



Antelope Valley IRWM

Stakeholder Group Meeting
City of Palmdale



Presenter:
Brian Dietrick, P.E.

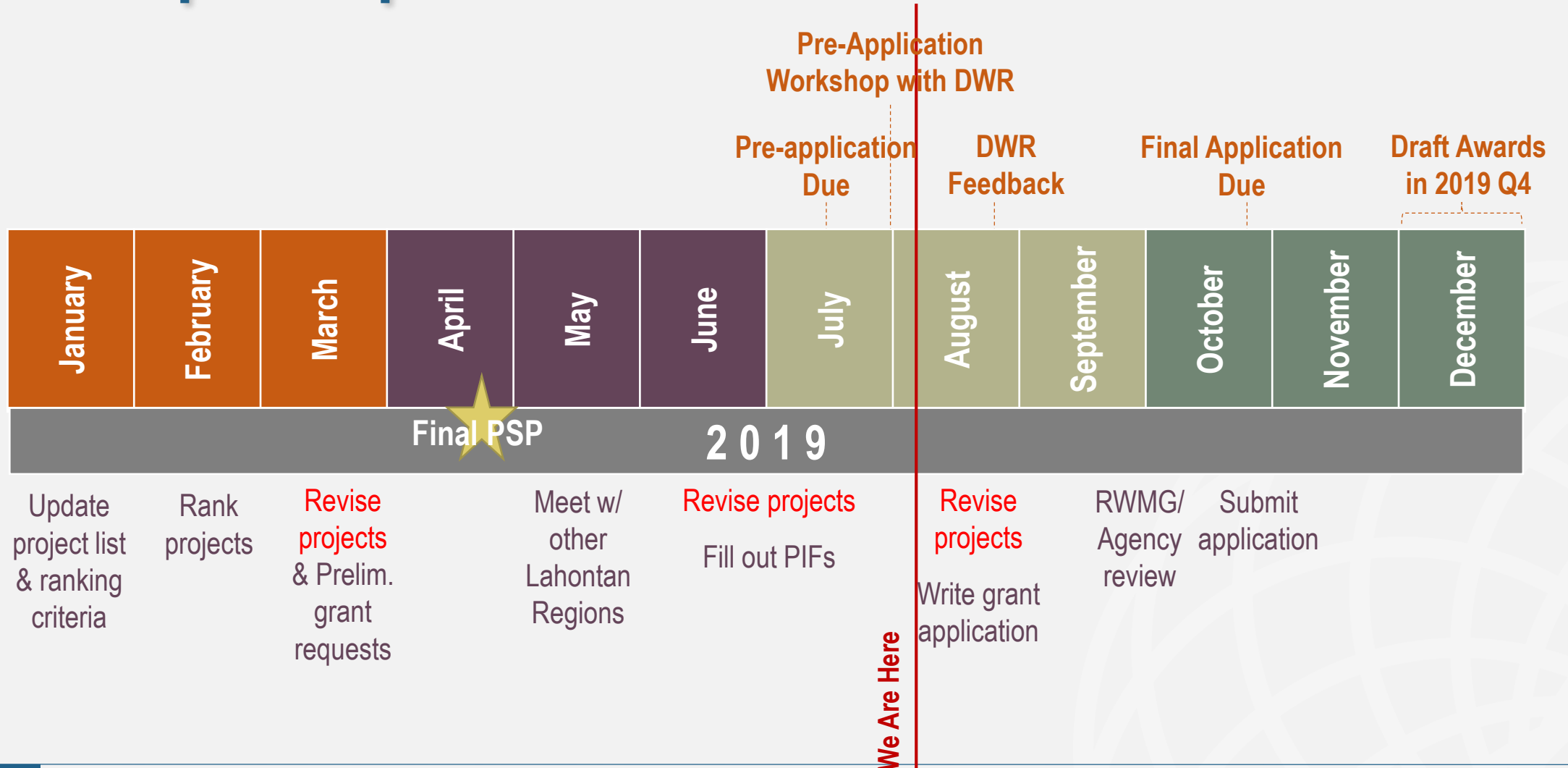
August 8, 2019

Agenda

1. Prop. 1 IRWM Implantation Schedule
2. Prop. 1 Implementation Projects
3. DWR Pre-application Workshop Debrief
4. Full AV IRWMP Update
 1. Regional Issues and Needs
 2. Climate Change Vulnerabilities
 3. Goals, Objectives, and Targets
 4. Resource Management Strategies
 5. Water Supply and Demand

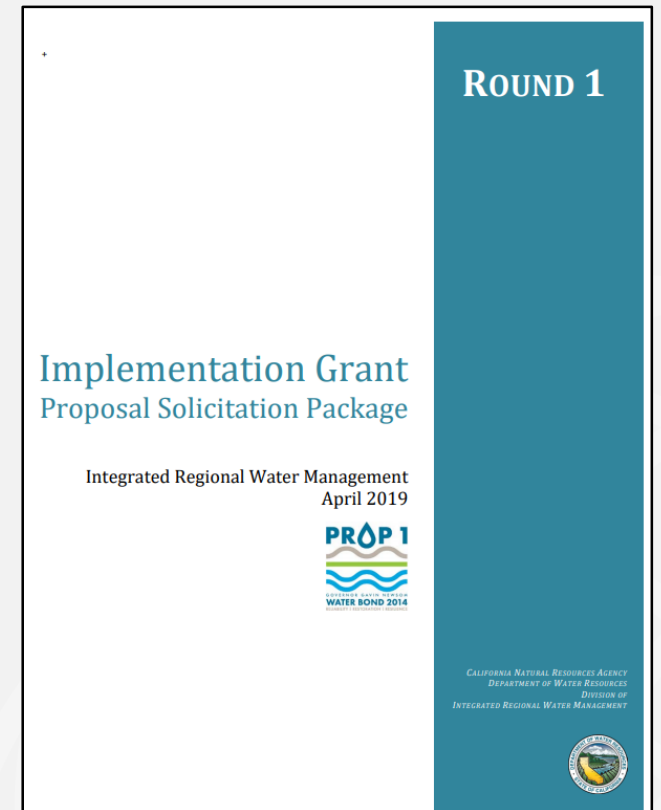


Prop. 1 Implementation Grant PSP – Schedule



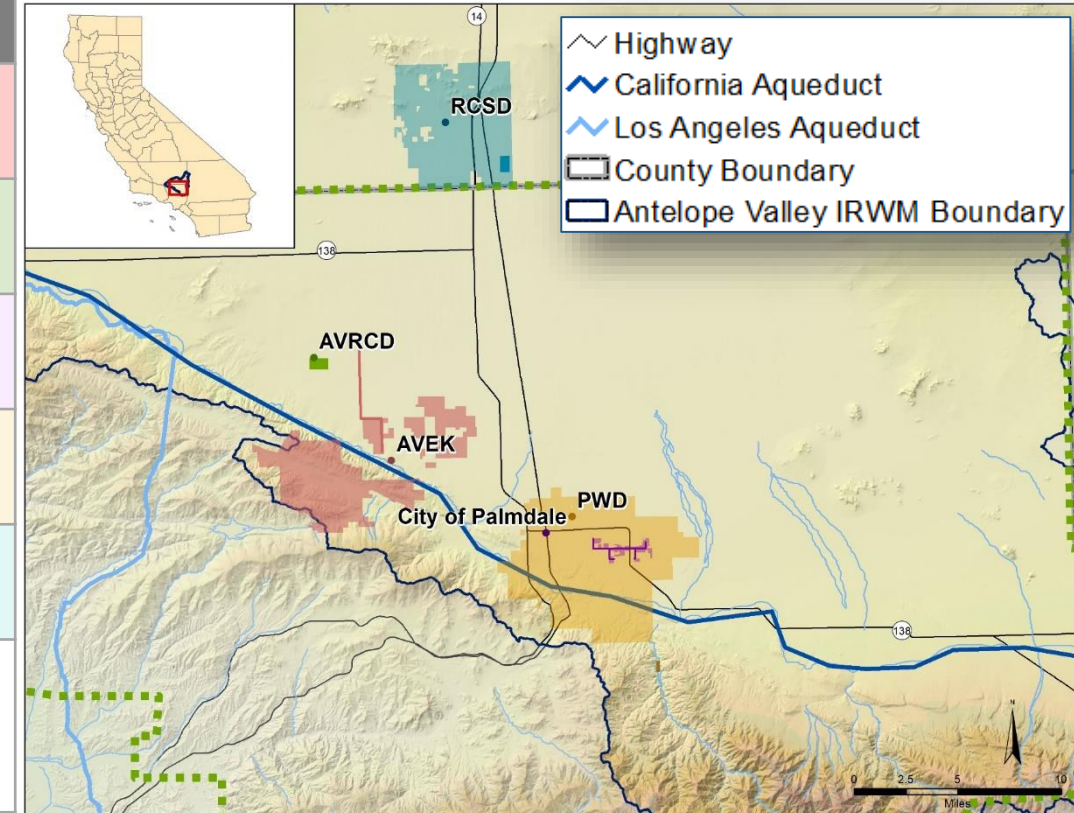
DWR Pre-Application Workshop Debrief

- Workshop: July 30, 2019
- General Feedback on PIFs
 - Benefits – better quantify; consider climate change
 - Schedule – admin. 3 months after project completion
 - Budget – sources for local cost share
 - Permits – review as needed
- RCSD – WWTP Rehabilitation and Groundwater Protection Project
 - Ineligible for Prop. 1
 - **How do we redistribute grant funds for Round 1?**



Prop. 1 Round 1 – Grant Requests

Project Name/Sponsor	Total Cost	Requested Amount	% Local Match
SNIP Phase 2 AVEK	\$26,400,000	\$924,875	96%
Antelope Valley Regional Cons. Project AVRCD	\$396,000	\$195,500	51%
Phase 2 Distribution System PRWA	\$8,324,875	\$924,875	89%
Littlerock Dam Sediment Removal PWD	\$19,657,557	\$924,875	95%
WWTP Rehab. and GW Protection RCSD	\$12,150,000	\$924,875	92%
Total	\$66,928,432	\$3,895,000	94%
Potential Adjustment	-\$12,150,000	-\$924,875	
Revised Total	\$54,778,432	\$2,970,125	95%



Proposed funding split: \$3.9M Round 1; cover AVRCD's total requested amount; distribute the remaining funds equally among the larger projects.

AV IRWMP: 2013 Objectives and Targets

WS



Objectives	Planning Targets	Status
<p>Provide reliable water supply to meet the Antelope Valley Region's expected demand between now and 2035-2040; and adapt to climate change.</p>	<ul style="list-style-type: none"> Maintain adequate supply and demand in average years. Provide adequate reserves (61,200 31,200 AFY) to supplement average condition supply to meet demands during single-dry year conditions, starting 2009. Provide adequate reserves (164,800 189,000 AF/ 4-year period) to supplement average condition supply to meet demands during multi-dry year conditions, starting 2009. Adapt to additional 7-10% reduction in imported deliveries by 2050, and additional 21-25% reduction in imported water deliveries by 2100. 	<p>Westside Water Bank, Eastside Water Banking and Blending Project, High Desert Water Bank, Willow Springs Water Bank</p>
<p>Establish a contingency plan to meet water supply needs of the Antelope Valley Region during a plausible disruption of SWP deliveries.</p>	<ul style="list-style-type: none"> Demonstrate ability to meet regional water demands over an average year without receiving SWP water for 6 months over the summer by 2017 2025 	
<p>Stabilize groundwater levels.</p>	<ul style="list-style-type: none"> Manage groundwater levels throughout the basin such that a 10-year moving average of change in observed groundwater levels is greater than or equal to 0, starting January 2010. Production Rights defined in the Judgement are met by 2023. 	<p>AV Groundwater Adjudication</p>

AV IRWMP: 2013 Objectives and Targets

WQ



Objectives	Planning Targets	Status
Provide drinking water that meets regulatory requirements and customer expectations.	<ul style="list-style-type: none"> Continue to meet Federal and State water quality standards as well as customer standards for taste and aesthetics throughout the planning period. 	
Protect and maintain aquifers.	<ul style="list-style-type: none"> Prevent unacceptable degradation of aquifer according to the Basin Plan throughout the planning period. 	
	<ul style="list-style-type: none"> Map contaminated sites and monitor contaminant movement, by 2017. 	Complete? SNMP
	<ul style="list-style-type: none"> Identify contaminated portions of aquifer and prevent migration of contaminants, by 2017. 	Complete? SNMP
Protect natural streams and recharge areas from contamination.	<ul style="list-style-type: none"> Prevent unacceptable degradation of natural streams and recharge areas according to the Basin Plan throughout the planning period. 	
Maximize beneficial use of recycled water.	<ul style="list-style-type: none"> Increase infrastructure and establish policies to use 33% of recycled water to help meet expected demand by 2015, 66% by 2025, and 100% by 2035. 	PRWA updates?

AV IRWMP: 2013 Objectives and Targets

FM



Objectives	Planning Targets	Status
<p>Reduce negative impacts of stormwater, urban runoff, and nuisance water, and adapt to climate change impacts in the future.</p> <p>Optimize the balance between protecting existing beneficial uses of stormwater and capturing stormwater for new uses.</p>	<ul style="list-style-type: none"> Coordinate a regional flood management plan Stormwater Resources Plan and policy mechanism by the year 2017 2025 and incorporate adaptive management strategies for climate change. 	

ER



Objectives	Planning Targets	Status
<p>Preserve open space and natural habitats that protect and enhance water resources and species in the Antelope Valley Region.</p>	<ul style="list-style-type: none"> Contribute to the preservation of an additional 2,000 acres of open space and natural habitat, to integrate and maximize surface water and groundwater management by 2017 2025. 	<p>Littlerock Sediment Removal Project</p>

AV IRWMP: 2013 Objectives and Targets

LU



Objectives	Planning Targets	Status
Maintain agricultural land use within the Antelope Valley Region.	<ul style="list-style-type: none"> Preserve 100,000 acres of farmland in rotation through 2035 2040. 	Keep acres?
Meet growing demand for recreational space.	<ul style="list-style-type: none"> Contribute to local and regional General Planning documents to provide 5,000 acres of recreational space by 2035 2040. 	
Improve integrated land use planning to support water management.	<ul style="list-style-type: none"> Coordinate a regional land use management plan by the year 2017 2025 and incorporate adaptive management strategies for climate change. 	

CC



Objectives	Planning Targets	Status
Mitigate against climate change.	<ul style="list-style-type: none"> Implement “no regret” mitigation strategies, when possible, that decrease GHG’s or are GHG neutral. 	

AV IRWMP: Resource Management Strategies

- RMS not considered feasible in 2013 because there was no adjudication of groundwater rights:
 - Crop Idling
 - Temporary removal of lands from irrigation to allow for the temporary transfer of water supplies for other uses
 - Irrigated Land Retirement
 - Permanent removal of farmland from irrigated agriculture to free up water supplies for other uses

- Now that adjudication is finalized, should RMS be incorporated into IRWM Plan for consideration? If not, why?

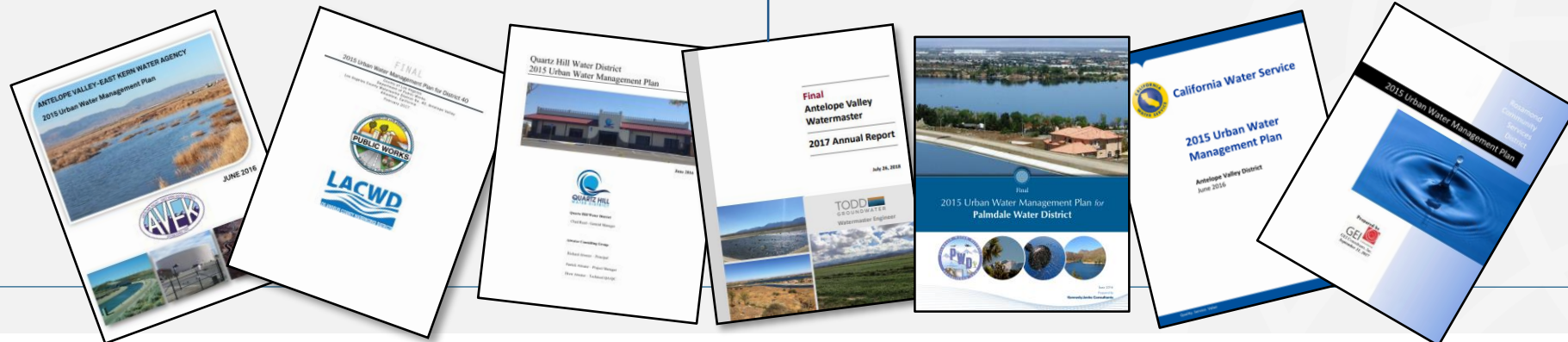
AV IRWMP: 2019 Water Supply & Demand Update

Preliminary Supply Projections

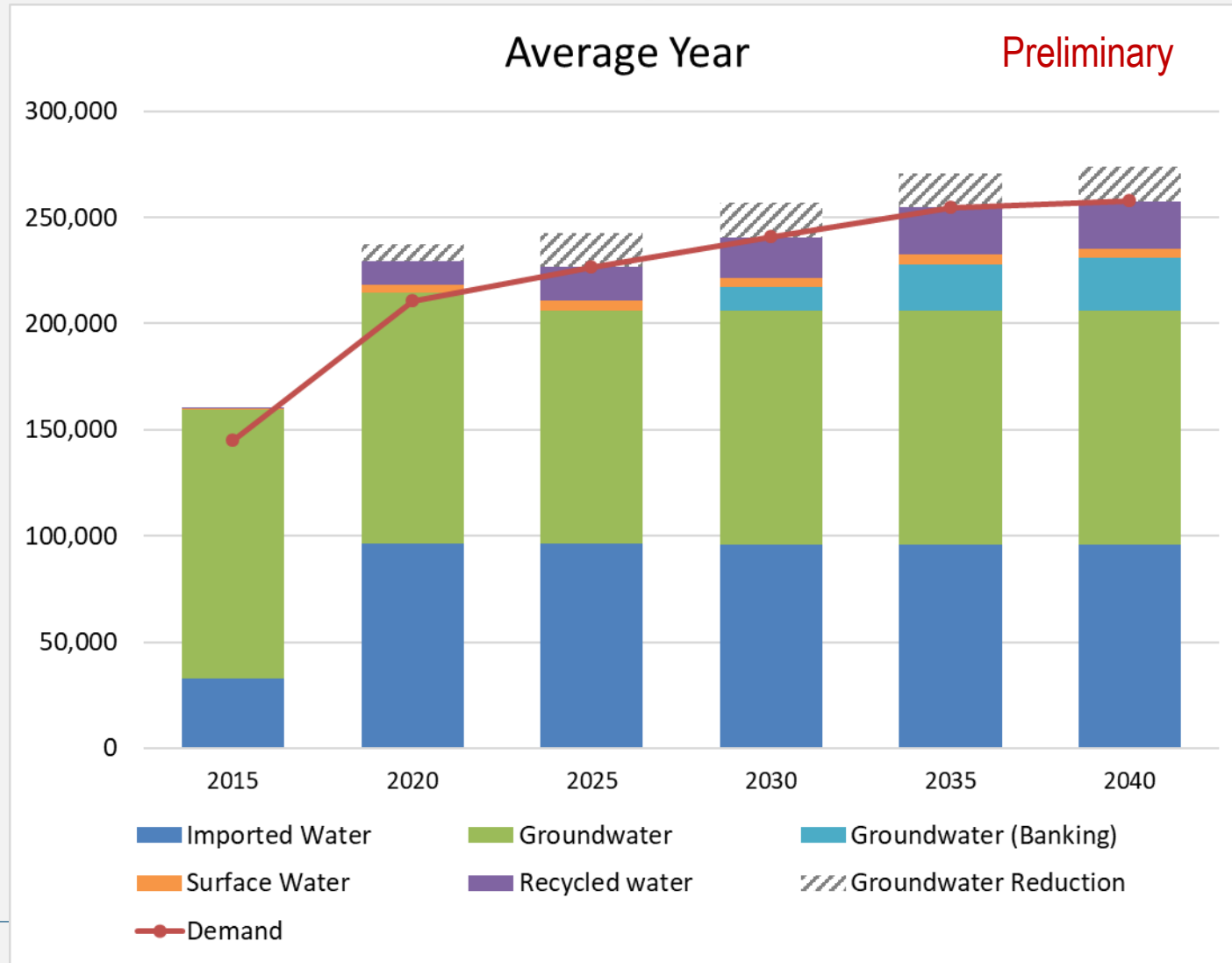
- Imported water (UWMPs)
- Surface water (UWMPs)
- Recycled water (UWMPs)
- Groundwater & return flows (AV 2017 Watermaster Annual Report)

Preliminary Demand Projections

- Urban demands (extrapolated from UWMPs and Census Data)
- Agricultural demands (Kern County & LA County)
- Projections assume population growth estimates (Department of Finance)

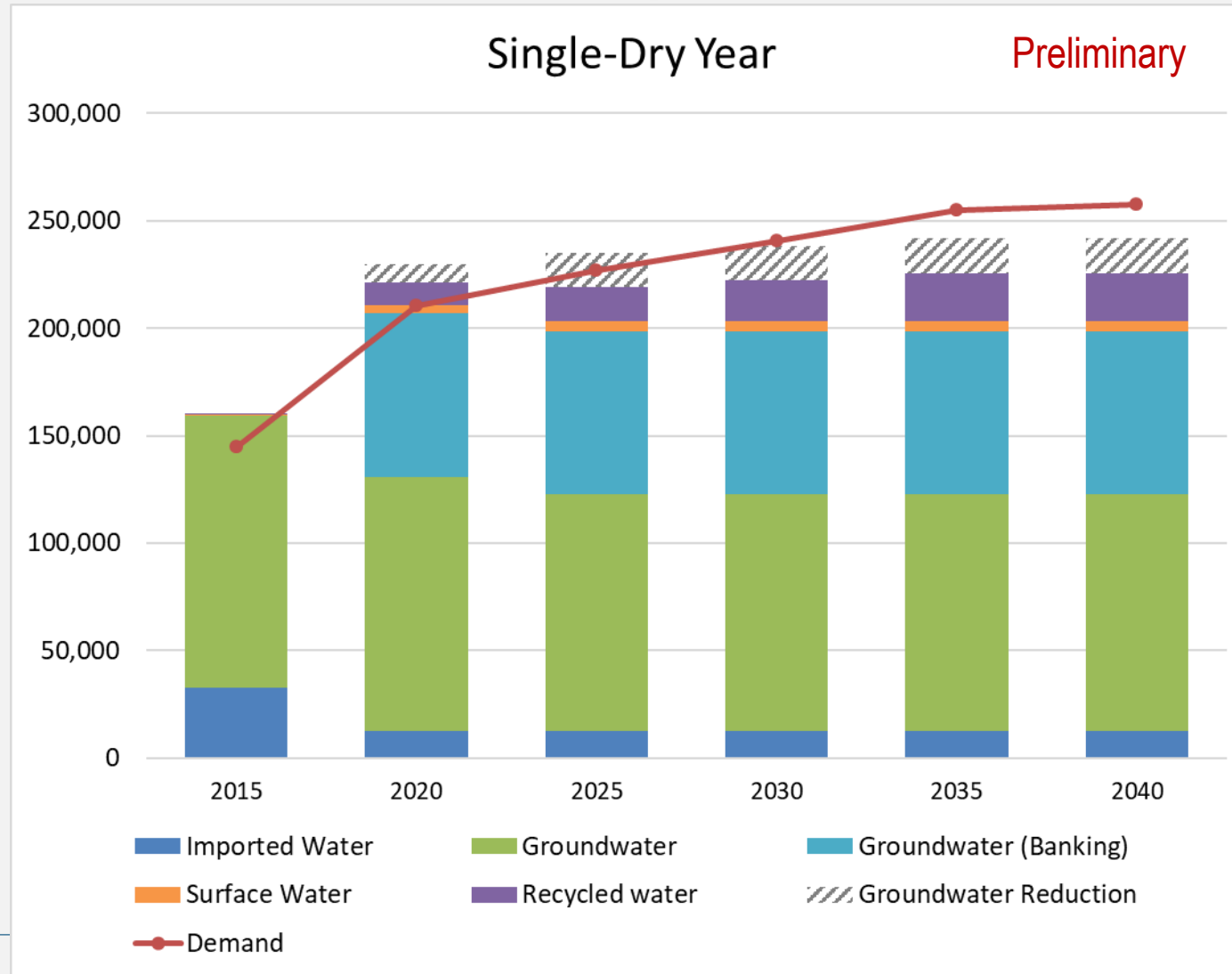


AV IRWMP: Water Supply & Demand Update (draft)



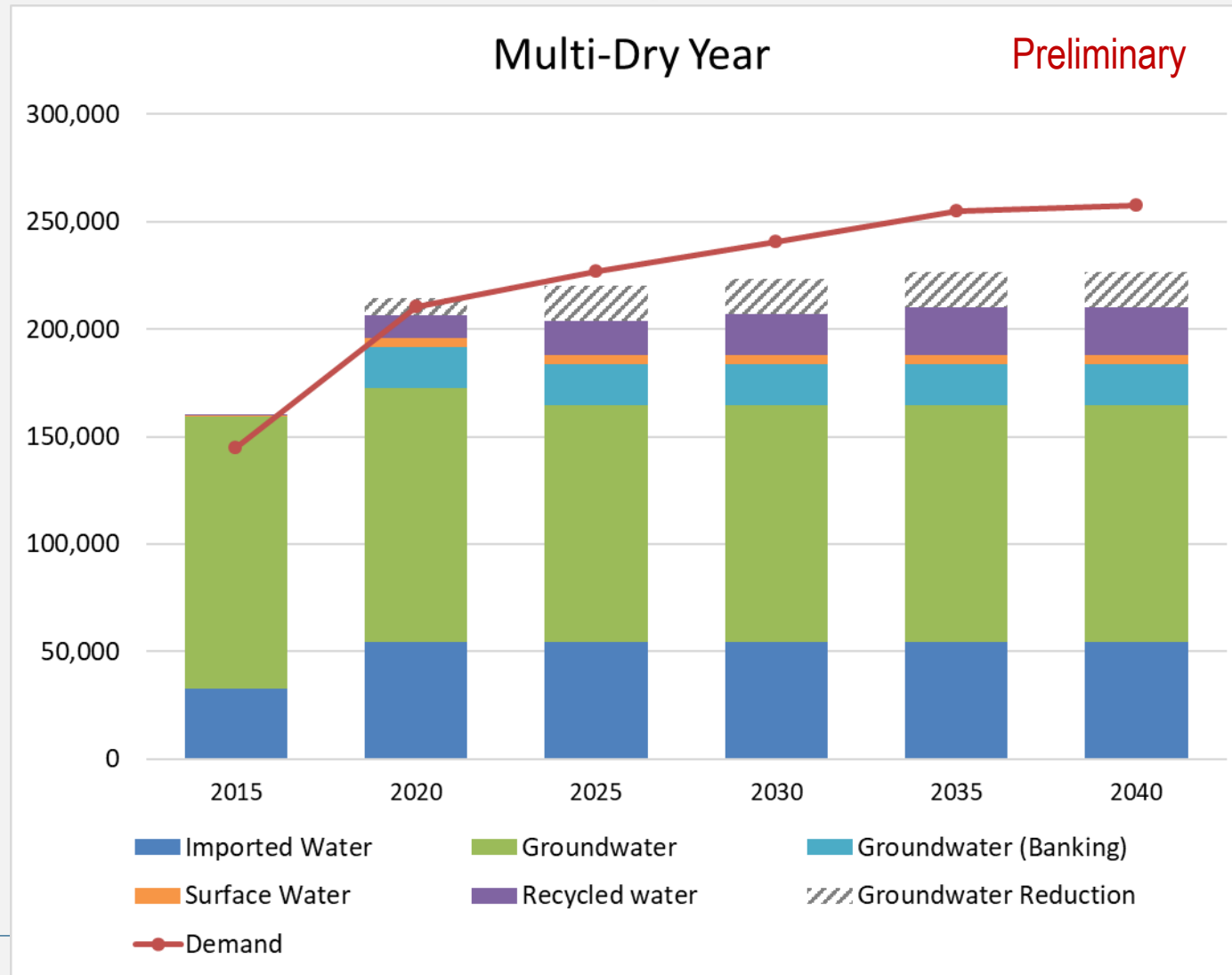
* Assumes groundwater banking will meet any potential supply shortfalls

AV IRWMP: Water Supply & Demand Update (draft)



* Assumes total groundwater banking supplies will be available to meet potential supply shortfall in a single-dry year

AV IRWMP: Water Supply & Demand Update (draft)



* Assumes total groundwater banking supplies will be used $\frac{1}{4}$ each year of the 4-year drought

Next Steps

Prop. 1 Implementation Grant

- Revise projects
- Prepare application materials
- Submit final application

IRWMP Updates

- Revise Supply and Demand Projections
- Continue full IRWM Plan Update

