

Metropolitan Water District Innovation and Technology Program



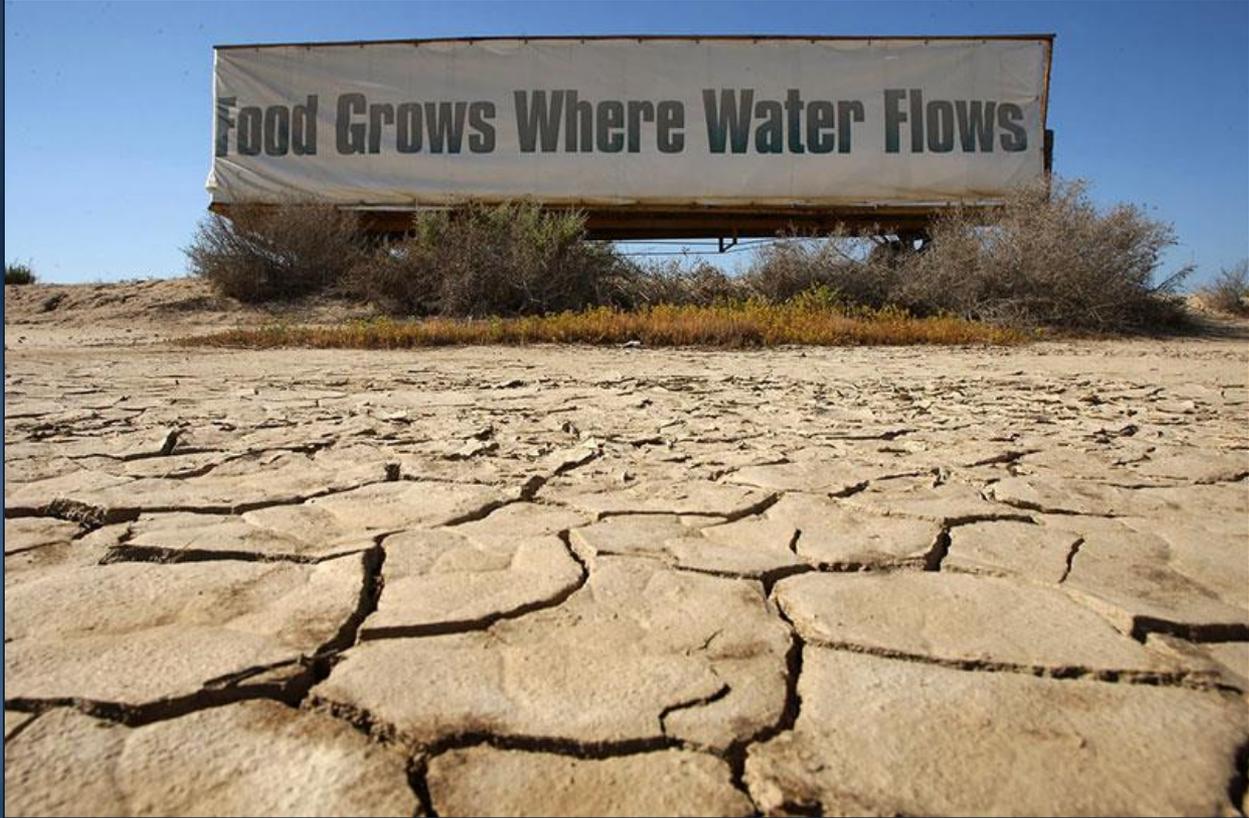
Metropolitan Water District of Southern California



- Regional water wholesaler
- Includes 6 counties
- 5,200 square miles
- 26 member agencies
- 250-300 retail water agencies
- 19 million people
- Add about 150,000 people/yr
- Imported water supplies meet about half of retail demands

Southern California Imported Water Supply







Lake Oroville - July 20, 2011

Lake Oroville - September 5, 2014

What is Innovation ?

- Innovation is the creation and use of more effective ideas or methods
- Innovations refer to the creation of the idea or method itself
- The focus is on new processes rather than new objects
- Innovation is transformation which results in change
- The water industry needs innovations to address emerging challenges

PROGRAM OBJECTIVES

- Discover innovations that support MWD and member agencies' mission of water supply reliability and conservation
- Promote a culture of innovation in MWD work practices
- Advance public water agencies' role in the development of water and power related technologies
- Assist small business innovation with resources

What Drives development of Water Technology?

- Increasing Regulation
- Failing Infrastructure
- Focus on Recycling and Reuse
- Increased Interdependence Between Water and Energy
- Impact of Global Climate Change

Maxwell, S., “2012 Water Market Review “-A Concise Review of Challenges and Opportunities in the World Water Market, 2012

PROGRAM COMPONENTS



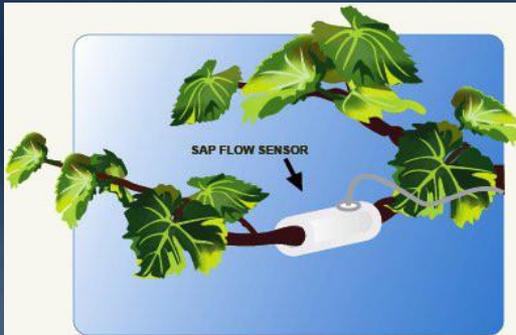


Discover innovations that support MWD and member agencies' mission of water supply reliability and conservation

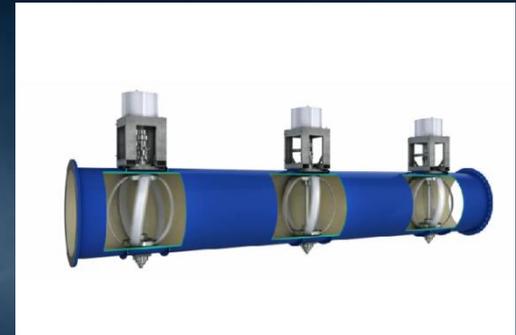
- Quarterly forum of public and private water agencies to evaluate emerging technologies in the water sector
- Interested water agencies can host a pilot, trial program or procure the technology
- Technologies are evaluated by water industry leaders across the globe
- Promotes industry collaboration
- Introduce emerging technologies from small businesses

Technology and Innovation

Emerging Technologies from small entrepreneurs



Real-time sensors send a wireless reading of the vine's transpiration rate



Harvesting renewable, low-cost electricity from gravity-fed water pipes



Accurate and reliable in-situ sampling
And measurements performed autonomously



Floating solar arrays-land is scarce
& access is difficult or remote



Link innovations and investments to water, energy, wastewater, storm water and watershed management

- Matching search engine that links innovation community
- Virtual incubator - resources for emerging technologies
- No selling
- Community Managers



*Promote a culture of innovation
in MWD work practices*

- Lunch and learn series covering technologies and approaches used in district operations
- Resource for learning about emerging technologies applicable to district uses
- Launchpad for employee techtransfer resulting from job expertise and passion for innovation



Advance public water agencies' role in the development of water and energy related technologies

- Feedback forum for entrepreneurs and innovators
- Promotes public water agency role in the development of new and applicable technologies for the water sector
- Encourages partnerships with water industry

Strategic Alliances

Innovation & Technology

- PortTech LA
- Cleantech LA/OC/SD
- WET Center – Fresno
- AWWA
- Imagine H2O
- CA I-Hubs
- Los Angeles Venture Association
- SBDC
- TriTech - Riverside



Thank you

