



# Our Water Future in the Salinas Valley

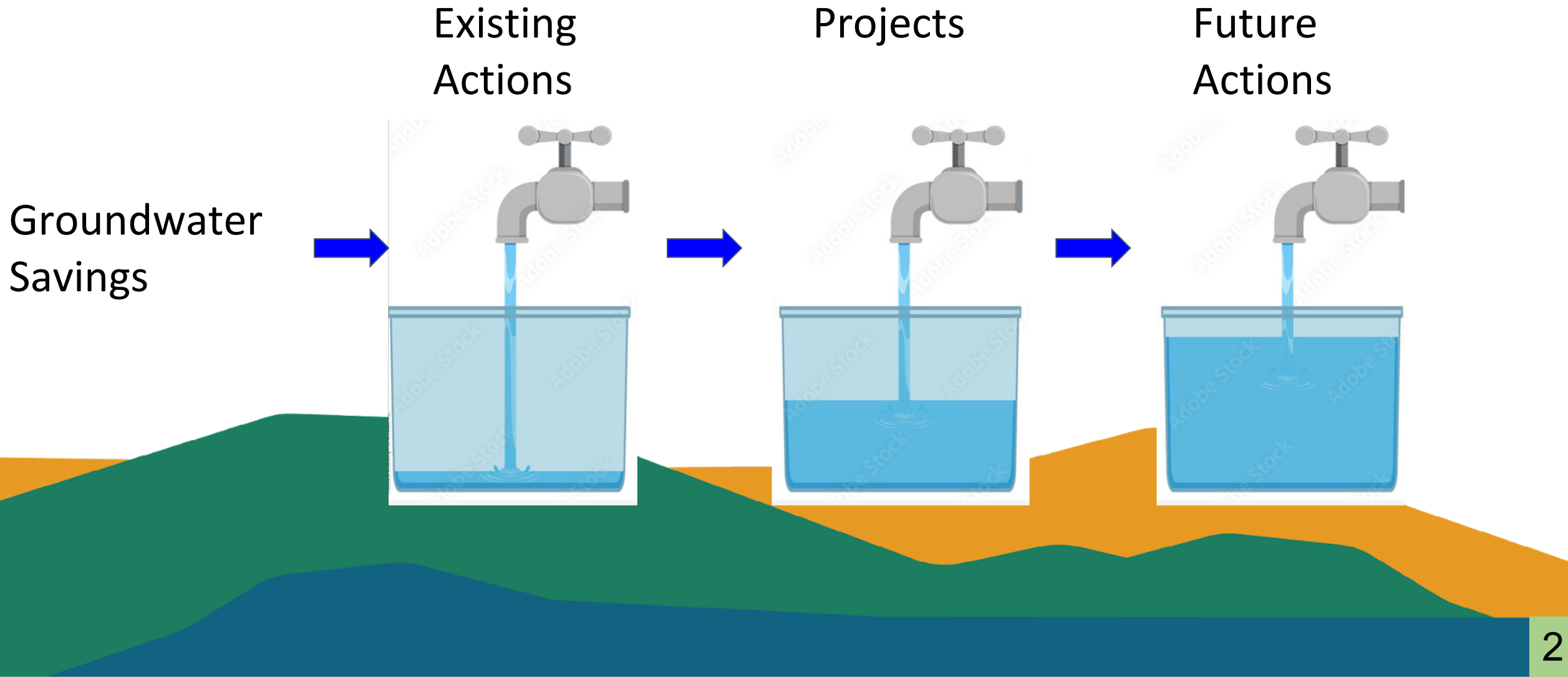
PLANNING FOR UNCERTAINTY

Management Options: What Can We Do?

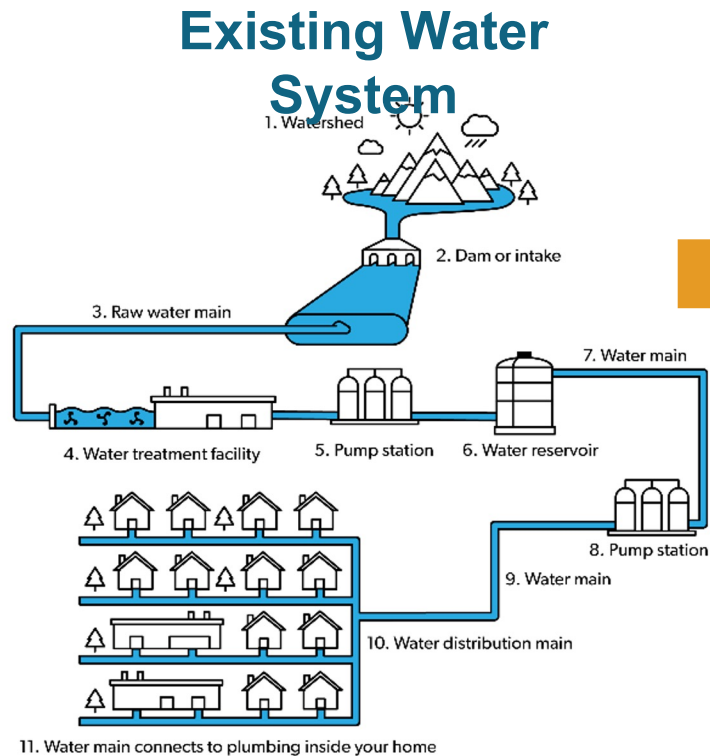


Salinas Valley Basin  
Groundwater Sustainability Agency

# Actions Are Part of Our Portfolio



# Focusing on How to Address Uncertainty and Scarcity



## Uncertainty and Unavoidable Challenges

Drought  
Growth  
Change in Demand Pattern  
Infrastructure Failure  
Regulatory Changes

What Actions Can We Take as a Community?



# Management Action Differentiators

# All Actions are Not Equal

## Temporary vs. Permanent

- Temporary addresses short term problems such as drought.
- Permanent support other projects attaining long-term sustainability

## Reliance of Benefits

- Some actions have the same benefit every year
- Some actions have variable annual benefits, depending on rainfall, public participation, etc.

# All Actions are Not Equal

## Voluntary vs. Obligatory

- Voluntary might be implemented by some people. Success relies on how many people implement the action
- Obligatory requires all people to participate

## Variable Cost

- Cost to implement
- Cost to maintain
- Cost to the local economy vs. cost to individuals

# Examples of Management Actions

# Example Management Actions

- NOT an Exhaustive List
- Ranked generally from low cost/low benefit to high cost/high benefit
- They can be implemented together or separately
- Some are variations on each other



# Urban Conservation

Water savings come from individuals investing in new practices/ technology

- Permanent
- Voluntary for individuals - likely obligatory for municipalities
- Low cost
- Recurring, but low benefit every year



# Decentralized Residential Water Capture

Water savings come from individuals storing rainwater for non-potable use

- Permanent
- Voluntary
- Low cost
- Recurring, but low benefit every year



# Promote Best Agricultural Practices

## LOW-COST ACTIONS



Water savings come from individuals investing in new practices or technologies

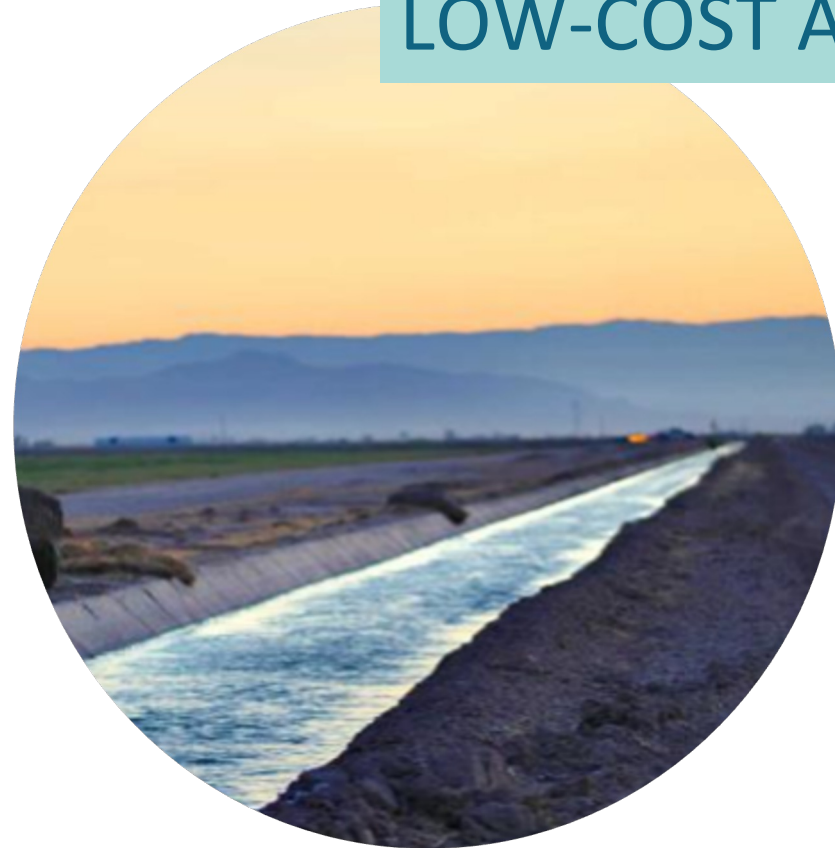
- Permanent
- Voluntary
- Low cost
- Recurring, but low benefit every year



# Limit Place of Use

Water savings come from limiting how far water can be moved

- Temporary or Permanent
- Obligatory
- Low to Medium cost
- Recurring benefit every year



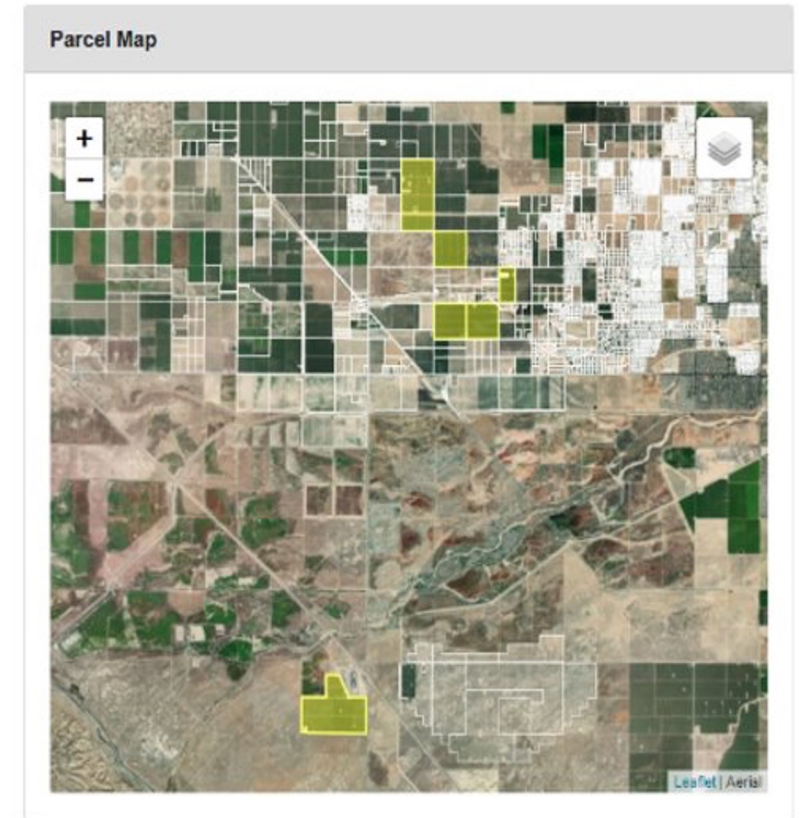
# Provide Water-Use Data

Water savings come from individuals assessing their individual water use, and increasing efficiency

- Permanent
- Voluntary
- Medium cost to implement and maintain
- Likely recurring benefit every year

Water Use	
Estimated through 12/31/2018*	
APN	Water Usage
104-220-04	1,384.0 ac-ft
160-130-36	1,017.7 ac-ft
407-111-01	457.1 ac-ft
407-112-23	195.5 ac-ft
408-121-06	585.4 ac-ft
408-121-07	585.7 ac-ft

\*Estimated water usage is based on satellite imagery and may not be accurate at the APN level.



MEDIUM-COST ACTIONS



# Fallowing Options

- Agricultural land is idled
- Groundwater is not pumped for irrigation
- Land must still be managed
- Various, related options



MEDIUM-COST ACTIONS

# Delay Crop Replacement

Water savings come from occasionally following fields before crops are replaced

- Temporary or permanent policy
- Voluntary
- Low cost to public, medium cost to individual growers
- Variable and likely low, benefit every year



MEDIUM-COST ACTIONS

# Rotational Fallowing

Water savings come from resting different fields on a rotating basis

- Permanent
- Obligatory
- Low cost to public, medium cost to individual growers
- Recurring benefit every year



MEDIUM-COST ACTIONS



# Fallow Bank

Water savings come from resting different fields on a rotating basis. All growers fund a “bank” that reimburses following costs.

- Temporary or Permanent
- Voluntary fallowing
- Medium cost to public and individual growers
- Variable benefit every year



MEDIUM-COST ACTIONS

# Repurpose/Retire Agricultural Land

Water savings come from permanently stopping irrigation on certain parcels

- Permanent
- Voluntary
- High cost – land must be bought or otherwise be compensated for
- Recurring and benefit every year



# Tiered Extraction Fees

Water savings come from economic incentive to reduce water use

- Permanent or Temporary (but difficult)
- Obligatory
- High cost for managing program
- Recurring and potentially high benefit every year



HIGH-COST ACTIONS



# Compulsory Rationing

HIGH-COST ACTIONS

Water savings come from enforcing strict limits on water use

- Permanent or Temporary
- Obligatory
- High cost for managing program
- Recurring and high benefit every year



# Simplified Actions for the Exercise

# Simplifications

## Simplified to 2 factors

- Cost
- Benefit

## Three categories of actions

- Pay one (smaller cost), receive annual benefit
- Receive benefits in year it is paid for
- Pay one (larger cost), receive annual benefits

# Questions?



Abby Ostovar



[aostovar@elmontgomery.com](mailto:aostovar@elmontgomery.com)



(781)-526-2439