

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



Incentives to Expedite Recycled Water Development

Ray Mokhtari
Metropolitan Water District of Southern California

WaterSmart Innovations Conference and Exposition
October 2-4, 2013
Las Vegas, Nevada

Metropolitan Water District of Southern California

- Regional water wholesaler to 6 counties
 - 5,200 square mile service area
- 26 member agencies
- 37 member board
- 19+ million residents
- Regional economy: \$1 trillion
- Provides about ½ of retail demand



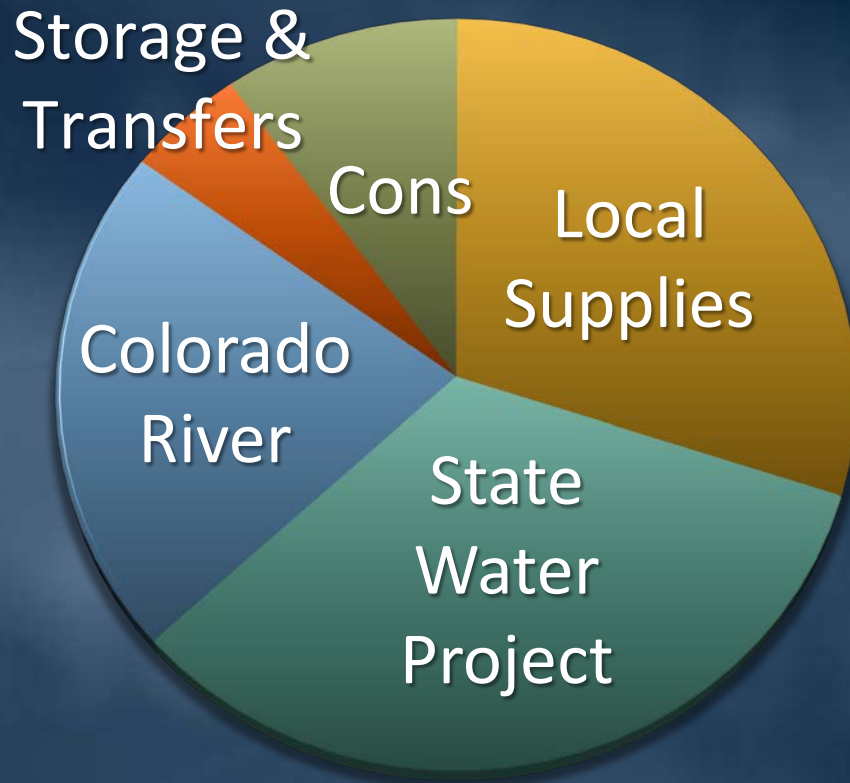
MWDSC

Where Southern California Gets its Water



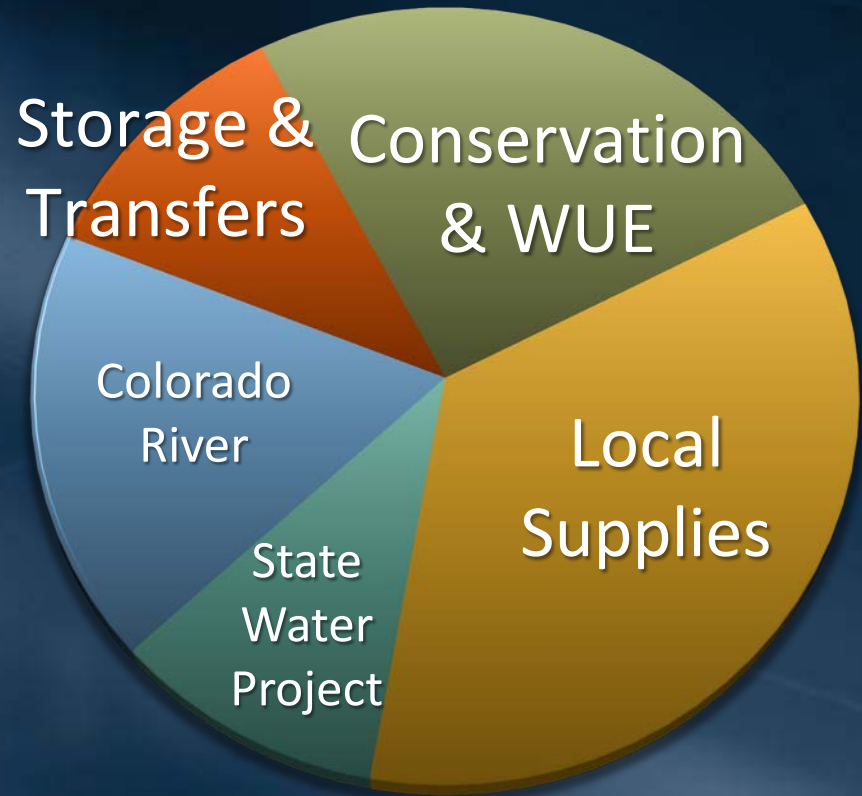
Diversification of Water Portfolio

Early 1990's



Heavy dependence on imported supplies

2010 IRP Strategy



Emphasis on Conservation, Local Supplies, and Storage & Transfers

LRP is important part of IRP

Water Use Efficiency

- 20% Reduction in Per Capita Water Use by 2020

Local Resources

- Encourage/Assist Local Development
- Implement Foundational Actions

State Water

- Pursue Delta Improvements

Colorado River

- Develop Dry-Year Supply Programs

Local Resources Program

(Background)

- 1980 - Orange and Los Angeles Counties Reuse Study
 - Recycled water potential
 - Regional benefits/ water supply reliability
- 1982 - Local Projects Program
 - Provide upfront capital funding
- 1986 – Provide incentives for project production
 - Incentives continue today
- 1991 - Groundwater Recovery Program
 - Incentives for recovered groundwater
- 1998 - Local Resources Program
 - Incentives for recycled water and recovered groundwater

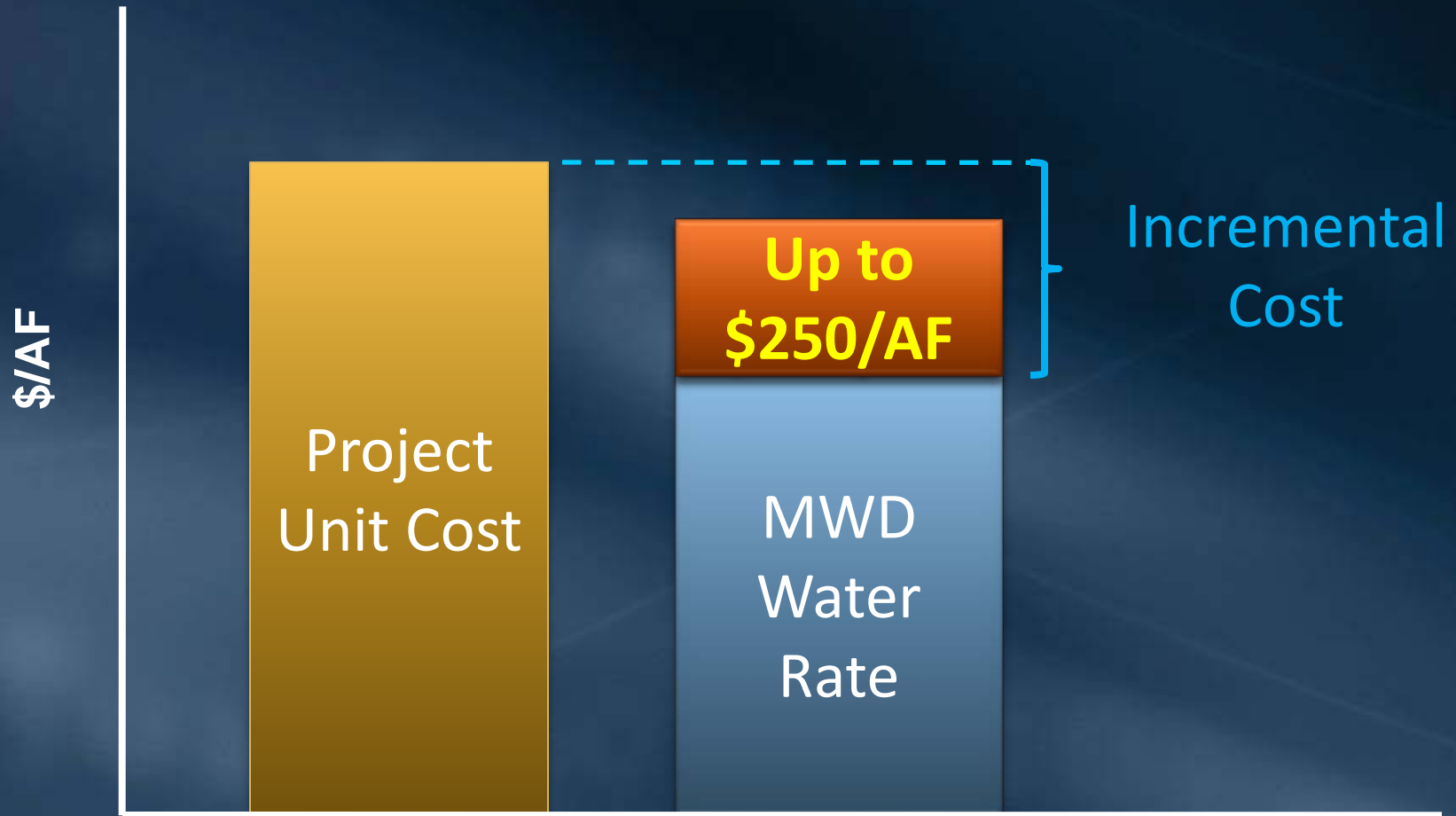
Local Resources Program

Provides incentives for development of new

- Recycled water
 - To reduce imported water demand
- Recovered groundwater
 - Increase regional groundwater production
 - Sustain yield during drought without imported water replenishment
- Agreement Terms
 - Up to 25 years
 - Incentives up to \$250/AF



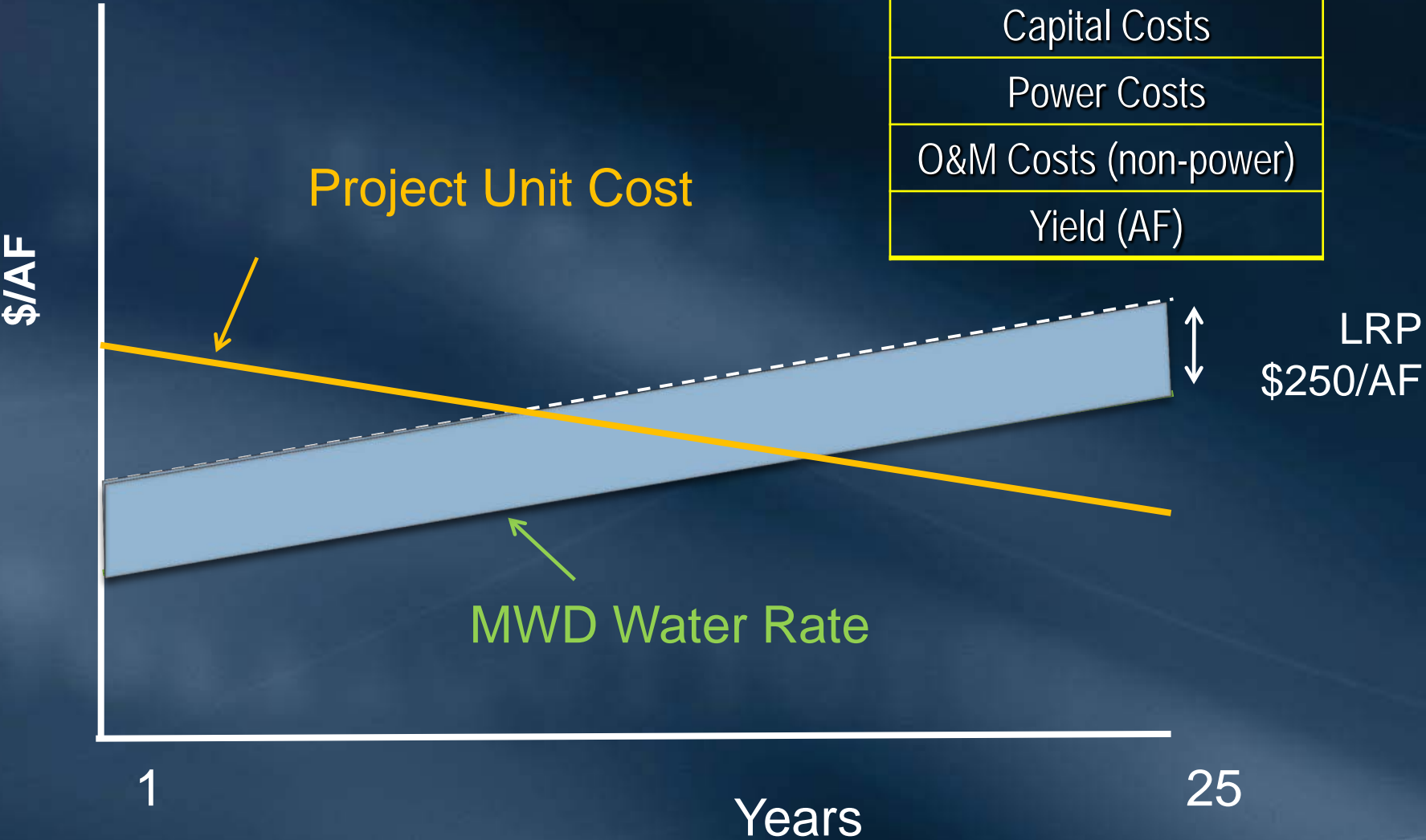
LRP Incentive Calculations



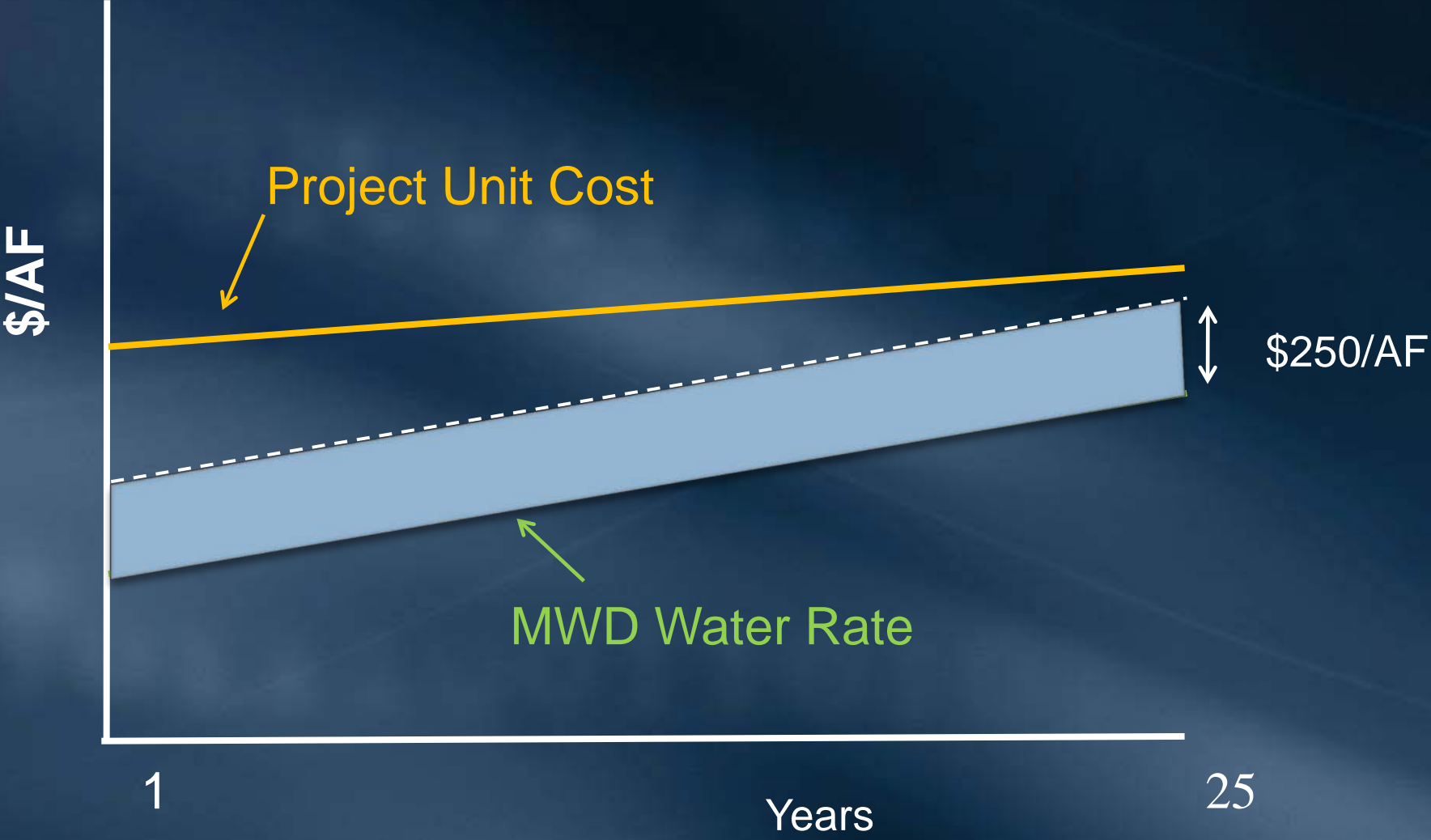
* Maximum LRP incentive is \$250/AF.

LRP Incentive Projections

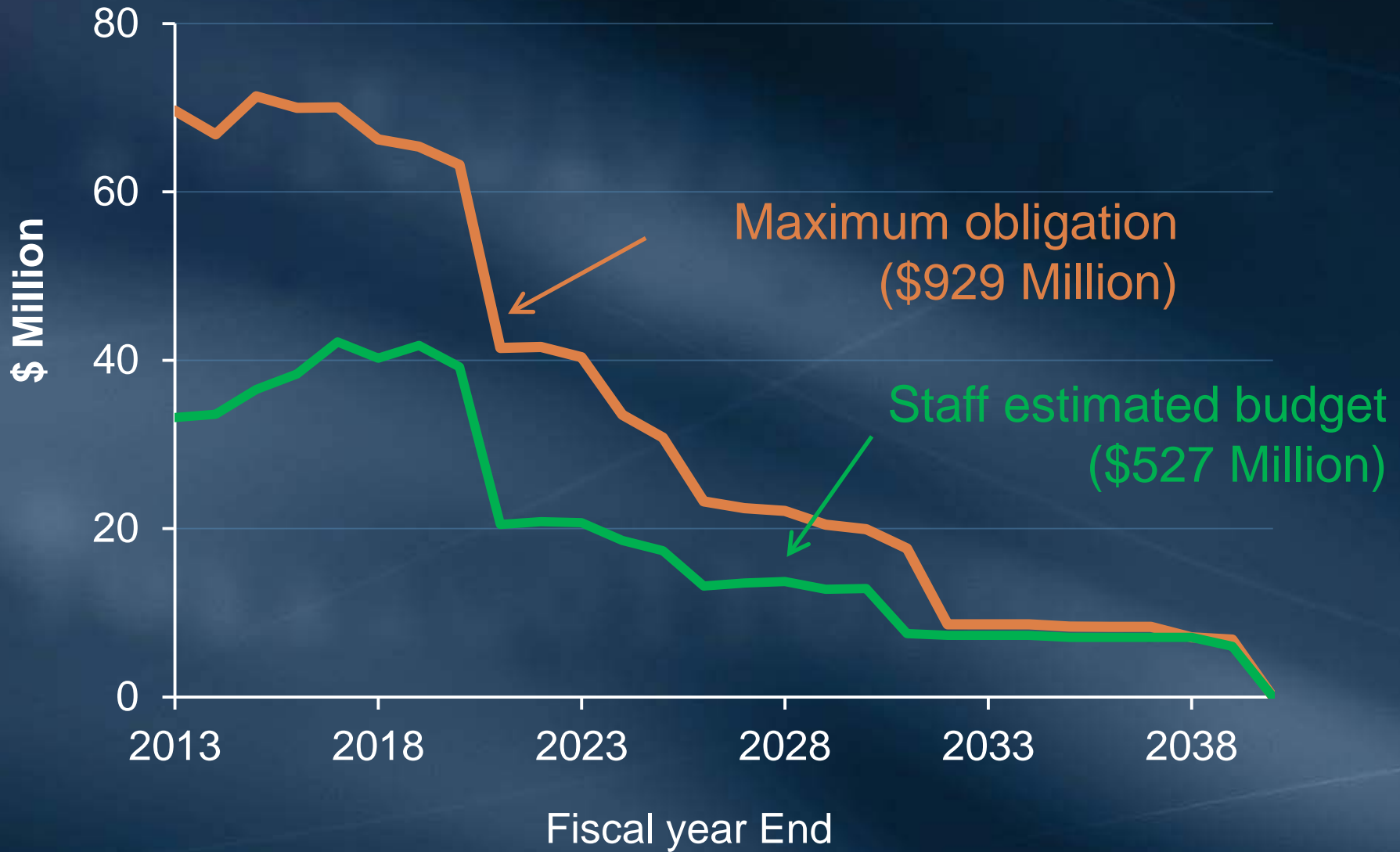
Unit Cost Drivers
Capital Costs
Power Costs
O&M Costs (non-power)
Yield (AF)



LRP Incentive Projections (Typical Scenario)



LRP Obligations Under Current Contracts



Current Program

- Established in 2007
- New target
- 22 projects approved
- Remaining balance
 - 6,000 AFY under review

174,000 AFY

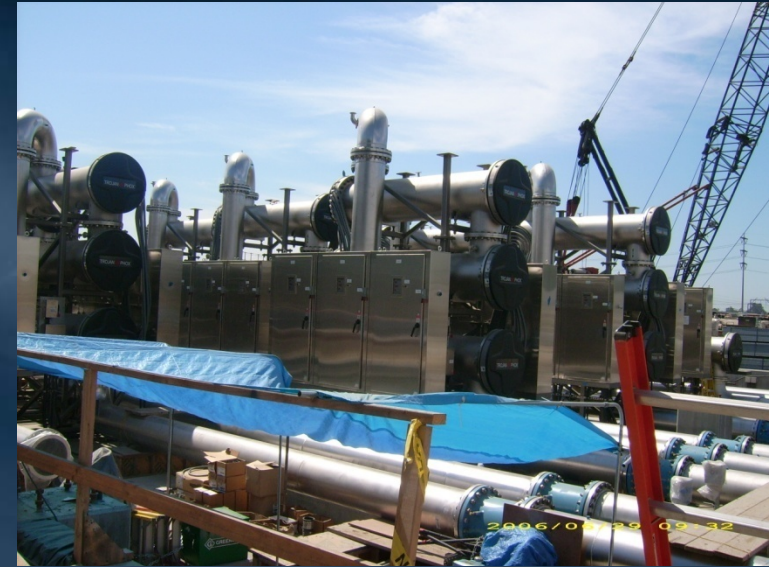
105,000 AFY

69,000 AFY



Project Development Challenges

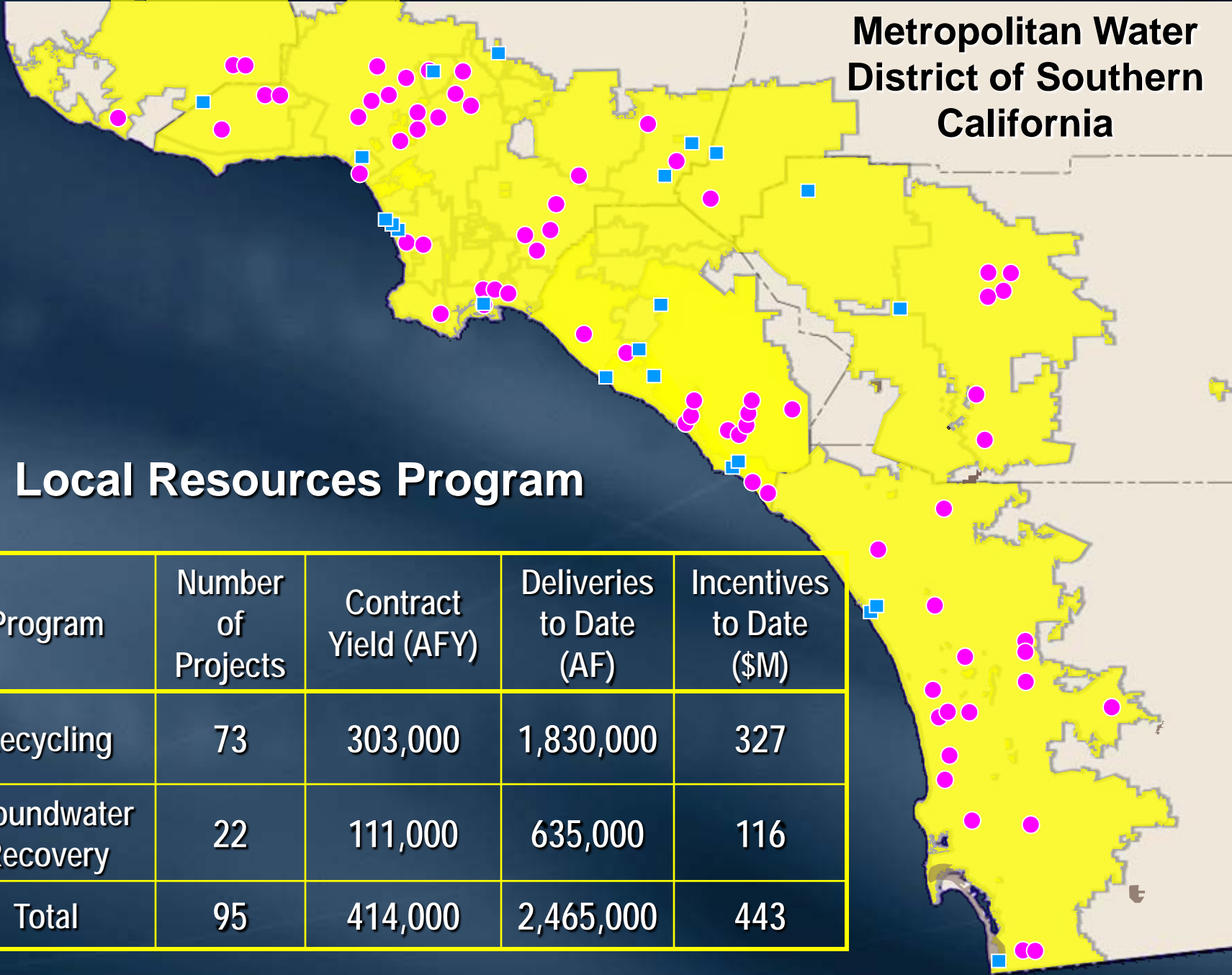
- Sporadic and slow development
- Challenges
 - Regulatory / permitting
 - Public acceptance
 - Cost
- Financing
 - Federal / State grants
 - Low interest (SRF) loans
 - Local agency bond / cash
 - Metropolitan LRP incentives



Metropolitan Water District of Southern California

Local Resources Program

	Program	Number of Projects	Contract Yield (AFY)	Deliveries to Date (AF)	Incentives to Date (\$M)
●	Recycling	73	303,000	1,830,000	327
■	Groundwater Recovery	22	111,000	635,000	116
	Total	95	414,000	2,465,000	443



Lessons Learned

- Upfront capital funding could put strain on an agency's capital capacity
- Incentives serve as a catalyst to expedite development of local resources
 - Low hanging fruits are gone
 - New projects cost more and need financial assistance
- Project performance issues – how to resolve
- Modifying the program to meet new conditions and agencies' needs

Summary

- LRP assists local projects development
 - More than half of recycled water and recovered groundwater in the region
- LRP is important part of IRP
- Recycled water helps meet 20x2020 goal
- Cost remains predominant constraint
 - Data shows most local projects cost more than MWD rate
 - Financial assistance needed, especially in early years

Questions?

Ray Mokhtari
(213) 217-6142

rmokhtari@mwdh2o.com

LRP Application on website
mwdh2o.com