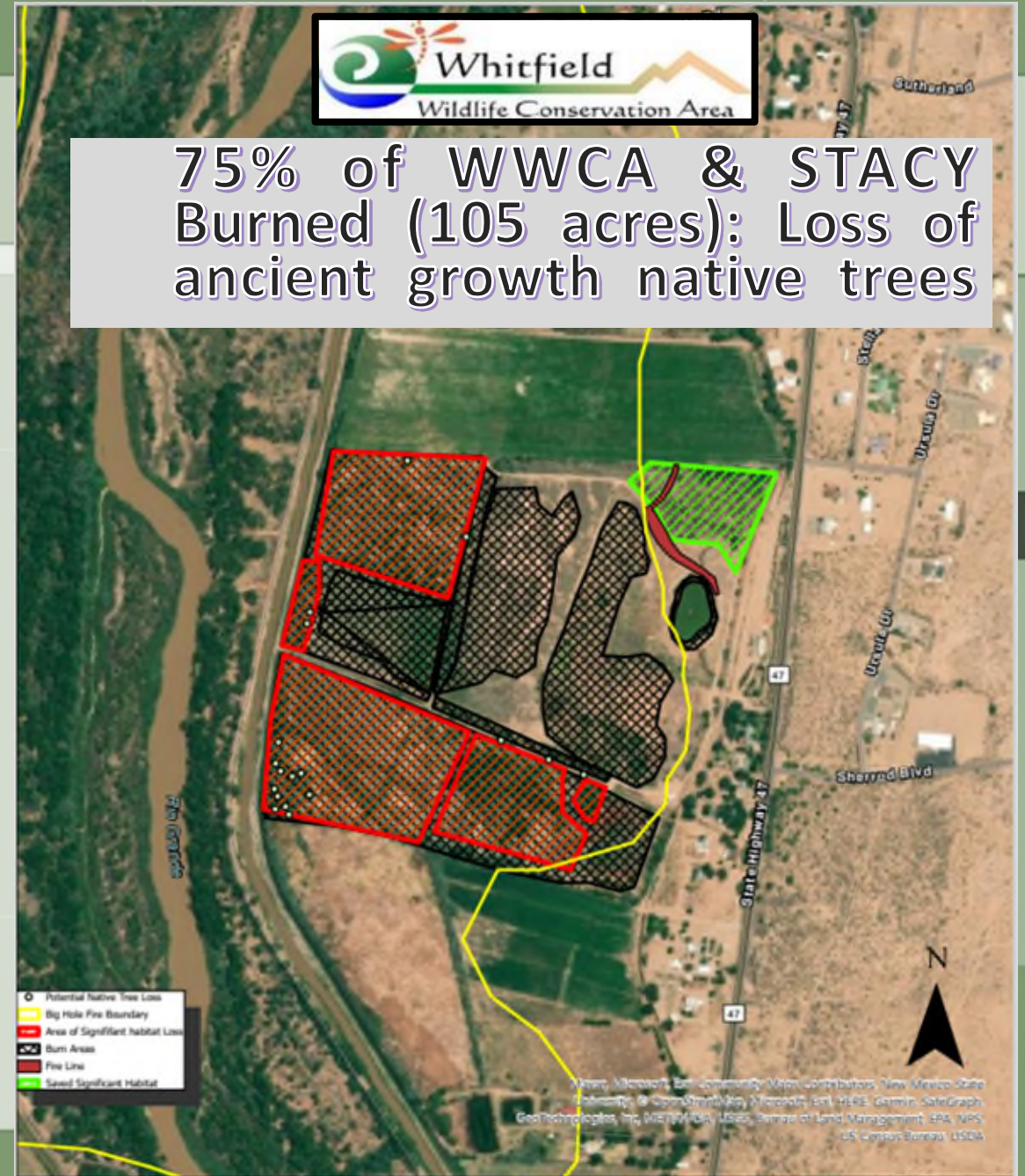


Stacy Unit
Whitfield Wildlife Conservation Area

Rio Abajo Conservation Area (3 miles S of WWCA)



75% of WWCA & STACY Burned (105 acres): Loss of ancient growth native trees



Big Hole Fire April 11th 2022
Whitfield Wildlife Conservation Area

Big Hole Fire: Drone photo taken a week after 4-11-22 fire:



BIG HOLE FIRE: Day of Photos

April 11, 2022





A BEFORE FIRE picture of the WWCA West Gate (and someone's abandoned Mountain Bike) ...



And an April 13th, 2022 picture of the gate & bike



Outdoor classroom

Before & ...

After

WHITFIELD'S Iconic OWL TREE



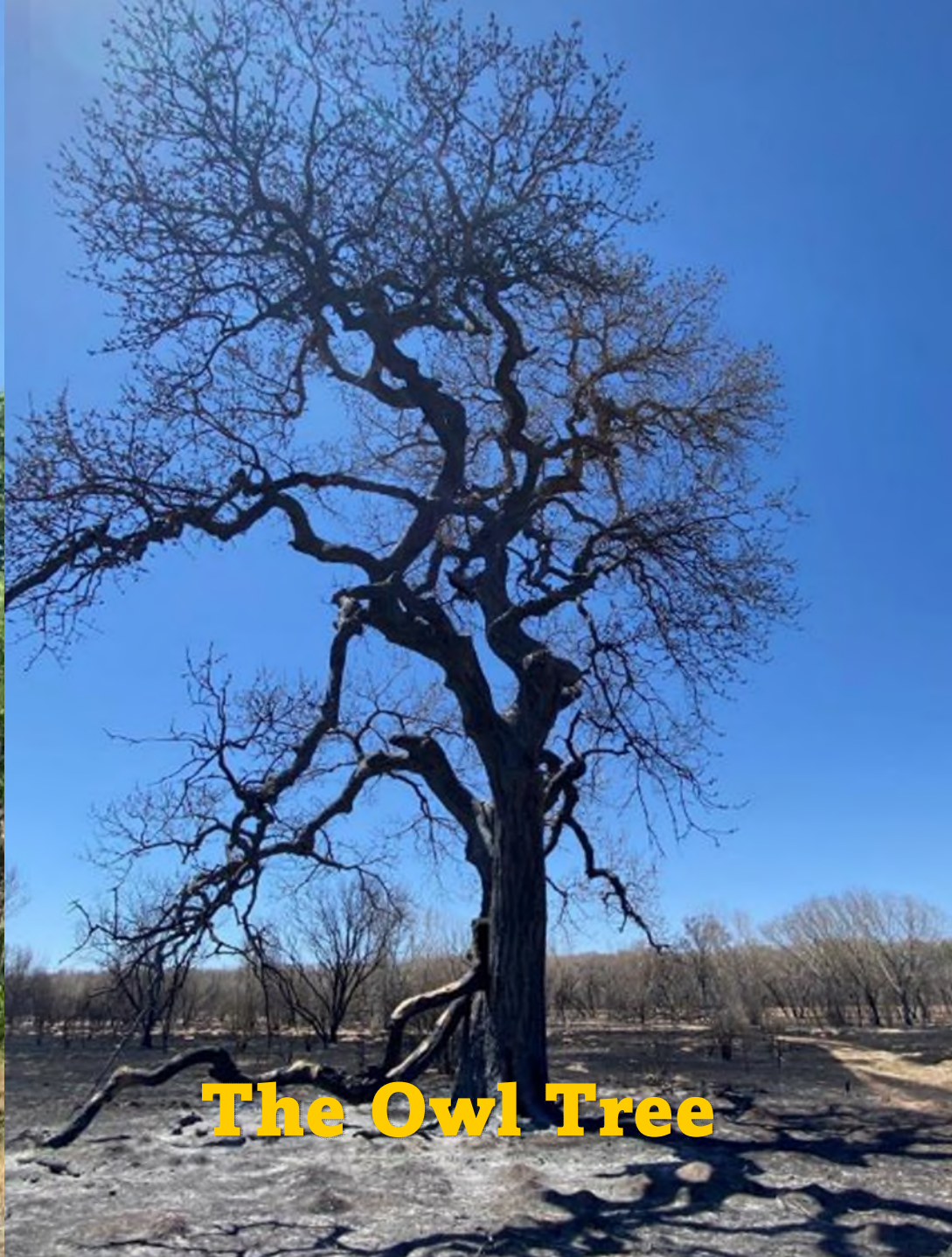
Summer 2021



100 Year
Old
Teaching
Tree



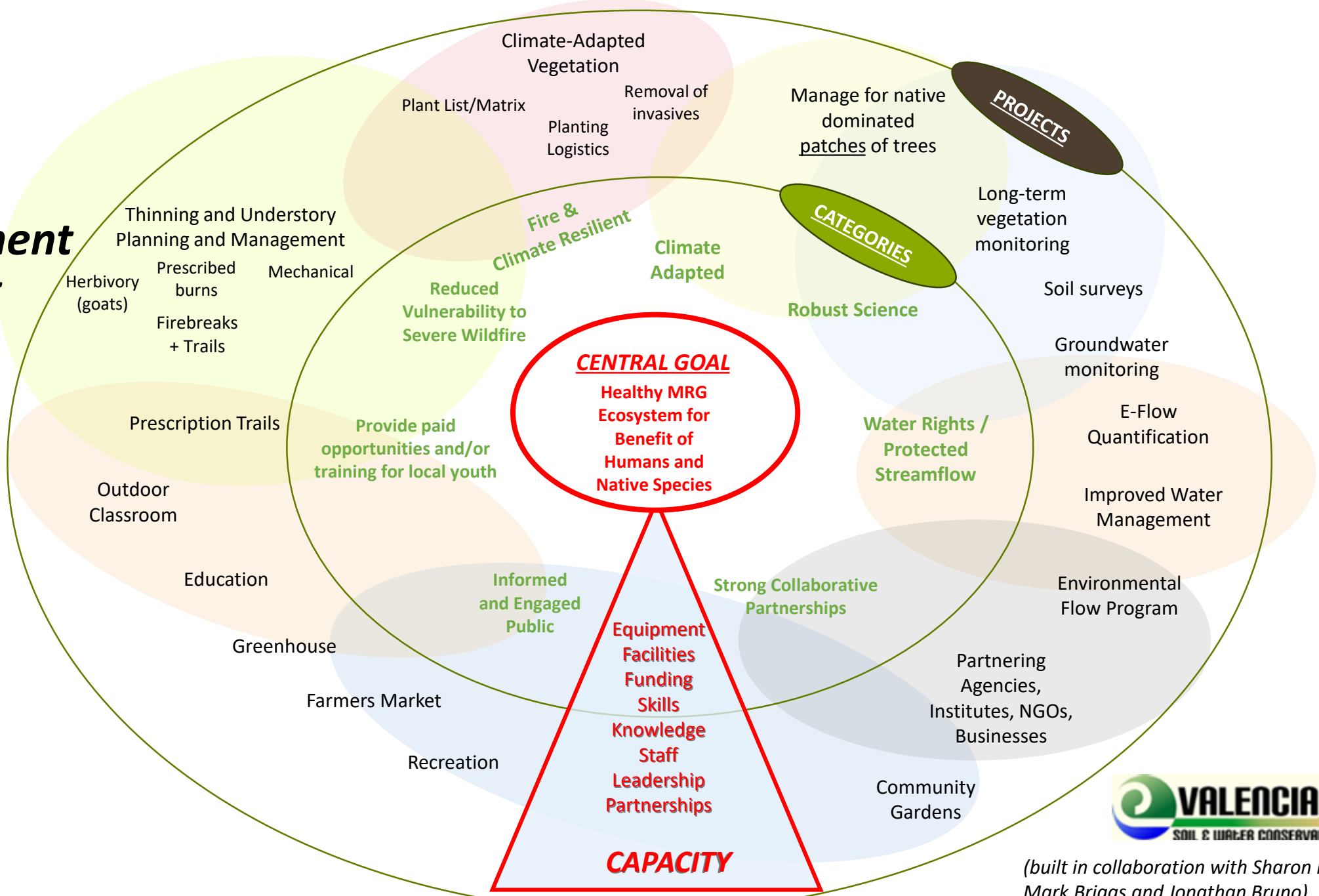
Most Visited Tree in Valencia County



The Owl Tree



Valencia SWCD's Bosque Management UNIVERSE



(built in collaboration with Sharon Hausam, Mark Briggs and Jonathan Bruno)

VSWCD's Approach to Achieve Effective Restoration:

*BUILDING RESILIENCY ALONG THE MIDDLE RIO GRANDE
IN RESPONSE TO A CHANGING FIRE REGIME*

IMPLEMENT TWO PILOT CLIMATE-& FIRE ADAPTED PROJECTS

POST-BURN

Pilot Project One:
A Climate Adapted
Riparian Revegetation
Project On VSWCD Lands
Burned by Big Hole Fire

(re: VSWCD's Whitfield
and Stacy Units)



PRE-BURN




Pilot Project Two:
Building Climate and
Fire Resiliency on
VSWCD Lands **Not**
Burned by Big Hole Fire

(re: VSWCD's Rio Abajo
Conservation Area)

PILOT PROJECT Opportunity: **Post-Fire** Restoration Scenario

Whitfield & Stacy Units:

3 TYPICAL POST-FIRE RESTORATION CHOICES:

-  -- Do Nothing
-  -- Plant Back As Was
-  -- Do Something Different (e.g., climate- & fire-adapted)

**POST-BURN PILOT PROJECT
OPTIONS @ WWCA and STACY**

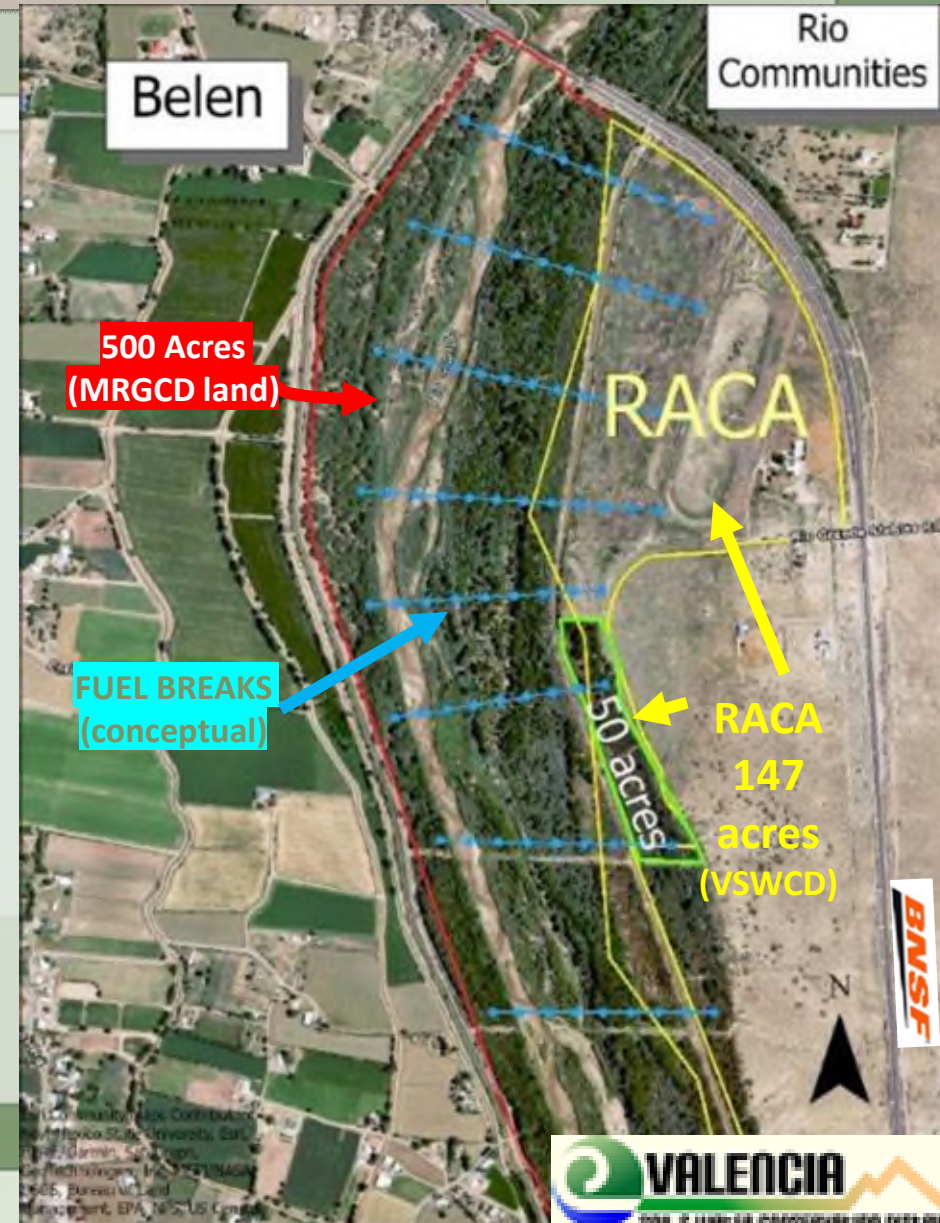


PILOT PROJECT Opportunity: Pre-Burn Site RACA

Rio Abajo Conservation Area

Pre-burn Pilot Study Location

- 🌳 147 acre mixed riparian site to showcase Bosque management restoration techniques
- 🌳 Thinning / Fuel Reduction / Native Retention
- 🌳 **Fuel Break** Design Opportunity
- 🌳 RACA Monitoring---Long-term Sentinel Site installed at RACA July 2022
- 🌳 Evaluating climate-science guidance (e.g., assisted migration)
- 🌳 Partners including: MRGCD, IRSA/Audubon, EMNRD, VC Fire Department



VSWCD's Partners Make All the Difference

- AmeriCorps VISTA
- Albuquerque Community Foundation
- Albuquerque, Open Space Administration
- Bosque Ecosystem Monitoring Program
- Central New Mexico Audubon
- CLIMAS (U of AZ)
- Total New Mexico (Environmental Educ.)
- Friends of Whitfield 501c3
- Isleta Reach Stewardship Association
- **MRG Endangered Species Collaborative**
- Mid-Region Council of Governments/EDA
- MRG Conservancy District
- NM Department of Agriculture
- NM Association of Conservation Districts
- NM Youth Conservation Corps
- NM State Forestry
- Pueblo of Isleta
- Pueblo of Laguna
- Pueblo of Santa Ana
- Salazar Center for N. Amer. Conservation
- UNM A.R.I.D. Institute
- UNM Dept. of Water Resources
- USDA SW Climate Hub
- US Bureau of Reclamation
- USDA-NRCS Wetland Reserve Program
- USGS-FORT Science Center
- USFWS NWRS and Eco Services
- US NPS Rivers & Trails, Conserv. Assist.)
- Youth Development Incorporated
- Valencia County Fire Department



Restoring Whitfield Workshop: Two Day session focused on improving bosque management



RESTORING
Whitfield:
A Climate Adapted Revegetation Workshop
April 6-7, 2023

WHITFIELD CONSERVATION AREA COMPLEX
WWW.VALENCIASWCD.ORG

VALENCIA
SOIL & WATER CONSERVATION DISTRICT

USDA Southwest Climate Hub
U.S. Department of Agriculture

VSWCD APRIL 2023 WORKSHOP --KEY THEMES:

- ❖ 38 fire- & climate-adaptation experts contributed to preliminary climate-adapted post-burn plan (summary rpt.)
- ❖ Compilation of important resources (e.g., climate-adapted plant database)
- ❖ Partners focused on projects with actionable outcomes driven by informed priority list re: responding to new wildfire regime



RESTORING WHITFIELD: A WORKSHOP TO DEVELOP A CLIMATE ADAPTED REVEGETATION DESIGN FOR THE WHITFIELD COMPLEX LANDS ALONG THE MIDDLE RIO GRANDE

(April 6-7, 2023)

Summary of Results
June 30, 2023

New River/New World



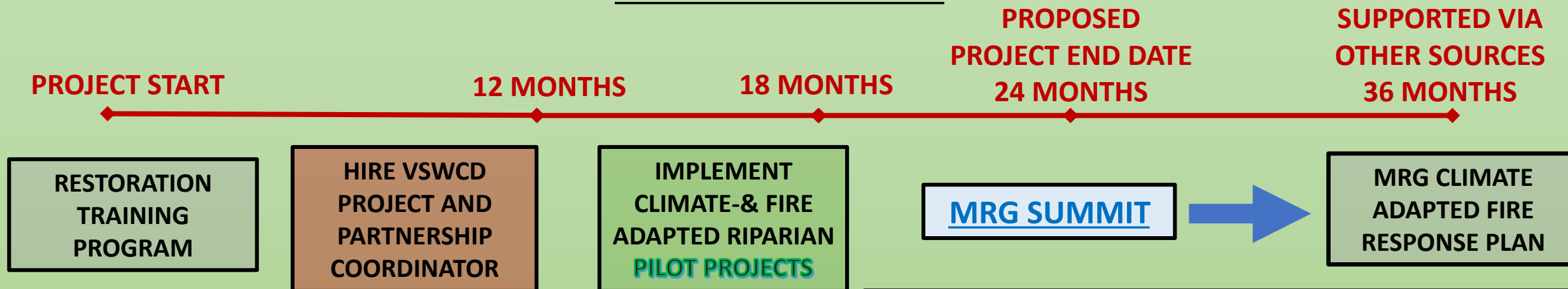
United States Department of Agriculture
Southwest Climate Hub



How to do that?

BY BUILDING CAPACITY AND RESILIENCY IN HOW WE RESPOND TO A CHANGING FIRE REGIME

CONCEPTUAL TIMELINE



Bring MRG Partners Together To:

- Take stock of lessons learned thus far: What's worked, what did not, how would we modify?
- Set in motion the need to develop a collaborative climate adapted fire plan for the entire MRG

Applying Climate- & Fire-adapted Integrated Site Planning:

- What do you **PLANT**, Where & Why?
- Use a Diverse Native Plant Pallet – to be built via a riparian database for a changing climate (USGS-FORT)
- **Fuel Break designs**, to provide:
 - Access for Firefighters
 - Defensible Space
 - Eco-function considerations
 - Demonstration of different fuel breaks designs, types & performance



Stacy Unit



Whitfield Wildlife Conservation Area



Rio Abajo Conservation Area



STRAW DAWG
FUEL BREAK IDEAS

0 0.130.25 0.5 Miles

Rio Abajo Conservation Area's Cottonwood Grove



Current Forest Thinning Project at RACA made possible through partnership with EMNRD-State Forestry

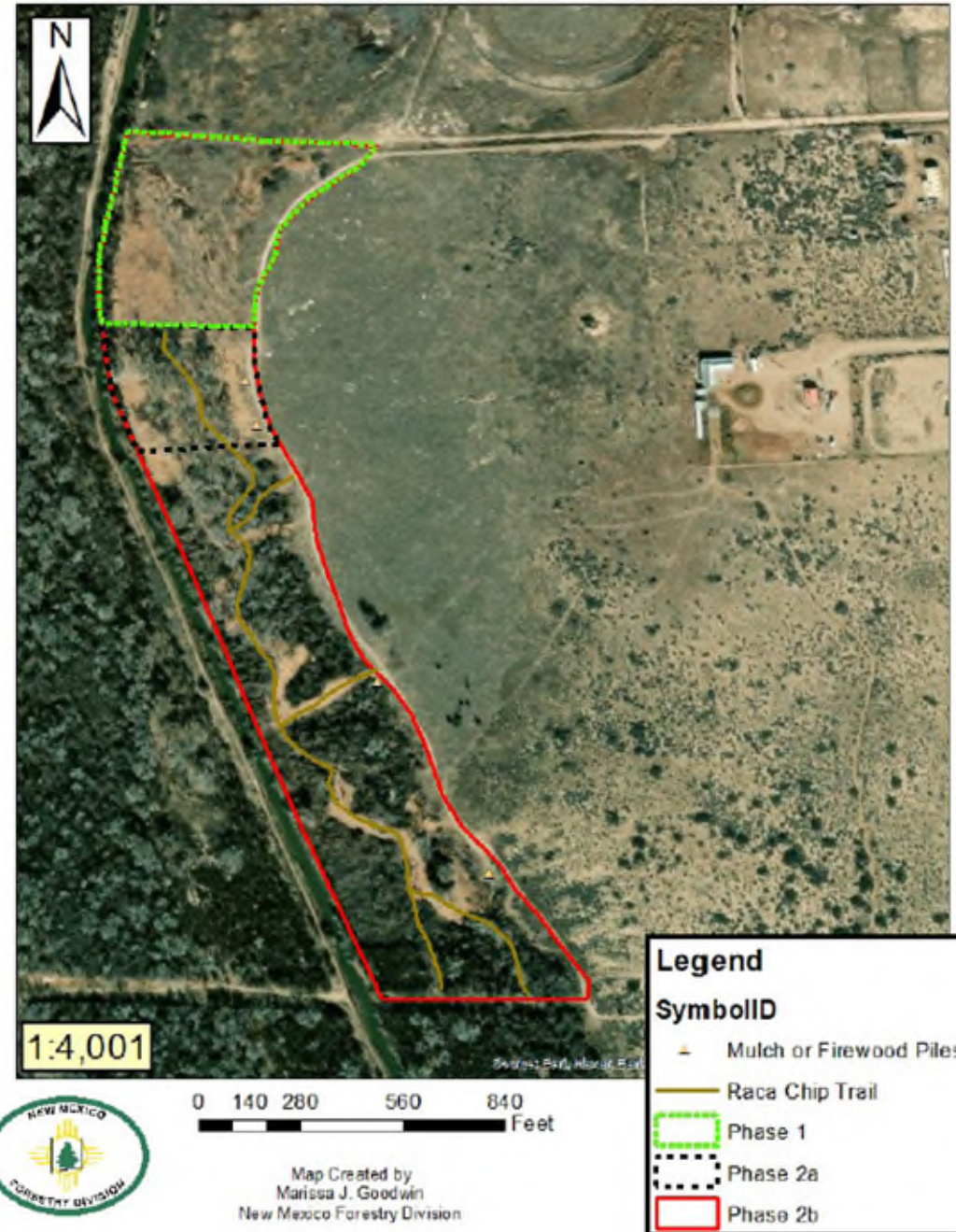
**Project Forester:
Marissa Goodwin**



2021 (ethereal) photo of cottonwood grove with 95% non-native understory

RACA Project Update:

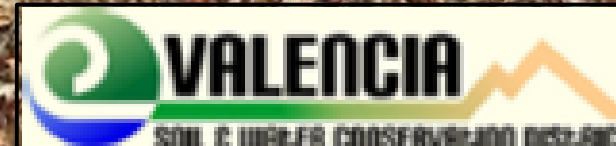
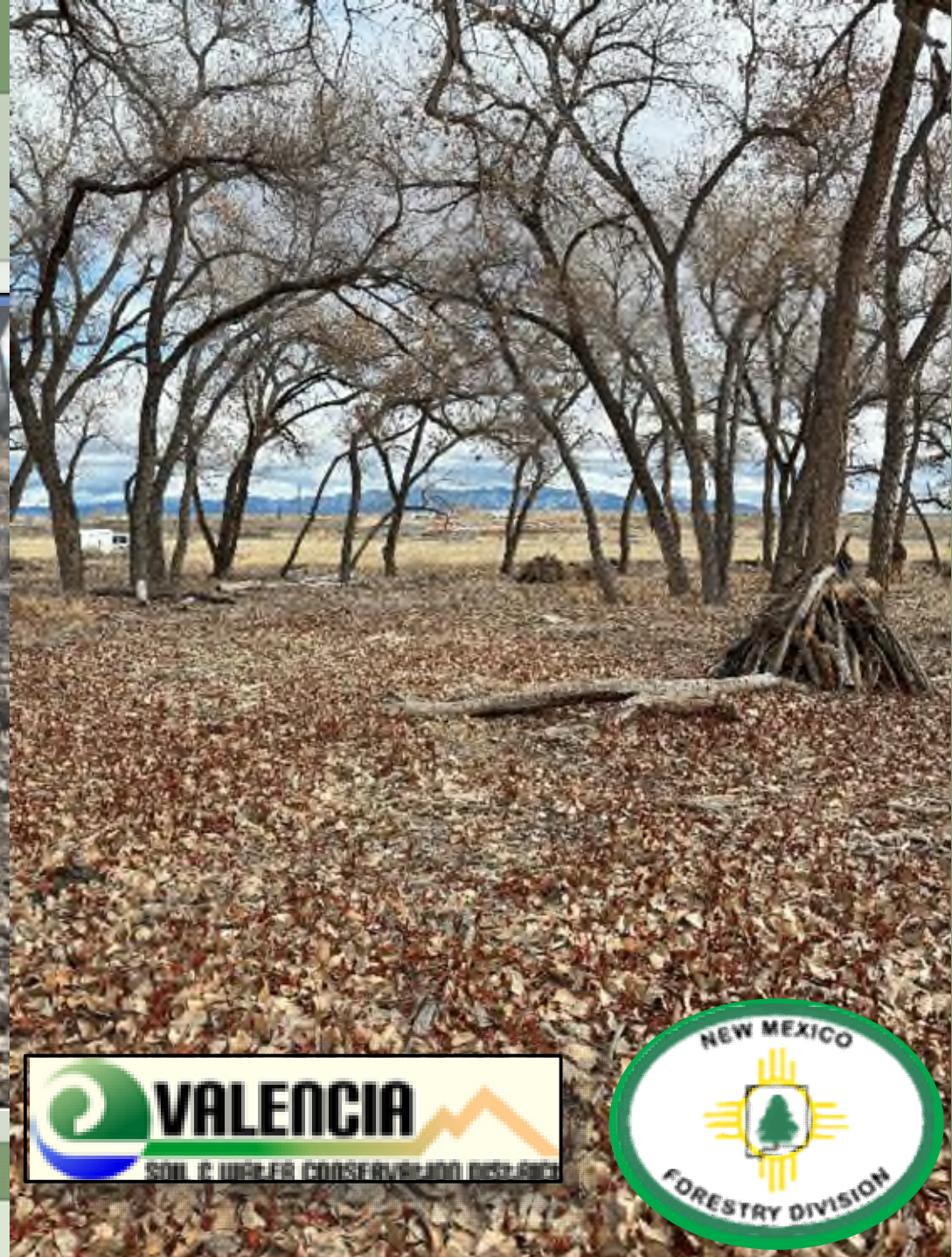
- EMNRD-State Forestry **PRE-BURN** Thinning Project on VSWCD (44 acres)
- Removal and chipping of non-native understory
- Prescription calls for:
 - 5 habitat piles per acre
 - No more than 2" chip depth except on trails (6 inches of mulch)
 - Retain 5 largest most stable snags per acre
 - Re-plantings: work in progress



RACA Project Update:



Habitat Piles: 5 / acre



POTENTIAL STRATEGIES TO REDUCE SEVERITY OF FUTURE WILDFIRE EVENTS:

- PATCHY REVEGETATION DESIGN (a la 1935)
- Climate- & Fire-Adapted NATIVE PLANT LIST
- STRATEGIC DESIGN & PLACEMENT OF FUEL BREAKS
- ONGOING UNDERSTORY MANAGEMENT
- COLLABORATE w/ WITH LOCAL FIRE COMMUNITY on FIRE RESPONSE PLAN
- STRATEGIC USE OF WATER
- PRESCRIBED BURN PROGRAM (for grassland components)
- STRUCTURED GRAZING: GOATS back in the BOSQUE?



1935 aerial photo
(Paul Tashjian)





The Middle Rio Grande Endangered Species Collaborative Program will host a **Climate Futures Planning Workshop** in **2024**---Stay Tuned!

The **Workshop's goal** is establishing a framework for collaborative adaptive management to increase climate resilience in support of listed species and their habitats in the MRG.

The workshop is expected to have a 10-km² Focus Area centered around the **Whitfield Complex** lands.



WWCA South Road (April 2023)

Ending this talk by inviting any & all help to **Valencia SWCD's** efforts to use the death of the 100-year-old Owl Tree to provide some Urgency in Improving How We Manage Our Treasured Bosque



Big Hole
Fire:
4/11/2022



Thanks!

QUESTIONS?

