

RECHARGE

Land Repurposing Solutions Seminar

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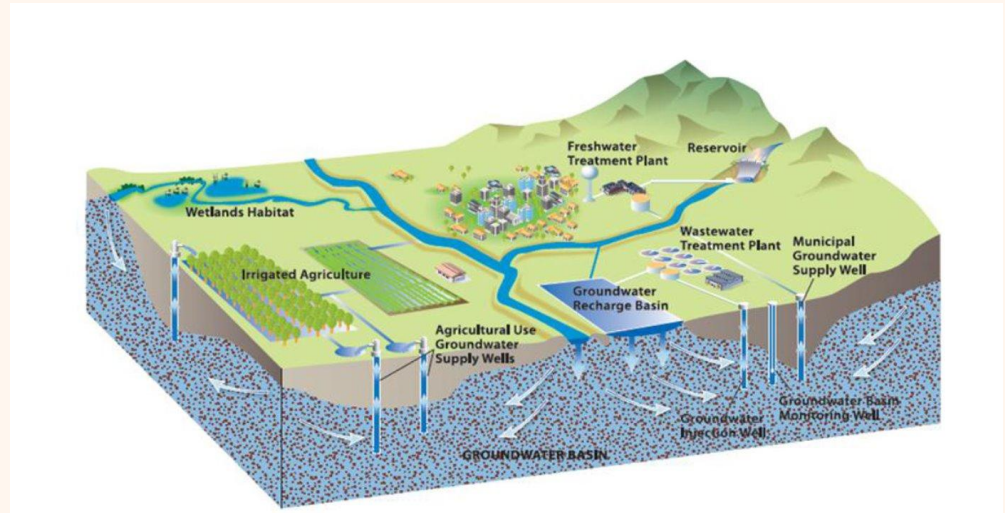
Recharge Refresher

How is groundwater recharged?

- Natural vs Managed Aquifer Recharge (MAR)

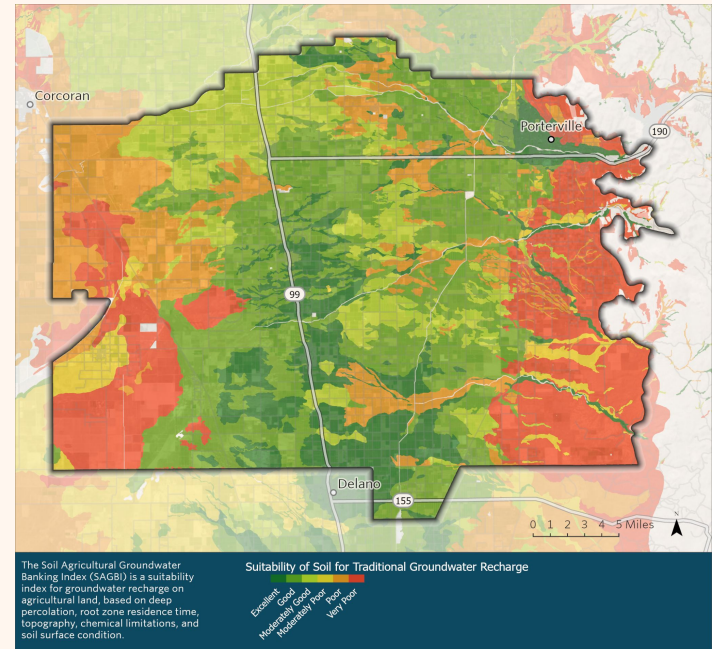
Types of MAR:

- Dedicated basins
- Wetlands
- Injection wells or subsurface
- Streams and canal seepage
- On farm-recharge



Recharge Feasibility Considerations

- Water Rights
- Access to Conveyance
 - Irrigation Systems
- Soil Suitability
- Underlying geology
 - depth to groundwater
 - corcoran clay
- Crop Suitability (On-Farm Recharge)



Stakeholder Benefits

Wildlife

- 90% of historical wetland acreage lost
- Remaining 5-10% of acreage supports 20% of North America's Waterfowl
- High potential benefits to grower and wildlife



Stakeholder Benefits

Communities

- Increased water quantity
- Potential benefit to water quality



Stakeholder Benefits

Landowner:

- Slowing or halting subsidence
- Decrease cost of pumping
- Financial incentives through district
- Reliable water source



Grower Incentives through District

- Landowner Developed Credits
 - Flexibility to water account
 - Build for future use
 - Transfer to different parcels
- Groundwater trading programs
 - Lower Tule, Pixley, and Eastern Tule GSA
- Replenishes the aquifer
 - Stabilizes the groundwater level
- Potential ET reduction to your account

District Process/Requirements

- Notify District
- Fill out application
- Install a meter/turnout

Other things to note:

- Water cannot be diverted out of the basin
- Crops cannot be grown in the facility(unless cover crop)
- Facility must be large enough to hold a 24 hour water order
 - Average is a minimum of 5 acres
- Depending on water conditions water ownership ranges from 75/25 to 90/10

Example: Wildlife-Friendly Recharge Basin at Deer Creek

Features:

- Gently sloped sides
- Vegetation for habitat, food, and infiltration
- Reduced flood risk to Alpaugh
- Can recharge up to 40-45 AF per day



Example #2: DCTRA Recharge Basin

Features:

- Gently sloped sides
- Vegetation for habitat, food, and infiltration
- Designed for migratory birds
- Can recharge up to 10-15 AF per day





Questions?

