

Conservation and Local Resources Committee

Item #4b

Subject: Discussion on conservation programs and the 2015 IRP Update conservation targets

Purpose: Provide history of Metropolitan's conservation programs and how it relates to the IRP targets

Conservation and Local Resources Committee

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Discussion on conservation programs and the 2015 IRP Update
conservation targets



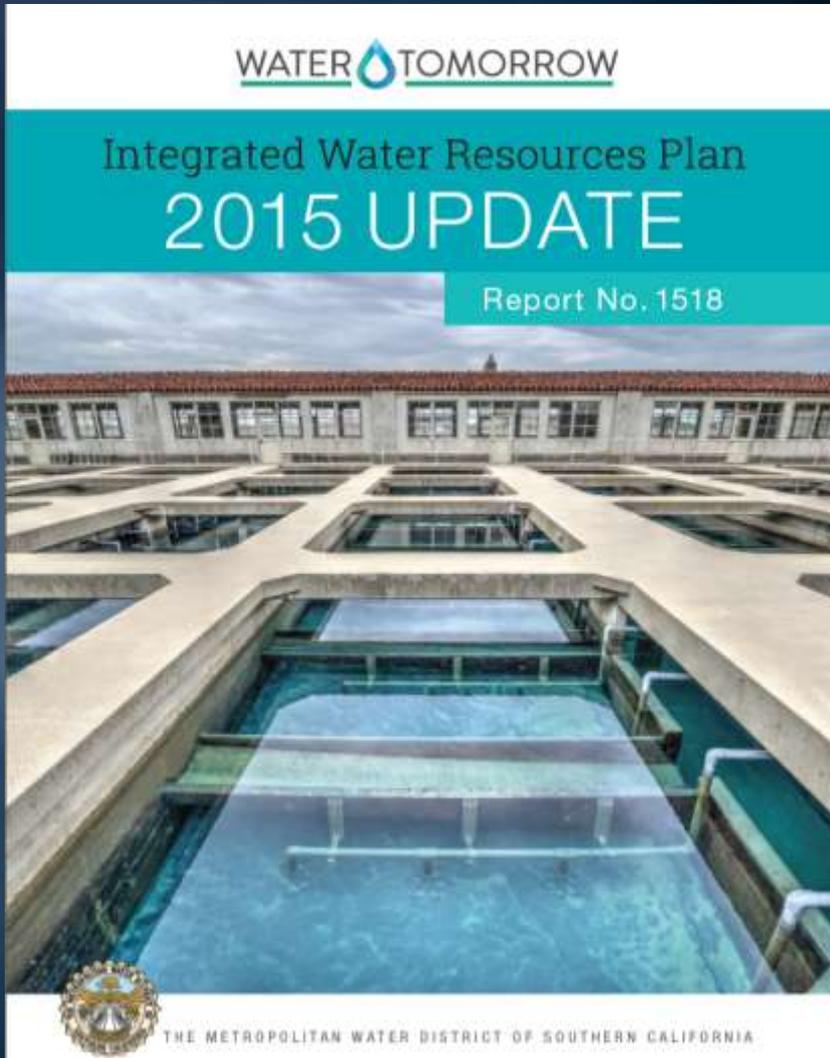
Discussion on Conservation Programs and the 2015 IRP Update Targets

Conservation and Local Resources Committee

Item 4b

November 14, 2017

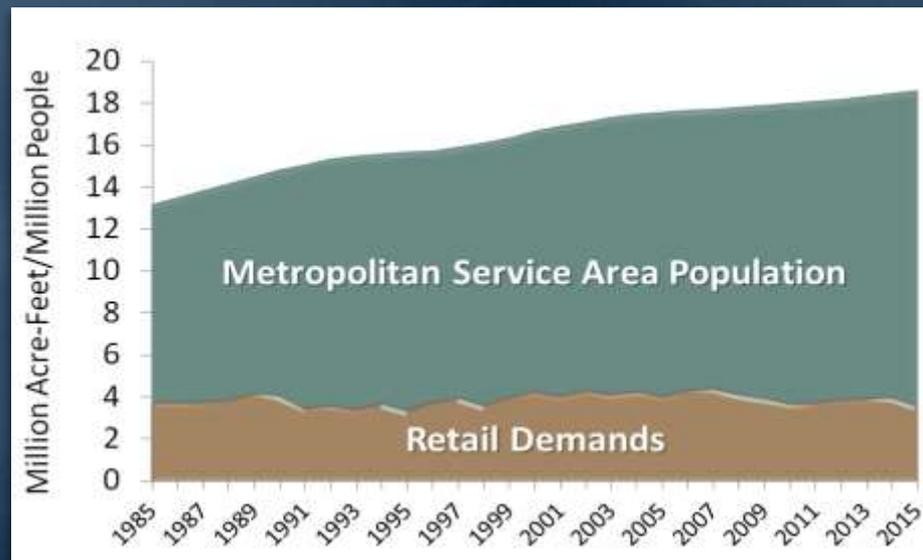
Integrated Water Resources Plan (IRP)



- Long-term strategy to adapt to changing conditions facing Southern California
- Adopt diverse portfolio of supply resources to improve regional supply reliability

Role of Conservation

- Core resource strategy to reduce demands and reliance on imported water
- Adaptive management strategy improves resilience to future conditions



Historic Approach to Conservation

Early Conservation Efforts

- Inception during drought of 1976-1977
- Requested Member Agencies to reduce deliveries by 10%
- Distributed 50,000 conservation kits



CLR Committee

Item 4b



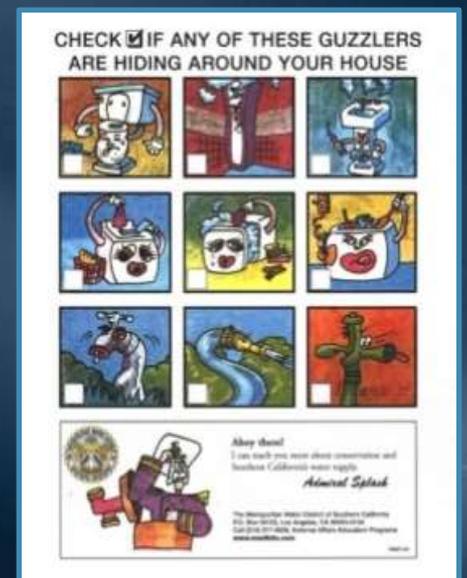
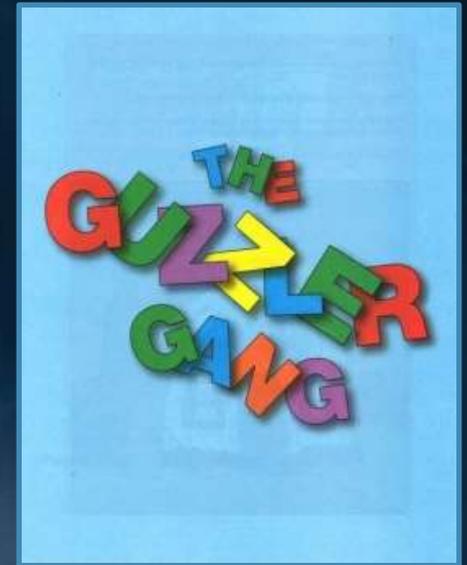
Slide 6



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Early Conservation Efforts

- 1982 - First long-term conservation programs developed
 - Promoted water conservation awareness in schools
- 1985 - Established framework to attain savings goal in Regional Urban Water Management Plan



Conservation Credits Program (CCP) Milestone Dates



Conservation Credits Program Supported Best Management Practices

Creation of BMPs

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graph TD; A[Creation of BMPs] --> B[First IRP goal based on BMPs]; B --> C[CCP spread BMP implementation]; C --> D[BMP reporting incorporated in UWMP Act]; D --> E[Foundation for current conservation efforts];
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First IRP goal based on BMPs

CCP spread BMP implementation

BMP reporting incorporated in UWMP Act

Foundation for current conservation efforts

Current Conservation Programs



Drought Activity

Conservation During the Recent Drought

- Program activity ramped up to meet increased demands for savings
 - Board authorized record \$450M conservation budget
 - Doubled existing turf rebate to \$2 per square foot
 - Rapid increase in rebate and class requests
- Media helped spread conservation awareness



Lessons Learned from the Recent Drought

- Unique environment to expand conservation programs
- Messaging critical to increase consumer awareness about the value of water
- Traditional approaches will remain foundational, but focus on landscape efficiency key for future



2015 IRP Update Targets

2015 IRP Update Targets



Local Resources

- Ensure that total local supply production target of 2.43 MAF in 2040 is reached
- Recognize risks and potentially develop additional supplies



State Water Project

- Manage flow and export regulations through collaborative science-based approaches
- Pursue a long-term Delta solution through WaterFix/EcoRestore



Colorado River Aqueduct

- Develop sufficient programs to ensure 900 TAF of diversions
- Maintain flexible programs to ensure access to 1.2 MAF of diversions in dry-years



Take your turn.
Every drop we save counts.

Conservation

- Pursue savings in outdoor water use (MWELo equivalent)
- Continue device-based approaches in support of target
- Ensure consistency with 20x2020 goals

2015 IRP Conservation Targets

	2016	2020	2025	2030	2035	2040
Code-Based & Past Active	821,000	841,000	869,000	896,000	913,000	941,000
Price-Effect	205,000	215,000	258,000	304,000	350,000	398,000
Subtotal	1,026,000	1,056,000	1,127,000	1,200,000	1,263,000	1,339,000
New Program Savings	8,000	40,000	70,000	110,000	140,000	180,000
Total Target	1,034,000	1,096,000	1,197,000	1,310,000	1,403,000	1,519,000

Influencing Factors

- Per capita water use
- Demographics
- Economy
- Water sales

New Program Savings

- Active conservation programs
- Outdoor water use focus

Code-Based and Past Active Savings



Potential Savings Scenarios

AWE Water Conservation Tracking Tool

- Industry standard tool
- Modified to include programs specific to Metropolitan
- Able to do scenarios including:
 - Water savings analysis
 - Budget or water savings targets
 - Factoring in constraints and scalability

Savings Scenario #1: Status Quo

Assumptions

- Device activity remains same as FY2017
 - Expenditures approximately \$12M
- No changed conditions
- No new actions
- No turf removal program

Scenario #1: Status Quo



Potential Program Refinements

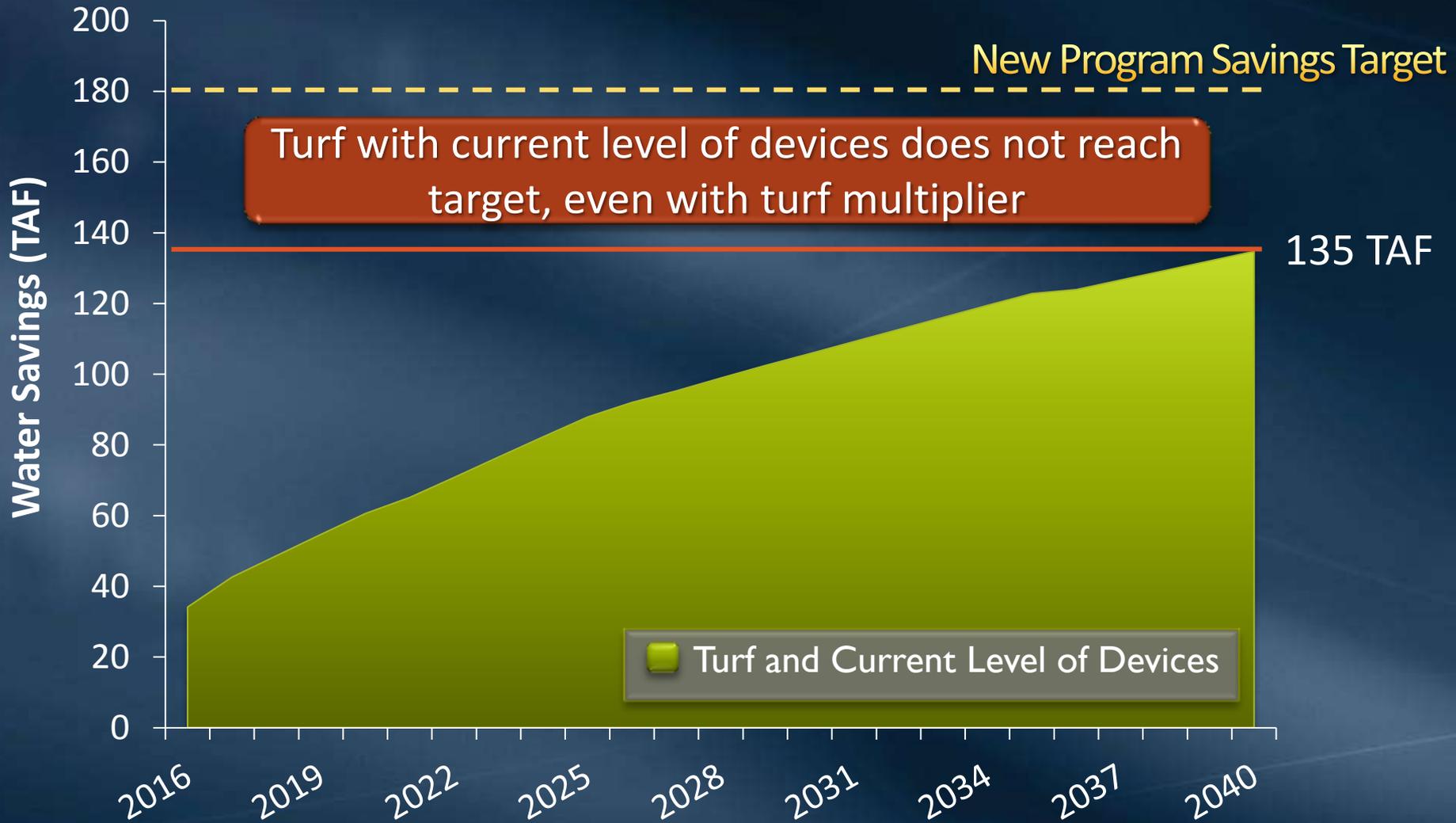
Refined Turf Removal Program

- New regional program to incentivize the removal of turf and landscape transformation
- Require watershed approach that may include:
 - A target percentage of plant coverage
 - Runoff retention
 - Changes to irrigation system
- Consider additional requirements:
 - Residential class participation
 - Pre- and post-inspections

New Program Savings Scenario #2: Refined Turf Removal Program with Multiplier Assumptions

- Used FY2017 as base year for calculations
- Turf Removal and Landscape Transformation Program with limited budget
- Assumes multiplier of 2
- No other new actions
- No direct outreach
- Expenditures approximately \$22M

New Program Savings Scenario #2: Refined Turf Removal Program with Multiplier



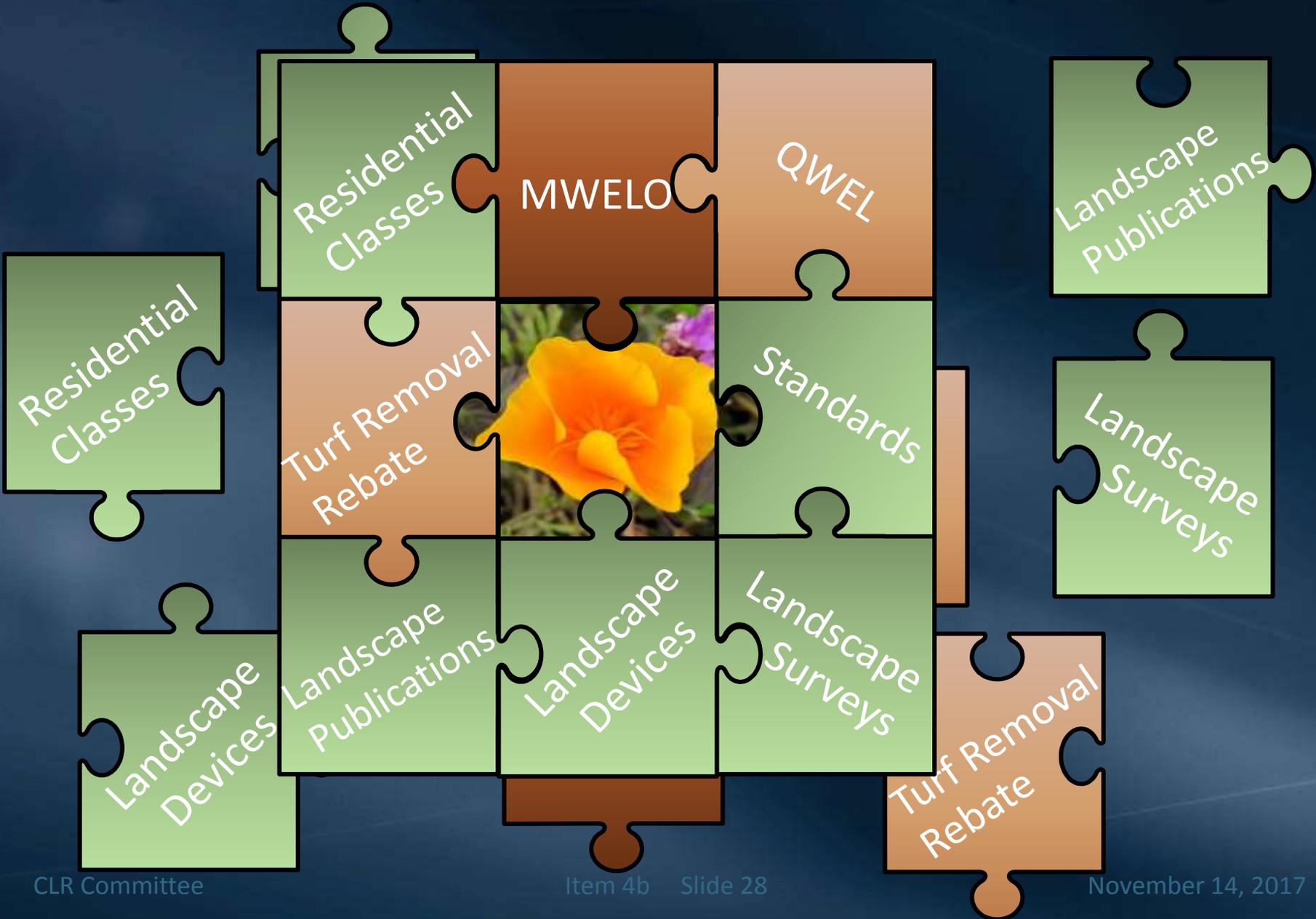
Program Components

to achieve 2015 IRP update target

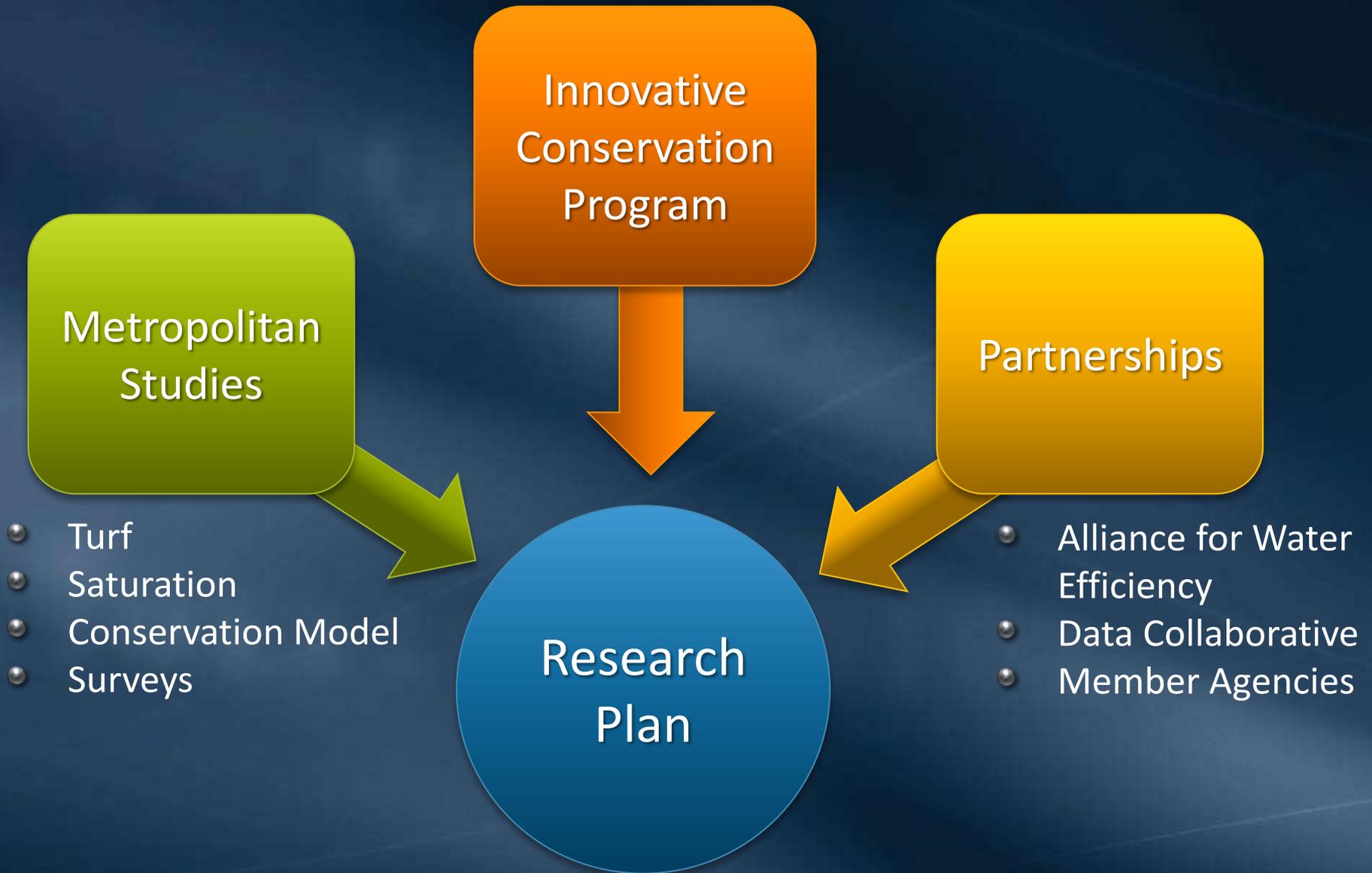


Potential New Integrated Programs to Reach IRP Target

Integrate Comprehensive Landscape Program



Integrate Comprehensive Research Program



Modify Incentives to Motivate Customers

- Pilot Market-Based Incentive for Residential including multi-family
- Expand Public Agency Landscape Program
 - Add plumbing devices to the program
 - Add direct customer and contractor outreach
 - Offer audits of devices, if needed

Modify Member Agency Funding for Local Programs

- Encourage development of innovative local programs
- Increase the total allocated to help agencies implement projects specific to their service area
- Expand eligible projects:
 - Include projects not solely based on water savings
 - Projects that support landscape focus
 - Demonstration gardens
 - Design services

Additional Support Services

- Assistance to Water Efficiency Ordinance Implementation
- Add direct customer and contractor outreach
 - In Store Point-of-Purchase materials
 - Target high-water users
 - Work with plumbing and landscape contractors to promote incentive programs

New Program Savings Scenario #3: New Actions

Assumptions

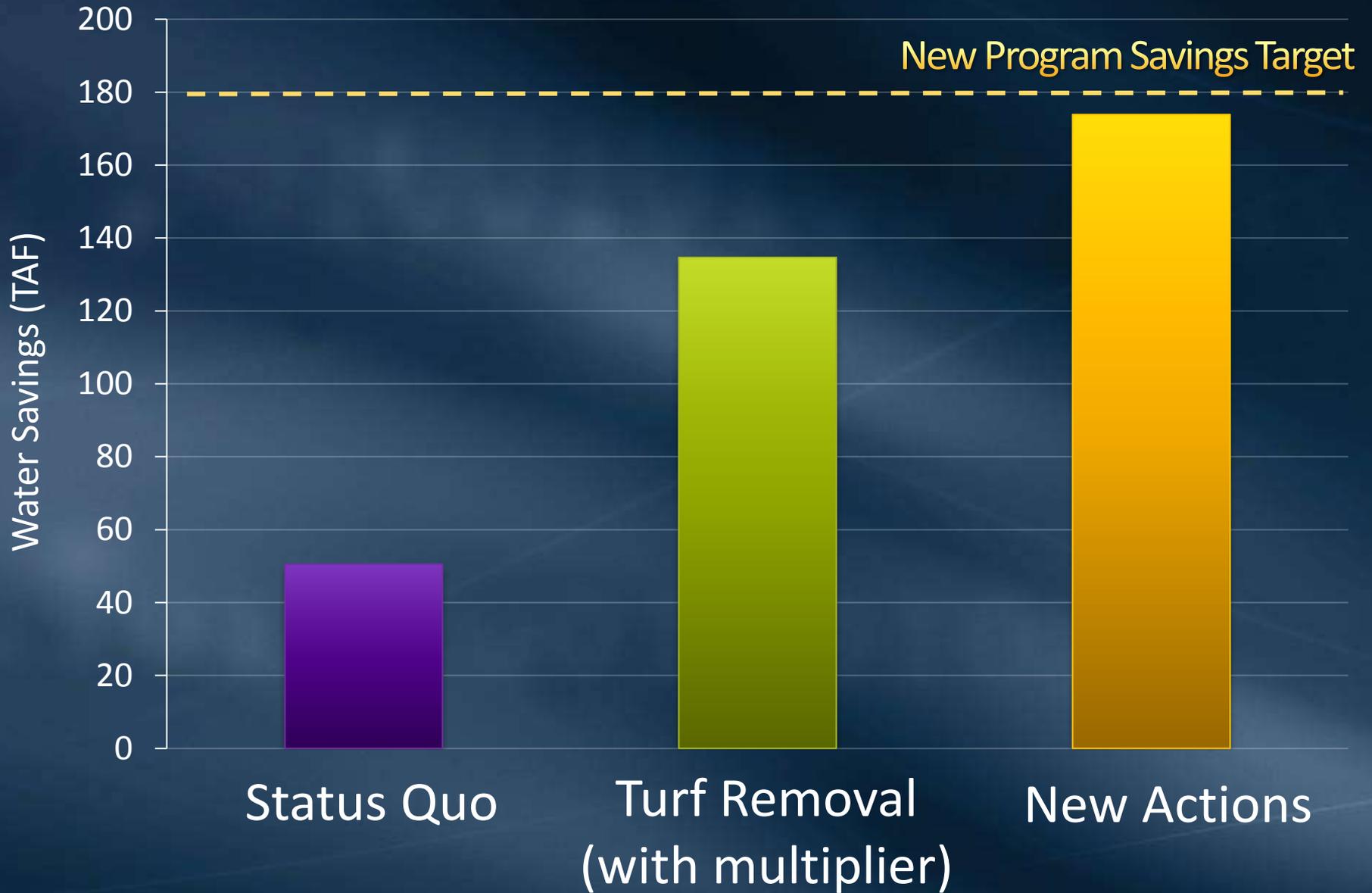
- Used FY2017 as base year for calculations
- Landscape and device actions included
 - Turf Removal Program with limited budget
 - Public agency plumbing devices
 - Residential market-based incentive
- Expenditures approximately \$38M
 - Does not include outreach

New Program Savings Scenario #3: New Actions



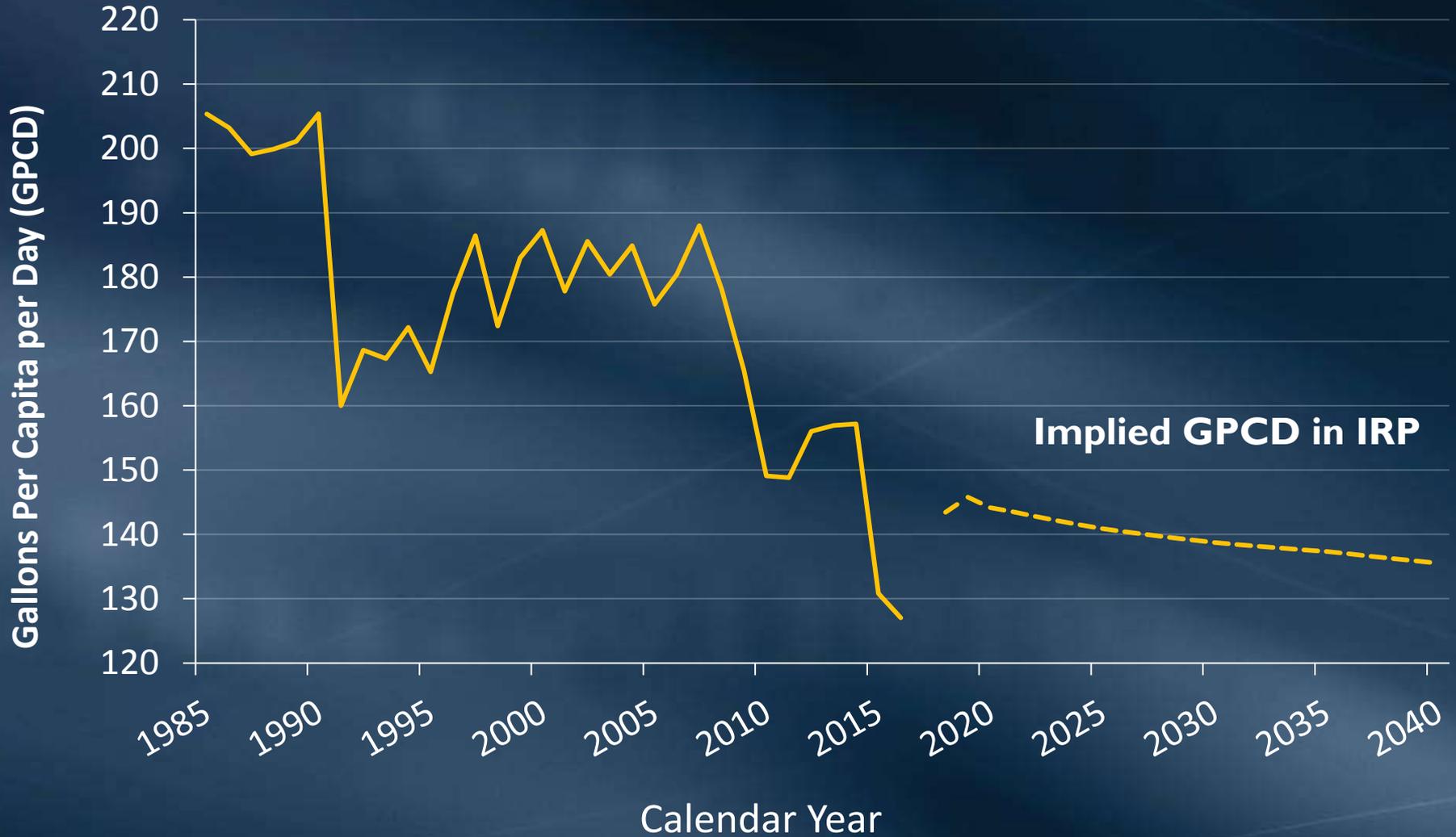
Comparison of New Savings Projections

Comparison of New Savings



Measuring Success

Potable GPCD History and IRP Projection



Specific Indicators to be Considered

- Conservation savings compared to IRP Target
- GPCD
- Water Sales
 - Metropolitan level
 - Retail level
- Demographics

Summary

- Conservation plays a key role in regional demand management and supply reliability
- Changing conditions in region call for adaptable conservation strategies
- Program changes focus on landscape efficiency to achieve IRP targets

Next Steps

- Continue to work with committee leadership to identify appropriate use of data and reporting
- Continue to assess water savings data
- Continue to refine new program ideas
- Bring program modifications to the Board as needed

