

Tule MLRP Workshop: “Finding Common Ground and Shared Priorities on Land Repurposing”

The Top Five Land Repurposing Tools

1. Temporary (Annual) Fallowing

Temporary fallowing refers to land left unplanted or irrigated for a year, as a method of sustainable land management. Fields taken out of crop rotation remain fallow for one to five years. Multi-benefit fallowing includes using cover crops to promote soil health, retain ground moisture, and reduce weeds and dust. The crop is not irrigated or harvested; however, it may be grazed, leaving behind the crop biomass to improve the soil.

Potential Benefits

- With cover crops: increases water infiltration, decreases dust, promotes moisture retention and soil health, and can boost pollinator habitat
- Can improve water quality by reducing excess nitrogen infiltration
- Provides flexibility for farmers to adapt based on soil conditions, costs, and yield needs

Limitations

- Only works for annual crops, not perennials
- Given annual timelines, temporary fallowing does not improve habitat values much

No map provided/needed, as many ag lands may be suitable if they exist in participating GSA territories

Example: [Tule Land Trust Fallowing Program](#)

2. Habitat

Habitat can range from thousands of acres to small strips and hedgerows. Habitat can be created through conservation easements, covenants, or other protective approaches. Conservation restricts land use to preserve certain ecosystem functions, such as shelter and food for animals, water filtration, and dust reduction.

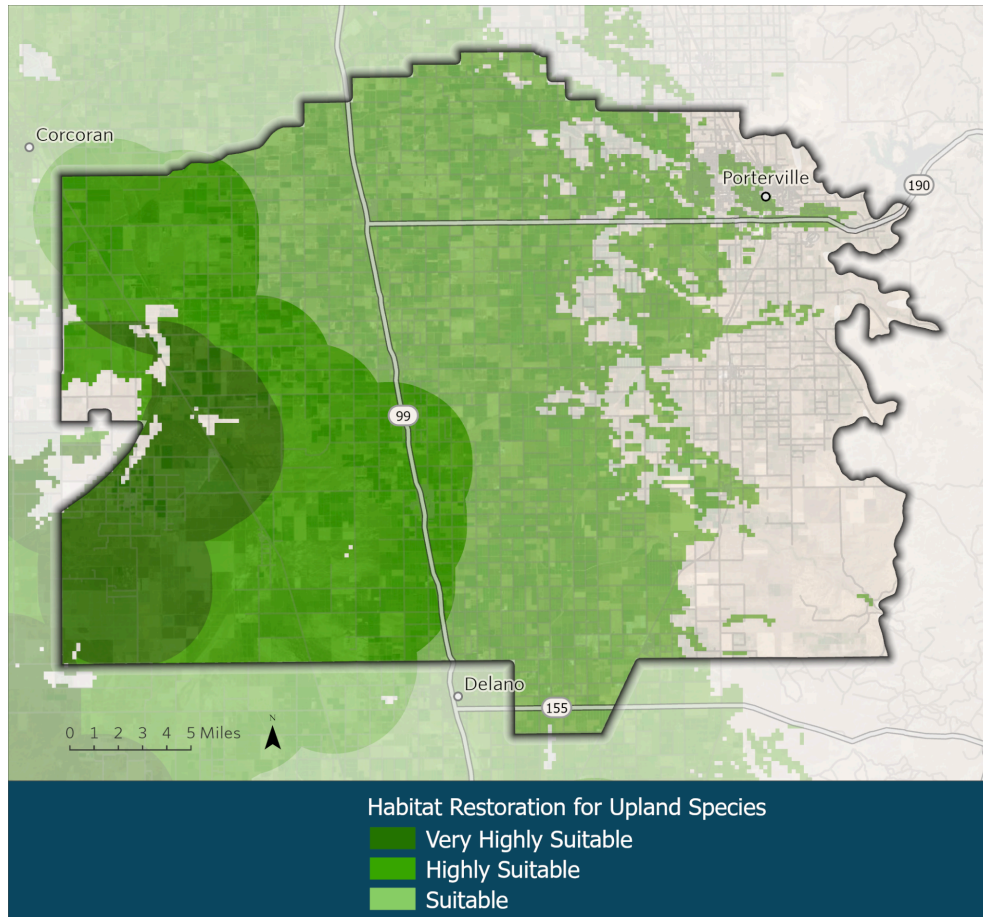
Potential Benefits

- Selling some of an owner’s ag land can help them stay in business and focus on their more valuable acres
- Provides opportunities for recreation, education and connection to the land
- Can reduce pesticide use by incorporating natural predators in areas adjacent to farms
- Increased habitat and biodiversity can improve air and water quality, provide recreation opportunities and attract visitors and tourists to the area (aka “eco-tourism”).
- Provide Tribal access to and stewardship, with their input, of culturally essential crops like saltgrass, deer grass, and tule.

Limitations

- It can be expensive and time-consuming to assess and purchase property.
- Ag land valuable and suitable to meet habitat priorities is more limited than the map shows (given the high cost of land acquisition and easements).

Example: [Capinero Creek Project](#)



3. Multi-benefit Recharge

Groundwater recharge is a practice that involves applying excess surface water flows on the land, with suitable conditions, to replenish the underground aquifers faster than they would occur naturally and in areas of high need. Converting active farmland to recharge basins can increase groundwater, reduce demand (by following that land) and reduce unintended flooding. *Multi-benefit recharge* adds wildlife habitat features to recharge basins and/or can provide public access trails for recreation purposes. Fields that are part of an irrigation district may benefit from financial incentives offered through the district, such as free or discounted surface water during flood flows or the ability to trade or sell recharged water in or out of the GSA.

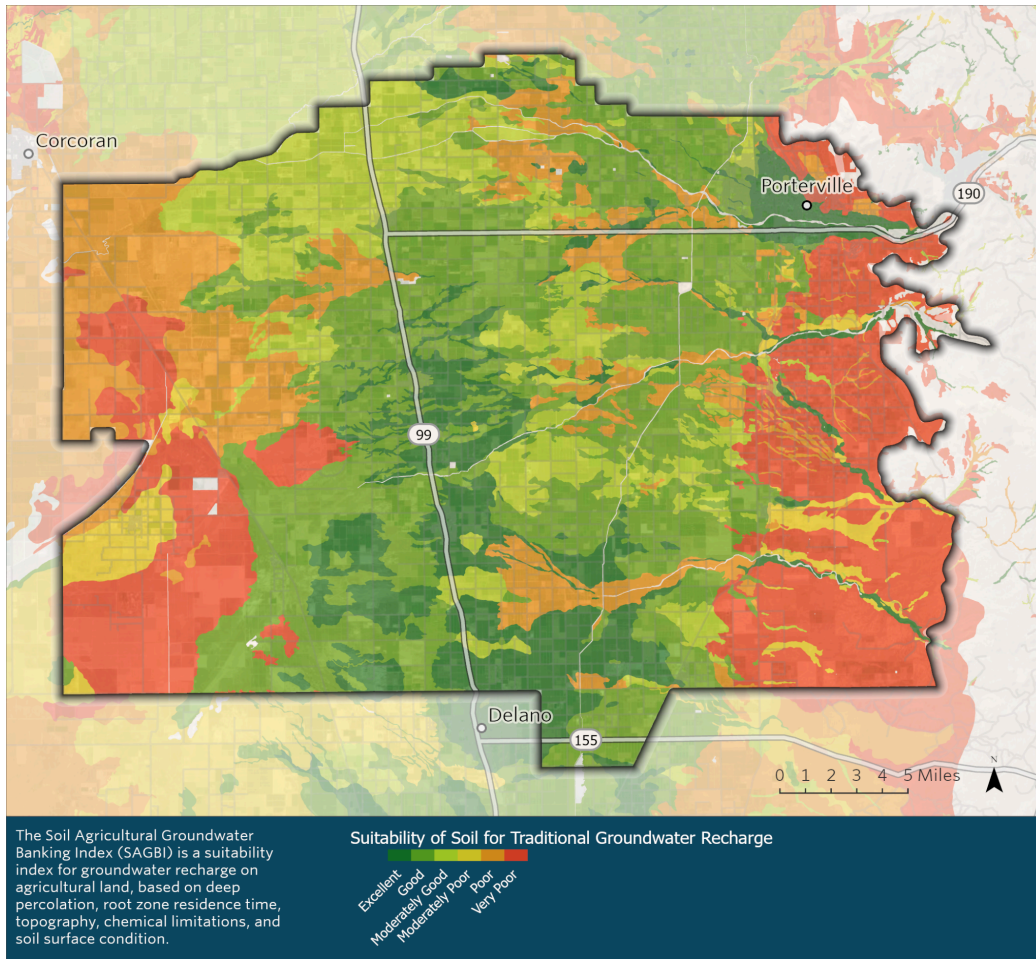
Potential Benefits

- Recharging near community wells (within a few miles) can help raise groundwater levels and protect community access to drinking water. Depending on local conditions, recharge can benefit or adversely impact the quality of community drinking water.
- Raising groundwater levels through recharge can make consistent and reliable water source for residential, agricultural, or even habitat needs
- In areas where fields are adjacent to creeks or rivers, creating temporary floodplains can help provide habitat for animals

Limitations

- 'Excess water' (or flood water) is in minimal supply or nonexistent most years. The total amount desired for recharge far exceeds the actual supply.
- Obtaining and recharging excess water requires a special permit, which is hard to get in time to capture floodwater.
- Effective recharge requires the right soil and hydrogeologic conditions, as verified by engineers.

Example: Flying Dragon Ranch



4. Open Space (especially near Communities)

Open spaces can provide habitat for animals, recreational opportunities (e.g., parks, walking paths), and even land for growing food (e.g., community garden), all of which can improve quality of life. While these uses may include limited water use, it is far less than agricultural uses, decreasing groundwater demand.

Open space can also act as a *buffer* around a community to help protect communities and schools by reducing drawdown of the water table near community wells, reducing contamination of the aquifer near wells, and by limiting pesticide drift or dust from nearby agricultural fields.

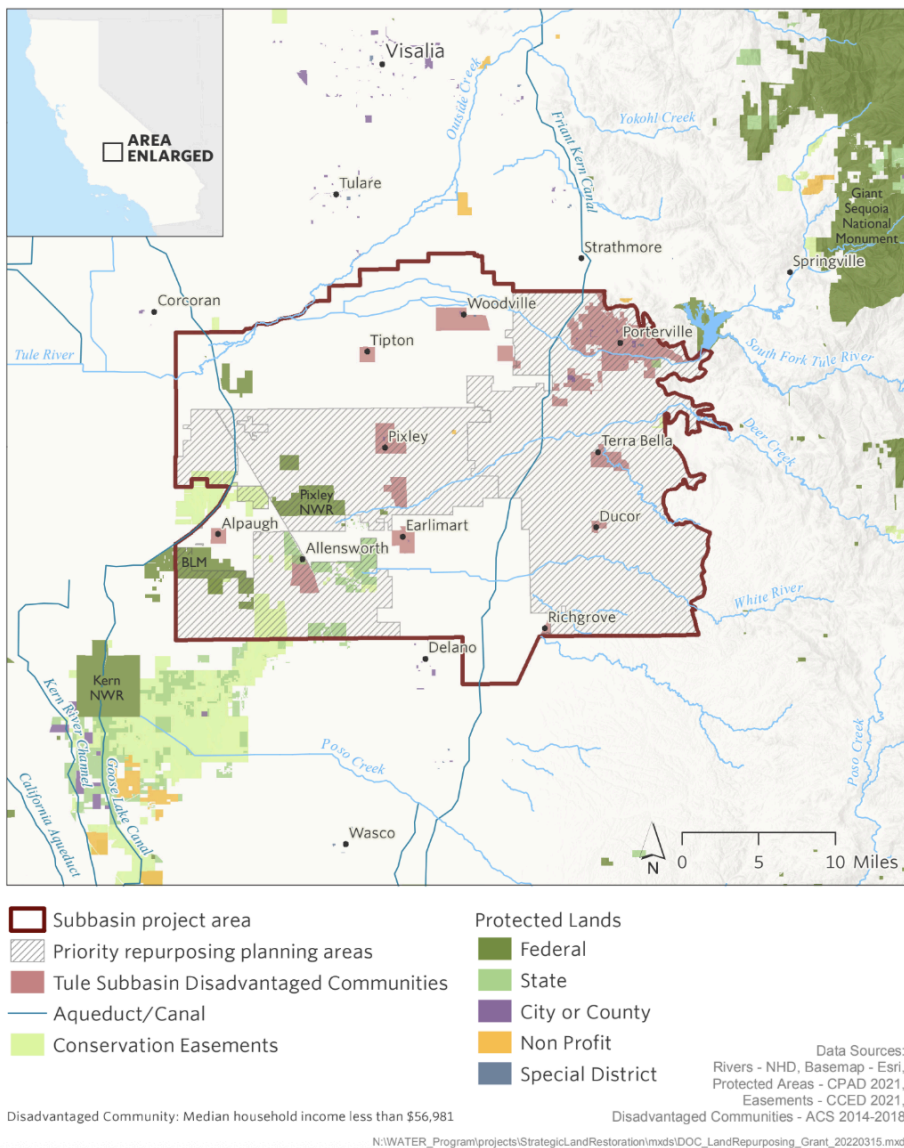
Potential Benefits

- Open space buffers around communities can help protect communities and schools by reducing drawdown of the water table near community wells.
- Reduce air pollution from pesticides, soil erosion, and dust compared to bare fallow lands or irrigated farmland.
- Provide quality of life improvements for communities lacking access to outdoor spaces.

Limitations

- Ag lands around or adjacent to communities may not be available for sale or are too expensive to fallow and convert to open space.
- The relatively small areas needed for open space and buffers around communities may only save limited amounts of water.

Example: La Vina Pilot Project



5. Solar Farms

Large-scale solar farms sell clean energy to the utility (“utility scale solar”) and are often 75 - 1000 acres of land. Specialized solar development companies will develop the project, secure permits and utility approvals, and own and maintain the system. They lease land from owners for 20 years or more. Smaller-scale “community solar” projects can be developed on agricultural lands where a third party owns the system and energy is sold locally to the community (instead of the utility).

Potential Benefits

- Utility solar generates long-term lease payments (20-25 years) and manages the project. In some cases, low-cost, clean energy can be provided to the local community.
- Local labor, once trained, can be hired to build and maintain these systems.
- Habitat can be added for pollinators, native plants, and other species in and around the perimeter of a solar project.
- Tax revenues accrue from development and ongoing leases to the local government

Limitations

- Projects can take many years to develop and get approved
- Will conflict with the Williamson Act if the County doesn’t include solar as an ‘ag use’
- Growers/land owners only really benefit from leasing land (not selling or using the energy generated)
- Systems are massive and industrial-looking and have limited local benefits if local entities do not manage them to be “multi-benefit.”

Example: Westlands Solar Park

Proposed Shared Priorities

1. Support growers' transition with a range of multi-benefit solutions and strategies to keep farmers farming and workers working
2. Encourage economic sustainability and diversification (retains key ag & community services and ag processing capacity, grows new revenue sources)
3. Address subsidence, and flooding, as major threats when possible (via fallowing, targeted recharge, floodplain restoration)
4. Improve access to clean, affordable (ground)water for domestic uses
5. Create access to land: open space (especially near communities) and to ag land (community-oriented farming/food security)
6. Improve air quality (mitigates dust, health issues, Valley Fever)
7. Foster and integrate valuable habitat and ecosystem functions with multiple-benefits