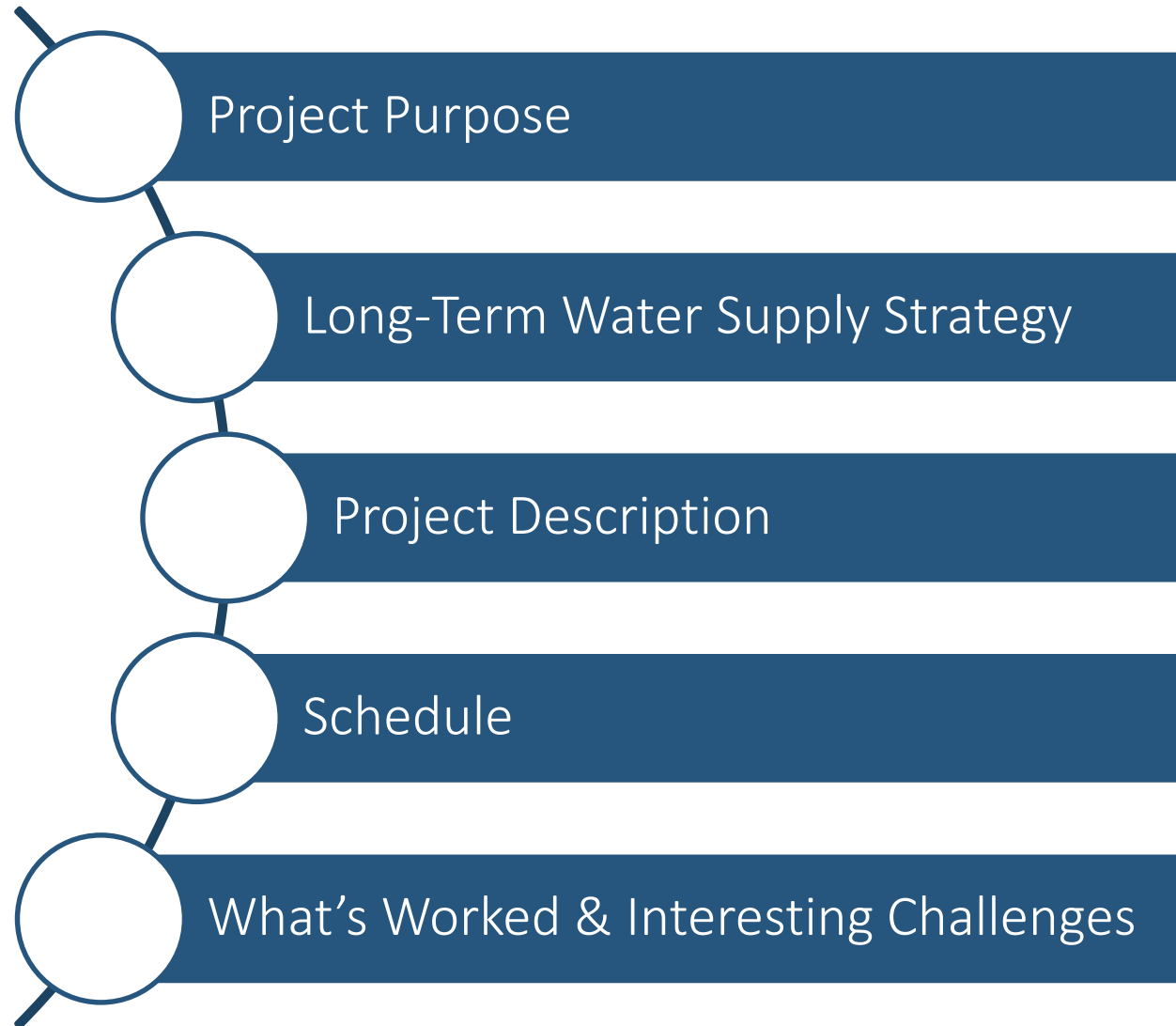
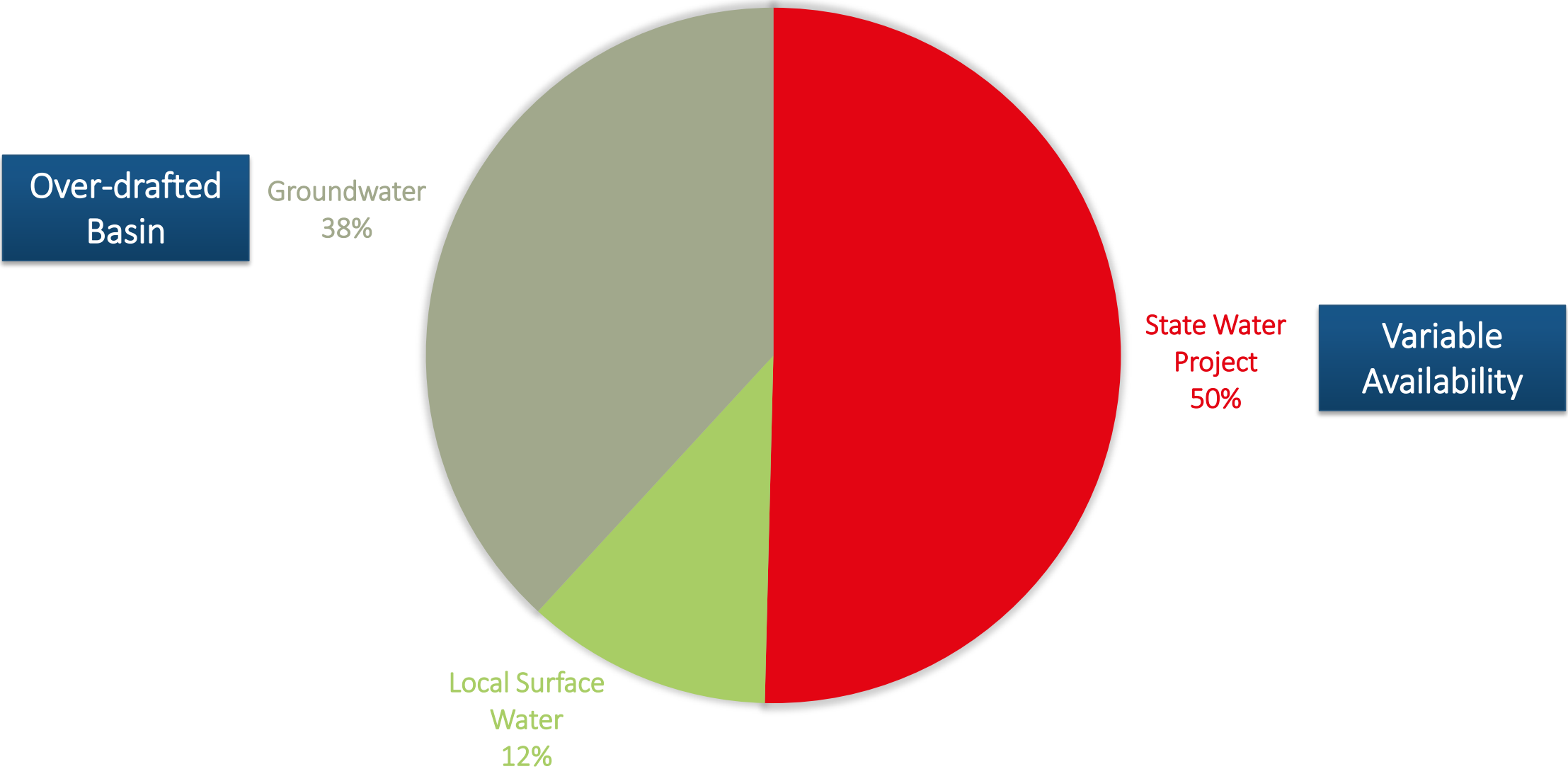
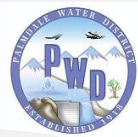


## Palmdale Regional Groundwater Recharge & Recovery Project Progress Update

Palmdale Water District Board of Directors Meeting  
March 23, 2016







Status Quo



45,000 AFY  
of Table A

\$\$\$



Conjunctive Use  
Water Bank



9,000 AFY  
of Table A

\$\$



Potable Reuse  
Water Bank



0 AFY of  
Table A

\$



Meet Future Demand Needs



Diversify Water Supply Portfolio



Maximize SWP Water Supply



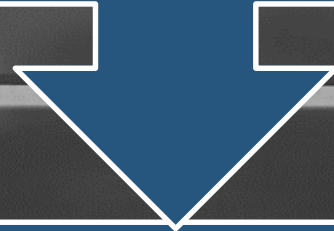
Increase Reliability



Provide More Local Control



## Surface Spreading GRRP

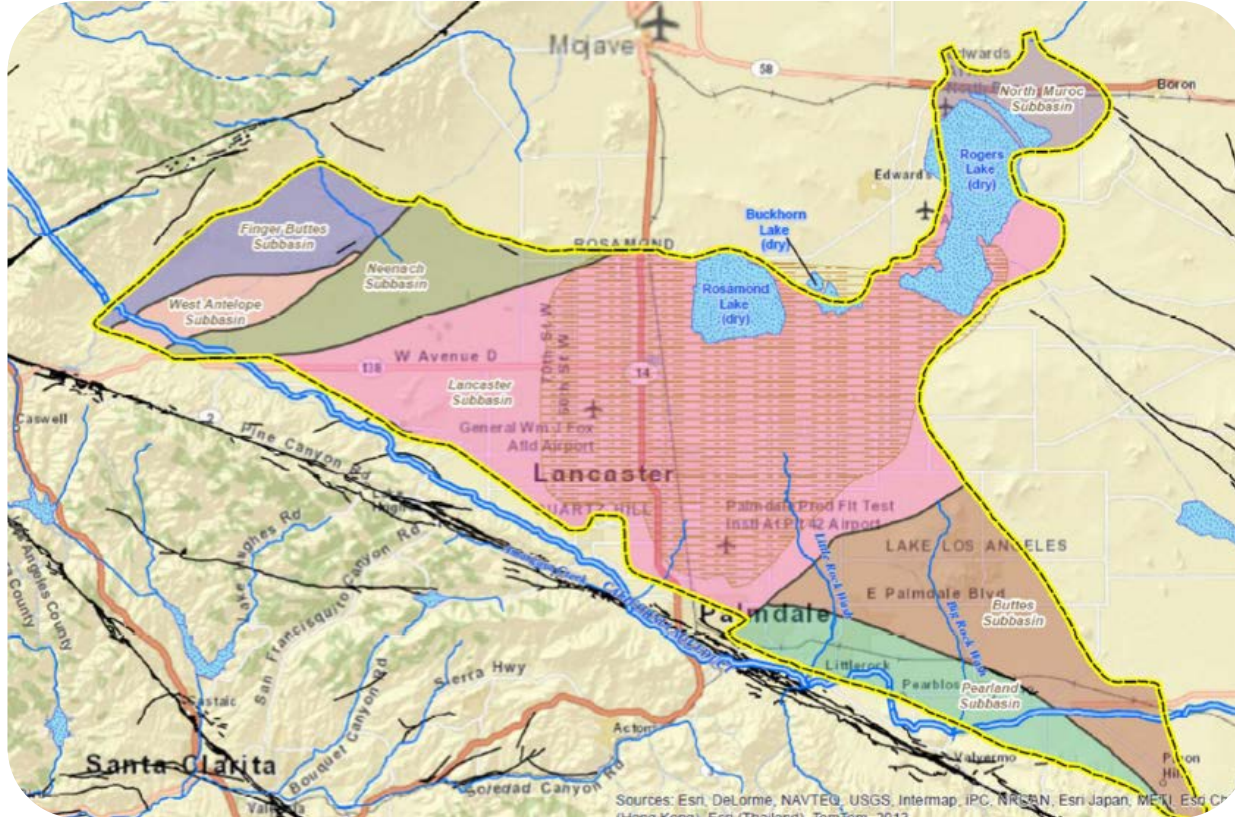


8,000-16,000 AFY Total Recharge

2,000-7,000 AFY  
Recycled Water

1,690 AFY  
Underflow

4,000-9,000 AFY  
SWP Surface Water

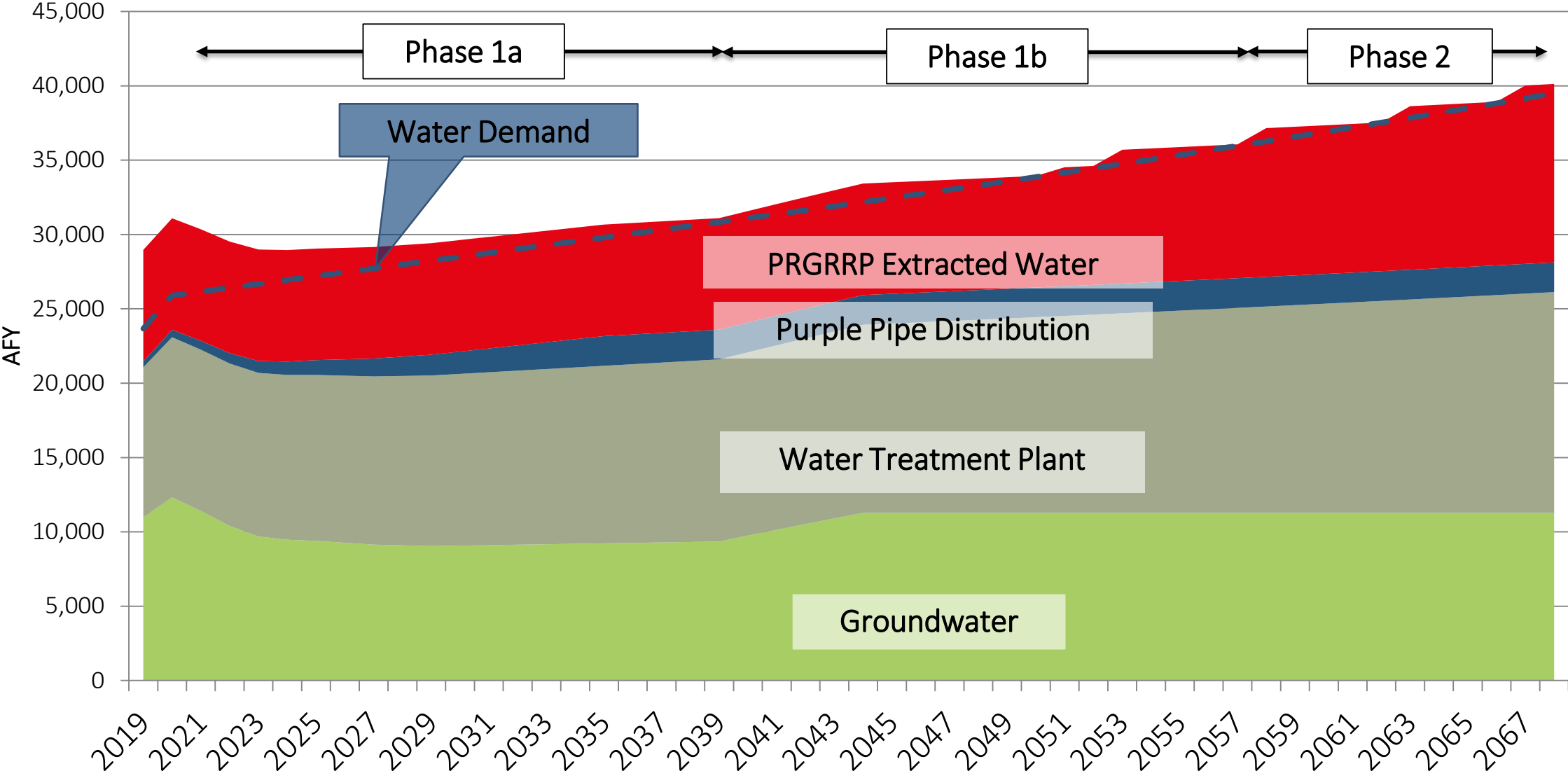


Large, over-drafted basin

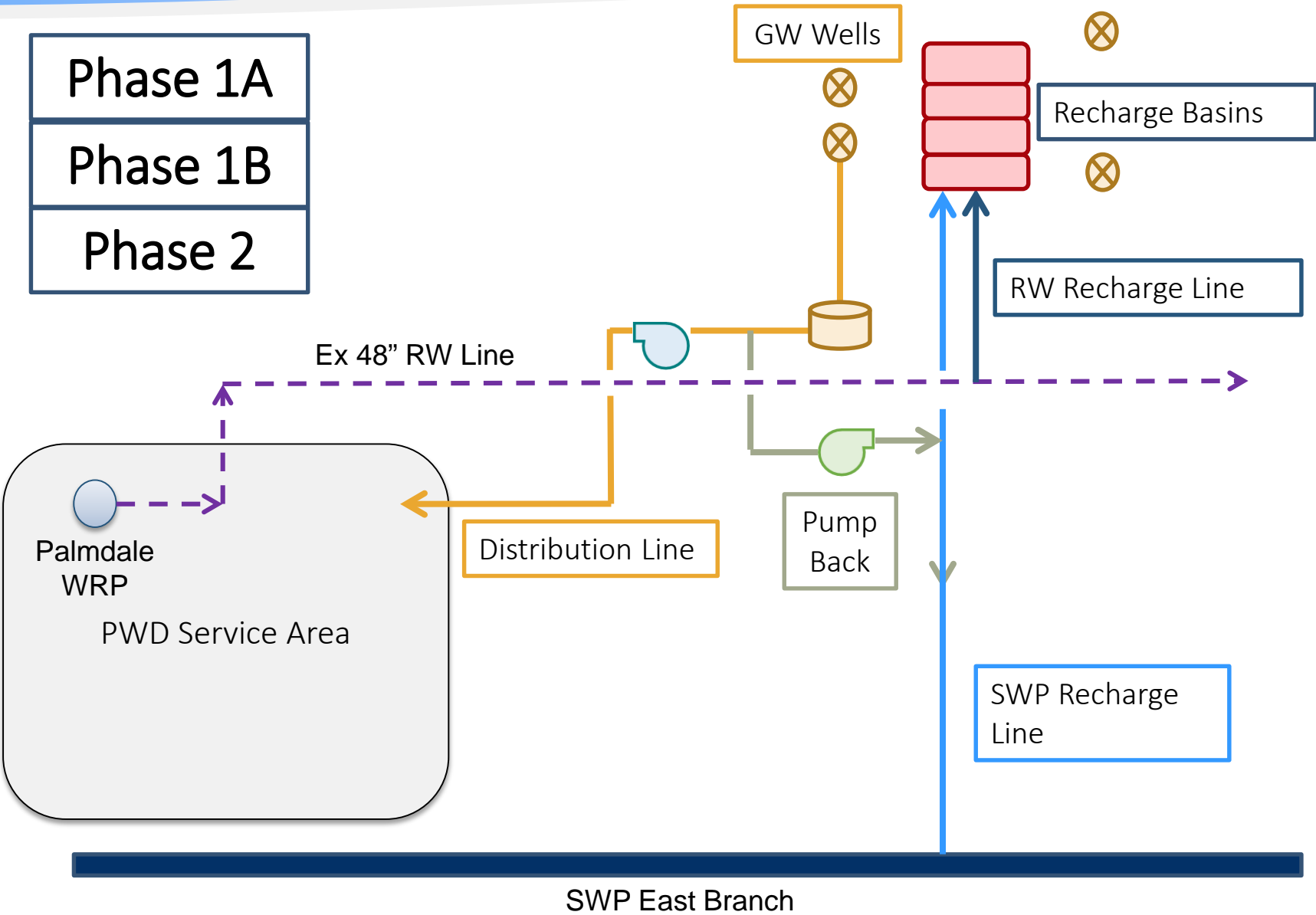
Close access to recycled water

Ample undeveloped land

Available diluent water









Phase 1A  
2019-2038



- ☐ 2 recharge basins
- ☐ 4 wells
- ☐ Pipelines

Phase 1B  
2039-2058

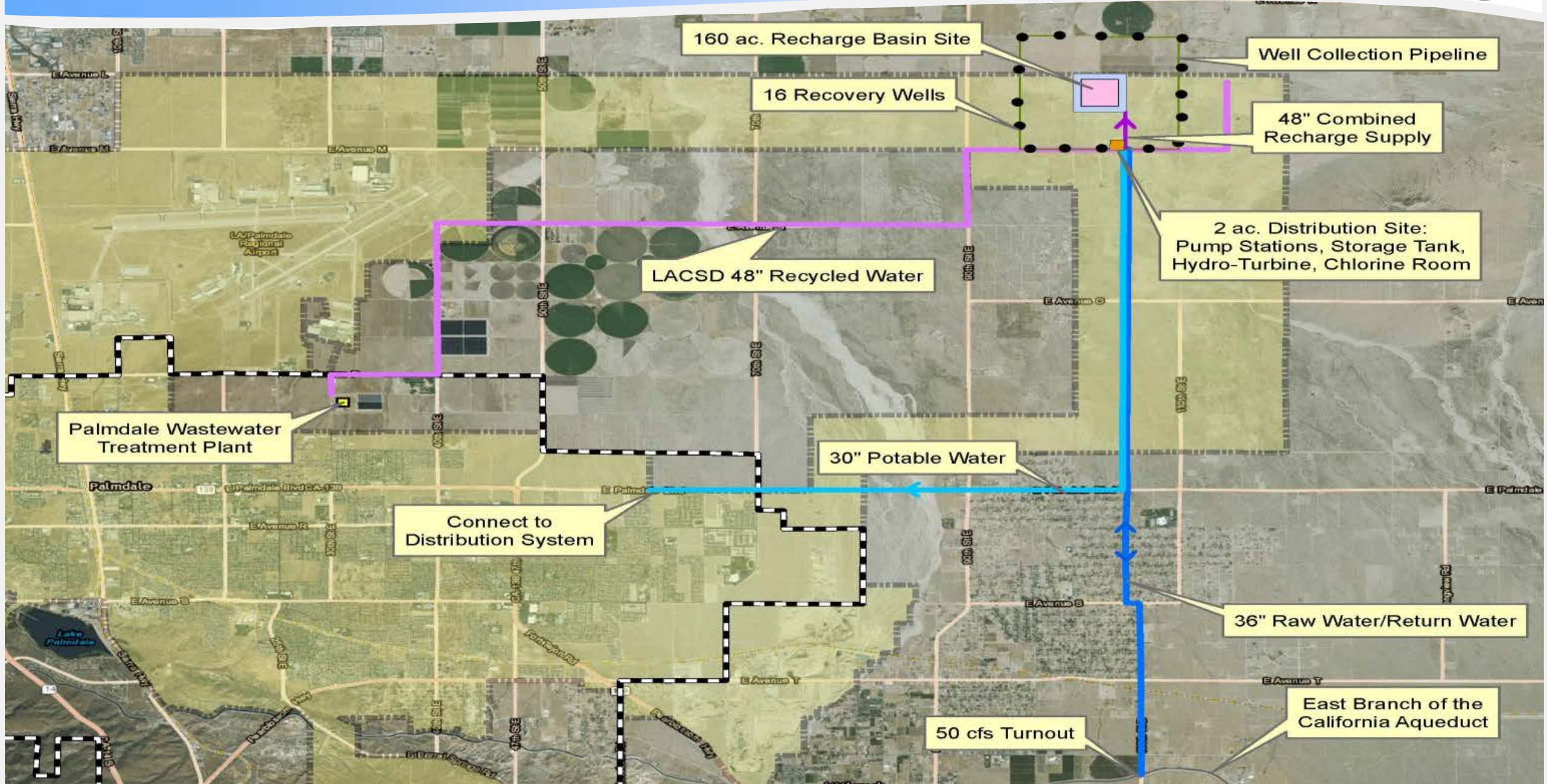
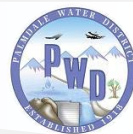


- ☐ 1 recharge basin
- ☐ 2 wells
- ☐ Storage tank
- ☐ Pump station

Phase 2  
2059-2068



- ☐ 1 recharge basin
- ☐ 2 wells

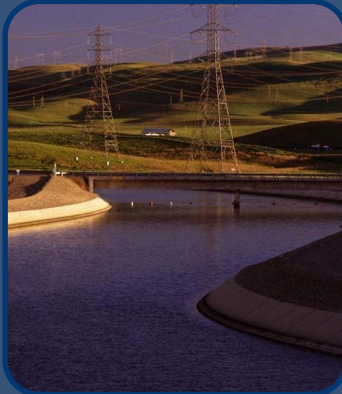






## Underflow

- 1,690 AFY



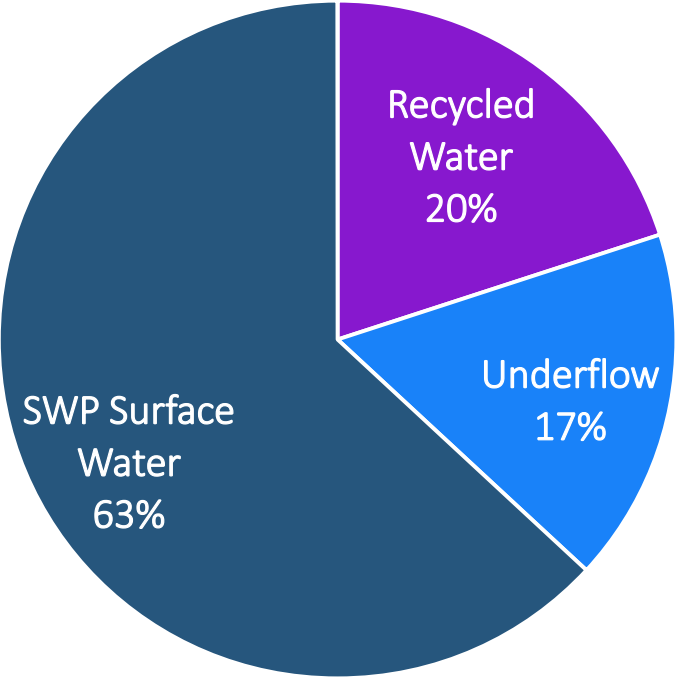
## SWP Surface Water

- 31,300 AFY Table A Amount
- 62% Long-Term Average Availability



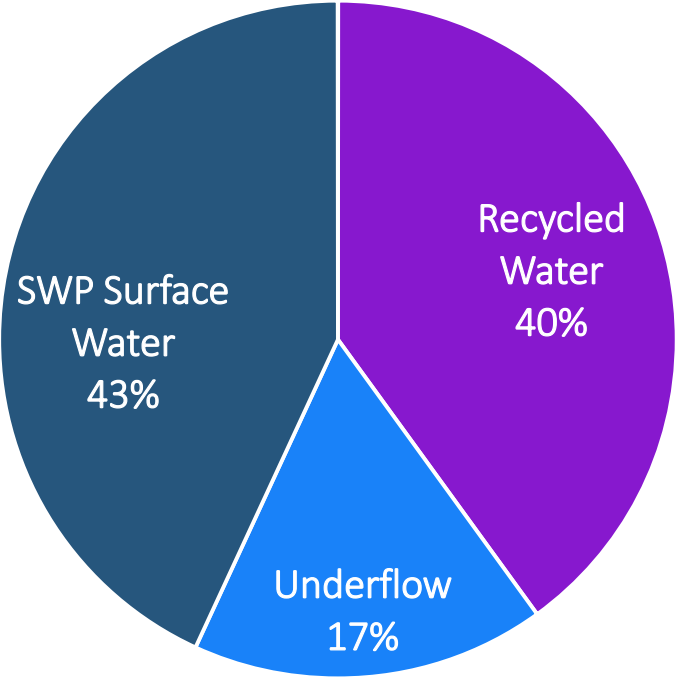


Initial Project



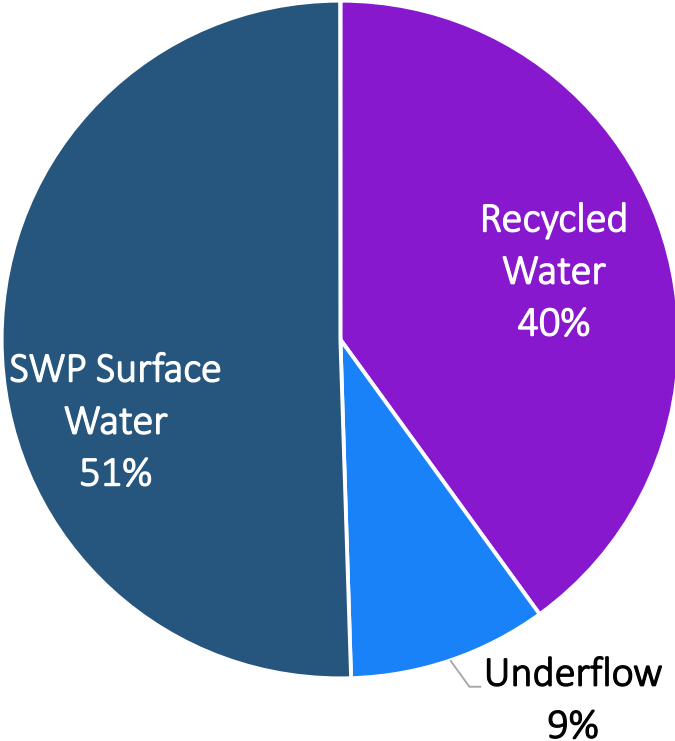
10,000 AFY

7-20 Years Later



10,000 AFY

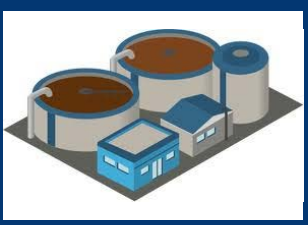
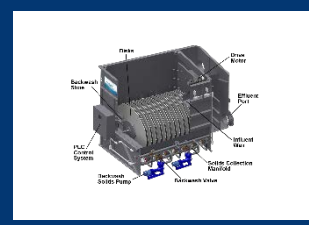

20+ Years

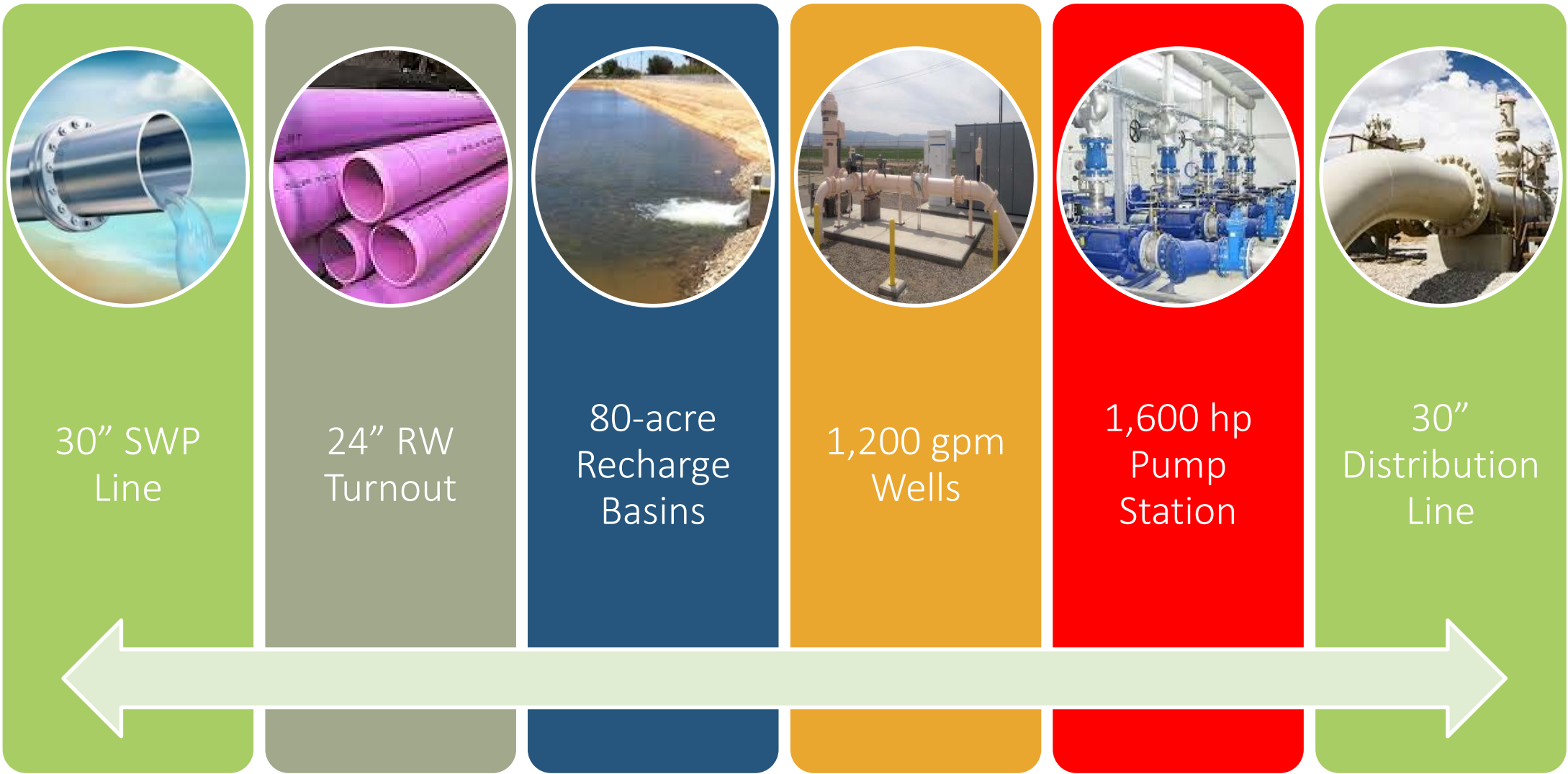
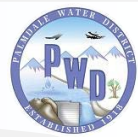


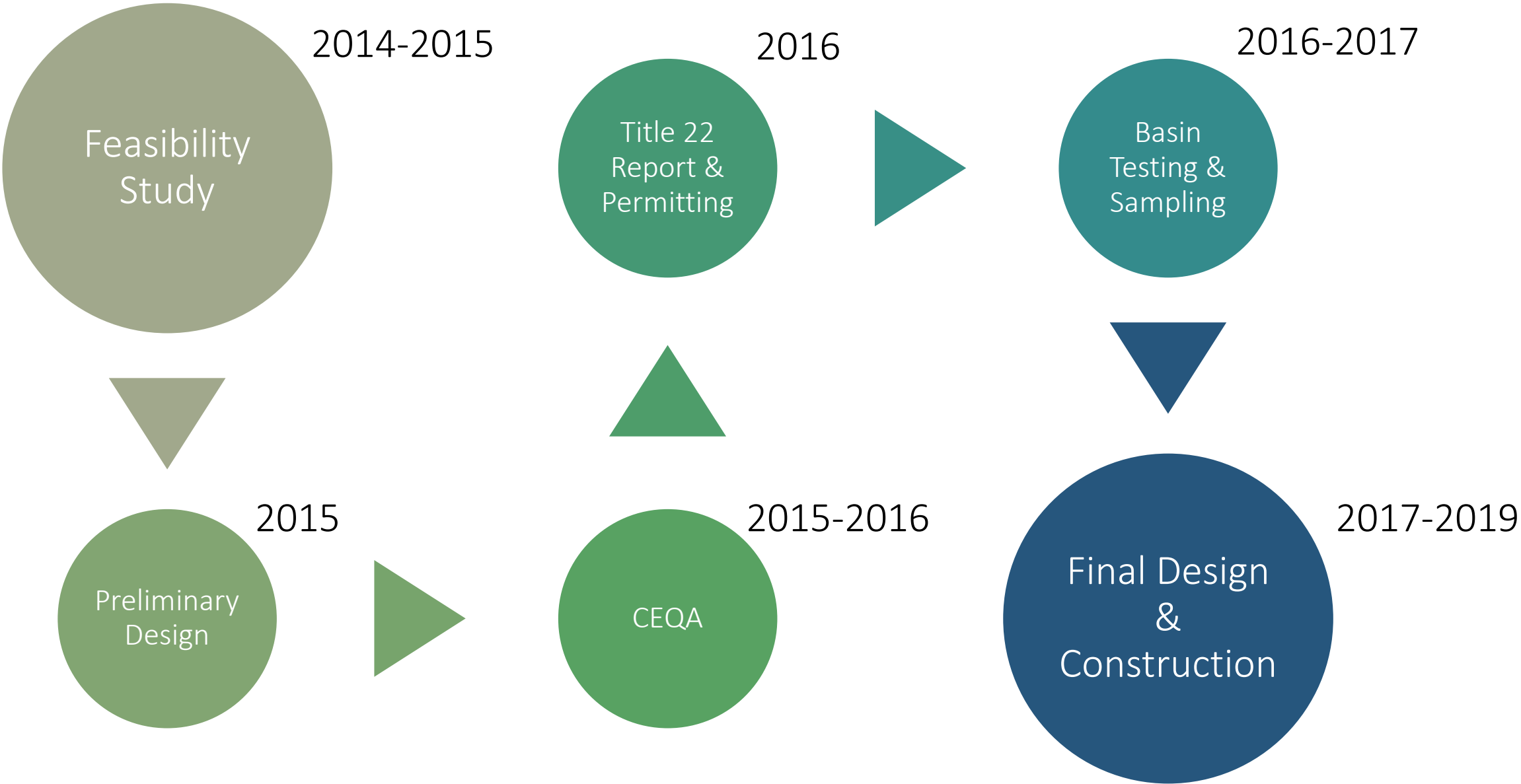
16,500 AFY



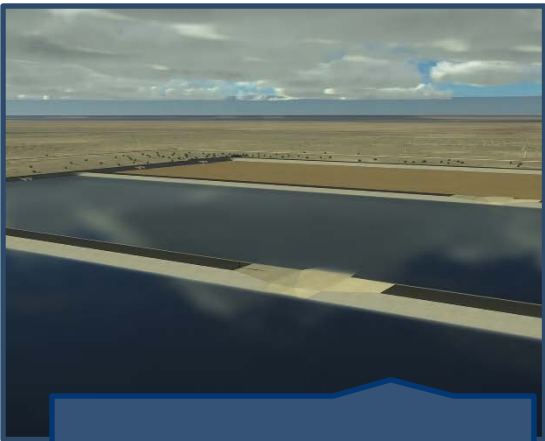
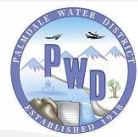
Surface Spreading Groundwater Recharge & Recovery	Virus	12
	Giardia	10
	Crypto	10

	Secondary Treatment	Tertiary Treatment	Aquifer Retention Time	
				
Virus	1.9	4.1	12	18
Giardia	10			10
Crypto	10			10









Test Recharge Basin



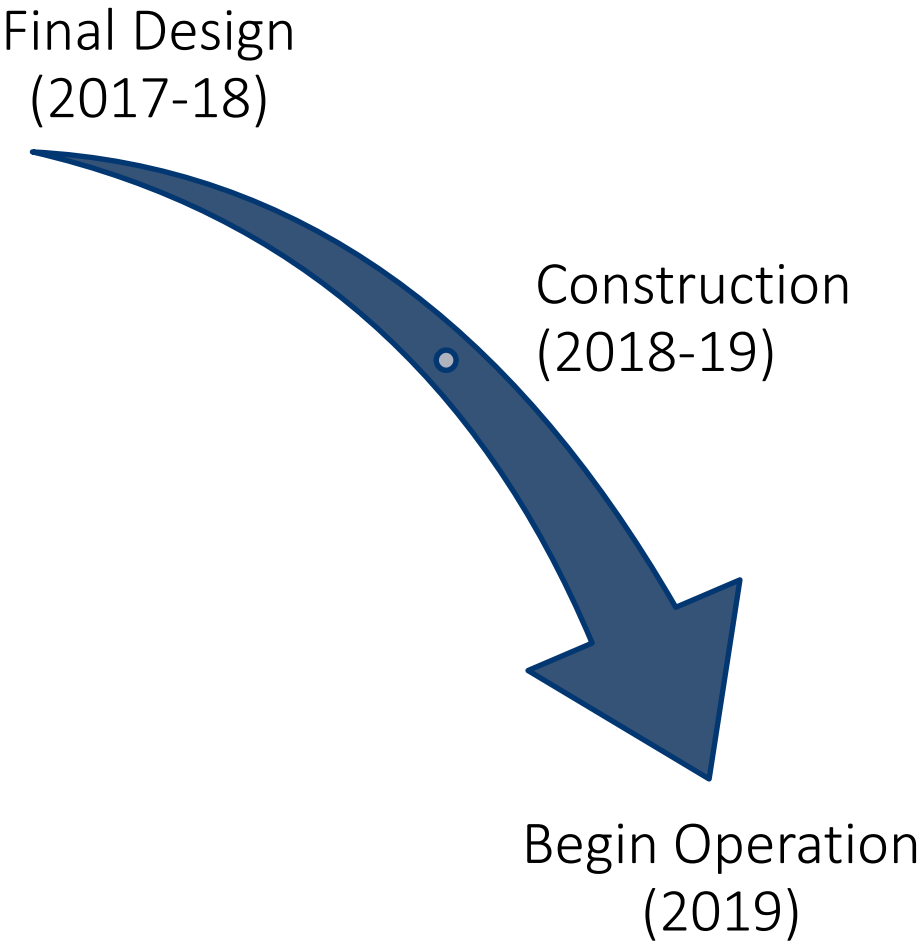
Monitoring Well



Water Quality Sampling



Soil Column Testing





Independent  
Advisory Panel

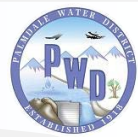
Early Public  
Engagement


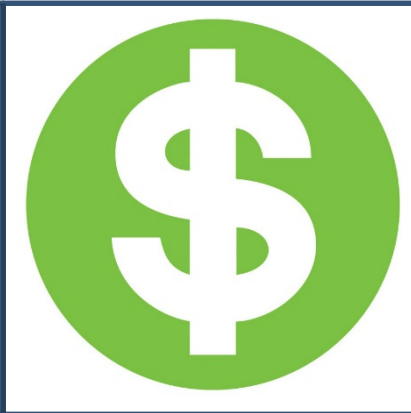



Stakeholder  
Involvement

Tapping into Project  
Partners' Resources





				
High NDMA in Recycled Water	Creating Regional Alliances	Funding Strategy	Project Phasing	Predicting the Future

Conjunctive Use of SWP Water

Utilize New, Reliable Water Supply

Local Control

Benefits Entire Region





Questions?