



Multibenefit Land
Repurposing Program | **MLRP Madera**

COMMUNITY WORKSHOPS

November 15-16, 2023

INTRODUCTIONS

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WORKSHOP AGENDA

Part 1 - 20 minutes

- About MLRP
- Eligibility and requirements
- Input survey
- Program timeline
- Participation options

Part 2 - 60 minutes

- Community discussion
 - Multibenefit outcomes
 - Project types
- Grower business case scenarios
 - Example project illustrations

PART 1 – ABOUT MLRP

Background

- CA Department of Conservation program to increase groundwater sustainability
- Madera County is one of eight grantees statewide
- Requires inclusive planning



PROGRAM GOALS



Incentivize

proactive ag land repurposing to improve groundwater sustainability.



Reward

commitments to long-term projects that create multiple benefits for communities and the environment.



Support

growers to envision, plan and implement projects that convert ag lands to new productive uses (that use less water).

MLRP MADERA

Our local approach

- Develop a land repurposing program that offers a variety of project types that make sense for **growers** in our region
- Ensure that the MLRP Madera program encompasses the specific co-benefits that are desired by **residents** in the community



HOW TO PRE-QUALIFY

MLRP applicants must

- Be an individual or entity that has defined responsibility for ag land in Madera County
- Be able to enter into a contract agreement for a duration of at least 10 years
- Ensure consistency with the Groundwater Sustainability Plans for your area
- Be in a GSA within Madera County
- Select an eligible *project type* and *multibenefit outcome* that will be achieved*

* *Specifications for eligible project types and multibenefit outcomes will be defined in the MLRP Madera plan.*

INPUT SURVEY

Offer your input on the project types and multibenefit outcomes for the MLRP Madera Plan

English Survey



Encuesta en Español



Also available online at maderacountywater.com/multibenefit-land-repurposing-program

MLRP MADERA PROCESS STEPS

Process Step	Timing
Community input workshops and surveys	Fall 2023 – Winter 2024
Formation of Stakeholder Advisory Group	Winter 2024
Stakeholder Advisory Group input on final MLRP Madera program plan	Spring 2024
MLRP Madera application window	Summer 2024
MLRP Madera funding award notifications	Fall 2024
Project support and implementation	Fall 2024 – Fall 2026

HOW TO PARTICIPATE

Input options and action steps

- Complete the community and grower input survey
- Email mlrp@maderacounty.com to sign-up for updates, submit a question or request language assistance
- Attend future workshops
- Join the MLRP Madera Stakeholder Advisory Group

PART 2 - DISCUSSION

Multibenefit outcomes

Project types

Business case scenarios

MULTIBENEFIT OUTCOMES

Every MLRP project must provide at least one of the following potential community or environmental benefits

- Air quality improvement
- Employment opportunities
- Flood risk mitigation
- Habitat creation
- Recreation or community space
- Renewable energy
- Tribal or cultural benefit
- Soil quality enhancement
- Water quality enhancement

MULTIBENEFIT OUTCOMES

Descriptions

Air quality improvement	Reduces dust, chemicals or other sources of particulate matter that impact the air quality within and around the project location.
Employment opportunities	Creates new jobs or supports job security.
Flood risk mitigation	Provides a diversion point or dedicated area for flood flows to reduce downstream flood risks to communities and farmland.
Habitat creation	Improves regional biodiversity supports the recovery of plants and animals that are at risk of extinction.
Recreation or community space	Offers opportunities for recreational, educational or other space to enhance community well-being.

MULTIBENEFIT OUTCOMES

Descriptions

Renewable energy	Creates a clean energy source that helps California reduce its climate impacts.
Tribal or cultural benefit	Provides space dedicated to traditional land uses, cultural traditions, or the arts.
Soil quality enhancement	Includes land maintenance and management practices to promote soil health or prevent erosion.
Water quality enhancement	Supports improved water quality of community or domestic wells.

PROJECT TYPES

Eligible MLRP project types must convert irrigated (or previously irrigated) ag land, and may include:

- Community recreational area or cultural space
- Dryland farming
- Floodplain habitat
- Less water-intensive crop
- Rangeland (Managed Grazing Land)
- Pollinator habitat
- Recharge basin or facilities
- Rotational strip cropping
- Solar energy production, storage, transmission
- Wildlife habitat

PROJECT TYPES

Descriptions

Community recreational area or cultural space

Convert land into a community area with opportunities for recreation, publicly accessible open space, or specific cultural uses. Conversion may include a change in ownership or a land lease involving one or more parties.

Dryland farming

Convert to growing a crop that solely relies on precipitation falling onto the field to grow an agricultural commodity, with no supplemental irrigation. Differs from less water-intensive by no presence of an irrigation system. Can serve as a transition crop and be flexible year to year.

Floodplain habitat

Modify land along natural waterway or flood channel to facilitate spreading of water during high-flow events. Land would be replanted with appropriate native plants to create valuable habitat during periods without any water inundation. Land modifications can also facilitate groundwater recharge.

PROJECT TYPES

Descriptions

Less water-intensive crop	Convert to growing a crop that uses less water than the current irrigated crop, including a crop that still requires regular irrigation, or a crop that needs only minimal irrigation to supplement precipitation. Differs from dryland farming due to the presence of an irrigation system. Must consider market demand and specialized labor need.
Rangeland (Managed Grazing Land)	Convert irrigated lands to non-irrigated land for livestock grazing. Land would be replanted and managed to facilitate healthy grazing plant species and practices. May include land preparation, replanting, weed management, fencing, livestock watering systems, and other facility improvements to provide necessary functionality.

PROJECT TYPES

Descriptions

Pollinator habitat	Convert to growing a crop that uses less water than the current irrigated crop, including a crop that still requires regular irrigation, or a crop that needs only minimal irrigation to supplement precipitation. Differs from dryland farming due to the presence of an irrigation system. Must consider market demand and specialized labor need.
Recharge basin or facilities	Modify land to create a dedicated basin or facilities where acquired surface water can be placed for seepage into underground storage. Recharge credits may be available, depending on the rules of the Groundwater Sustainability Agency within which the recharge basin or facility is located.
Rotational strip cropping	Modify the farming and management practice of annual crops such that different strips of the field are planted each year, resting the soil on non-planted strips.

PROJECT TYPES

Descriptions

Solar energy production, storage, transmission	Convert land to accommodate solar energy production, or to provide an area for needed energy storage facilities and transmission corridors. This could also include Agrivoltaic projects that combine solar generation with commodity farming.
Wildlife habitat	Convert land to support important native plant and animal species through planting, propagation and management of appropriate plants. Irrigation may be necessary to establish plants, but habitat would not rely on irrigation after establishment. Should consider the distance to existing habitat to connect large areas and create more successful habitat. Working with wildlife agencies will ensure projects are properly permitted and that project implementers have guaranteed assurances.

MLRP PROJECT EXAMPLES

Business case scenarios for land repurposing:

- Solar
- Less water intensive crop
- Habitat

Purpose

Illustrate the process for evaluating multibenefit land repurposing and encourage discussion about potential opportunities.

MLRP Project Opportunities

- Water availability is changing under SGMA in different parts of the county
- SGMA affects farming costs and income, which also affects local communities and opportunities in Madera County
- Repurposing land to lower water use activities requires capital investments and ongoing costs
- MLRP may provide opportunities and incentives to repurpose lands in ways that make sense for growers and provide other regional benefits

Some Examples to Illustrate MLRP

- Representative farming operations with insufficient groundwater to meet current crop water demands

Current Conditions	2023 market conditions and current GSP implementation (e.g., costs, projects, allocations, etc.).
2028 no land repurposing	Illustrates conditions in 5 years (at 2028) without any land repurposing.
2028 with land repurposing	Illustrates conditions in 5 years (at 2028) with example land repurposing: solar, lower water use crop, and habitat.

An Overview of the Methods

Business case examples are illustrated using an annual income statement from the perspective of the business (farming operation)

Income:

- Crops: average yield and average prices per unit yield
- Solar: average wholesale electricity rates
- Habitat: easement value for perpetual habitat that limits other farming opportunities

Costs:

- Crops: average cash farming costs plus overhead (including capital costs such as land development, equipment, etc.)
- Solar: average annual operating and maintenance costs plus overhead (including all capital development and connection costs)
- Habitat: average annual operating and maintenance costs for habitat plus overhead (including limited development costs)

Example Project Outcomes

Scenarios illustrate the evaluation process for considering various land repurposing projects. Examples are intended to help growers envision opportunities and encourage discussion, including:

Potential returns:

- Example business cases show returns across scenarios
- Land repurposing project can generate additional revenue, but also require additional capital investments and annual operating costs
- Each business will vary

Funding opportunities:

- For MLRP funding, projects must meet program requirements
- Specifics regarding MLRP funding will be defined by the MLRP Madera Plan and awards will be subject to a review and approval process.
- Other funding opportunities may be stacked with MLRP

Business Case #1

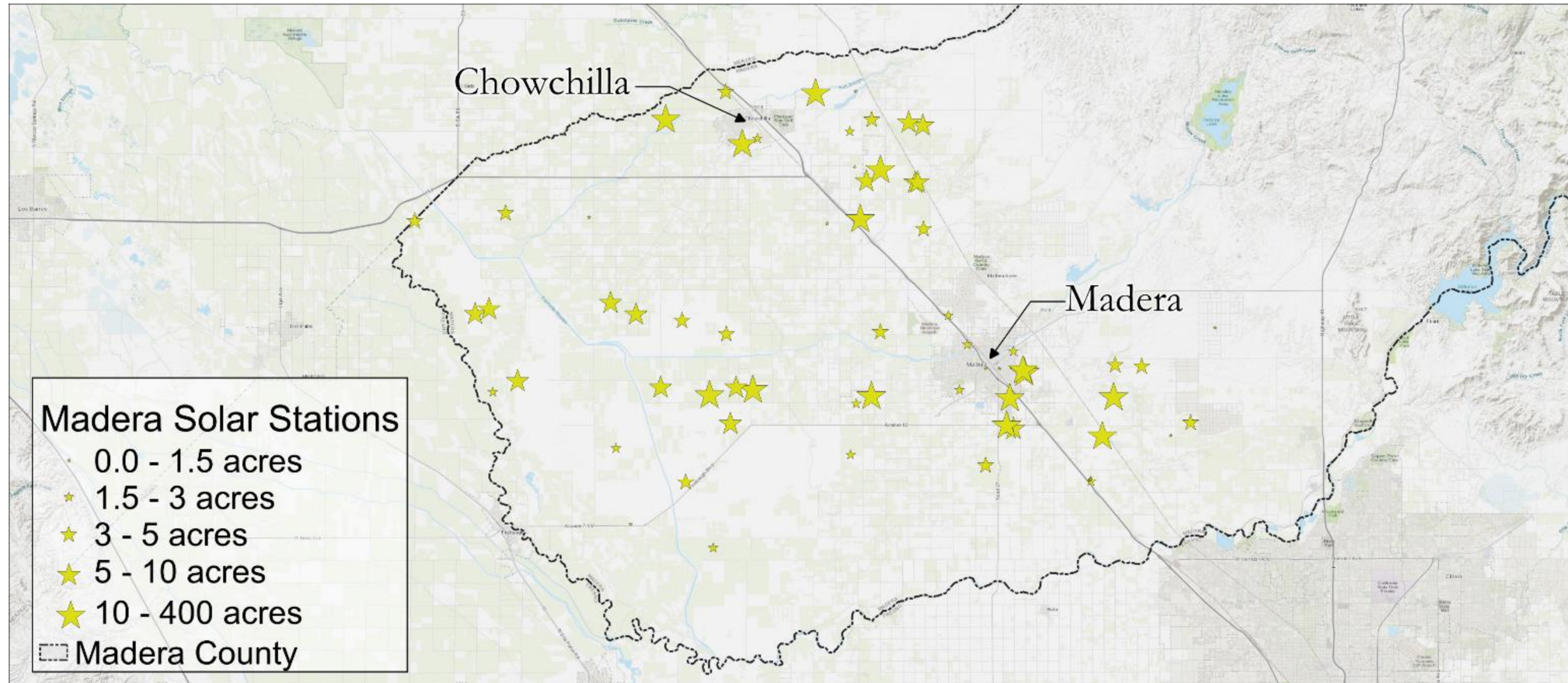
MLRP project type:

Solar energy production, storage, transmission

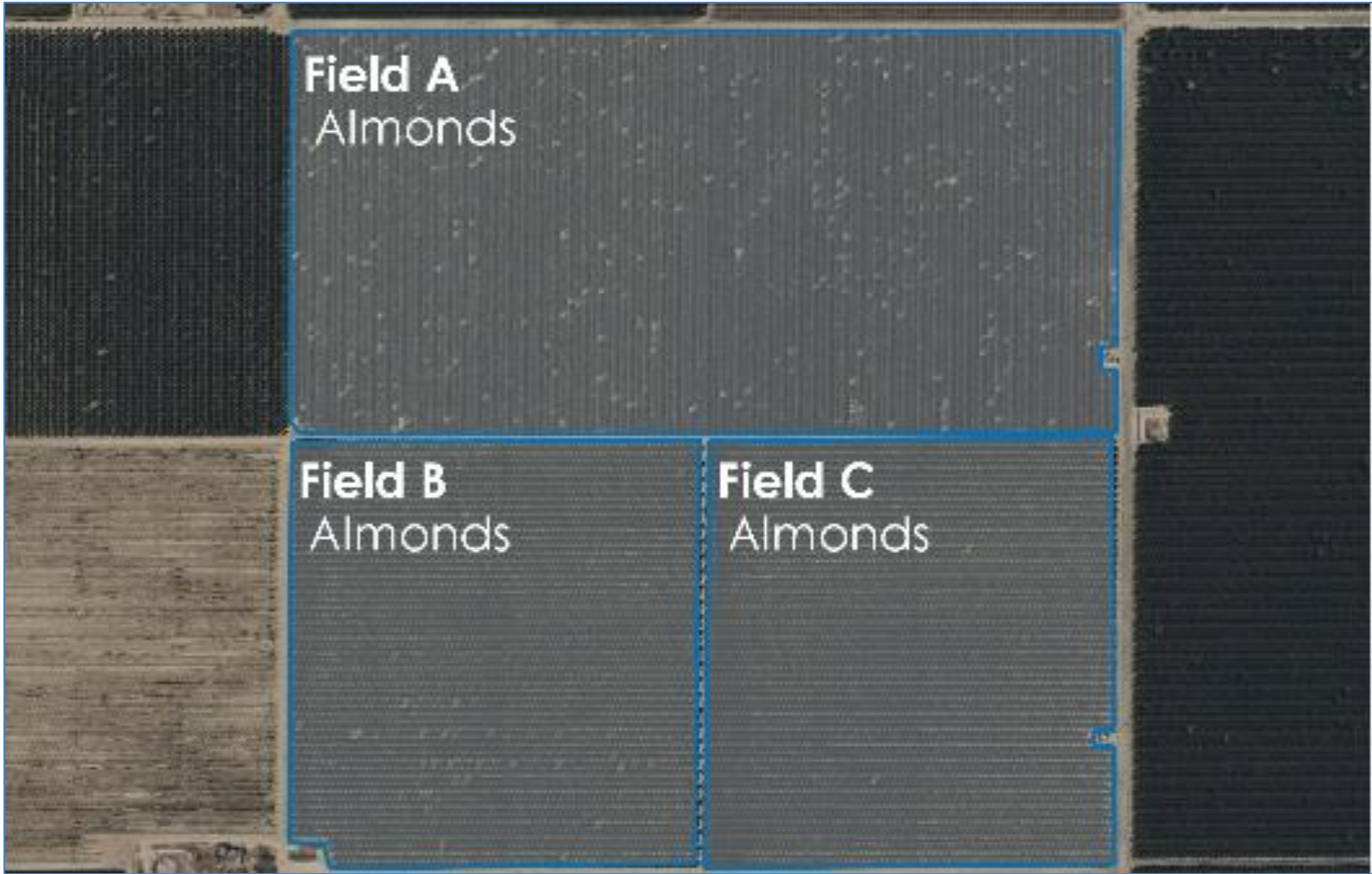
Potential MLRP multibenefit outcomes:

- ✓ Air quality improvement
- ✓ Renewable energy
- ✓ Employment opportunities

Current Large Solar Projects – Madera County



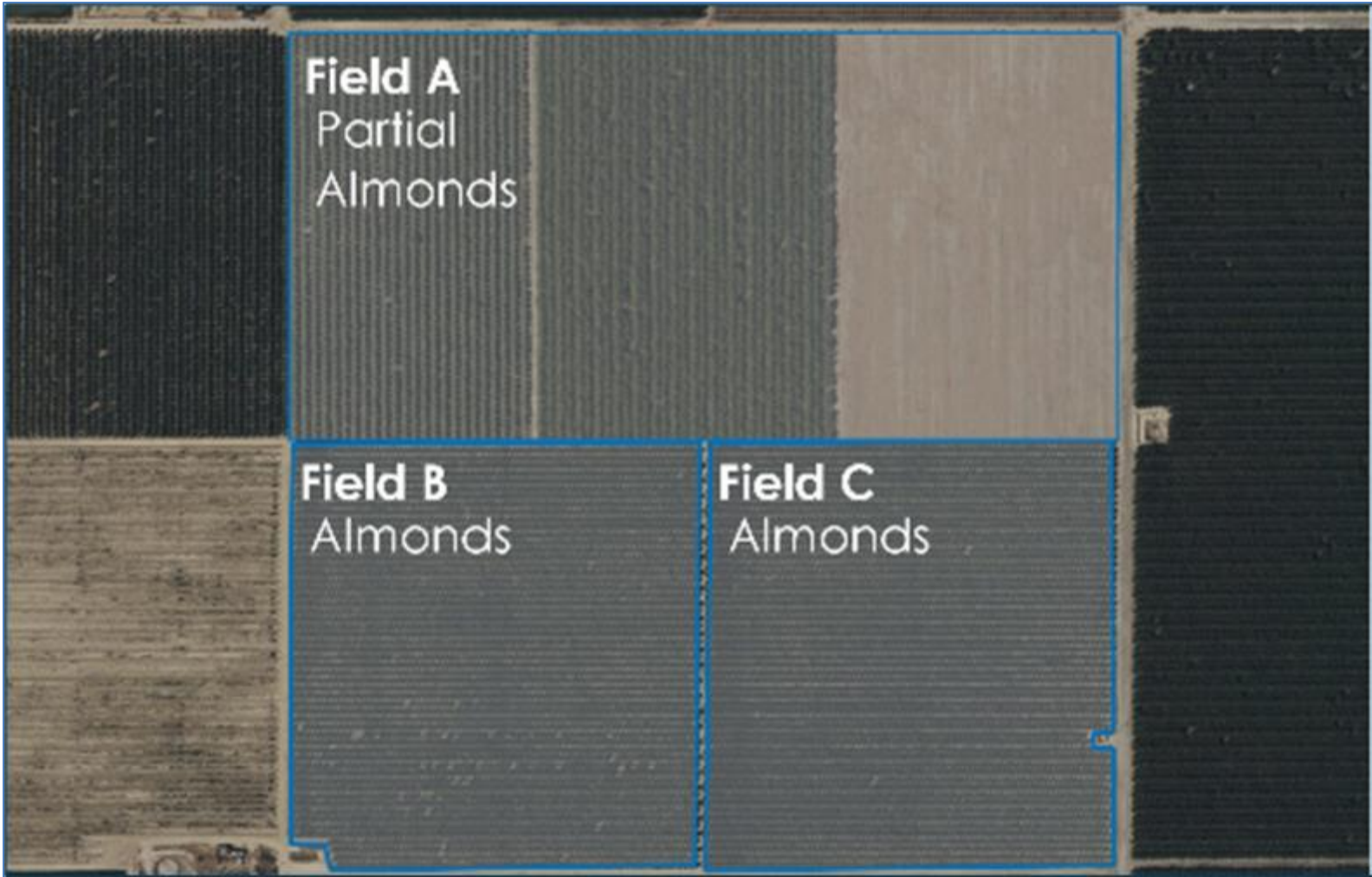
2023: Current Conditions



Example Simplified Income Statement	
Revenue (Crop Sales)	\$882,000
Costs (Farm Cash Costs, Farm Overhead, etc.)	\$769,000
Net Return	\$113,000

Water Supply	
Irrigated Acres	147
Average ETAW (AF/AC)	3.17
Demand 2023 (AF)	466

2028: SGMA Implementation, No Repurposing Small Field

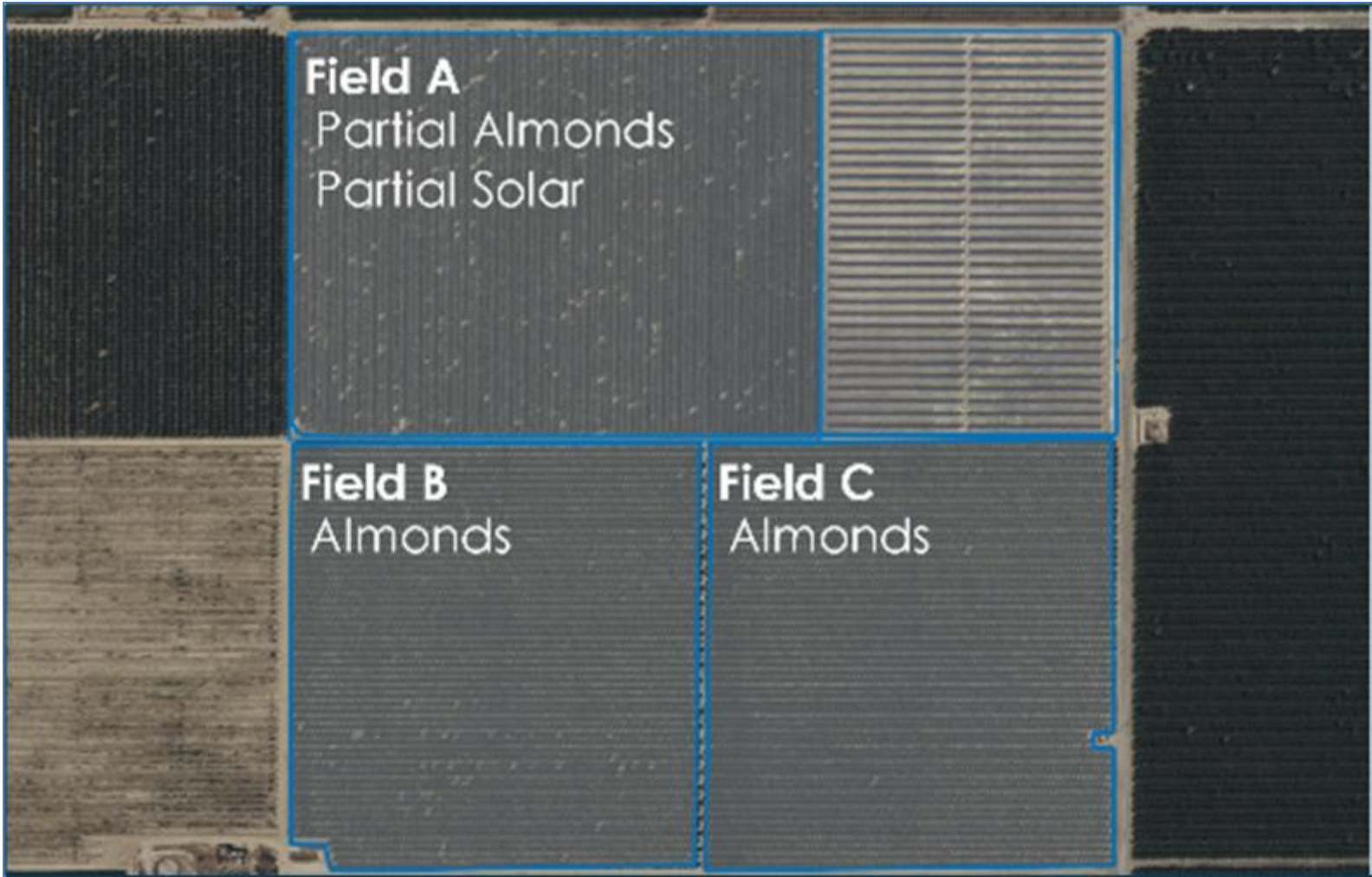


Potential Future Scenario

Revenue (Crop Sales)	\$772,000	
Costs (Farm Cash Costs, Farm Overhead, Orchard Removal, etc.)	\$681,000	
Net Return	\$91,000	-19%
Potential MLRP Funding	X	

Water Supply	
Irrigated Acres	129
Average ETAW (AF/AC)	3.17
Demand 2028 (AF)	407

2028: SGMA Implementation, With Small Solar Project



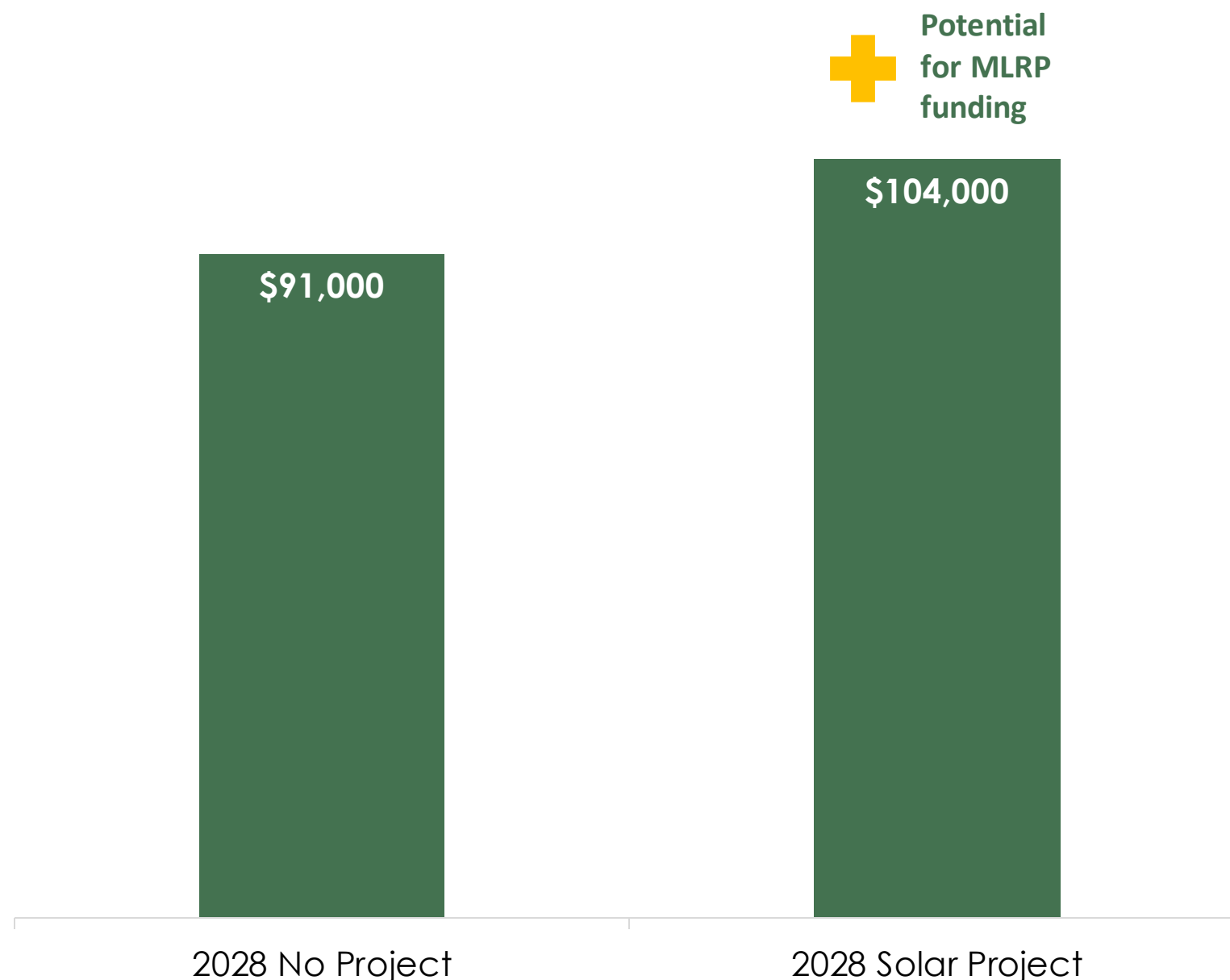
Potential Future Scenario			
Revenue (Crop Sales and Project Revenue)		\$1,105,000	
Costs (Farm Cash Costs, Farm Overhead, Orchard Removal, Project Costs, etc.)		\$1,001,000	
Net Return		\$104,000	-8%
Potential MLRP Funding		✓	

Water Supply	
Irrigated Acres	129
Average ETAW (AF/AC)	3.17
Demand 2028 (AF)	407

Solar Scenario Comparison

Considerations:

- Transmission capacity constraints
- Development costs
- Annual maintenance and operations



Examples of Other Funding Opportunities: Solar

Orchard removal	San Joaquin Valley Air Pollution District	Regulatory Relief
Solar incentives	Inflation Reduction Act programs funding (in development)	Tax incentives TBD
	California Energy Commission Renewable Energy for Agriculture Program (REAP)	Currently closed
	Other Programs under LCFS	Various

Business Case #2

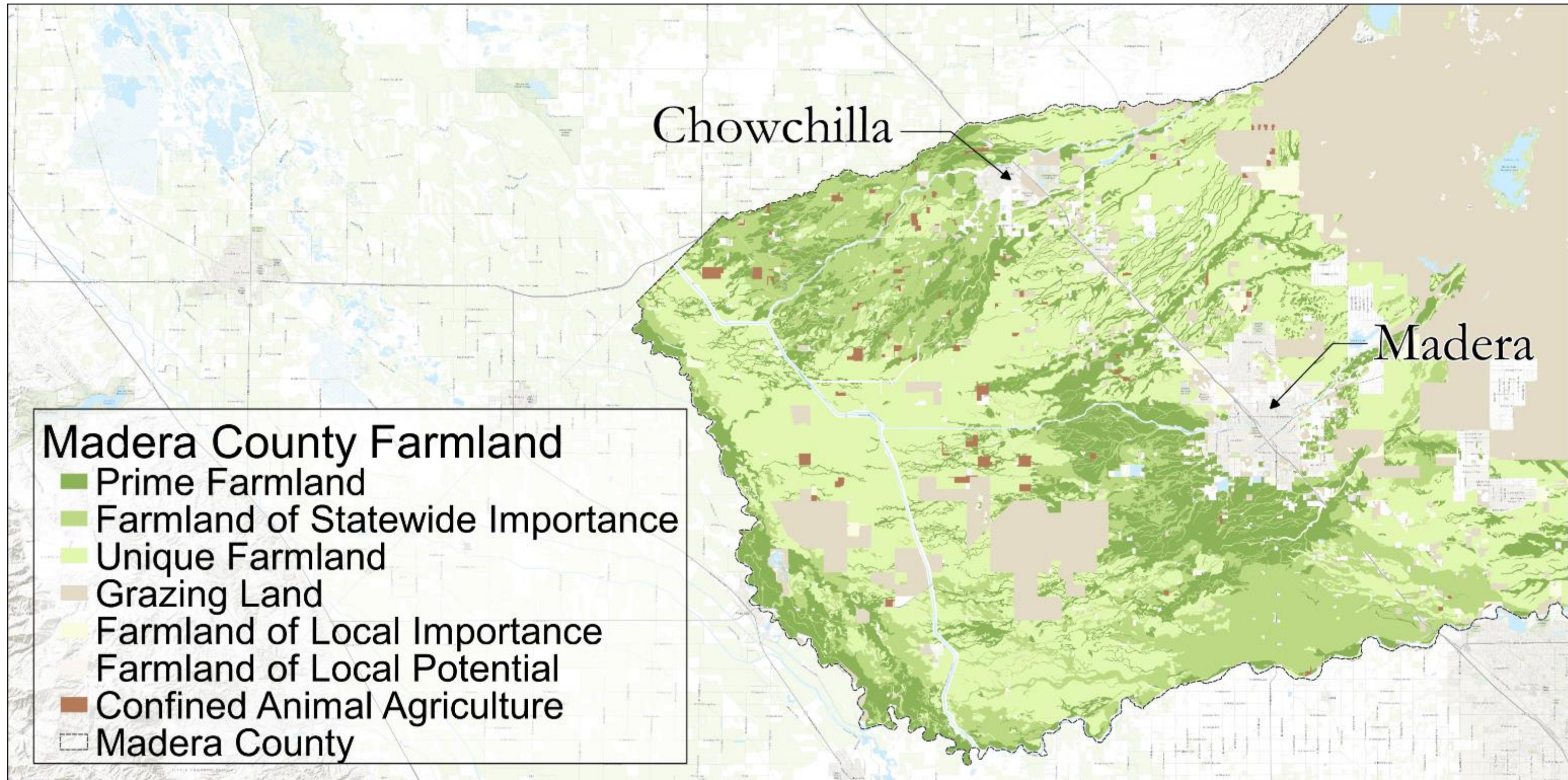
MLRP project type:

Less water-intensive crop

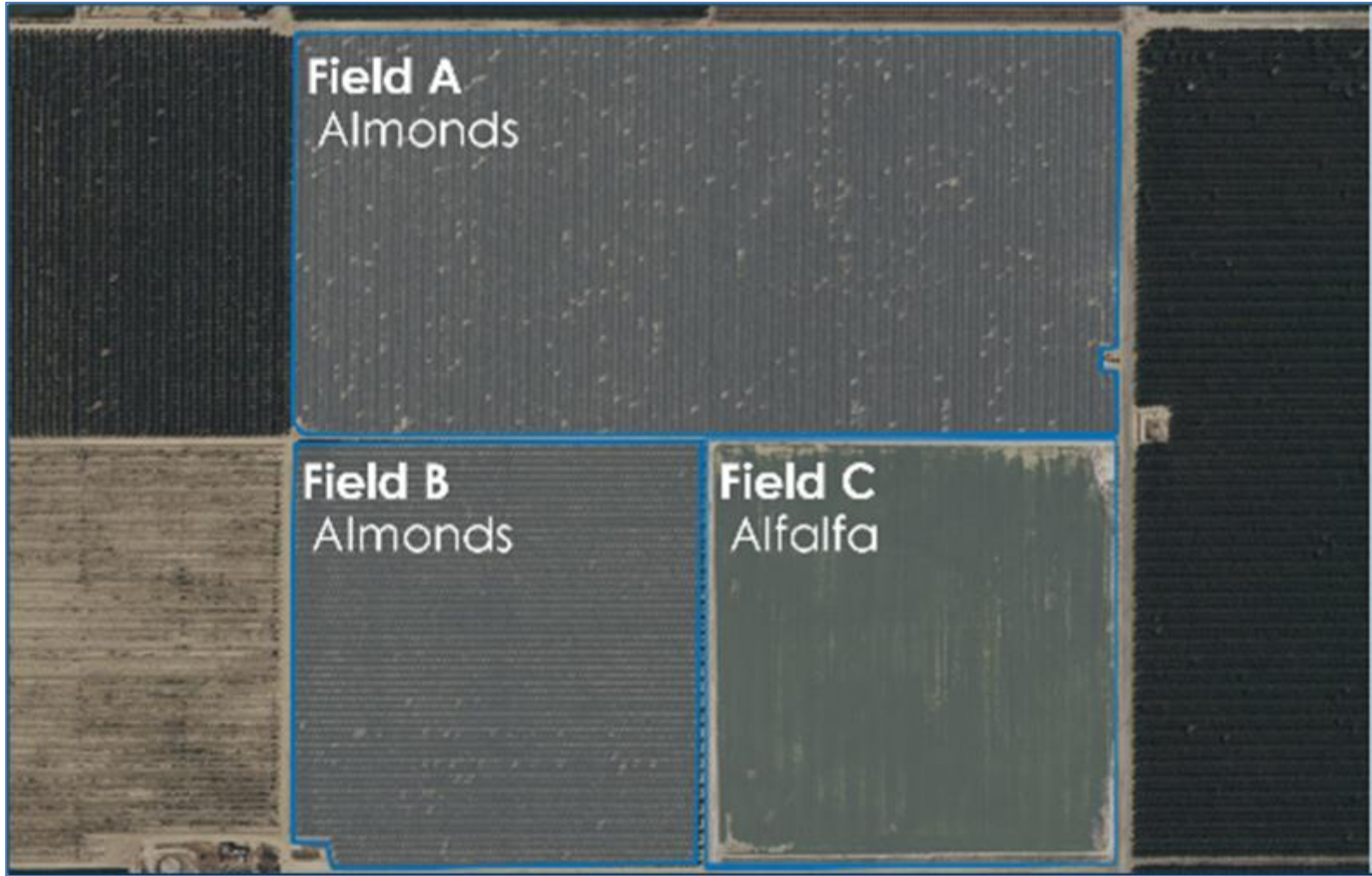
Potential MLRP multibenefit outcomes:

- ✓ Soil quality enhancement
- ✓ Water quality enhancement

Prime Farmland – Madera County



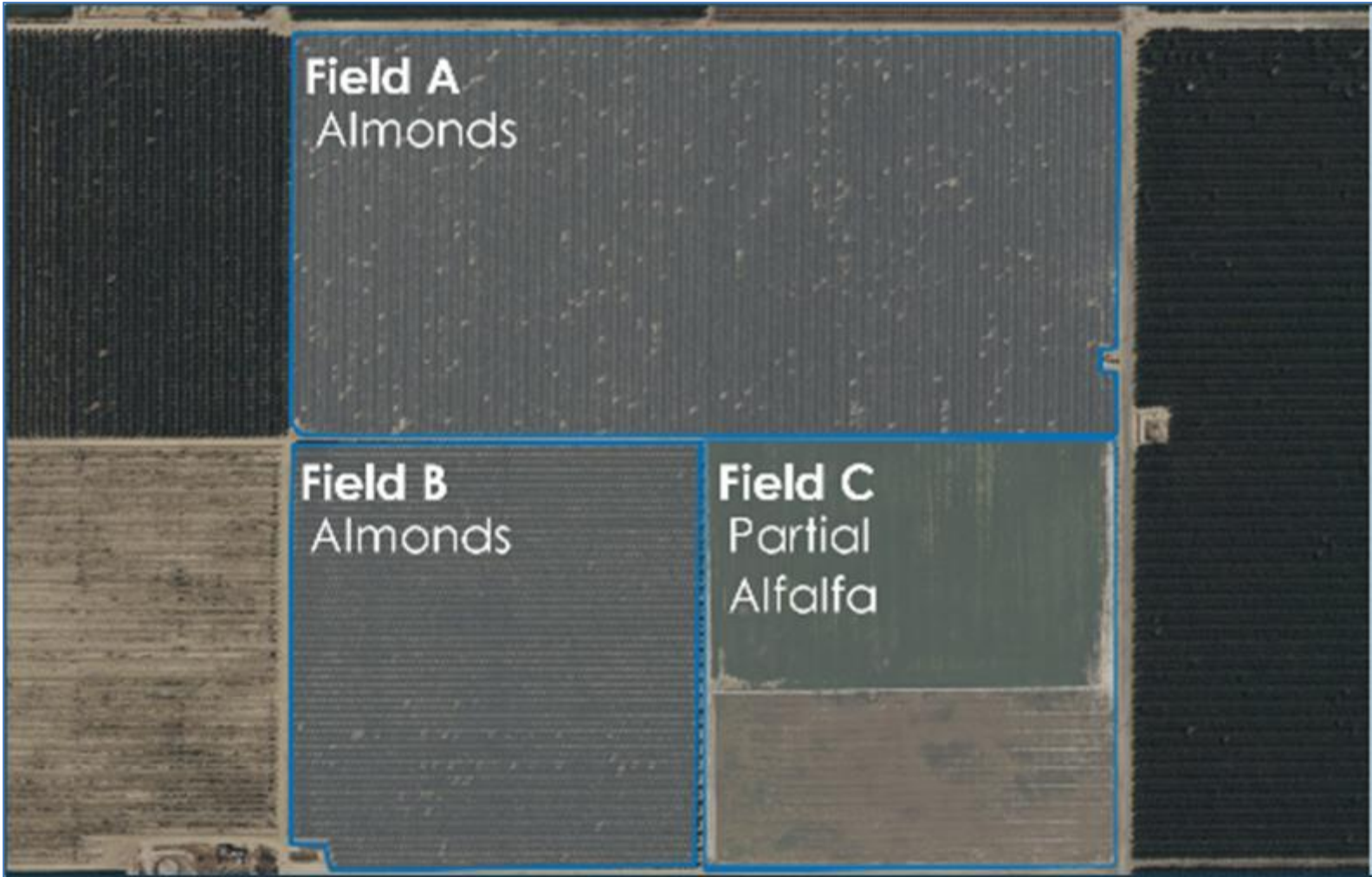
2023: Current Conditions



Example Simplified Income Statement	
Revenue (Crop Sales)	\$767,000
Costs (Farm Cash Costs, Farm Overhead, etc.)	\$663,000
Net Return	\$104,000

Water Supply	
Irrigated Acres	147
Average ETAW (AF/AC)	3.12
Demand 2023 (AF)	459

2028: SGMA Implementation, No Repurposing Small Field



Potential Future Scenario			
Revenue		\$713,000	
(Crop Sales)			
Costs		\$638,000	
(Farm Cash Costs, Farm Overhead, etc.)			
Net Return		\$75,000	-28%
Potential MLRP Funding		X	

Water Supply	
Irrigated Acres	130
Average ETAW (AF/AC)	3.14
Demand 2028 (AF)	407

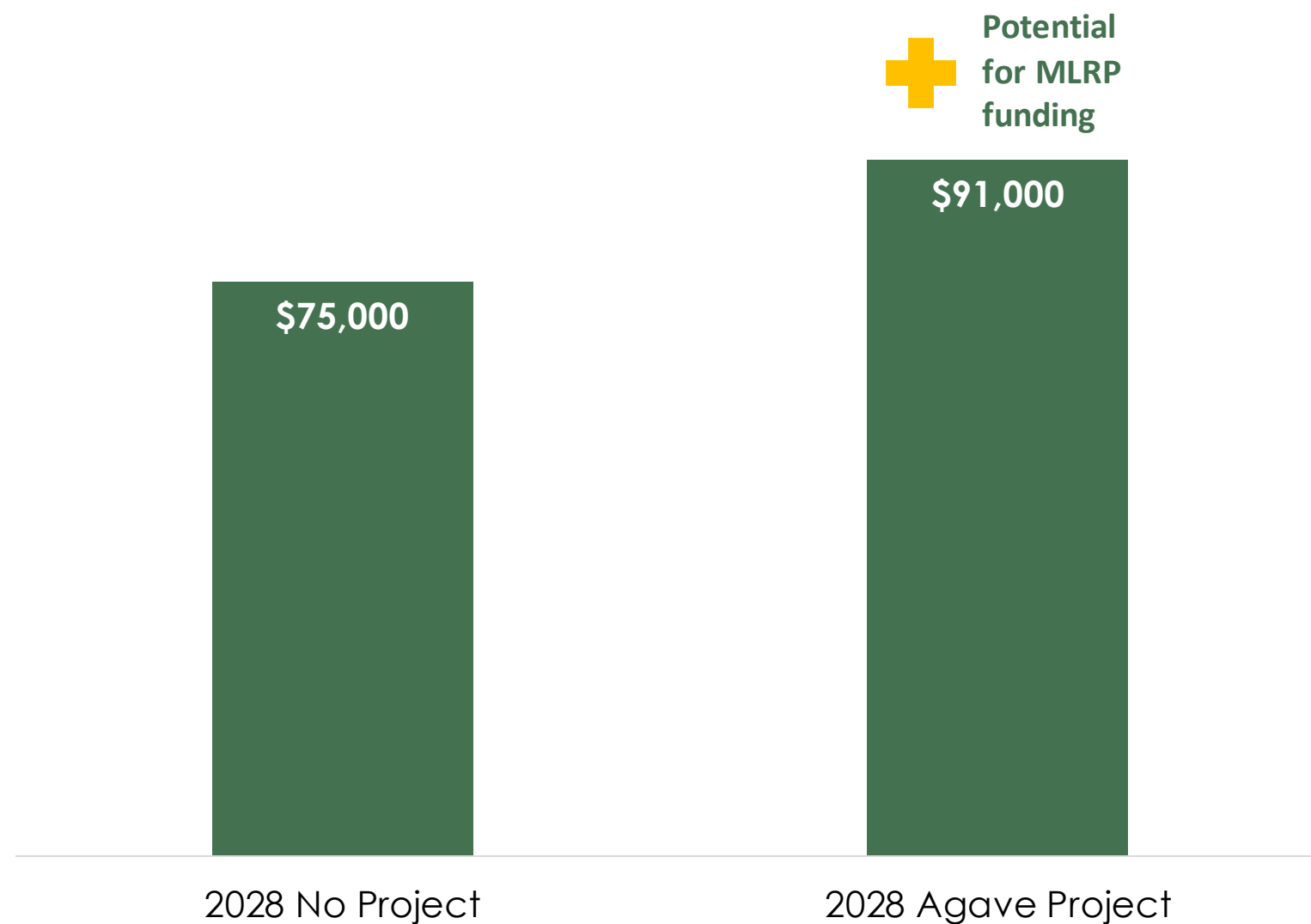
2028: SGMA Implementation, With Small Agave



Potential Future Scenario		
Revenue (Crop Sales and Project Revenue)	\$828,000	
Costs (Farm Cash Costs, Farm Overhead, Project Costs, etc.)	\$737,000	
Net Return	\$91,000	-13%
Potential MLRP Funding	✓	

Water Supply	
Irrigated Acres	128
Average ETAW (AF/AC)	3.18
Demand 2028 (AF)	405

Low Water Use Crop Comparison



Considerations:

- Markets for alternative crops
- Local knowledge and management
- Supply chain

Examples of Other Funding Opportunities: Alternative Crop

Orchard removal	San Joaquin Valley Air Pollution District	Regulatory Relief
Sustainable working lands	CDFA State Water Efficiency and Enhancement Program (SWEET)	Grant
	USDA Natural Resources Conservation Service: Environmental Quality Incentives Program	Grant and Cost Share
	DOC Sustainable Agricultural Lands Conservation Program	Easements
	Resource Conservation District (various technical assistance programs)	Grants, Technical Assistance, Cost Share
	USDA Conservation Innovation Grants	Grants, Cost Share

Business Case #3

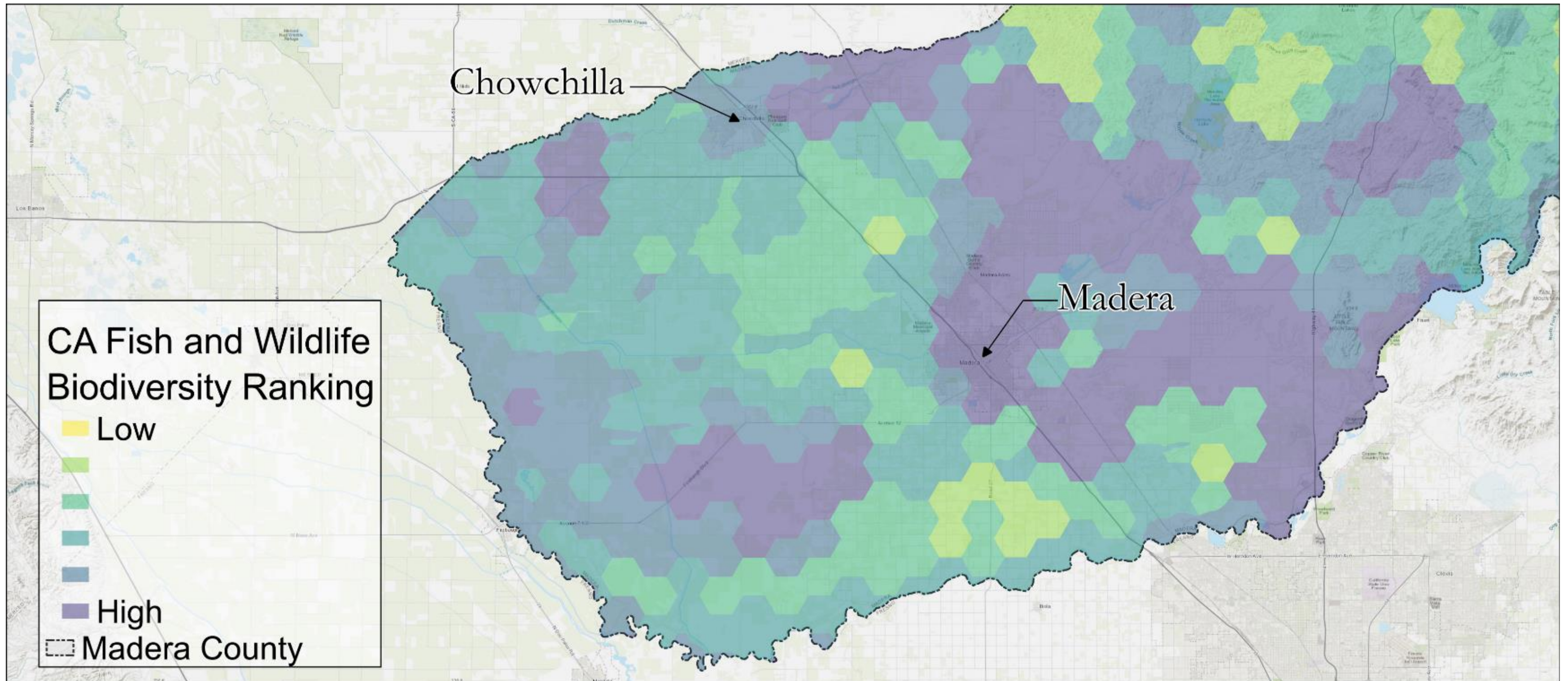
MLRP project type:

Pollinator and/or Wildlife Habitat

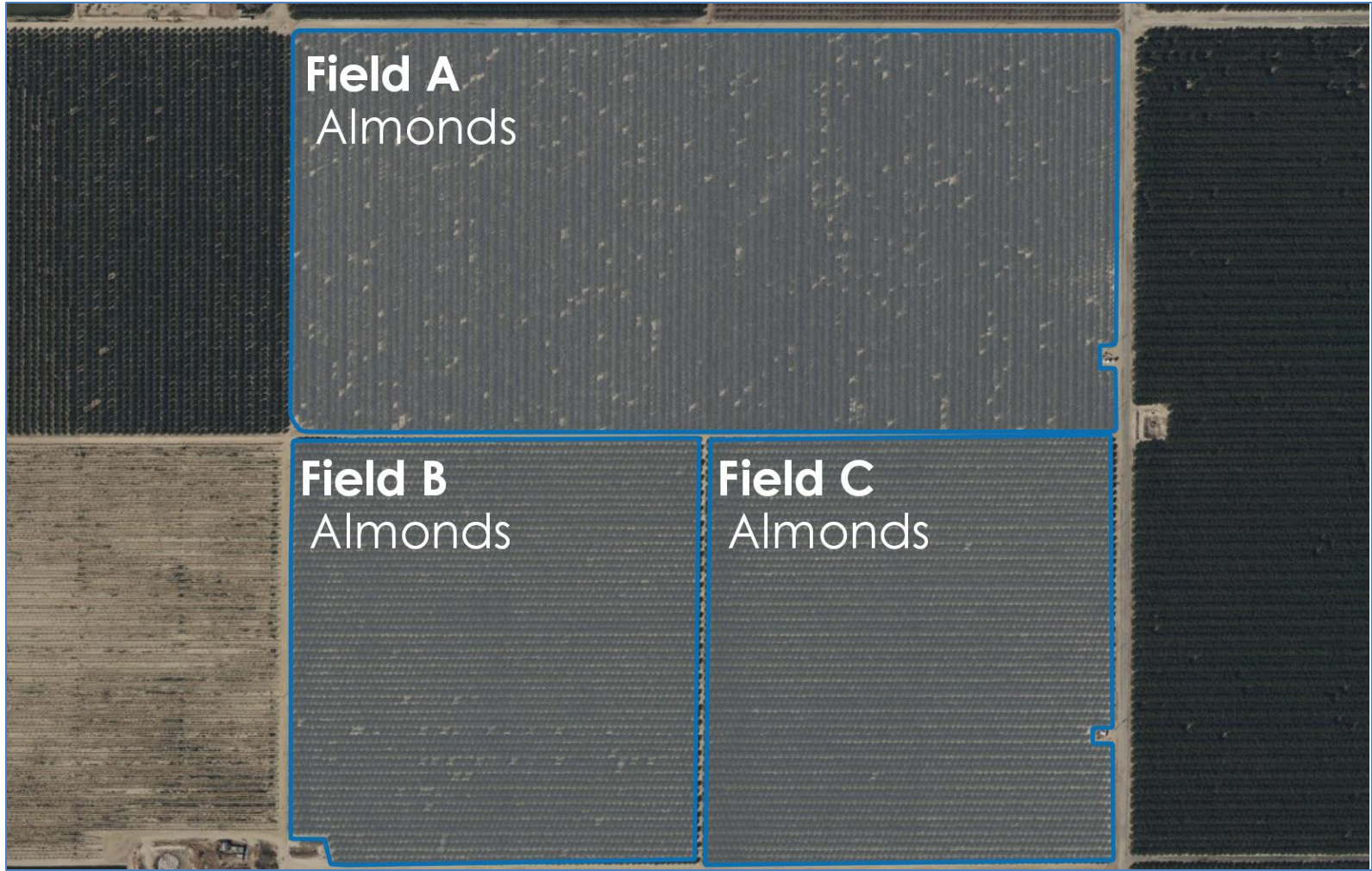
Potential MLRP multibenefit outcomes:

- ✓ Air quality enhancement
- ✓ Flood risk mitigation
- ✓ Tribal or cultural benefit
- ✓ Soil quality enhancement
- ✓ Water quality enhancement

CADFW Biodiversity Score – Madera County



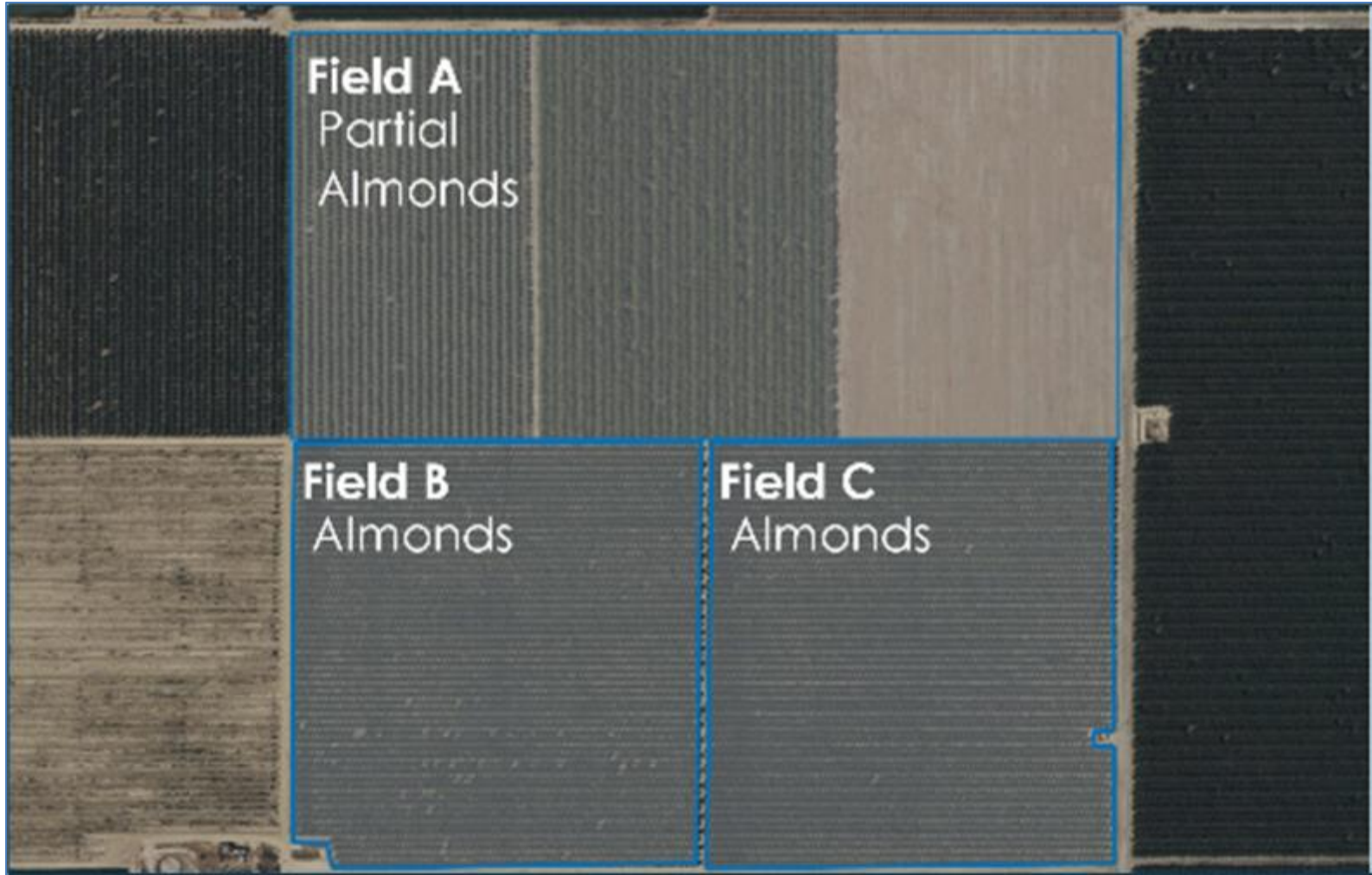
2023: Current Conditions



Example Simplified Income Statement	
Revenue (Crop Sales)	\$882,000
Costs (Farm Cash Costs, Farm Overhead, etc.)	\$769,000
Net Return	\$113,000

Water Supply	
Irrigated Acres	147
Average ETAW (AF/AC)	3.17
Demand 2023 (AF)	466

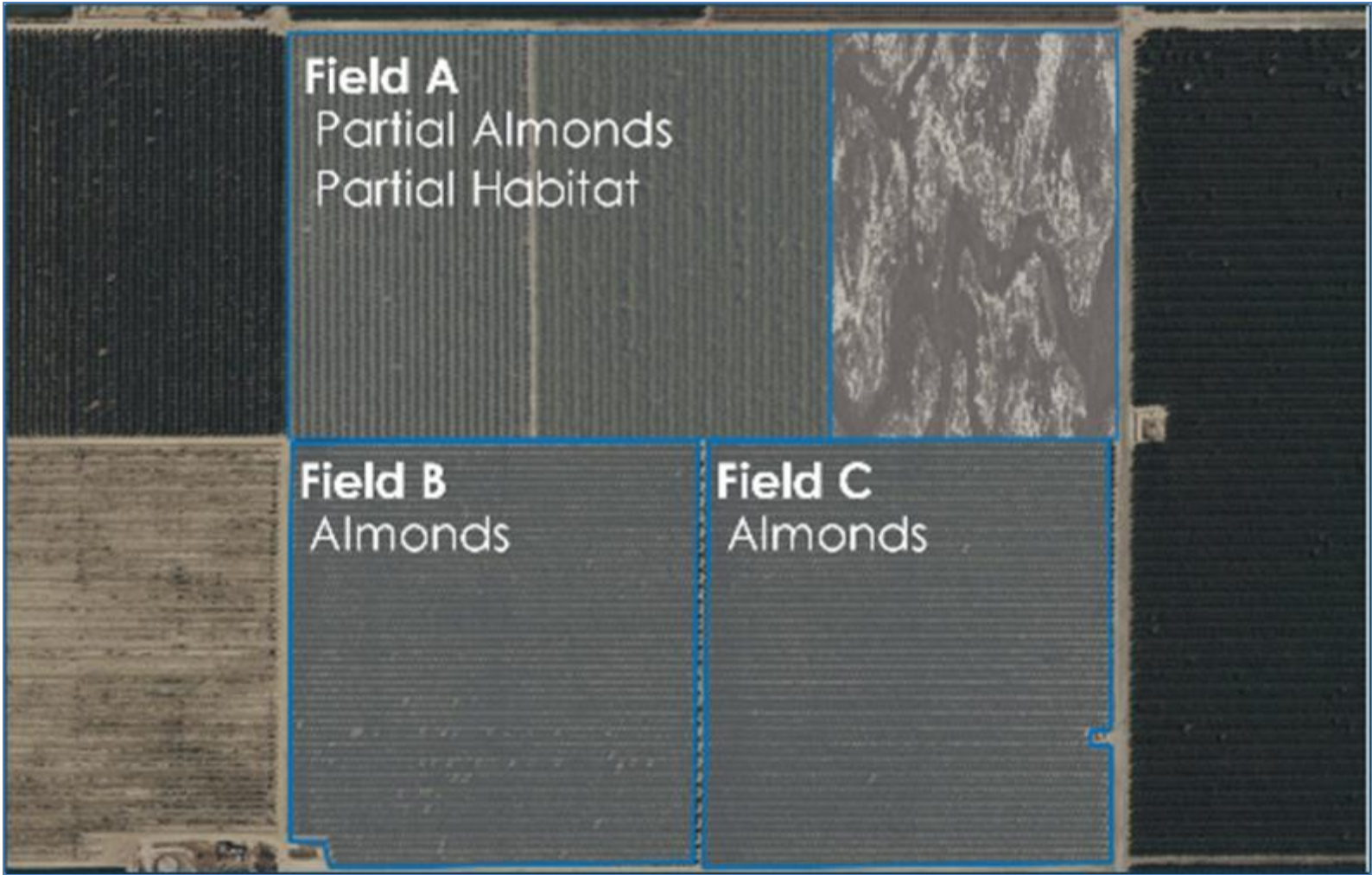
2028: SGMA Implementation, No Repurposing Small Field



Potential Future Scenario			
Revenue (Crop Sales)		\$772,000	
Costs (Farm Cash Costs, Farm Overhead, Orchard Removal, etc.)		\$681,000	
Net Return		\$91,000	-19%
Potential MLRP Funding		X	

Water Supply	
Irrigated Acres	129
Average ETAW (AF/AC)	3.17
Demand 2028 (AF)	407

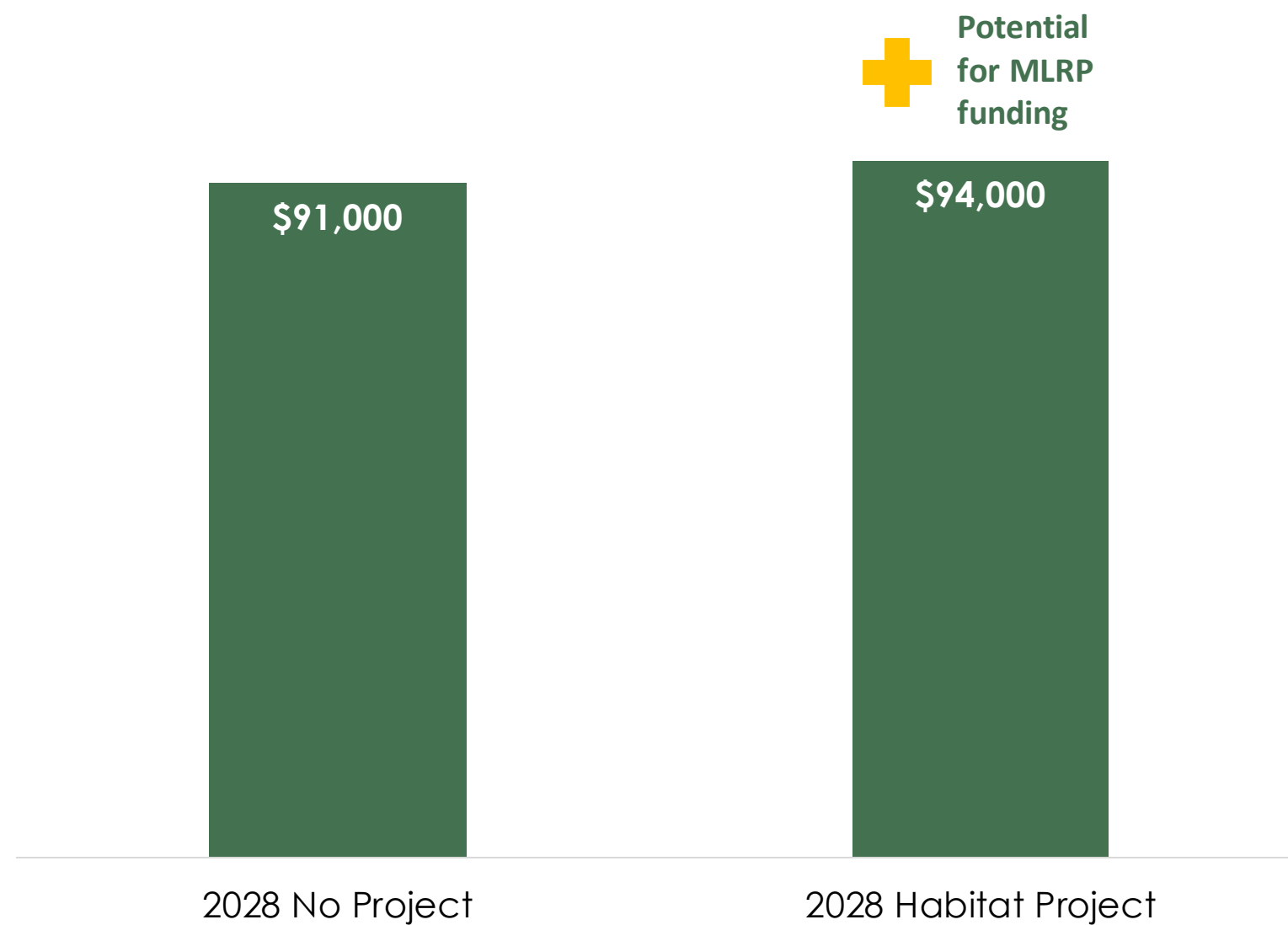
2028: SGMA Implementation, With Small Habitat Area



Potential Future Scenario			
Revenue (Crop Sales and Project Revenue)		\$778,000	
Costs (Farm Cash Costs, Farm Overhead, Orchard Removal, Project Costs, etc.)		\$684,000	
Net Return		\$94,000	-17%
Potential MLRP Funding		✓	

Water Supply	
Irrigated Acres	129
Average ETAW (AF/AC)	3.17
Demand 2028 (AF)	407

Habitat Comparison



Considerations:

- Land suitability and funding
- Other opportunities, such as mitigation banks
- Establishment and management costs

Examples of Other Funding Opportunities: Habitat

Orchard removal	San Joaquin Valley Air Pollution District	Regulatory Relief
Habitat payments	<div>USDA Conservation Reserve Program</div> <div>USDA Conservation Reserve Enhancement Program</div> <div>USDA Natural Resources Conservation Service</div> <div>Local Resource Conservation Districts</div> <div>USDA Agricultural Conservation Easement Program</div> <div>Conservation/Land Trusts</div> <div>Other DOI Grant Programs (e.g., FWS, DOE)</div> <div>Regional Conservation Partnership Program (RCPP)</div> <div>Conservation Stewardship Program (CSP)</div>	<div>Habitat Contract (Not in CA)</div> <div>Easement</div> <div>Grants, Tech Assistance, Cost Share</div> <div>Easement</div> <div>Easement</div> <div>Grants, Cost Share</div> <div>Grants</div> <div>Grants</div>

NEXT STEPS

Provide your input and participate

- Complete the survey
- Email mlrp@maderacounty.com to sign-up for updates, submit a question, or request language assistance
- Attend future workshops
- Join the MLRP Madera Stakeholder Advisory Group
- Consider MLRP project types for your land