Rio Grande Project Area Drought Resilience Team

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Goals:

- Develop infrastructure and policy to cope with an increasingly arid climate
- With declining spring runoff from southern Colorado and northern New Mexico, we need to take advantage of alternate sources – storm water is again our focus
- Multiple objective approach:
  - Flood control
  - Direct use of storm water for irrigation
  - Aquifer recharge
  - Riparian/upland habitat
  - Water quality benefits
- Achieving the types of large projects necessary to ensure our infrastructure takes us another 100 years into the future requires working together

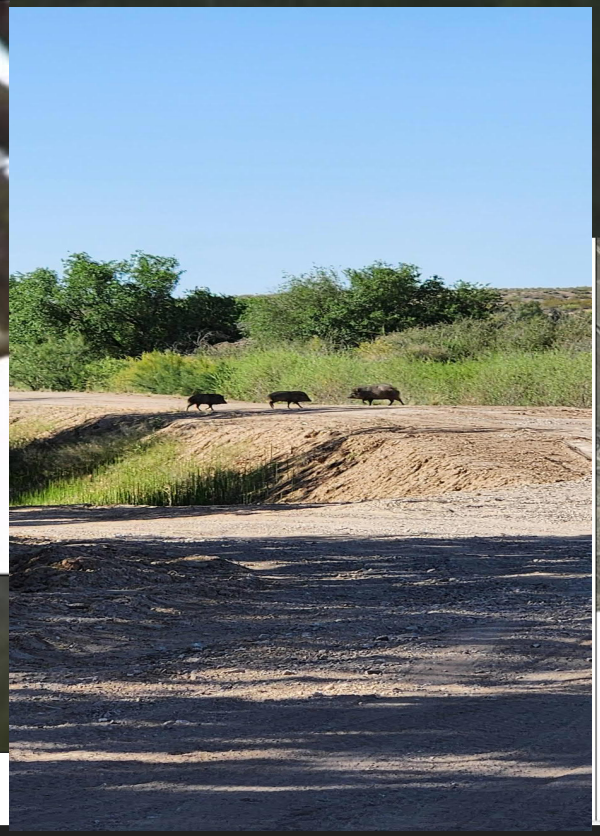
Flooding can be devastating —why not control and use the water instead?

Flood Control Dam Assessment

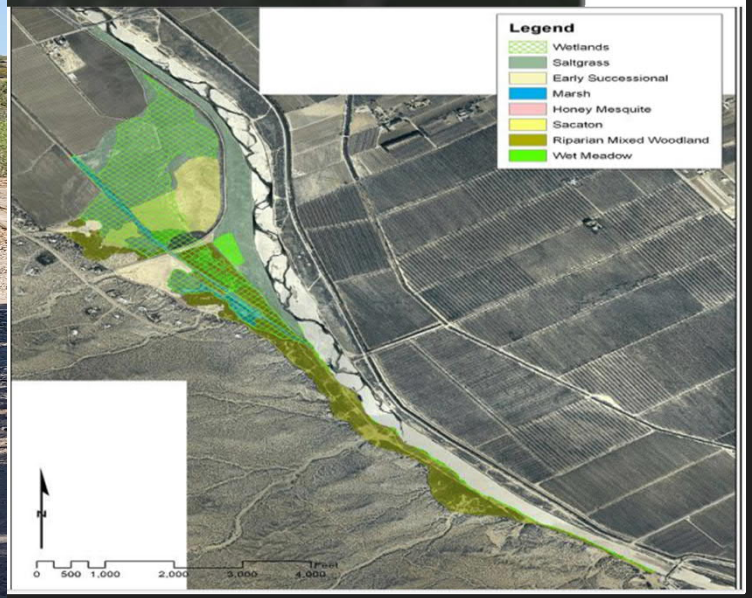
- EBID is sponsor for 27 flood control dams built in 1950s-1970s
- Originally built as low hazard dams, downstream development and changing standards renders them inadequate for high hazard service
- Goal is to capture water higher in watersheds and control it before it causes damage in the valley lands
- Start with assessment of potential for rehabilitation and repurposing to store and control storm water for aquifer recharge, direct use for irrigation and riparian/upland habitat
- The legislature must modernize funding for O&M

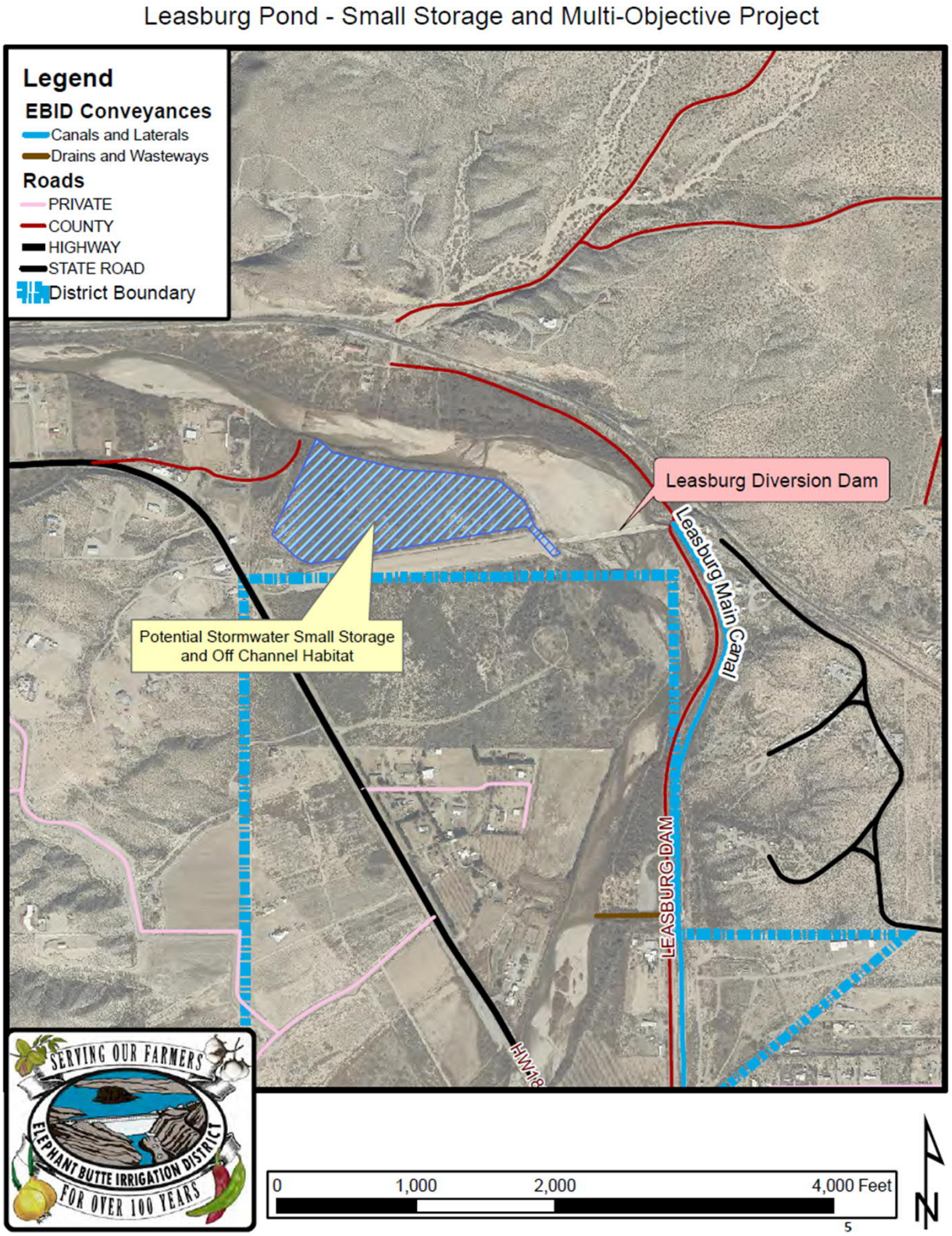
Habitat Restoration

- Goal: To supply surface water to historic floodplain for purposes of growing a mosaic of native riparian habitat including open woodlands, dense riparian shrub, meadows and grasslands to protect existing, endangered, and threatened species.



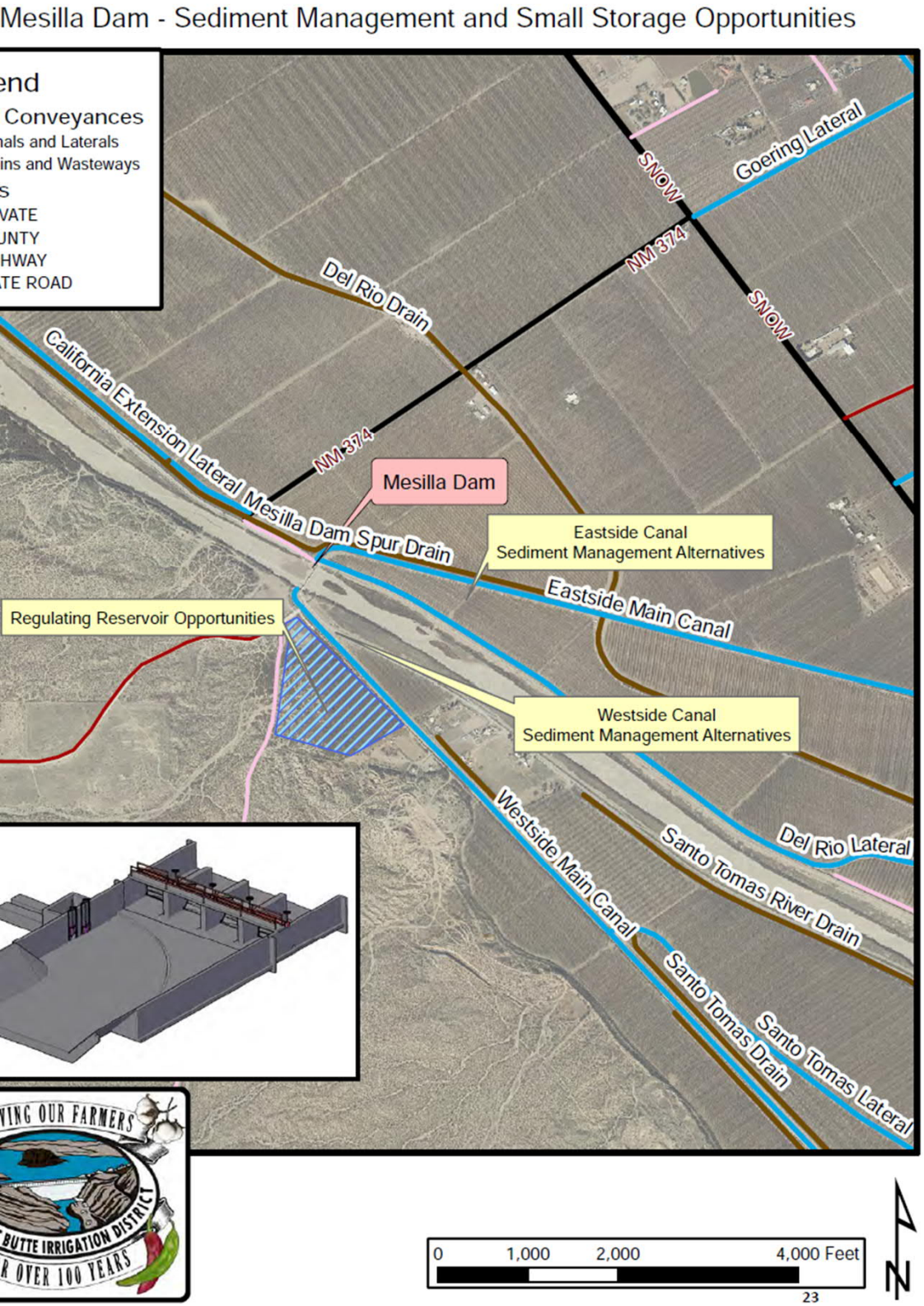
Mesilla Valley Bosque Park





Small Storage: Leasburg Pond

- 20-25 acres of withdrawn land held by US Government on west side of dam
- Gravity flow of storm water into pond
- Gravity flow into Rio Grande to make state line index delivery or diversion at Mesilla Dam
- Ideal riparian habitat
- Reduced flood peaks in river

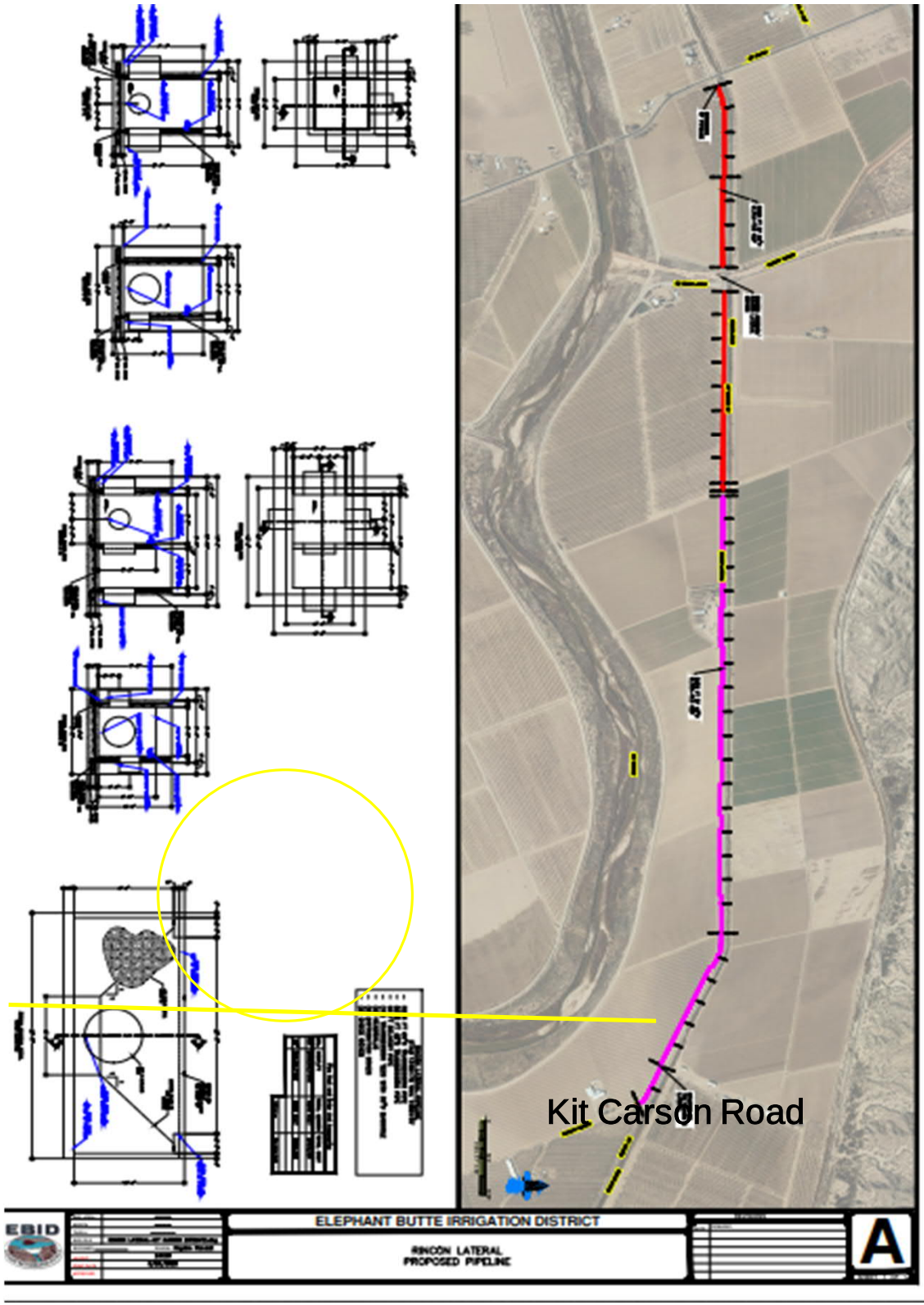


Small Storage: Mesilla Pond

- 20-25 acres of withdrawn land held by US Government on west side of dam
- Gravity flow of storm water into pond
- Gravity flow into Westside Canal for delivery to farmers
- Gravity flow into Rio Grande to make state line index delivery
- Reduced flood peaks in river

Piping Canals/Laterals

- Improves system efficiency
- Improves public safety and access
- Reduces maintenance, thereby reducing labor costs, machinery cost, cost of fuel, etc.
- Rincon Lateral in Hatch – Est. Water Savings 16KAF



Canal/Arroyo to Drain Recharge

- Drains originally designed for water table control are now “high and dry” due to declining groundwater levels
- Storm water or other excess flow either from arroyos or diverted from river into canal system and dropped into drains to recharge aquifer
- Several dozen potential sites, thousands of acre-feet of storage in drain system
- Improved flood protection
- Reduced peak flood flows in river
- Riparian habitat
- Reduced E. coli in river

An historic partnership

- EBID and MRGCD working together
- Learning from each other—metering, habitat, stormwater conveyance
- Low Flow Conveyance Channel vital to Southern NM

Rolling up our sleeves and getting down to business – in the field this summer to discuss LFCC

Opportunities for collaboration are abundant