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SocioEnvironmental and
Education Network

Strategic Cropland Repurposing for Socioenvironmental Justice:

Science, Policy, and Community Power

California Adaptation Forum

AUGUST 2, 2023

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AUGUST 2, 2023



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AUGUST 2, 2023



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SocioEnvironmental and Education Network, SEEN

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AUGUST 2, 2023

05 | Q&A, Activity, and Discussion

After the presentations, we will work on the **activity** in groups.

The presenters will walk around the tables to **respond to questions**.

Feel free to move around. Occupy space and give space.

Use jamboard (<https://tinyurl.com/4jcmbxhf>) or pen and paper to communicate your perspectives and priorities about land repurposing.

Draw, write, or use your imagination. Start now if you want. You will have 20 minutes to do/finish it after the talks.

05 | Q&A, Activity, and Discussion

Jamboard <https://tinyurl.com/4jcmbxhf>
Make comments on sticky notes.



Strategic Cropland Repurposing

3/6

Set background Clear frame

make comments on sticky notes about whatever you want

Multi-benefit cropland repurposing
Multi-benefit projects can provide environmental and socioeconomic justice to rural disadvantaged communities, water sustainability and income diversification for local farmers and landowners, and new business opportunities for clean industry and renewable energy.

Conventional Agriculture
Water insecurity
Extremely low air quality
Lack of fundamental infrastructure
No access to green areas
Unsustainable water use
Excessive use of pesticide and synthetic fertilizers
Greenhouse gas emissions

Communities
Water insecurity
Extremely low air quality
Lack of fundamental infrastructure
No access to green areas

Education
Most rural disadvantaged communities have the lowest educational attainment in the country.
Strategically repurposing cropland can provide new opportunities for K-12 students.

Employment
Rural disadvantaged communities often depend only on underpaid agricultural jobs that are not stable and do not provide career development opportunities.
New land uses can bring new socioeconomic opportunities and better paid job positions.

Future Development
RURAL COMMUNITY
WATER SECURITY
CLEAN AIR

Clean Industry and Renewable Energies
Clean industry and renewable energies can provide new employment opportunities that increase stability of the employees and are better paid. Clean industry can include services for agriculture and the food sector. For water-intensive processes, public-private partnerships can optimize the water use and provide water security to the community. Renewable energy can also provide energy independence and serve nearby agriculture, and can be combined with wildlife corridors and habitat restoration projects.

Habitat Restoration
Habitat around rural disadvantaged communities is often degraded, which reduces climate change resilience for them. New land uses that restore habitat can provide also cleaner air and water and green areas for mental health, while fostering nature for society and for tourism.

Flood Water
Aquifer recharge
Groundwater regulations require sustainable aquifers. New land uses can include replenishment of local aquifers to raise groundwater levels and improve water security in rural disadvantaged communities.

Sustainable Aquifers for Crops & People

Parks and Recreation
Green areas, parks, and recreation for well-being and mental health

Pathways & Wildlife Corridors Among Rural Communities
Rural communities experience linguistic and physical isolation. New land uses can facilitate physical communication while policies can give access to linguistic resources

Access to Land
Farmworkers can become small farmers with facilitated access to cropland to improve local economies and food security

Sustainable Agriculture
Regenerative agriculture fosters healthy soils (that sequester more carbon and increase water storage), biodiversity, ecosystem protection, food that is more nutritious, and better quality of life for farmworkers and the surrounding communities

START THE TRANSITION FROM CONVENTIONAL AGRICULTURE TO SUSTAINABLE AGRICULTURE

Questions about this framework? Contact land@seen.team
Other publications at seen.team

AUGUST 2, 2023

01

Environmental and potential socioeconomic benefits

RESILIENCE LOSS

AUGUST 2, 2023

STRATEGIC CROPLAND REPURPOSING

= CROPLAND RETIREMENT

+ NEW LAND USE WITH
BENEFICIAL SIDE EFFECTS

STRATEGIC CROPLAND REPURPOSING

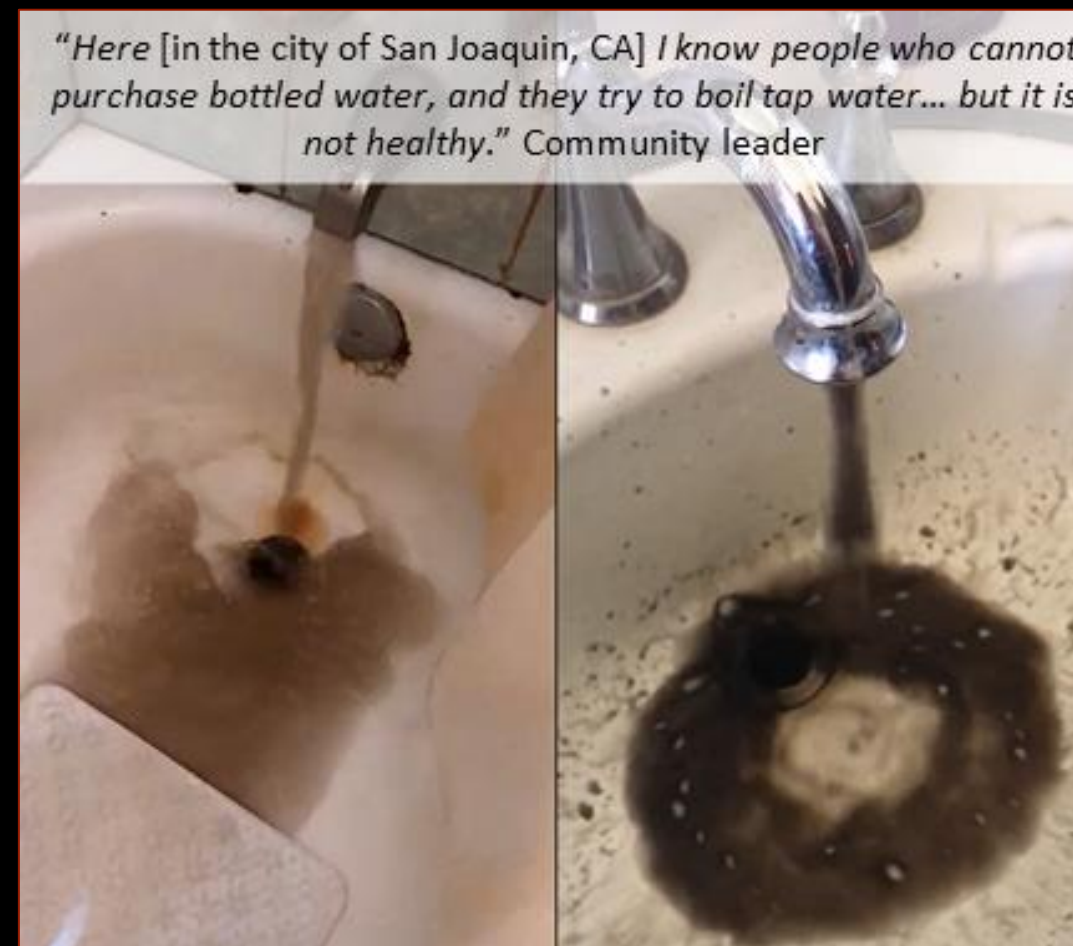
= CROPLAND RETIREMENT

+ NEW LAND USE WITH
BENEFICIAL SIDE EFFECTS

Remove negative side effects



Source: Bakersfield
Californian



"Here [in the city of San Joaquin, CA] I know people who cannot purchase bottled water, and they try to boil tap water... but it is not healthy." Community leader



Source: The Desert Sun

STRATEGIC CROPLAND REPURPOSING

= CROPLAND RETIREMENT

+ NEW LAND USE WITH
BENEFICIAL SIDE EFFECTS

Positive side effects



Green areas



Habitat



New socioeconomic opportunities



Clean energy and clean industry

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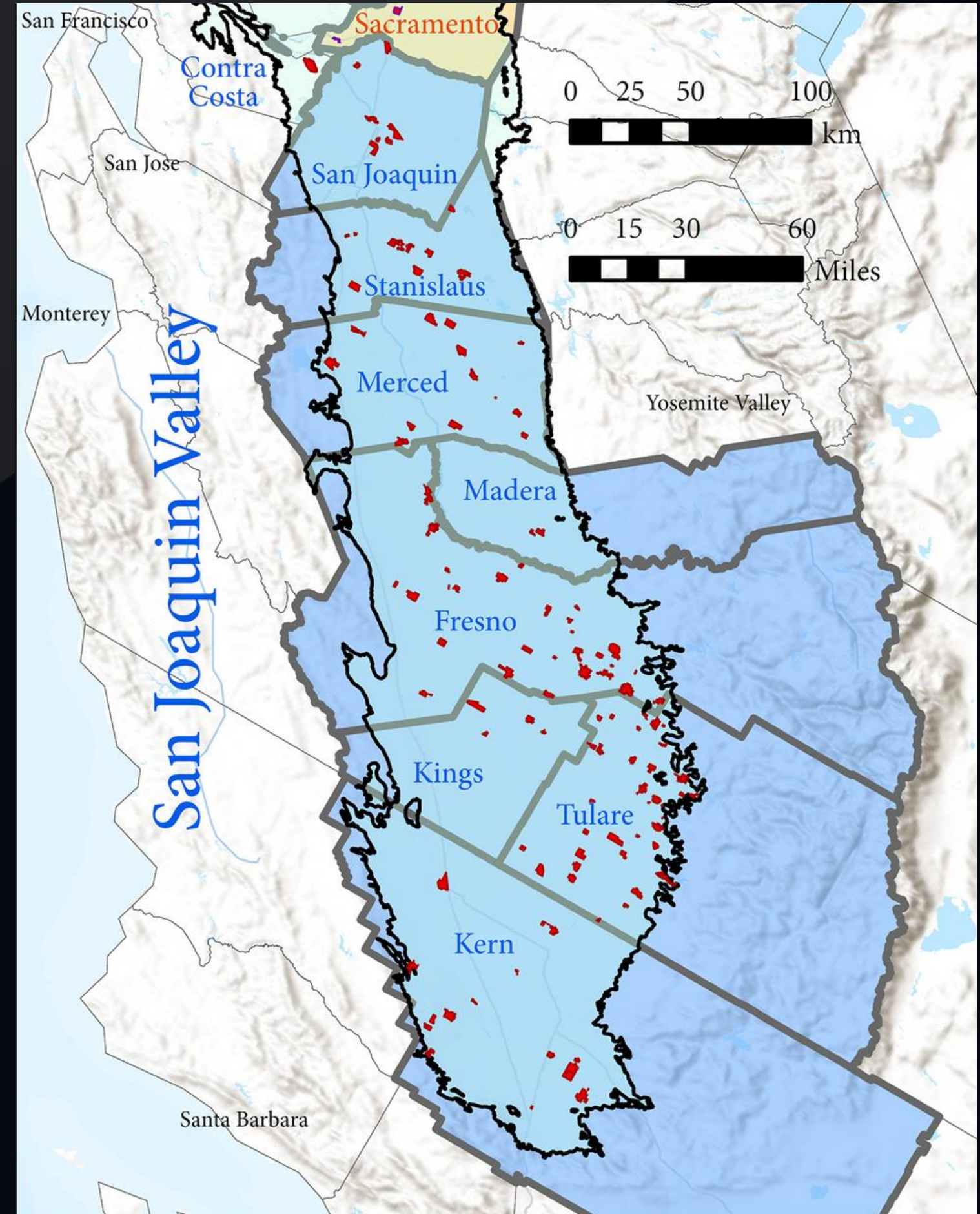
AUGUST 2, 2023

WHERE?

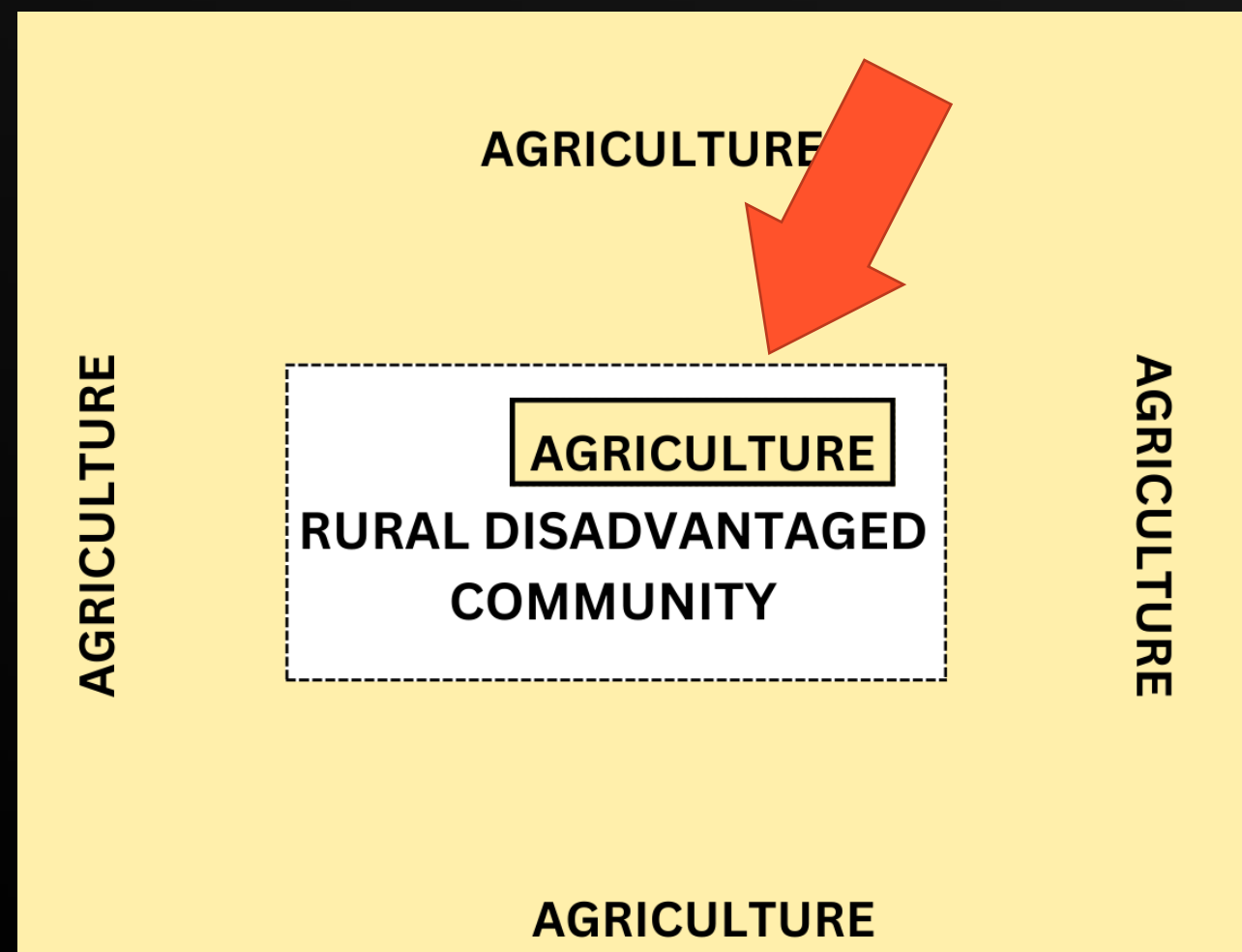
Small rural disadvantaged communities of the San Joaquin Valley

123 communities

Half million people



Agriculture inside rural communities of the San Joaquin Valley



123 small rural disadvantaged communities

Inside agriculture: 54,000 acres

19 million pounds of nitrate leached

CO₂eq emissions ~ 40,000 cars

1.15 million pounds of pesticide

Agriculture inside rural communities of the San Joaquin Valley

123 small rural disadvantaged communities
Inside agriculture: 54,000 acres



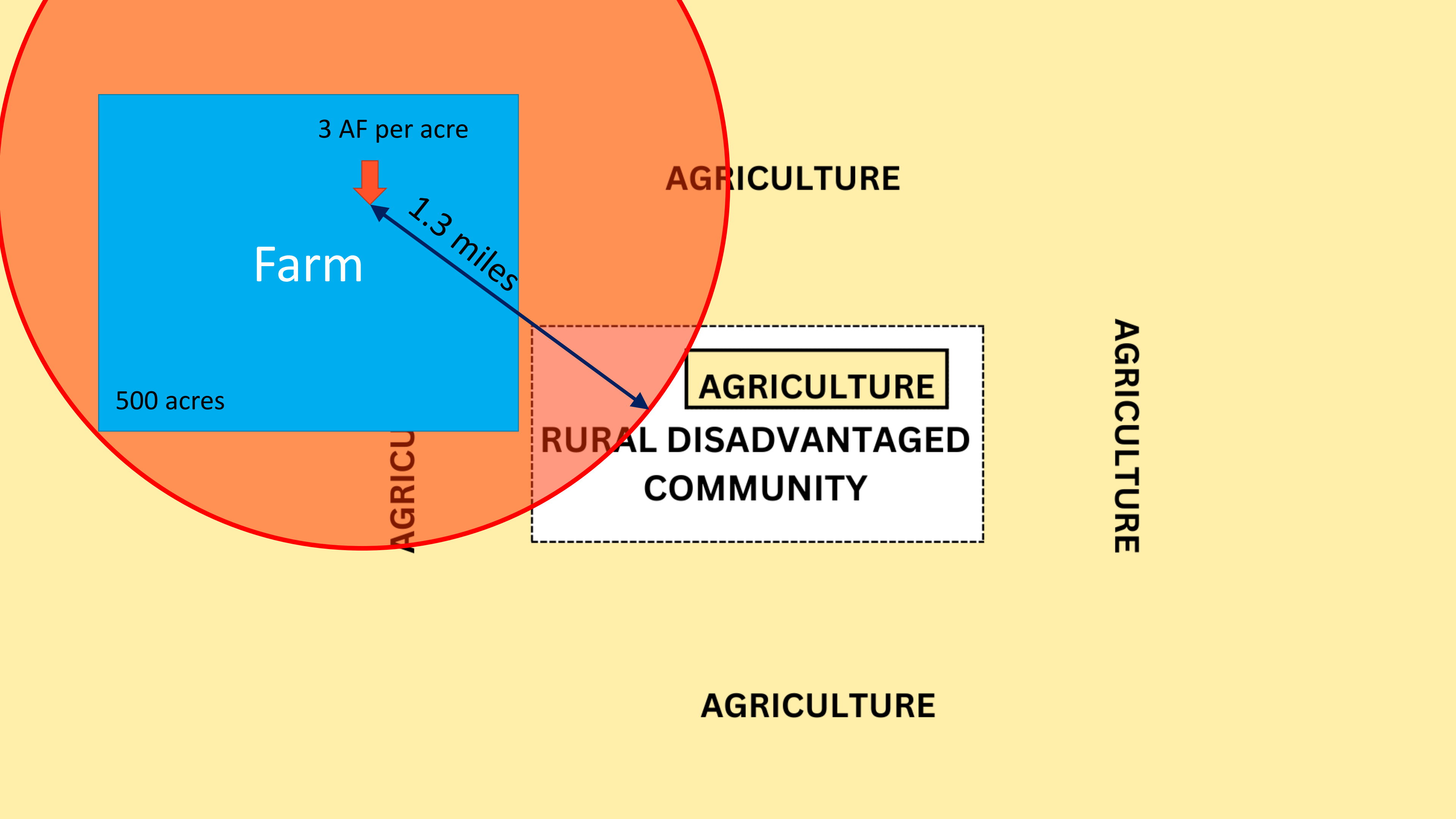
Ag Production: \$170 million per year

Cost of 1 gallon of bottled water per person:
\$190 million per year

Health impacts? Ecosystems destruction?
Lack of a circular economy? Education?

1st priority

**Repurpose agriculture
inside rural
disadvantaged
communities**



Farm

3 AF per acre

500 acres

1.3 miles

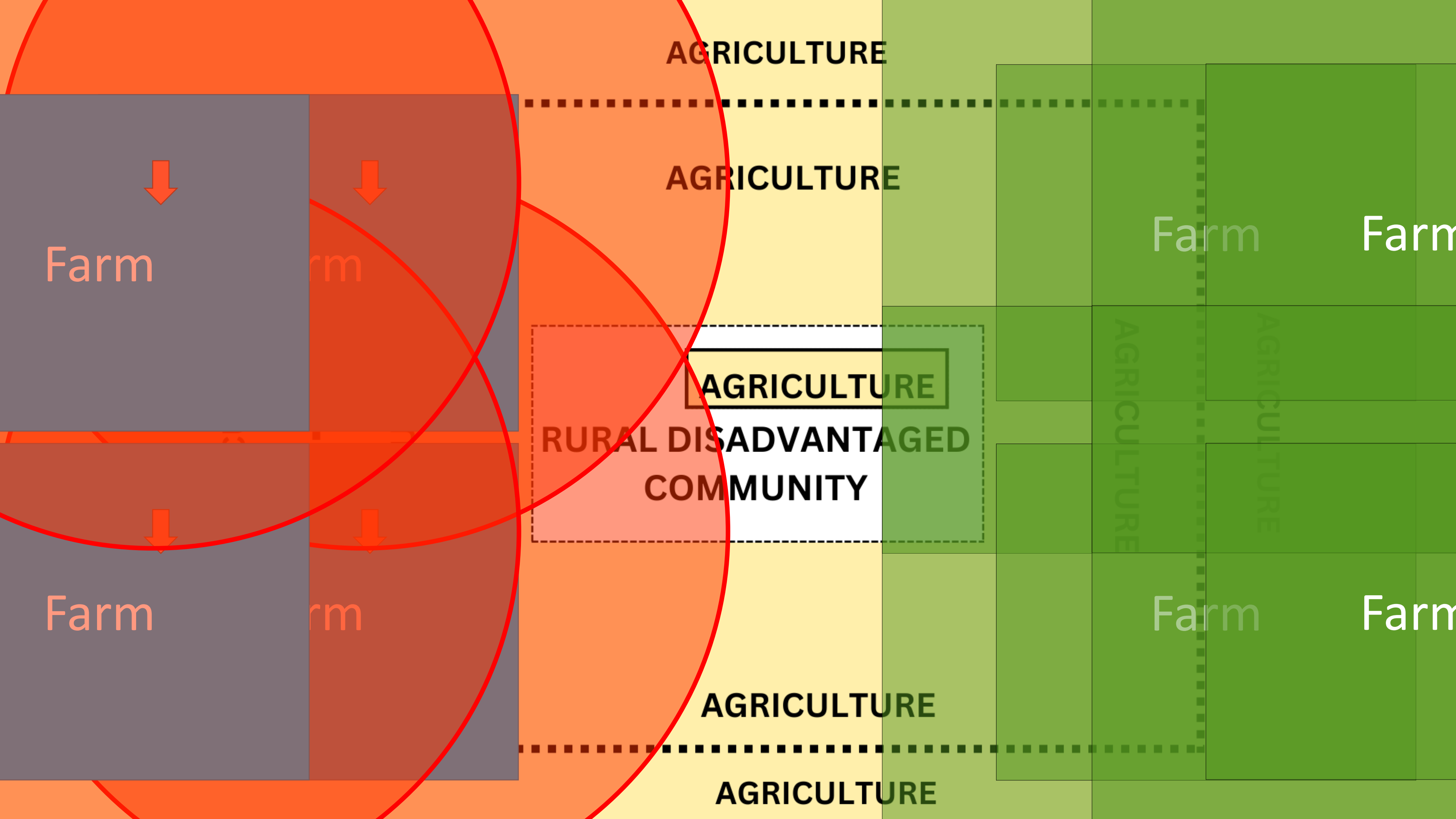
AGRICULTURE

AGRICULTURE

RURAL DISADVANTAGED
COMMUNITY

AGRICULTURE

AGRICULTURE



AGRICULTURE

AGRICULTURE

Farm

rm

Farm

Farm

AGRICULTURE

RURAL DISADVANTAGED
COMMUNITY

AGRICULTURE

AGRICULTURE

Farm

rm

Farm

Farm

AGRICULTURE

AGRICULTURE

BUFFER PERIMETER

AGRICULTURE

AGRICULTURE
RURAL DISADVANTAGED
COMMUNITY

BEFORE
REPURPOSING

AGRICULTURE

AGRICULTURE



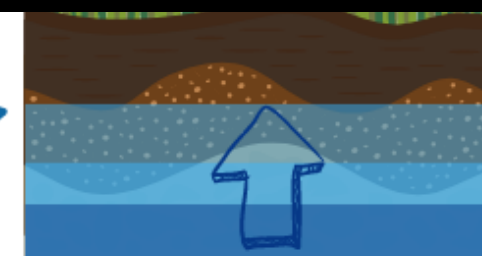
RENEWABLE CLEAN ENERGY AND WILDLIFE CORRIDORS

HABITAT
RESTORATION



JUST TRANSITION

CLEAN AIR



WATER TREATMENT
IN PUBLIC-PRIVATE
PARTNERSHIPS

PARKS AND
RECREATION

SUSTAINABLE
AQUIFERS
FOR CROPS & PEOPLE

CLEAN INDUSTRY

AGRICULTURE

Union of
Concerned Scientists

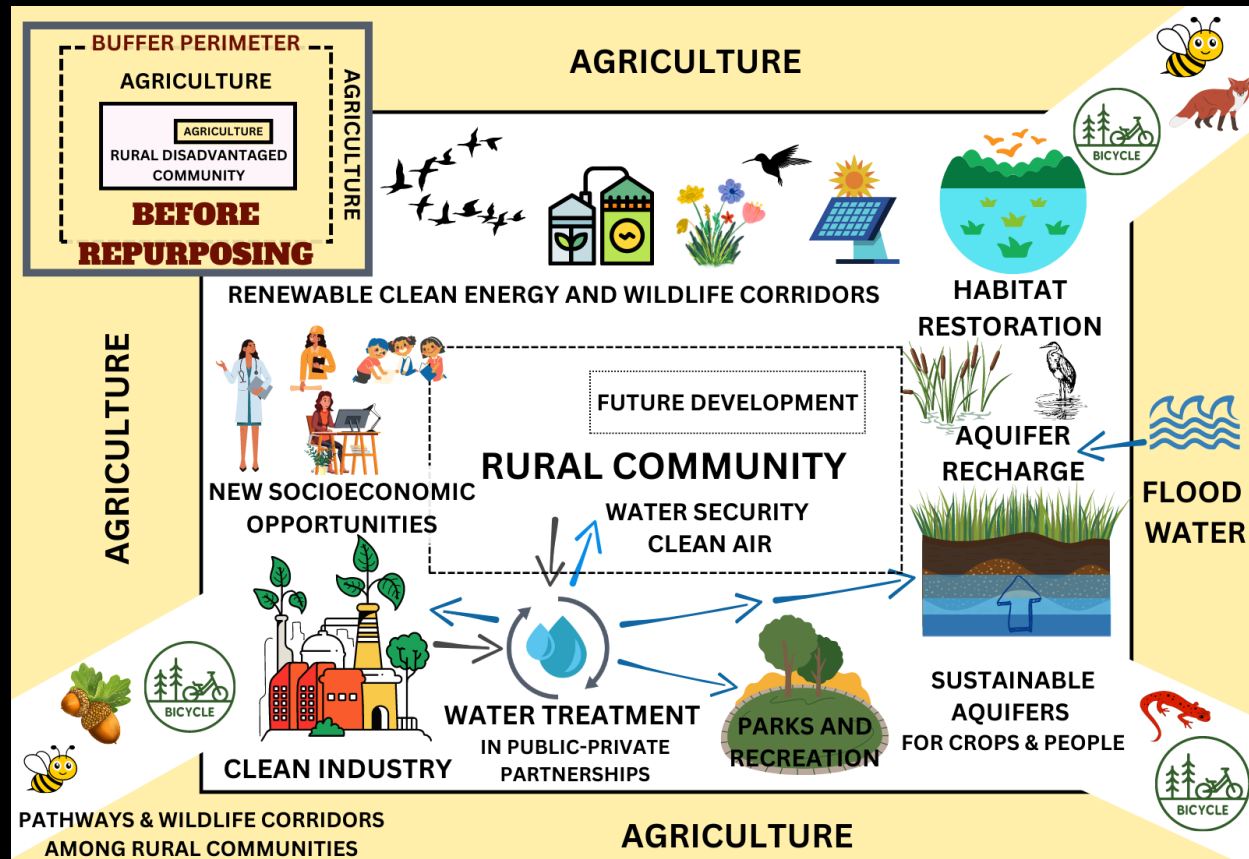
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PATHWAYS & WILDLIFE CORRIDORS
AMONG RURAL COMMUNITIES



How much \$ and jobs means repurposing agriculture within 1 mile per community (average)



30 years horizon

- Ag retired \$28 million per yr
- Ag jobs 167
- Investing \$27 million for 10 yr
- Revenue \$101 million
- New jobs 407 paying 67% more
- 2 MAF water use reduction

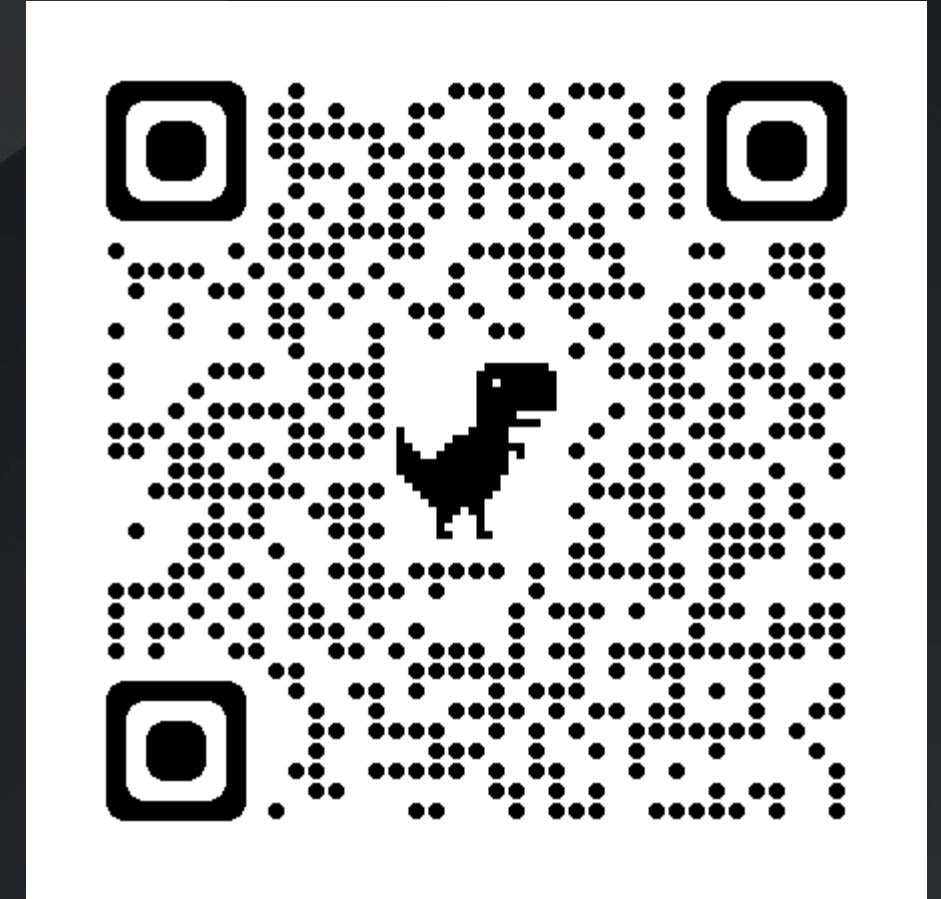
2nd priority

**Repurpose agriculture
around rural
disadvantaged
communities**

Water, environment, and socioeconomic justice in California: A multibenefit cropland repurposing framework



My blog



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THANK YOU

NEXT SPEAKER:

Nataly Escobedo-Garcia

02

Policy recommendation to maximize benefits

California Adaptation Forum

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Just Land Transition

Nataly Escobedo Garcia
Water Policy Coordinator



Where we work

- Merced, Madera, Fresno Counties
 - Delhi, South Merced, Planada, Fairmead, City of Madera, Cantua Creek/El Porvenir, Lanare, City of Fresno, Southwest Fresno, Tombstone, Tooleville, Matheny Tract, Pixley
- Kern County
 - Bakersfield Fuller Acres, Lamont
- Eastern Coachella Valley
 - Thermal, Oasis, Mecca, North Shore, City of Coachella

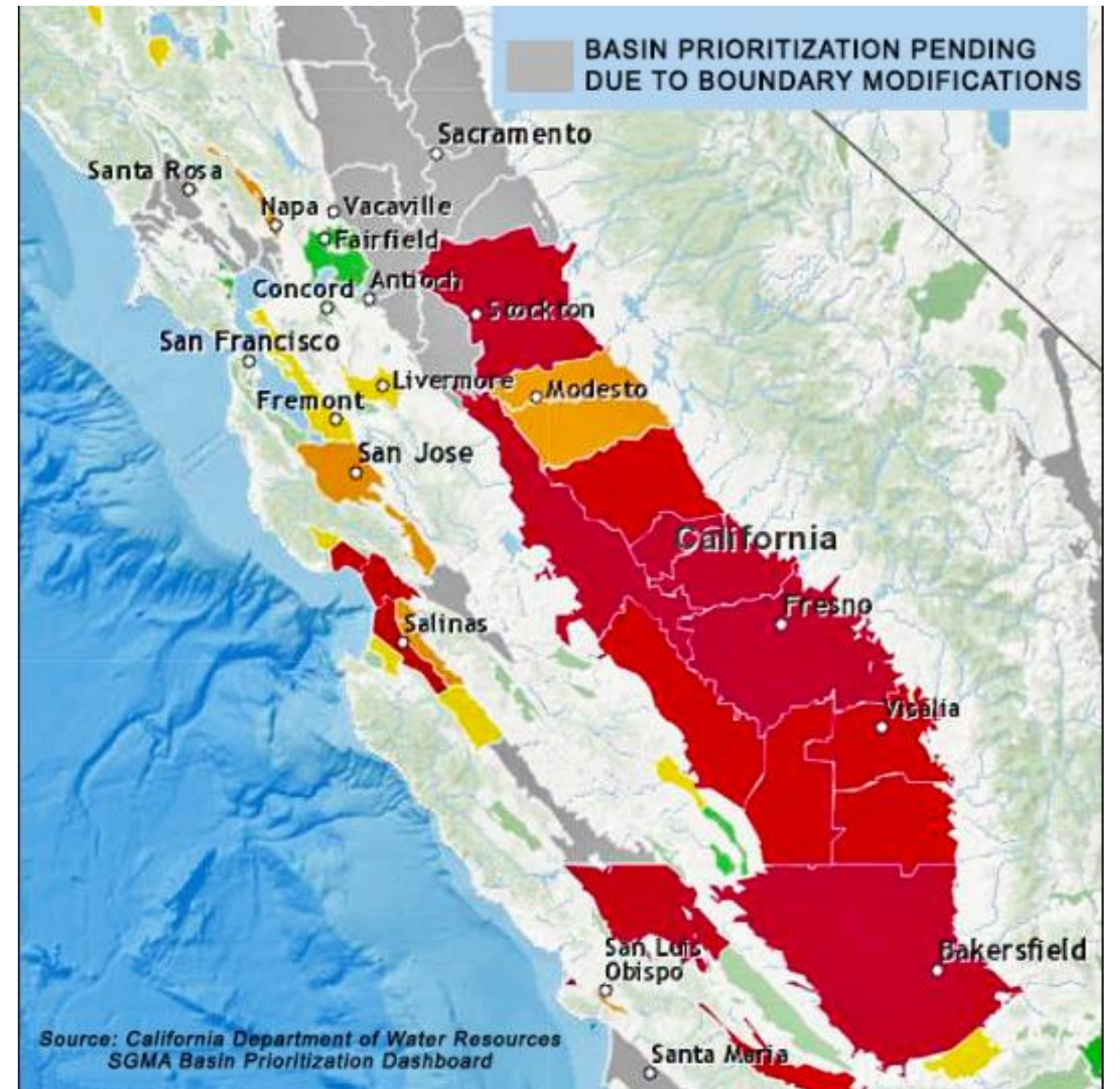
**Working alongside communities
Advocating for sound policy
& eradicating injustice**



**To ensure equal access to opportunity
Regardless of wealth, race, income or place**

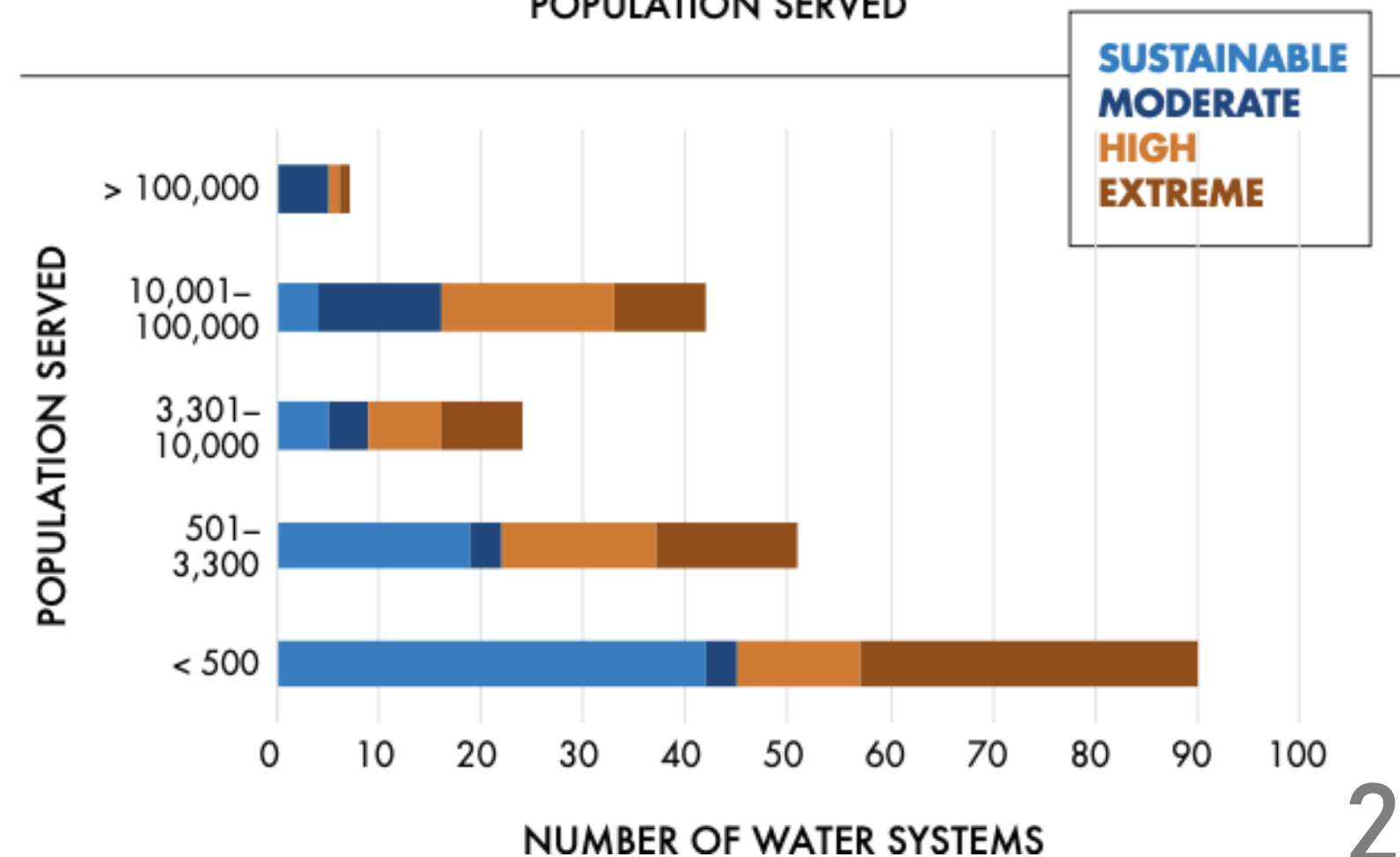
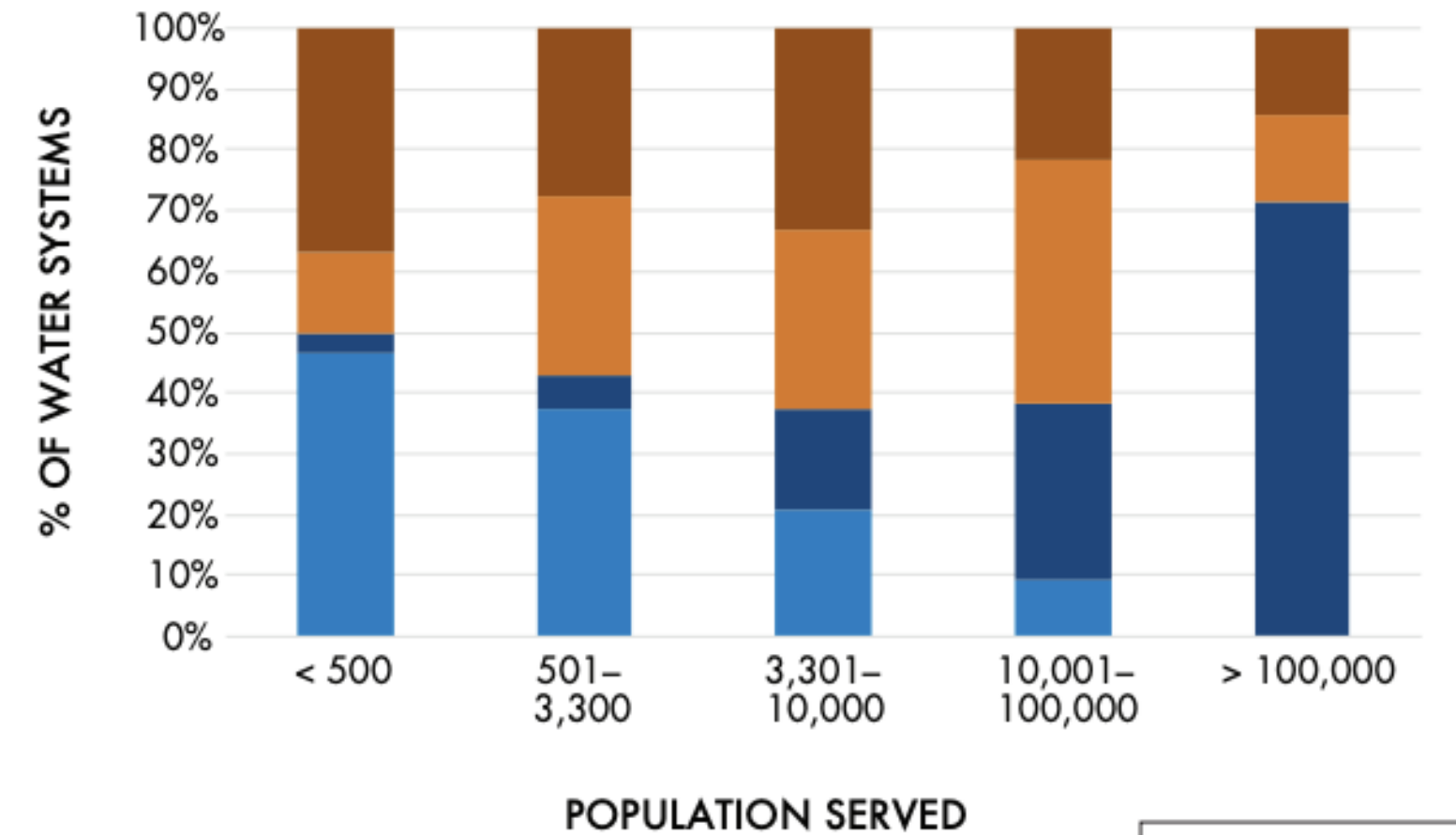
Why are we talking about land transition?

- Agricultural overpumping has been and continues to deplete our water resources
- Drought further limits our water resources
- Climate change, in combination with drought and agricultural overpumping intensifies water shortages



- SGMA meant to correct and put a stop to overpumping
- Lengthy timely that does not match our climate reality
- Based on current Groundwater Management Plans
 - Up to 12,000 private domestic wells could be impacted.
 - 503 of 1,200 public supply wells in the San Joaquin Valley, or 42%, are likely to be partially or fully dry at proposed minimum thresholds

Figure 8. Percent and Number of Water Systems Vulnerable to Minimum Thresholds by System Size



Where does that leave us?

- While SGMA is being implemented, DACs will continue to bear the brunt of present/past groundwater management choices
- Demand reduction
- Retiring/repurposing agricultural land



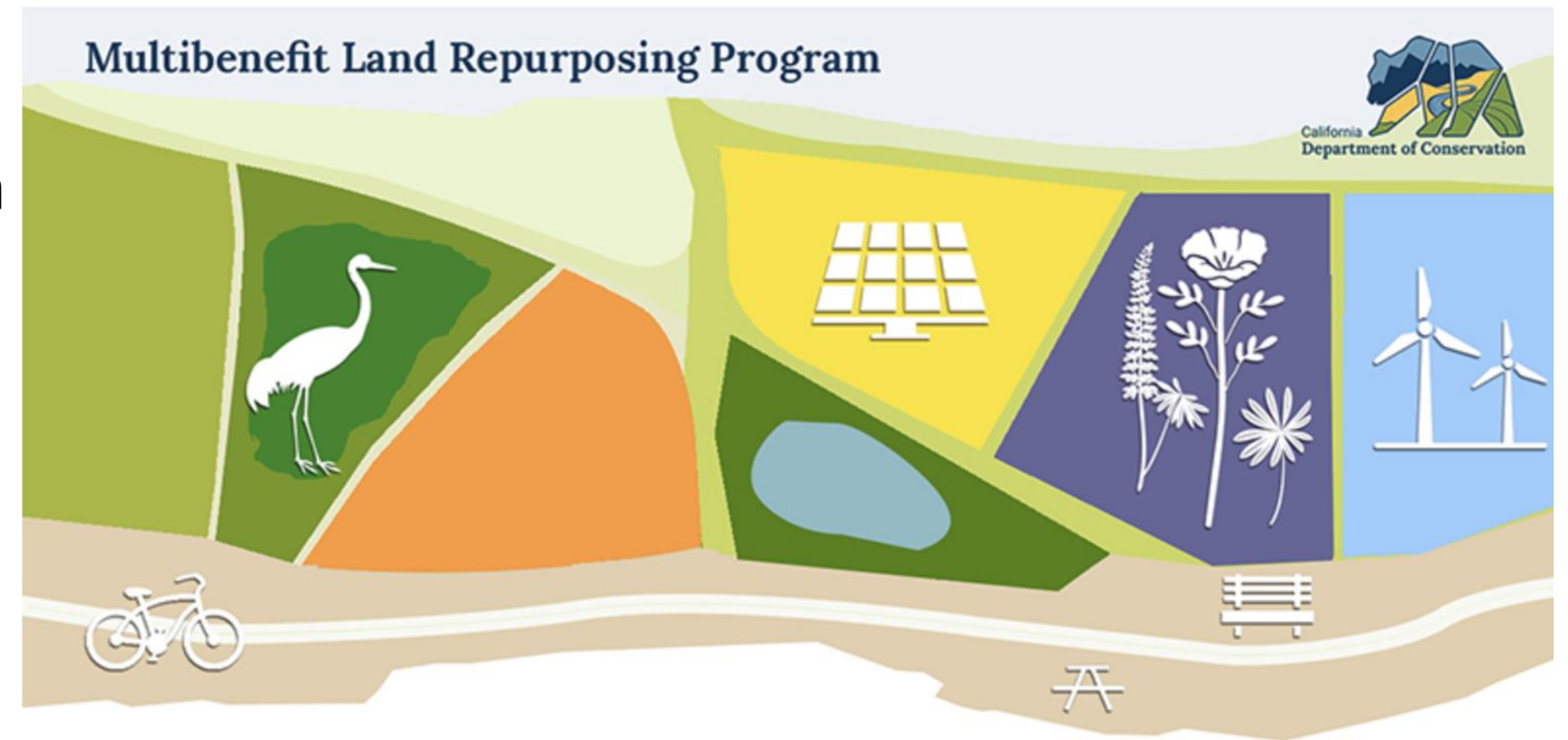
What is “Just Transition”?

- has been around since the 1980s
- In recent years, the concept has gained traction with reference to meeting climate goals by ensuring the whole of society – all communities, all workers, all social groups – are brought along in the pivot to a net-zero future.
- “Just Transition” a vision-led, unifying and place-based set of principles, processes, and practices that build economic and political power to shift from an extractive economy to a regenerative economy that centers communities most impacted by extractive economies.



Current Land Transition Investments

- State investments and local efforts are underway to invest in land transition/repurposing
 - Multibenefit Land Reproposing Program
 - LandFlex
 - GSA land fallowing programs
 - Community Economic Resilience Fund
- Anticipate Federal funding

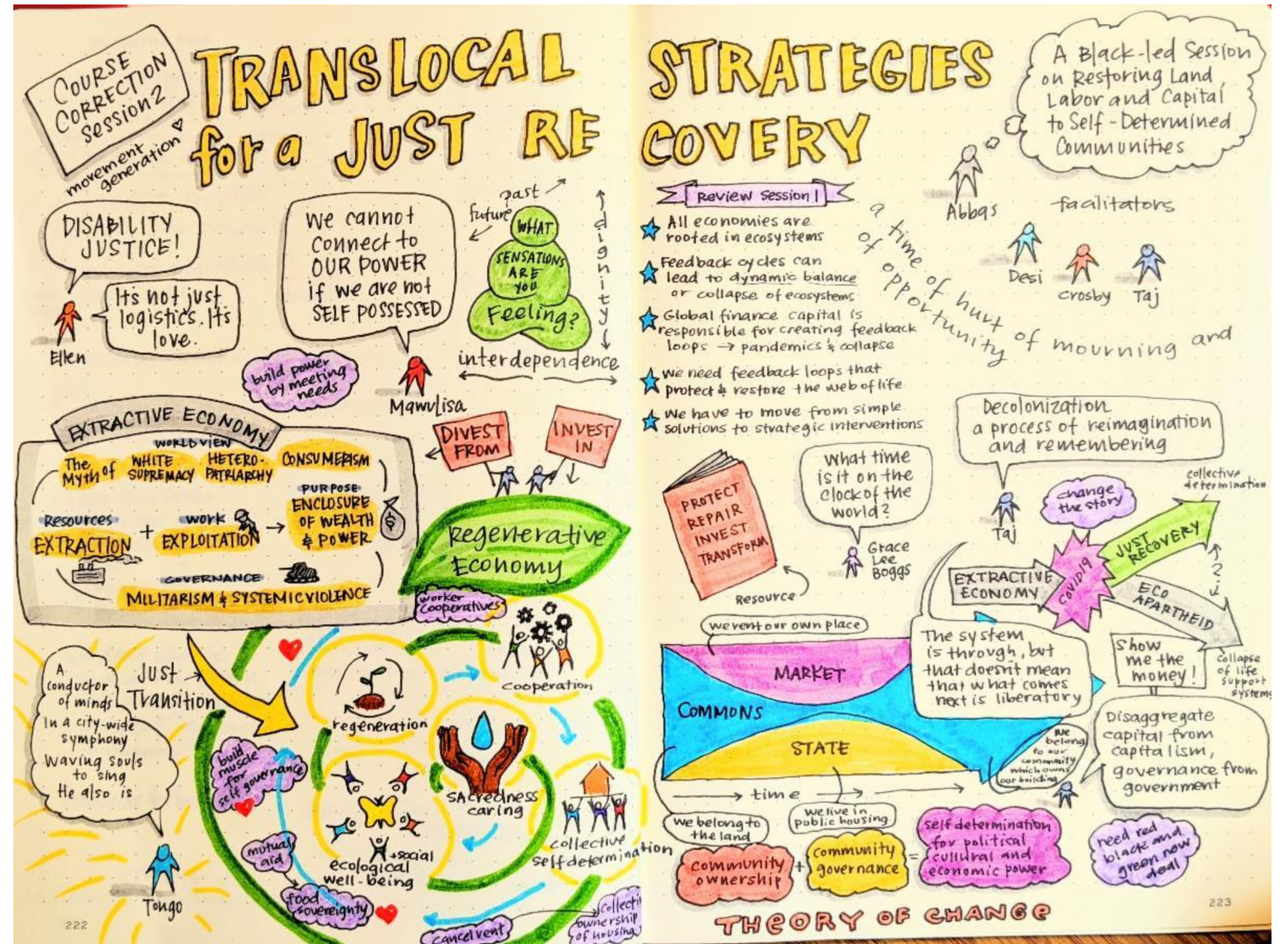


What's missing?

- Understand the socioeconomic impacts and opportunities connected to land transition/retirement for frontline communities
 - Programs built around their visions for land transition
- Investments/efforts in workforce development, transition, training and recovery programs
 - Programs/Initiatives built around farmworker priorities

Community Priorities

- Buffer Zones
- Climate Resilience Centers
- Green Space
- Community Land Trusts
- Affordable Housing
- Regenerative Economies
- Community Solar
- Co-Ops
- Land Back



Policy Recommendations

- Active communication between state agencies
 - Eg CRCs, TCC, and MLRP working in conjunction
- Any land transition/retirement/fallowing funding must at minimum include
 - funding for a Displaced Workers Fund (support available regardless of citizenship status)
 - Funding for community engagement in land transition programs
 - Grants, transportation, translation, etc
 - Prioritize transition of land in and around frontline communities
- Focus on large and industrial agricultural land retirement
- Prioritize permanent land transition
- Zoning changes (depending on county)
- Changes in General Plans and Land Use Policy

THANK YOU

NEXT SPEAKER:

José Armando Munguía

03

Allensworth: The town that refuses to die

California Adaptation Forum

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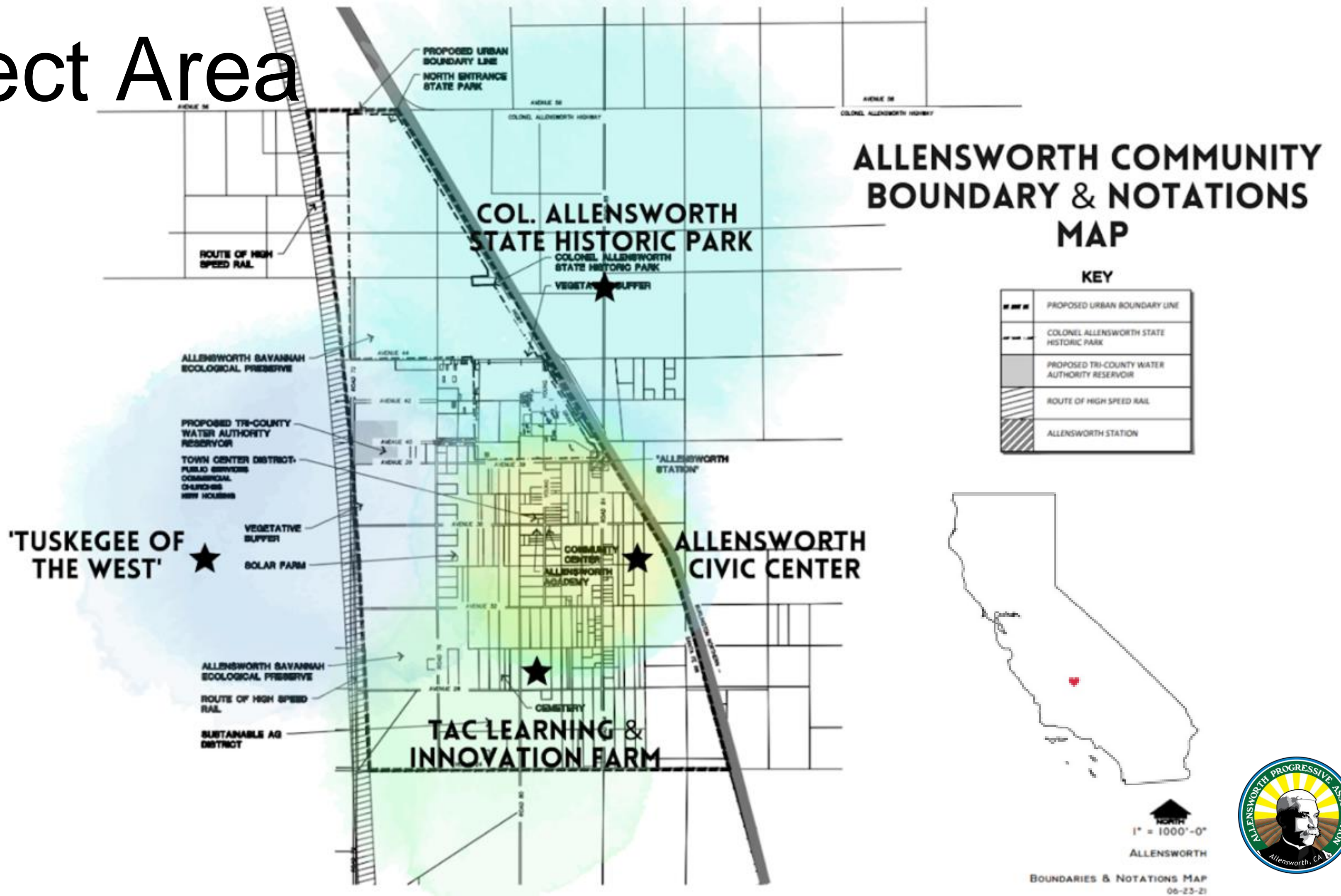
ALLENSWORTH

THE TOWN THAT REFUSES TO DIE



SW TULARE COUNTY | CALIFORNIA

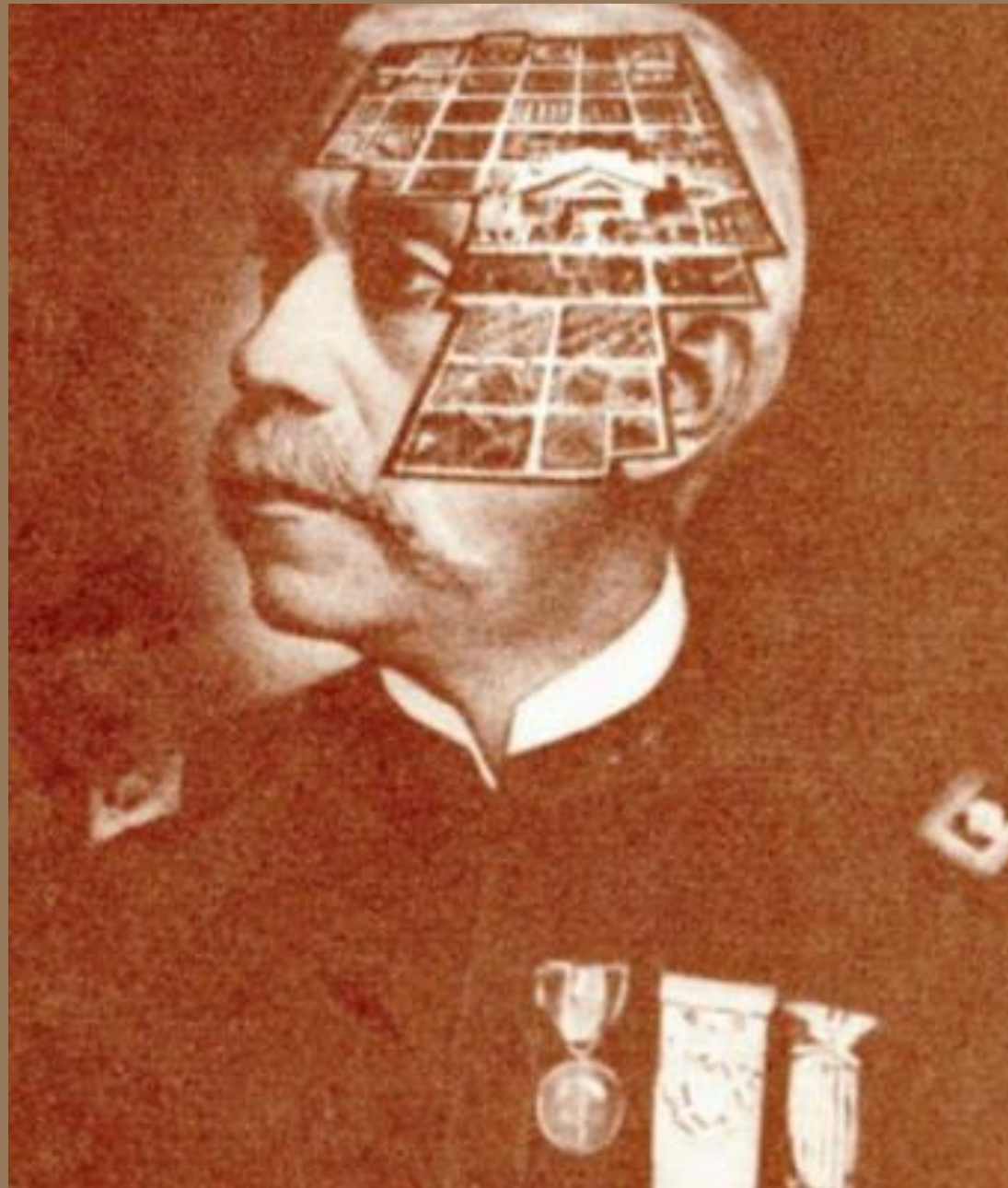
Project Area



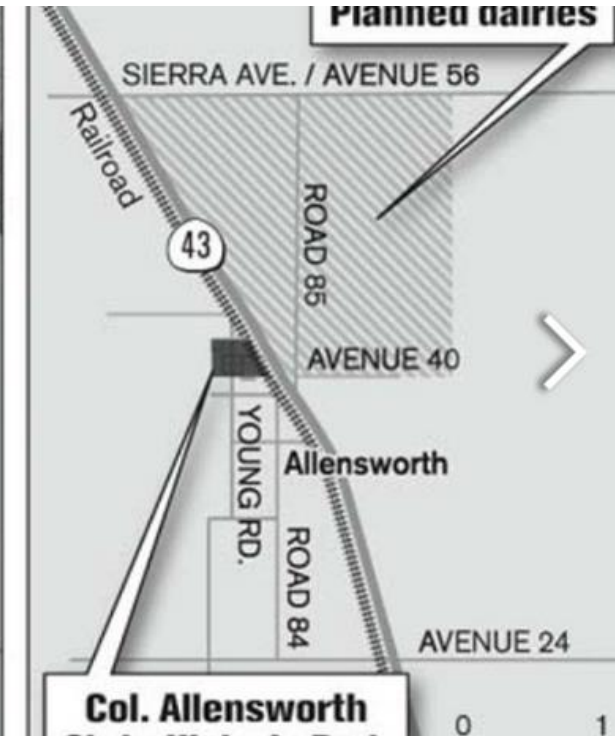
Allensworth

History

- Founded in 1908 by retired army chaplain Col. Allen Allensworth and Professor William Alexander Payne
- 900-acres on the shoreline of Tulare Lakebed in the southern Central Valley of California
- "Tuskegee of the West"
 - Self-government
 - Self-sufficiency
 - Community resilience



The Town That Refuses To Die



COL. ALLENSWORTH STATE HISTORIC PARK ESTABLISHED

- Established in 1974
- Original buildings restored & reconstructed
- Nettie Morrison establishes Friends of Allensworth
- Nettie Morrison establishes annual park events celebrating history & culture

ENVIRONMENTAL PROTECTIONS

- 2007 - 2 proposed neighboring mega-dairies threaten historic park & living community
- Nettie Morrison rallies residents to advocate against the intrusion & win!
- Legislation passed establishing a 2.5-mile buffer zone around Col. Alenworth State Historic Park

NOURISHING THE SPIRIT OF ALLENSWORTH

- Moved to Allensworth in 1979
- Nettie Morrison, unofficial 'Mayor of Allensworth'
- Establishes community food commodities program
- Raised funds to save & move Allensworth Christian Church

Building A Solidarity Economy



On Allensworth's Horizon

**TAC Regenerative
Farm**



Farmer's Market



**Modern Waste
Water Treatment**



**Resiliency
Center**



Solar Farm



Ecotourism



**Elderly &
Veteran Housing**



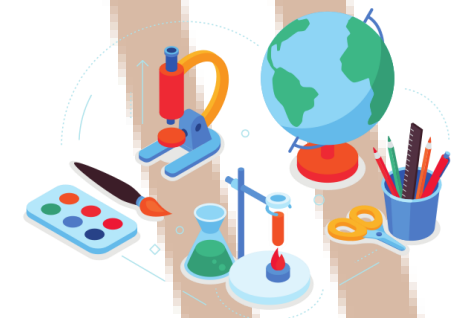
Community Forest



**Nature & Community
Trail**



**Green K-14
School Facilities**





The Future of Allensworth is Bright!



THANK YOU

NEXT SPEAKER:
Anna Gurevitz

04

K-12 Education and Citizen Science

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MEASURES OF SUCCESS

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**Monitoring by one
community expert**

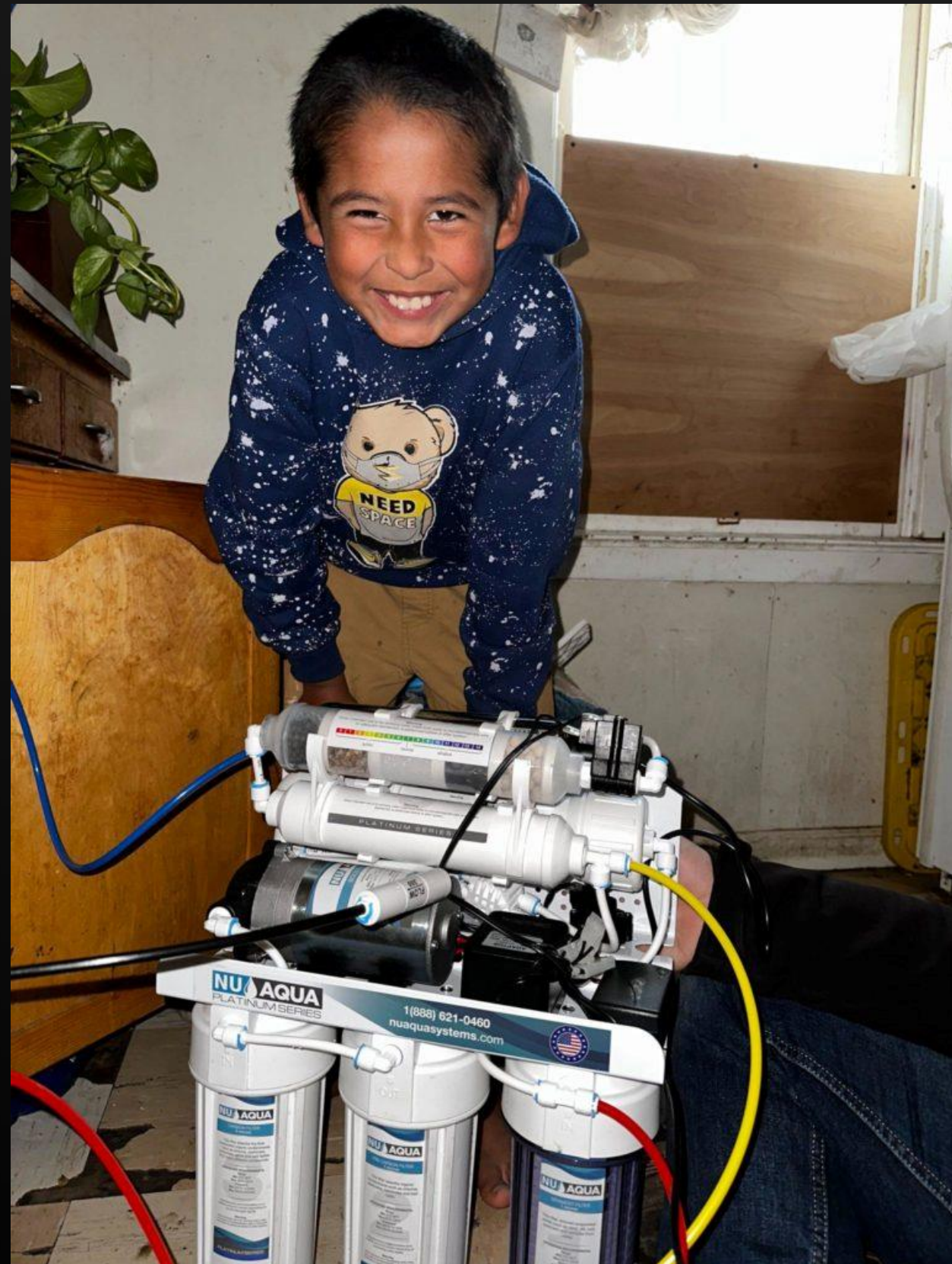


**Passive monitoring by
many community
members**



**Active monitoring by
many community
members**





Working with Youth



Working with Youth



Working with Youth



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Concerned Scientists**



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Education Network**

THANK YOU

**NEXT:
Q&A and Activity**

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AUGUST 2, 2023

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Q&A, Activity, and Discussion

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Strategic Cropland Repurposing

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BEFORE REPURPOSING

Communities
Water insecurity
Extremely low air quality
Lack of fundamental infrastructure
No access to green areas

Conventional Agriculture
Unsustainable water use
Excessive use of pesticide and synthetic fertilizers
Greenhouse gas emissions

BEFORE REPURPOSING

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Pathways & Wildlife Corridors Among Rural Communities
Reduce isolation
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Access to land
Farmworkers can become small farmers with facilitated access to cropland to improve local economies and food security.

Multi-benefit cropland repurposing

Clean industry and Renewable energies
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CONVENTIONAL AGRICULTURE

RENEWABLE CLEAN ENERGY AND WILDLIFE CORRIDORS

HABITAT RESTORATION

AQUIFER RECHARGE

WATER TREATMENT IN PUBLIC-PRIVATE PARTNERSHIPS

CLEAN INDUSTRY

PARKS AND RECREATION

SUSTAINABLE AGRICULTURE

WATER SECURITY

CLEAN AIR

RURAL COMMUNITY

NEW SOCIOECONOMIC OPPORTUNITIES

WATER SECURITY

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START THE TRANSITION FROM CONVENTIONAL AGRICULTURE TO SUSTAINABLE AGRICULTURE

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