



Proposed Future Supply Action Funding Program

Water Planning and Stewardship Committee
Item 6b
March 12, 2018

Outline



Background

Proposed Future
Supply Action
Funding Program



Next Steps

2010 IRP: We Face an Uncertain Future

Foundational Actions

- Low cost, low risk
- Prepare region for uncertainty
- Reduce barriers to resource implementation

Resources

- Groundwater
- Recycled water
- Seawater Desalination
- Stormwater

Foundational Action Funding Program

- Approved in 2013
- Funded 13 studies / 13 member agencies
- ~\$3.0 million invested
- Technical conference ~230 participants



Groundwater

- 4 projects
- 6 agencies
- \$990,000



Recycling

- 5 projects
- 10 agencies
- \$810,000



Desalination

- 2 projects
- 2 agencies
- \$325,000

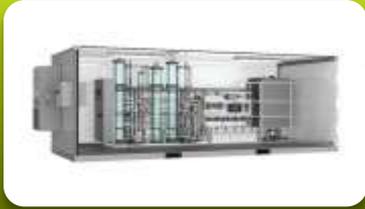


Storm Water

- 2 projects
- 2 agencies
- \$814,000

<http://www.mwdh2o.com/AboutYourWater/fafprogram>

Program Benefits



Groundwater

- Proved new technologies and developed groundwater utilization strategies



Recycled Water

- Supported regulations, advanced technologies and developed permitting strategies



Seawater Desalination

- Furthered the science on intake technologies and materials



Stormwater

- Developed pathways to implementation

Future Supply Action Funding Program

Two Program Elements

Potable Reuse Funding The Water Research Foundation

- ~\$1.0 million
- Potable reuse studies
- Managed by TWRF

Member Agency Studies

- ~\$3.5 million
- Same terms
- Add thematic focus

Southern California Leads the Way



- Permitted GW augmentation

- 7 projects; 203,000 AFY
- 99% of State

- Planned GW augmentation

- 13 projects; 153,000 AFY
- 71% of State

- Planned SW augmentation

- 3 projects; 111,000 AFY
- 100% of State

Funding Agreement with The Water Research Foundation

- ~\$1.0 million for TWRF-managed studies
 - MWD-selected potable and non-potable research
- TWRF funding goal: ~\$8.0 million
- SWRCB has approved \$4.5 million

SWRCB Grant 1		SWRCB Grant 2	
DPR Expert Panel Studies	Potable Reuse Studies	Non-Potable Reuse Studies	
\$1.0 Million	\$2.0 Million	\$1.5 Million	

Broad Water Industry Support (Funding goals)

California Agencies

LA County: \$440k

OC County: \$220k

SD County \$280k

Inland Empire: \$150k

Other Regions: \$580k

State Coalitions

Florida: \$150k

Texas: \$120k

Arizona: \$100k

Mid-Atlantic: \$100k

Other States: \$105k

Consulting Firms

~ 20 Firms

About \$1.0 Million

Leveraging Funding for Needed Studies

Objective: meet Future Supply Action criteria

SWRCB Grant	Proposed Studies for MWD Funding*	MWD Match
SWRCB Grant 1	Measure pathogen variability in wastewater	\$200k
	Develop statistical methods for assessing process trains	\$125k
SWRCB Grant 2	Treatment and blending strategies for system integration	\$200k
	Optimize wastewater treatment for potable reuse	\$100k
	Develop protocols for integrating real-time sensor data	\$200k
	Evaluate indicator viruses for monitoring treatment processes and aquifer recharge	\$100k
	Address impediments to agricultural reuse	\$50k
	Seven Project Total: \$3,500k	\$975k

* Includes recommendations from Water Resource Management and Water Quality

Draft Agreement Terms

- Up-front funding
 - Off-ramps and recourse to recover funds
 - Auditing provisions
 - Metropolitan receives all deliverables, invoices
- Staff participation in study oversight
- TWRF participation in Metropolitan activities
 - Regional information sharing
- Term: two and three-year studies



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Keep Core Program Elements

- ~ \$3.5 million total funding
- Up to \$500k per member agency or per study
 - 100% dollar-for-dollar match
- Competitive RFP
 - Studies must meet minimum criteria
 - Member agencies prioritize their own studies
 - Selected by expert panel
- Funding is available in current and proposed budget



Groundwater Desalter
Brine Reduction

Proposed Enhancements

- Hold MA meetings to prioritize research needs
 - Encourage fewer studies
 - Greater regional potential
- Promote partnering among agencies
- Thematic focus:
 - Example: sensors / data analytics



Recycled Water Tracers



Seawater Desalination Intakes



Stormwater Direct Use

Next Steps

- Incorporate feedback
- April Board consideration
 - Authorize funding agreement with TWRP for potable reuse studies
 - Approve RFP process for member agency studies
- Hold member agency meetings in spring 2018
- Issue RFP summer 2018
- Return to Board with study recommendations





Questions?

