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Peer Review of the Demand Management Programs of the Metropolitan Water District of Southern California

Peter Mayer, P.E.
Principal, WaterDM

Alliance for Water Efficiency
Metropolitan Water District of Southern California

- Regional water wholesaler serving 19 million people across 6 S. Cal counties
- 26 member agencies
- 38 member board of directors
- Water demand management started in 1976
- Highly evolved, well funded regional water conservation program
2014-16 Drought

Turf removal program – Metropolitan expected to remove 175 million square feet of turf – more than triple the governor’s goal for the entire state. Rebate started at $0.30 per square foot (SF) of turf removed.

Raised to $1.00 per SF and then to $2.00 per SF. $450 million conservation program budget (~$225 million per year).

75,000 landscape transformations (~average of $6,000 per transformation)
Gallons Per Capita Per Day – MWD of Southern California

- 205 GPCD (20x2020 Target)
- 145 GPCD
- 131 GPCD
Peer Review Goal

*To perform a thorough, but high level review of MWD's water conservation program efforts to date and offer insights and recommendations about how the program should evolve in the future to be more effective.*
Peer Review Team

- **Erin Morey**, New York City Dept of Environmental Protection, NY
- **Doug Bennett**, Southern Nevada Water Authority, NV
- **Karen Guz**, San Antonio Water System, TX
- **Kathy Nguyen**, Cobb County Water System, GA
- **Carol Ward-Morris**, Arizona Municipal Water Users Association, AZ
- **Peter Mayer, Bill Gauley, and Mary Ann Dickinson**
Peer Review Process

- Informational report on Metropolitan conservation program
- Team teleconference
- Peer review site visit
- Summary of reviewer comments
- Team teleconference to produce recommendations
Member Agencies Contributing to the Peer Review

- Los Angeles Department of Water and Power
- San Diego County Water Authority
- Metropolitan Water District of Orange County
- Eastern Municipal Water District
- City of Beverly Hills
- Three Valleys Municipal Water District
Peer Review Summary Comments

- Peer review is based on a brief window of insight.
- The exceptional challenges faced during a drought crisis led to this peer review.
- *The Peer Review Team found that Metropolitan’s water conservation programs were exceptional, far reaching, and innovative particularly given the enormous service area and limited staff resources.*
Peer Review Summary
Comments (Cont.)

- Metropolitan staff were open and forthcoming. The peer reviewers were complimentary of the performance of this small group of staff, particularly during such a severe and long-lasting drought.

- Member Agency staff were also open and forthcoming - offering perspective and constructive suggestions for improving the Metropolitan conservation program.

- All comments from the Peer Review Team, Metropolitan Staff, and Member Agencies are presented anonymously.
11 Consensus Peer Review Recommendations
1. Evaluate and Increase the Base Conservation Rate of $195/AF.

- This maximum value is fundamental to the entire conservation program.
- Re-evaluate and increase the cost-efficiency threshold
  - Could be based on the avoided cost of new supply in MWDs portfolio; or
  - Could be market-based, at level needed to incentivize action.
2 Improve and Expand Conservation Research

- Metropolitan is a national leader in both funding and conducting conservation research.
- Member Agencies (MA’s) want more pilot research and more rigorous program evaluation.
- Create committee of staff, MA’s, and technical experts to develop a prioritized research agenda.
Integrate research agenda and evaluation into programs as they are developed and launched.

Involve MA’s throughout the process so they are fully prepared to participate and provide data.

Metropolitan needs additional staff dedicated to conservation research, evaluation, and data management.
3 Develop a Comprehensive Education Effort

- Metropolitan’s education offerings are valuable and should be improved and expanded.
- Metropolitan’s education and outreach efforts are an essential component of the landscape transformation process, accelerated though the turf replacement program.
- Education programs are not well suited to a "Just in Time" approach. Programs need to be developed and improved over time.
Develop a Comprehensive Education Effort (cont.)

- Evaluate Metropolitan curriculum along with existing offerings of MA’s and beyond to identify the shared needs across the service area.
- Engage the green industry, universities, and others in landscape and irrigation training.
- Landscape curriculum should be adapted for different regions and climates.
4 Reinstall the Turf Removal Program

- Metropolitan’s turf replacement program was a valuable and necessary response to drought.
- More than just an emergency response, this program can be part of a long term change to urban landscapes.
- Lower water use is prioritized.
- Platform for promoting California Friendly landscapes, homeowner classes, and professional training.
Reinstate the Turf Removal Program (cont.)

- Maintain this program and its capabilities to further advance landscape changes and to keep the ability to “ramp up” the program if needed.
- Establish a fixed annual budget. Refine and scale the program annually in coordination with the MA’s.
- Incentive must be enough to motivate customers to participate in the program.
Expand the Water Savings Incentive Program (WSIP)

- The WSIP is valuable and should be expanded and improved.
- CII water use efficiency is complex. WSIP approach is good, but administratively intensive.
Expand the Water Savings Incentive Program (WSIP) (cont.)

- Additional assistance is needed to manage multiple projects across the region. Contract out for marketing, inspections, and some program administration.
- Reduce barriers to participation and simplify contracting.
- Set minimum $$ and water savings thresholds to ensure cost-efficiency.
Program Advisory Committee (PAC) meetings are important for member agency engagement, communication, and program success.

Member agencies value the “practical, detailed, and technical” forum that the PAC provides.

Members want productive, valuable meetings.

Member agencies are anxious to resume these meetings as they were prior to the drought.
7 Do a Final Promotion Before Eliminating Rebates

- Metropolitan and MA’s must determine if and when to terminate rebate programs.
- May consider saturation studies to base decisions on and ID where there may be opportunities to address through MAA programs or targeted pilots.
- As a practice, if funding is available, have one last “fire sale” push before closing down.
Continue the Member Agency Administered Program

- Strong support for this program.
- Mitigates the effect of programming to the least common denominator.
- Flexibility - member agencies appreciate.
- Allows Metropolitan the flexibility to easily modify program elements to accommodate different scenarios
Metropolitan - 10 FTE serving population of 19 million.

Comparison: Southern Nevada Water Authority – 16 FTE serving population of 2.1 million.

Metropolitan has little or no capacity for redundancy or cross training.

Several critical functions have no back up during a prolonged absence or staff vacancy.

Consider Additional Staffing for Water Conservation
Codes, standards, and legislation have played an essential role in increasing water use efficiency.

These types of wide-reaching changes have driven market-scale improvements in water efficiency and reduced per capita consumption.

Metropolitan’s role in driving these efficiency policies was significant.

Metropolitan should continue an active role with the potential to reduce future water demand.
Target Programs to Disadvantage and High Water Users

- Where possible, work with MA’s to target customers across regions.
- High water users have the greatest potential for savings.
- Disadvantaged customers are least likely to benefit from Metropolitan program offerings without assistance.
- These are very different customer groups, but both have potential to benefit.
Thank you

Peter Mayer, P.E., Principal
peter.mayer@waterdm.com