



Lower Arkansas Valley Water Conservancy District

Arkansas River Compact Administration

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Lower Arkansas Valley Water Conservancy District

Mission Statement – To conserve, protect, and enhance the water resources of the Lower Arkansas Valley to sustain its agriculture, benefit its economy, keep water in its streams for fish and wildlife habitat, and participate in water-related projects that embody thoughtful conservation and beneficial water use within the Lower Arkansas Valley.

Lower Ark Water Quality

Why is LAVWCD pursuing Grant Funds?

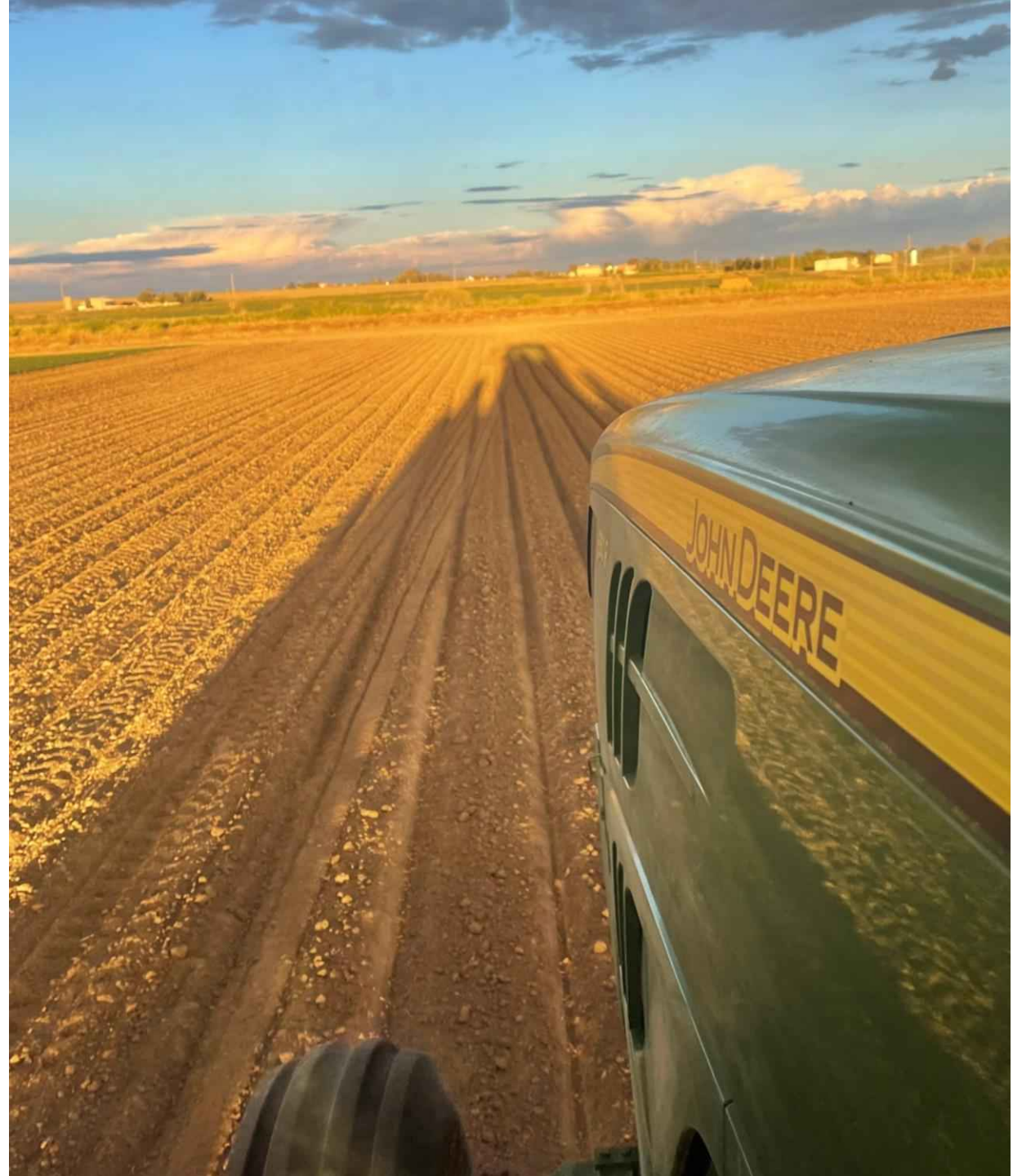
- Arkansas River Water Quality Declines as it moves east
- Certain on farm practices have shown to reduce the release of undesirable nutrients
- State level discussion of Non-Point Source Regulation/Mandates
- Lower Ark began to pursue Grant Funds in 2016 to implement BMPs
 - Assist with the implementation
 - Stave off regulation

Lower Ark Grant Funding Sources

- Colorado Department of Ag
- Colorado Water Conservation Board
- Colorado Department of Health and the Environment 319 Grants
- Supplemental Environmental Projects
- Others

Current Grant Projects

- 2019 319 Grant
- 2020 319 Grant
- CWCB Soil Health
- Supplemental Environmental Project
- 2024 319 Grant



What projects has LAVWCD Done?

- Sprinkler Improvements – 6 Completed - 2 In Progress
- Drip System Improvements – 1 Completed
- Lateral Lining Improvements – 3 Completed - 2 In Progress
- Soil Health Projects – 7 Completed
- Pond Liner Improvements – 8 Completed - 2 In Progress
- Lease-Fallow Projects – 2 Completed
- Riparian Buffer Zone Project – 2 Completed - 2 In Progress
- Fertilizer Reduction Project – 1 Completed - 2 In Progress
- Cover Crops – 2 In Progress

42 Improvent Projects in 7 Yrs – More On the Way

Rule 10 Compliance

- Sprinklers, pond liners, lateral linings subject to Rule 10 compliance
- Producers agree to comply to Rule 10 before project begins



Fall 2022

Projects – Lateral Lining



Fall 2022

Projects – Lateral Lining



Spring 2023

Project – Sprinkler Improvement



Project – Sprinkler Improvement 2

Spring 2023



Spring 2023

Project – Pond Lining



Spring 2023

Project – Pond Lining



Spring 2023

Project – Pond Lining



General Project Timeline

1. Outreach
2. Locate a Project
3. Pre-sampling – 1 yr
4. Install BMP – Fall/Winter
5. Post Sampling – 2 yrs
6. Summarize Grant & Write Report



What's Next?

- Lower Ark has been awarded a 2024 319 Contract
- ~\$920,000 for BMP Implementation
- Original Goals:
 - 4 Sprinkler Improvements
 - 1 Pond Liner Improvement
- Cost Share Level @ ~\$125,000
- Additional Projects will be possible above goal



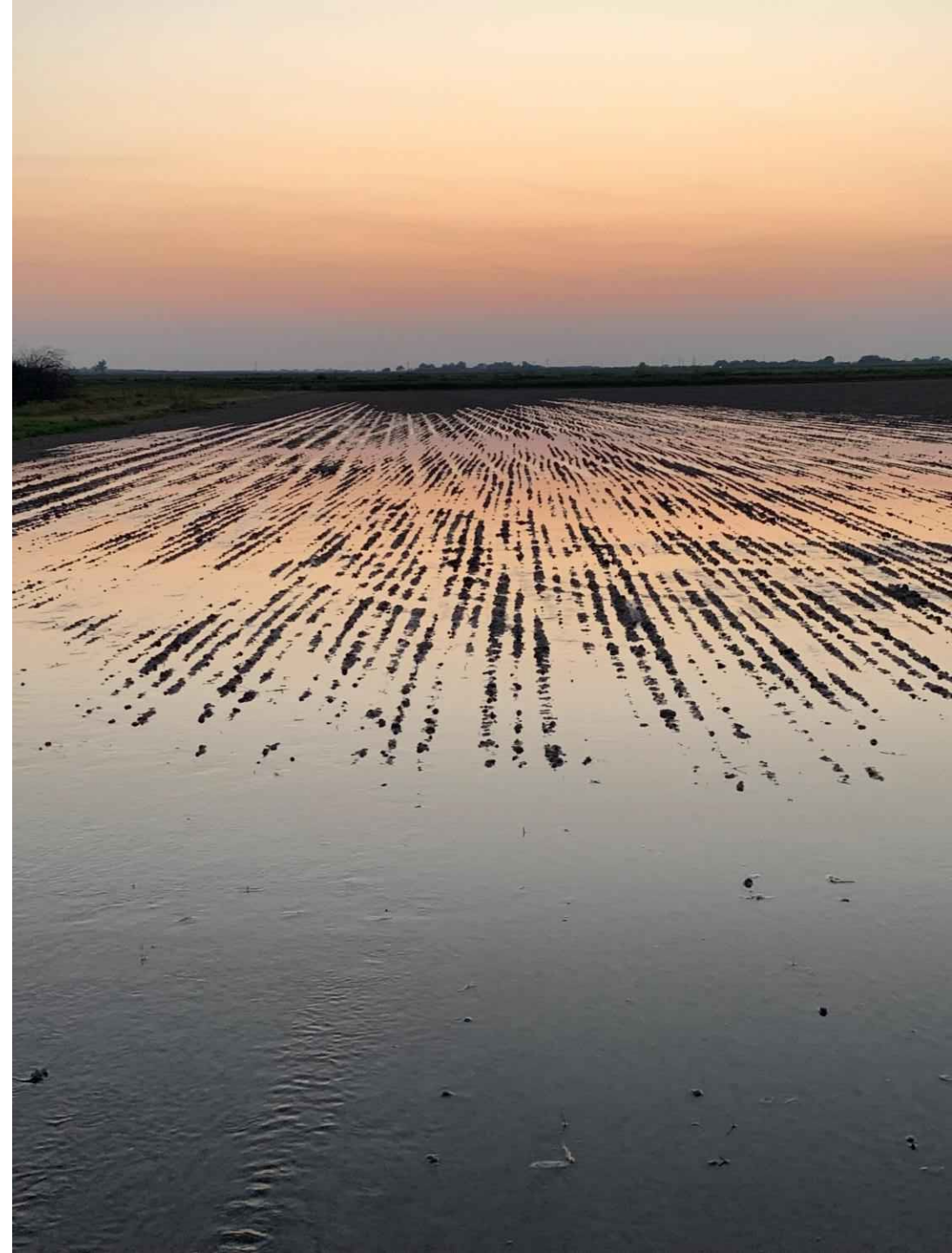
2024 319 Grant

- Producer Cost Share on all projects
- Coordinate with CDPHE on Locations
- Outreach will begin Spring of 2024
 - Outreach will target the entire Lower Ark Region - All 5 Counties in Lower Ark District
- Site Selection and Pre Sampling Early 2024



Producer Process

- Interested Producers Need to Apply
 - Lower Ark Website – Water Quality
 - Lower Ark Outreach with Canal Companies
 - Meet with me
- Lower Ark reviews applications and ranks them
 - Work with CDPHE to Select
- Present Selections to the Board
 - Monthly Board Mtgs
- Begin Pre-Sampling
- Install Improvement



Obstacles/Opportunities

- More Producer Interest Than Funding - Sprinklers
- Lateral Lining Projects – Easy Ones have been done
 - Large Deep Overgrown Laterals Remain
- Drought – Tough for Sampling
 - Low Irrigation Flows
 - Dry Drainages
 - Months without Available Water to Sample
- The installed BMP dries up local water
 - Site Data Quality Declines

Results and Challenges

- Load Reductions observed following 2016 CDA Sprinkler Project
 - Selenium – 39 lb/year reduction
 - Nitrogen – 351 lb/year reduction
 - Phosphorous – 706 lb/year reduction
 - Uranium – 134 lb/year reduction
- Limited Recent Loading Data
- Best Management Practice dries up water around improvement
 - A success - but it makes acquiring loading data difficult
- Future projects to be located where sampling is easier
- Locate projects in proximity to running/flowing drains

Upcoming Events:

**Colorado & Kansas Arkansas River
Water Quality Summit**

April/ May 2024

Kansas Meeting Location TBD

Water Quality Presentations

Producer Panel

Grant Activity Updates

Cooperation Between CO/KS on Water Quality Efforts

Questions?

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