

Upper Gunnison Watershed Management Planning

Presented by: Jesse Kruthaupt, Trout Unlimited Upper Gunnison Project Manager

- Overview of Process and Purpose
- What do agricultural water users want to see from the process?
- What has been done to date
- Example projects

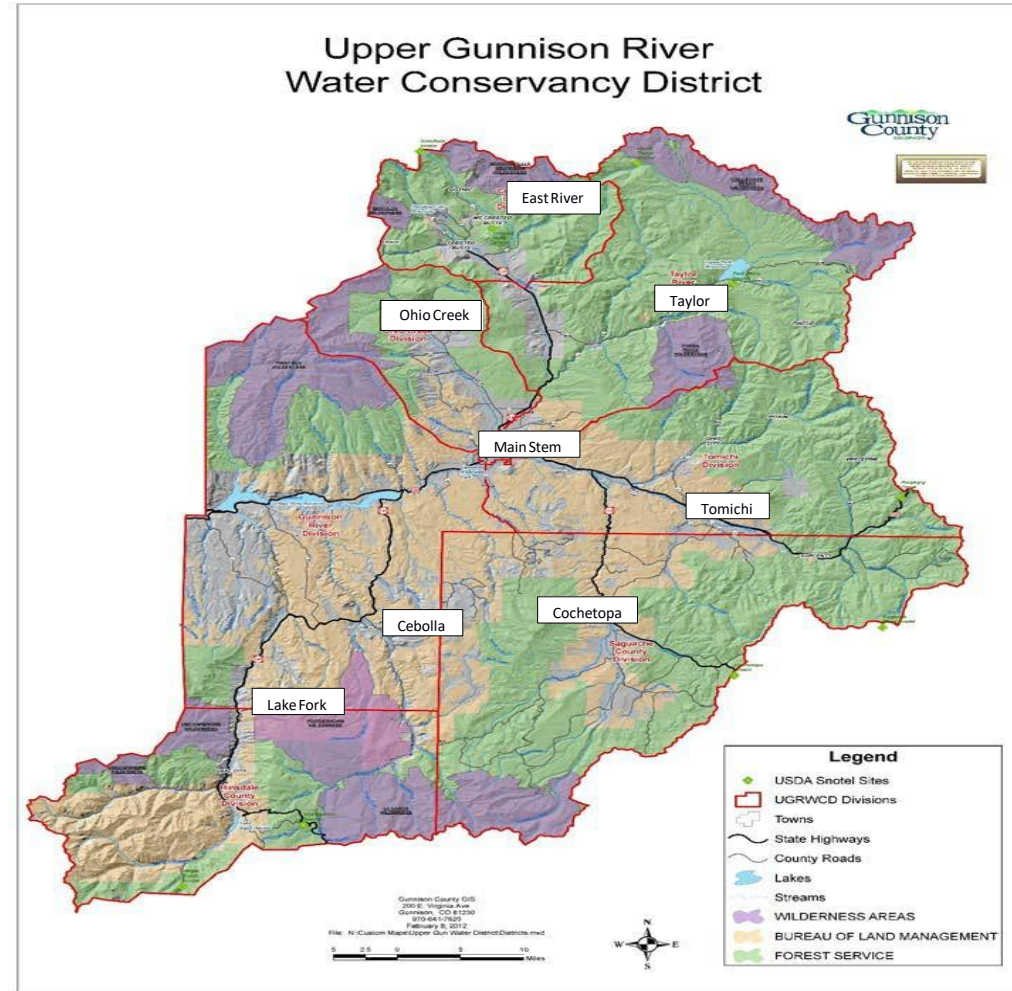


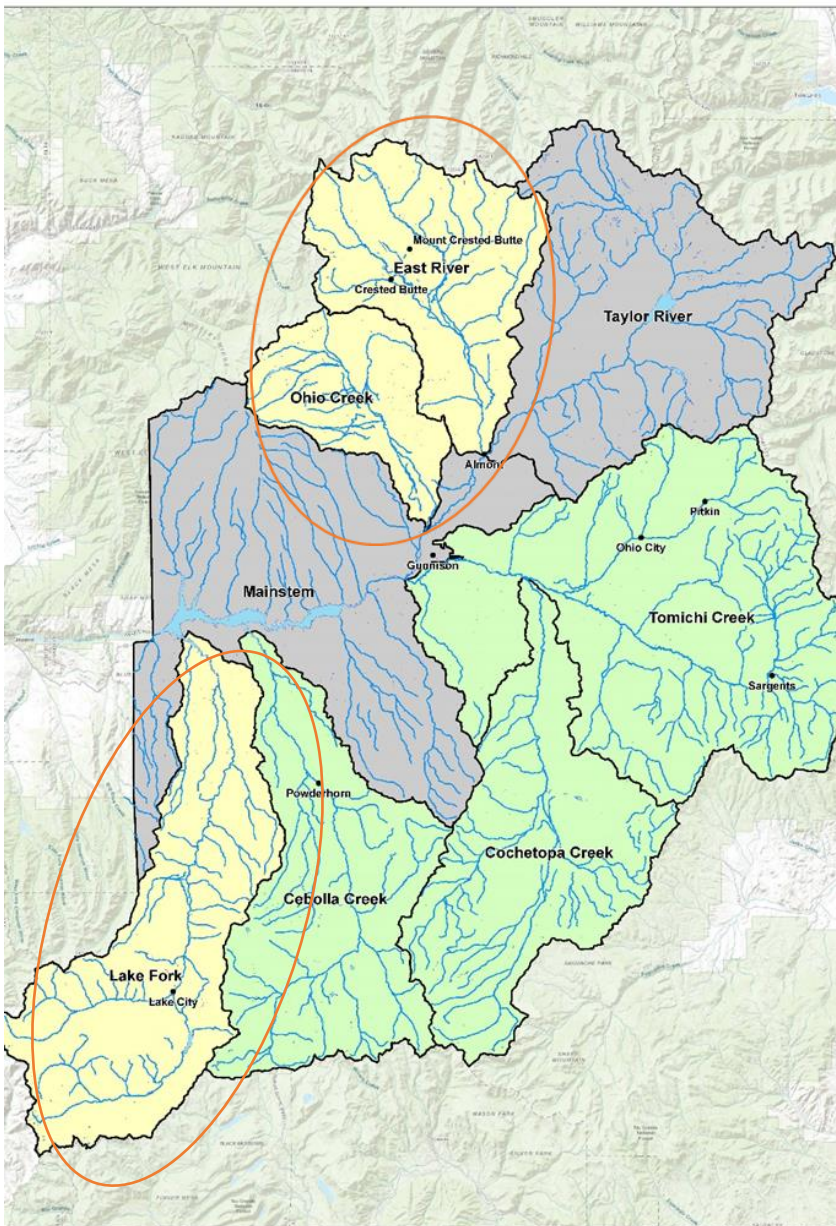
Purpose



Protect existing water uses and watershed health in the Upper Gunnison Basin in the face of pressure from increased water demands and permanent reductions in water supply

Upper Gunnison River Water Conservancy District is managing the effort.





Current Sub-basins

- Began in 2017 with funding from CWCB and UGRWCD
- Phase 1 - Ohio Creek (Jesse), East River (Julie), and Lake Fork (Camille).
 - Assessment
 - Demo Projects
 - Options
- Phase 2 – Continue with initial three and begin Gunnison, Taylor, and Cebolla. Began in 2019 but postponed for a couple months.

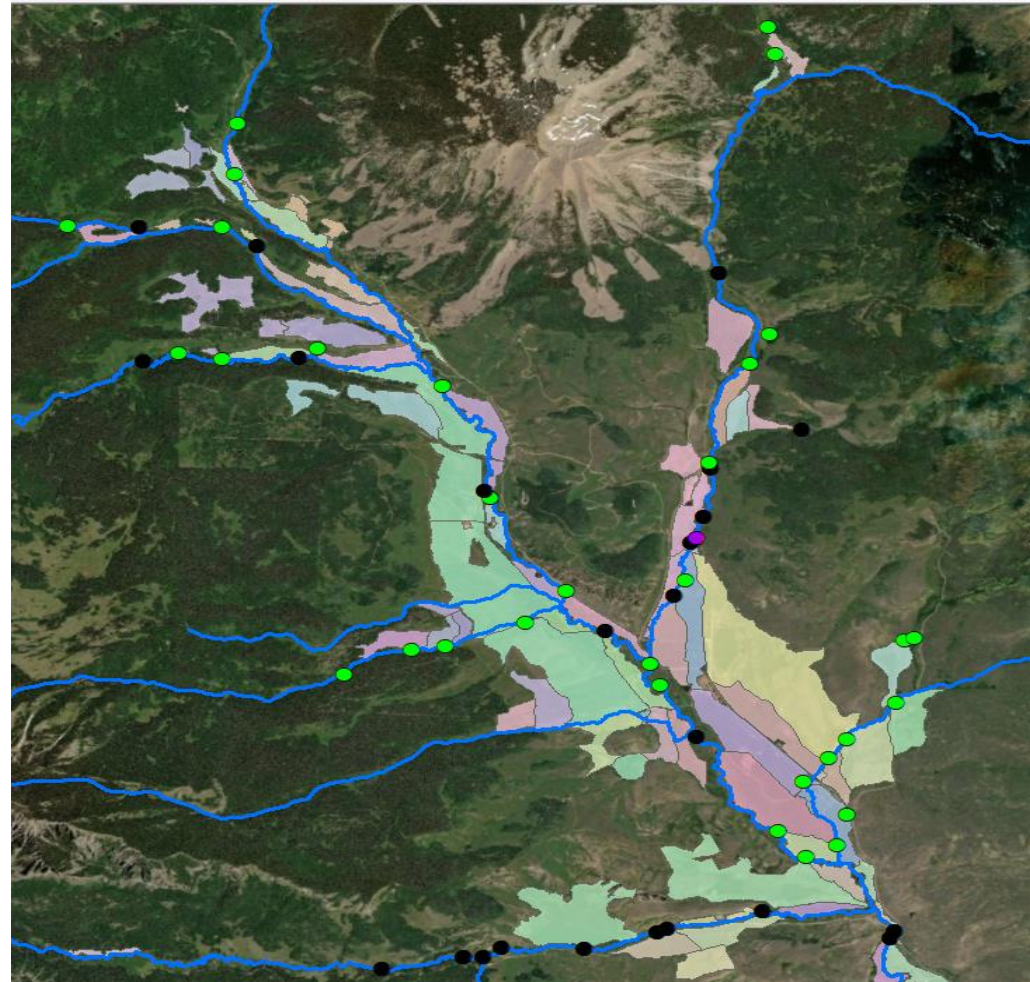
Three desirable agricultural WMP outcomes?



Take 5 minutes to brainstorm three WMP outcomes (projects, research, programs, etc.) that would be desirable and/or beneficial to your ag. operation or the general agricultural community.

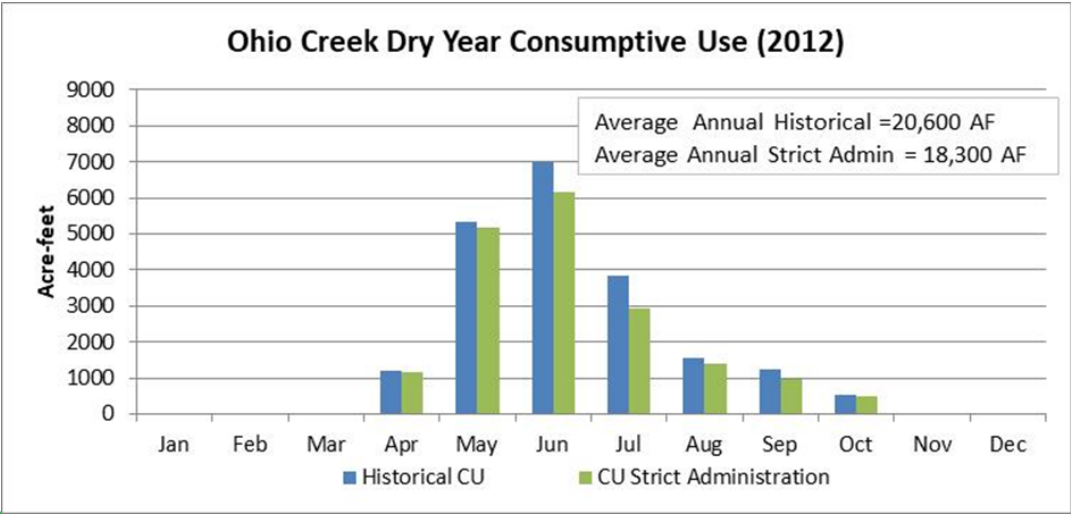
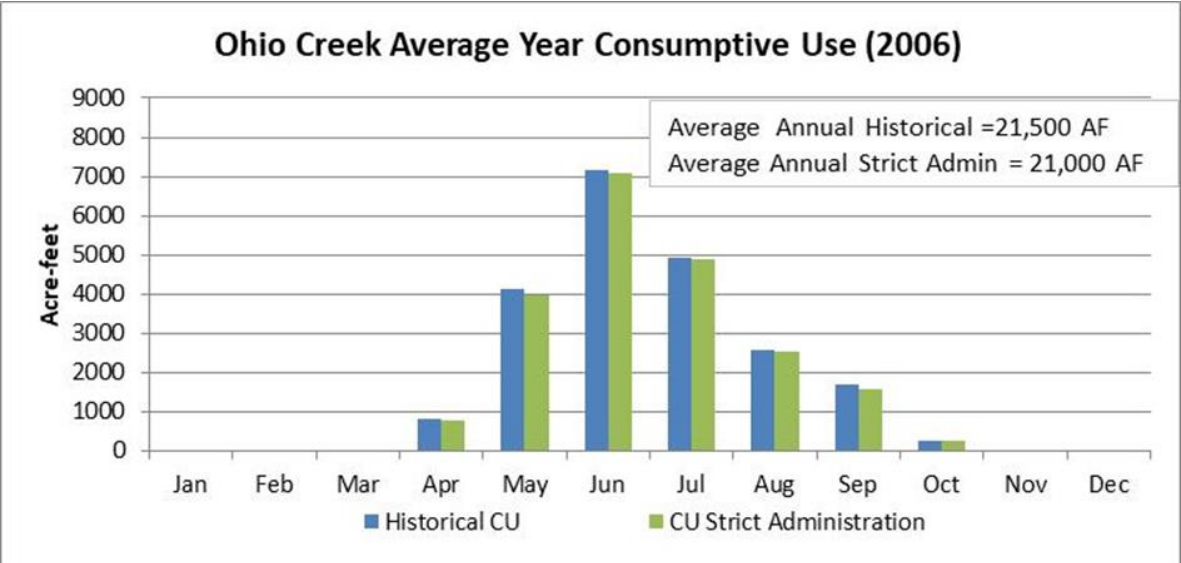
Upper Ohio Creek Modeled Diversions

- Black nodes – in previous model and current model
- Purple nodes – not in previous model, in current model
- Green nodes – previously in aggregate, now explicitly modeled
- Made changes to about 70% of the irrigated parcels



Model Outputs

- It's not gospel
- Data in
 - Diversion records
 - Gage records
 - Temp and consumptive use calculations
 - Irrigated acreage
 - Return flow timing
 - Strict Administration*



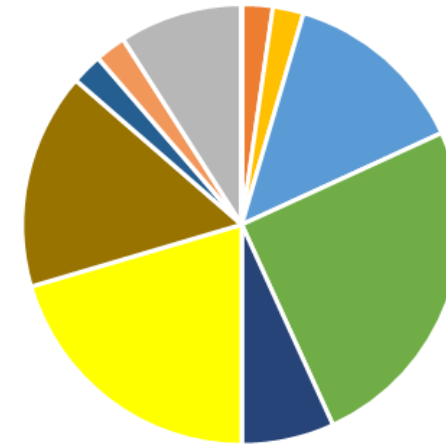
Assessment Survey and Identified Issues



Top Issues

- Diversion/Conveyance/
On-farm Infrastructure
- Water Supply
- Channel Stability
- Water Administration
- Watershed Health
- Irrigation Practices*

Ohio Creek



- Administration
- Legacy Preservation
- Water Administration
- Irrigation Practices
- Water Supply
- Fisheries
- Riparian/Habitat
- Watershed Health
- Recreation

- Education
- Property
- Diversion/Conveyance/On-farm Infrastructure
- Low Flows
- Channel Stability/Geomorphic
- Mine Reclamation
- Water Quality
- Flood Protection
- Undefined

Assessment Field Surveys:



R2Cross

- An Excel model to identify when criteria are attained. The criteria are:
 - Average velocity
 - Average depth
 - Percent wetted perimeter
- Creates recommendations for winter and summer flows needed to protect fish, wildlife, and the environment to a reasonable degree.
- Basis for existing CWCB ISF water rights



Assessment – Demo Projects

On ranch improvements

- Ditch conveyance
- Automated irrigation scheduling - maintain historic flow patterns and improve efficiency
- Diversion structure upgrades
- Check structure upgrades
- Remote sensing

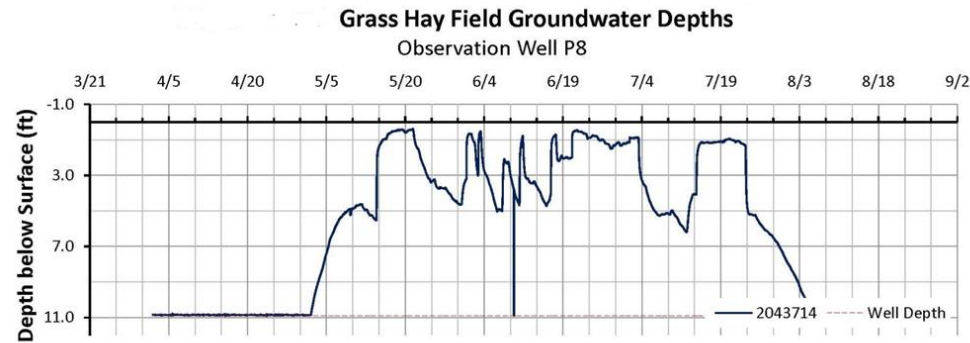


Assessment – Demo Projects



Watershed-wide ideas

- Ground water/return flow monitoring
- Small reservoir sites/feasibility
- Pete Lake (wetland and storage)
- Options to bolster flows for Ag and Env.



Assessment – Demo Projects, East River

18 different stakeholders (landowners, ranchers,
Town of Crested Butte, CB Land Trust)

Highlights

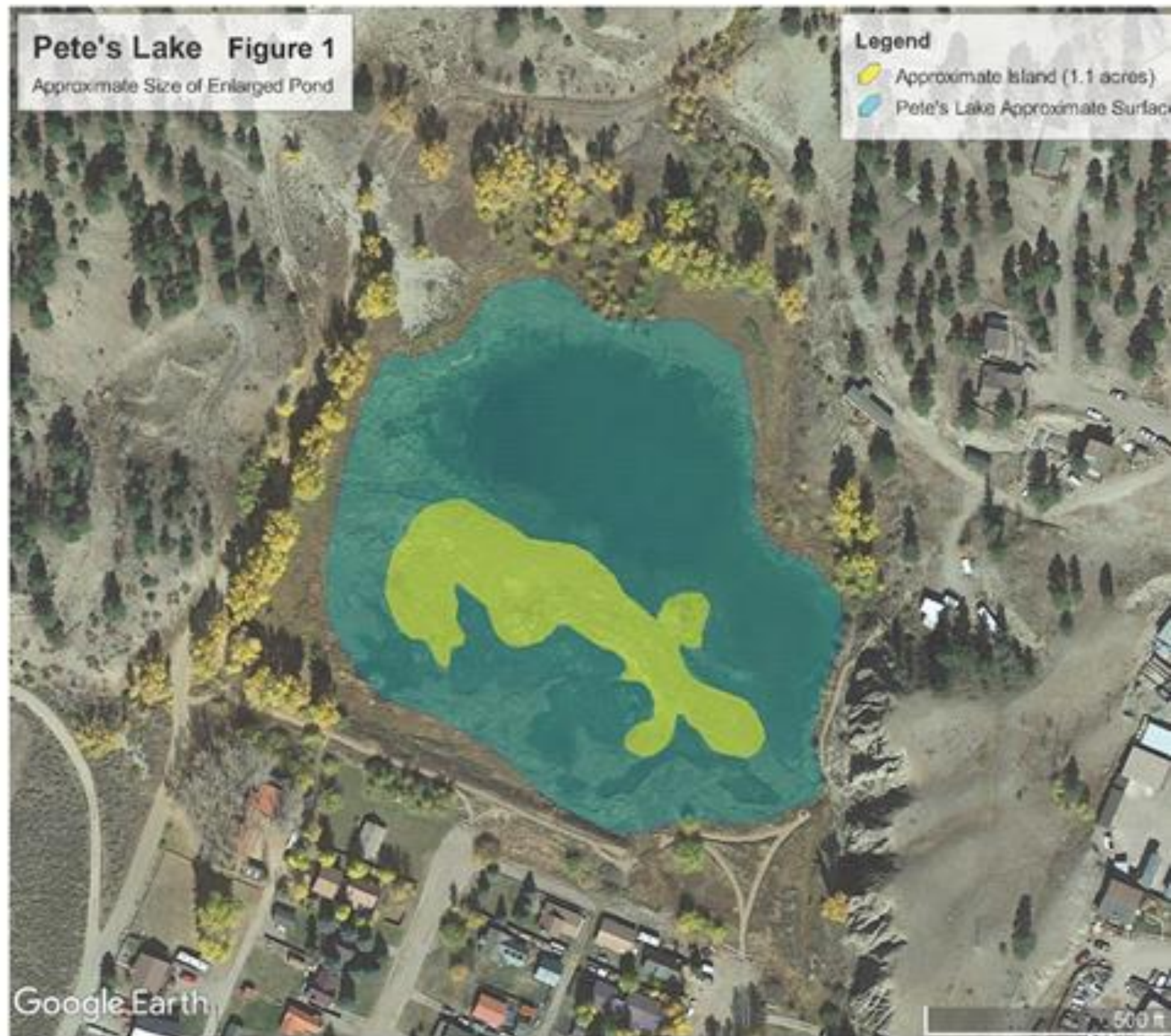
- Access and alleviating conflict (boaters coming onto private lands, education about when it's too low to float without touching bottom)
- Protecting a heron rookery through a voluntary no-float closure period during sensitive rearing
- User education about private property, etiquette (no dogs chasing cows/wildlife)
- Installation of boater friendly fences (SUP community partnering with ranchers)



Assessment – Demo Projects, Lake Fork

Highlight Pete's Lake

- Protect and enhance lake and wetlands
- Abandoned Storage Right
- New water right and upgraded infrastructure



Questions?



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Camille Richard: Lake Fork/Cebolla, (970)-944-5382

Julie Nania: East River, 866-349-7104