

Integrated Resources Planning Committee (ORAL REPORT required, hide slide)

Item #4b

Subject: Review of current IRP targets and initial look at changed conditions

Purpose: The purpose of this oral report is to provide the IRP committee with a review of the 2010 IRP Targets, progress towards those targets, and an update on changed conditions

Integrated Resources Planning Committee (ORAL REPORT required, hide slide)

Item #4c

Summary

This report provides a review of the 2010 IRP Targets by resource area, progress towards those targets, and an update on changed conditions



Review of IRP Targets and Initial Look at Changed Conditions

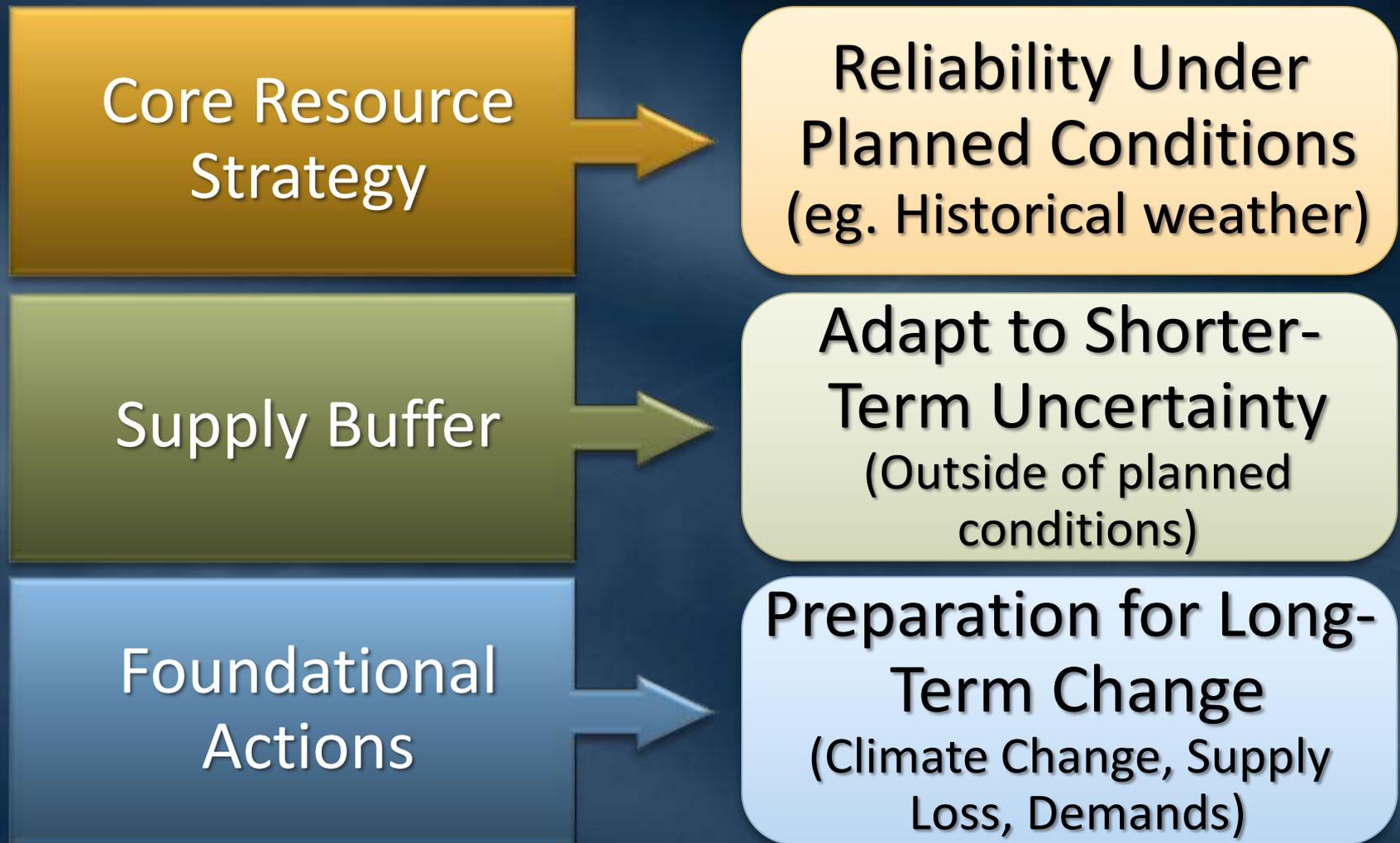
Integrated Resources Planning Committee

Item 4b

April 28, 2015

IRP Adaptive Management Approach

Blueprint for Adapting to Change



IRP Development Goals

Water Use Efficiency

- Achieve a 20% reduction in GPCD as a region by 2020

Local Resources

- Develop ~100 TAF through incentives and partnerships

SWP

- Seek short, mid, and long-term Delta improvements

CRA

- Develop Dry-Year supply programs to fill the aqueduct when needed

IRP Technical Update Topics

How are We Doing?

- Water Use Efficiency
- Local Resources Augmentation
- State Water Project
- Colorado River Aqueduct
- Other Factors
 - Retail demands
 - Other local supplies
 - Storage and transfers

Water Use Efficiency



2010 IRP Update Target

Water Use Efficiency

- Achieve a 20% reduction in GPCD as a region by 2020

- Conservation and recycling
- 20% reduction in GPCD calculated in 2010
 - 580 TAF of additional WUE by 2020
- Development beyond forecast of conservation and recycling
- Total annual targeted development
 - 2015: 1.29 MAF + 290 TAF target = 1.58 MAF
 - 2035: 1.59 MAF + 580 TAF target = 2.17 MAF

Types of Conservation Savings

- Active
 - Agency driven
- Code-Based “aka Passive”
 - Plumbing codes and ordinance driven
 - Tied to demographics
 - New home construction/sales/turnover
 - Employment/jobs
- Price and other
 - Behavioral change
 - Other activity driven by increasing water price not covered by Active or Code-Based

Major Changed Conditions

- Revised demographics resulting from 2010 Census
 - Re-benchmarked DOF
 - SCAG RTP 12 and SANDAG Series 12
- Updated Conservation Savings Model projections
- Revised recycled water projections

Demographic Changes Impact the WUE Target

Demographics

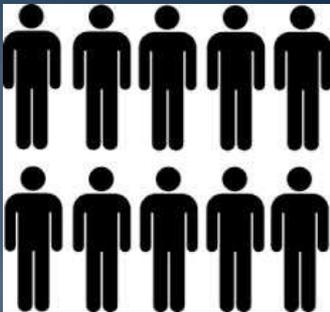
GPCD Calculation Example



Gallons

12,000

÷



Person

3

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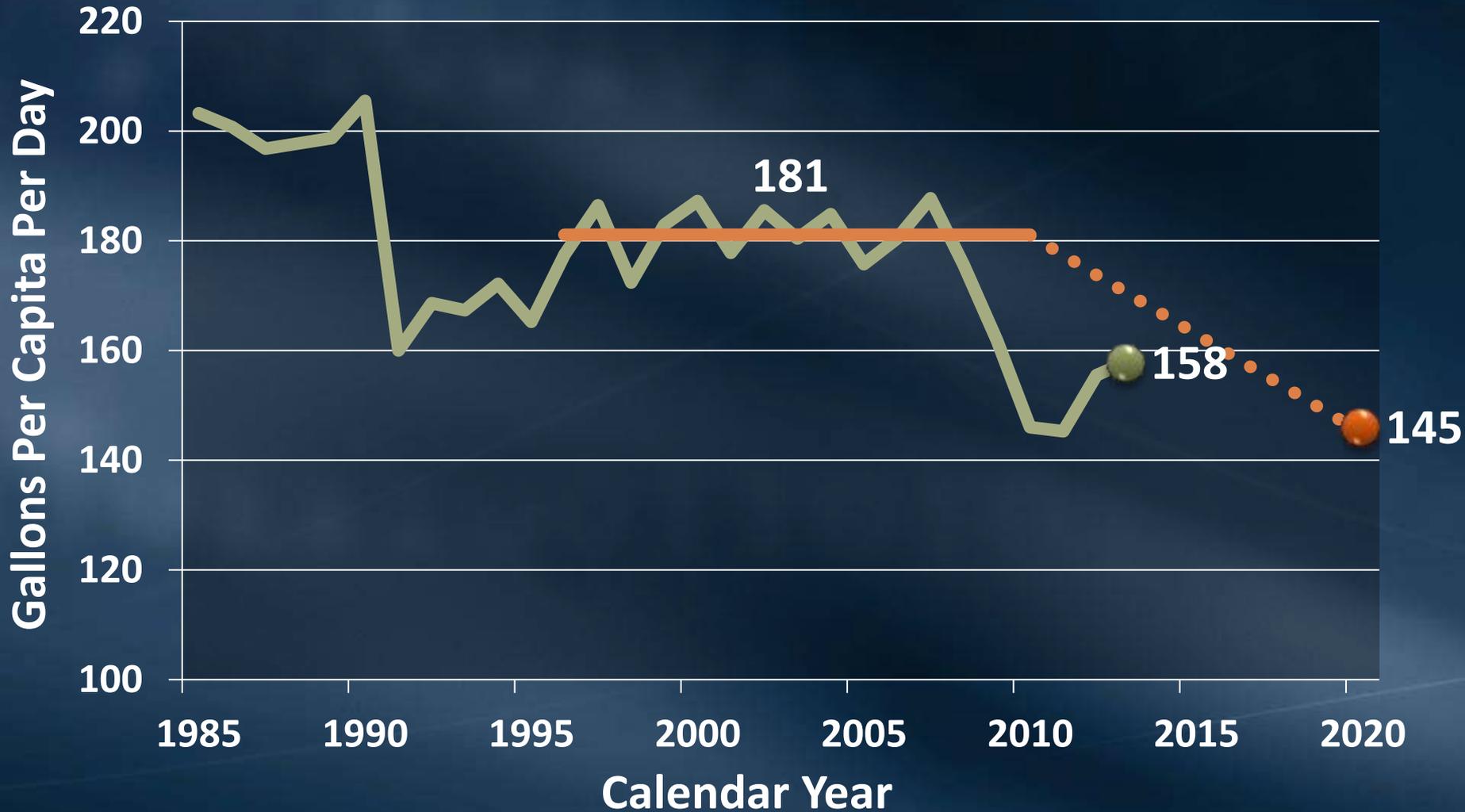


Day

30

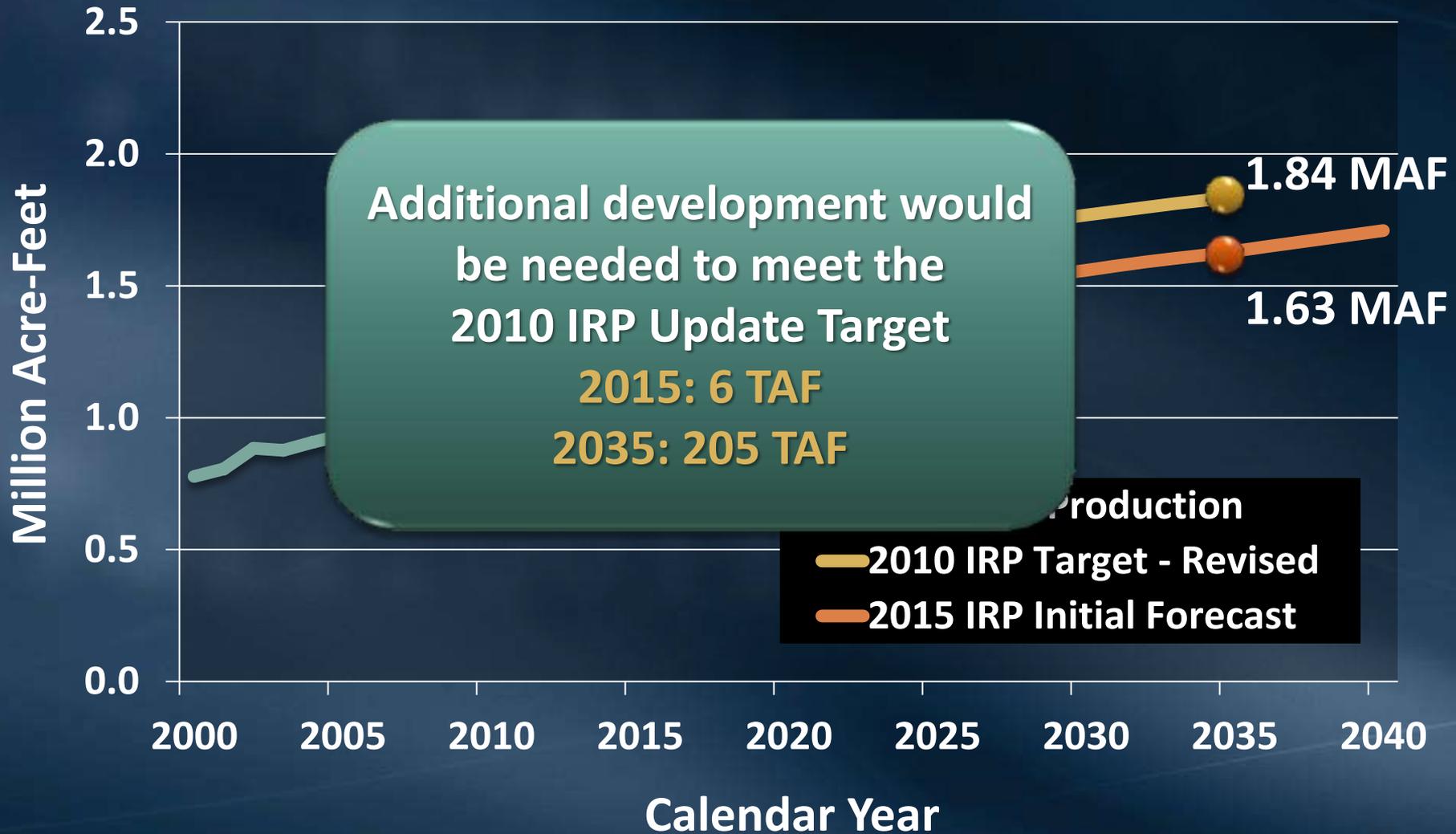
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GPCD

20% Regional Reduction in Potable GPCD by 2020



Water Use Efficiency

2010 IRP Target and Initial 2015 Forecast



Issues for IRP Technical Process

- Conservation model assumptions and methodology
- Status of existing and under construction recycling projects
- Inventory of potential future projects

Local Resources Augmentation



2010 IRP Update Target

Local Resources

- **Develop ~100 TAF through incentives and partnerships**

- Groundwater recovery, seawater desalination, and recycling
 - Assumes recycling goes towards WUE target
- Development beyond forecast of existing and under construction projects
- Total annual targeted development
 - 2015: 122 + 72 target = 194 TAF
 - 2035: 150 + 102 target = 252 TAF

Major Changed Conditions

- Timing and yield of existing and under construction projects
 - SDCWA seawater desalination

Development Towards IRP Target

- New annual groundwater recovery since 2010
 - 2015: 5 TAF
 - 2035: 38 TAF
- New annual seawater desalination since 2010
 - 2015: 20 TAF
 - 2035: 52 TAF
- Total annual forecasted development
 - 2015: 137 TAF
 - 2035: 203 TAF

Local Resources Augmentation

2010 IRP Target and Initial 2015 Forecast



Issues for IRP Technical Process

- Status of existing and under construction groundwater recovery and seawater desalination projects
- Inventory of potential future projects

State Water Project



2010 IRP Update Target

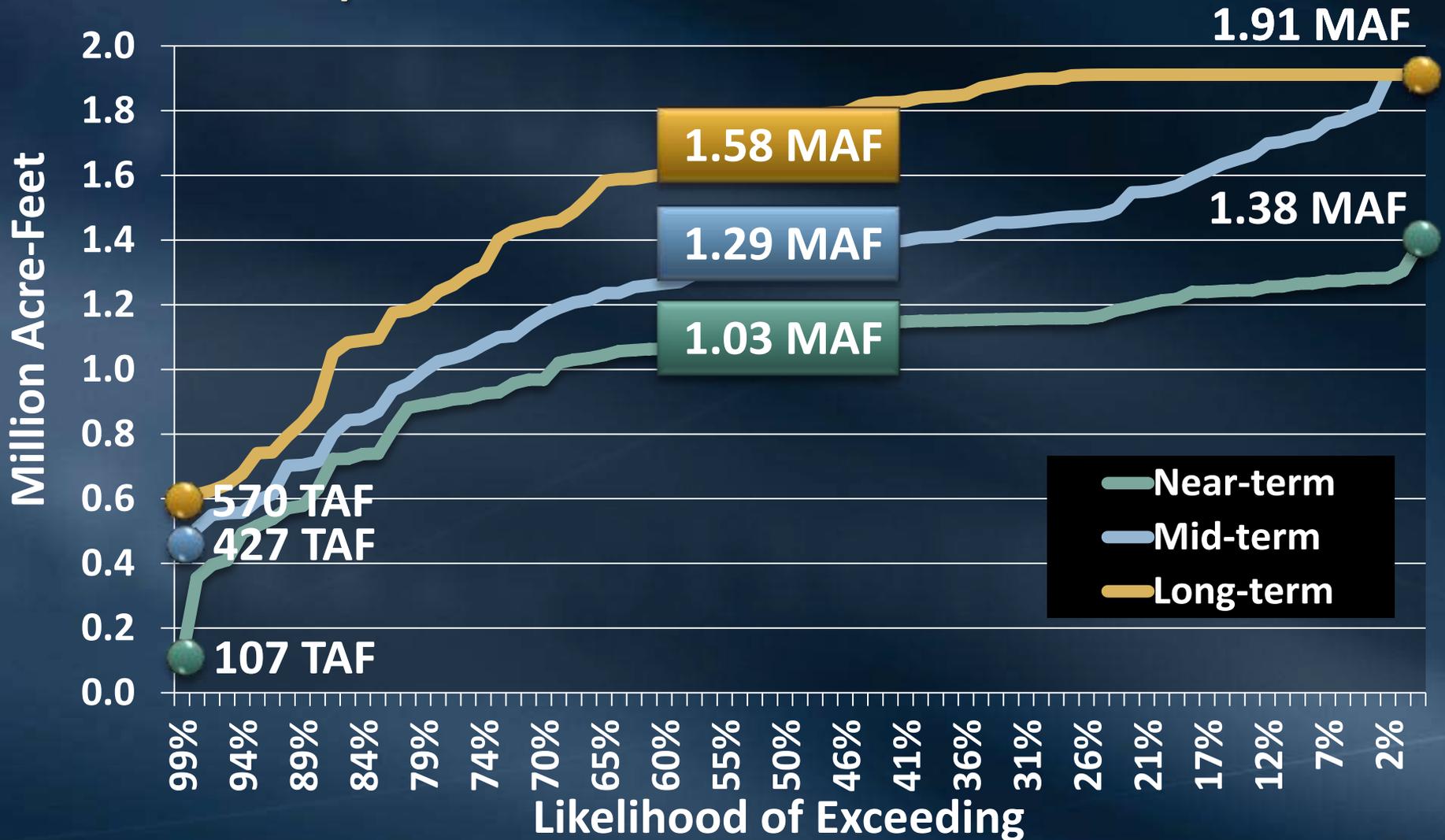
SWP

- **Seek short, mid, and long-term Delta improvements**

- Near-term 2010 – 2012
 - Draft 2009 DWR SWP Reliability Report
- Mid-term 2013 – 2021
 - Ten percent reduction in impacts over the near-term assumption
- Long-term 2022 – 2035
 - 2005 DWR SWP Reliability Report

State Water Project Supplies

2010 IRP Update Forecast



Major Changed Conditions

- Updated DWR modeling studies
 - 2013 Reliability Report
- Revised outlook for mid-term improvements
- Timing and yield of Delta improvements
 - BDCP Proposed Project

Average State Water Project Supplies

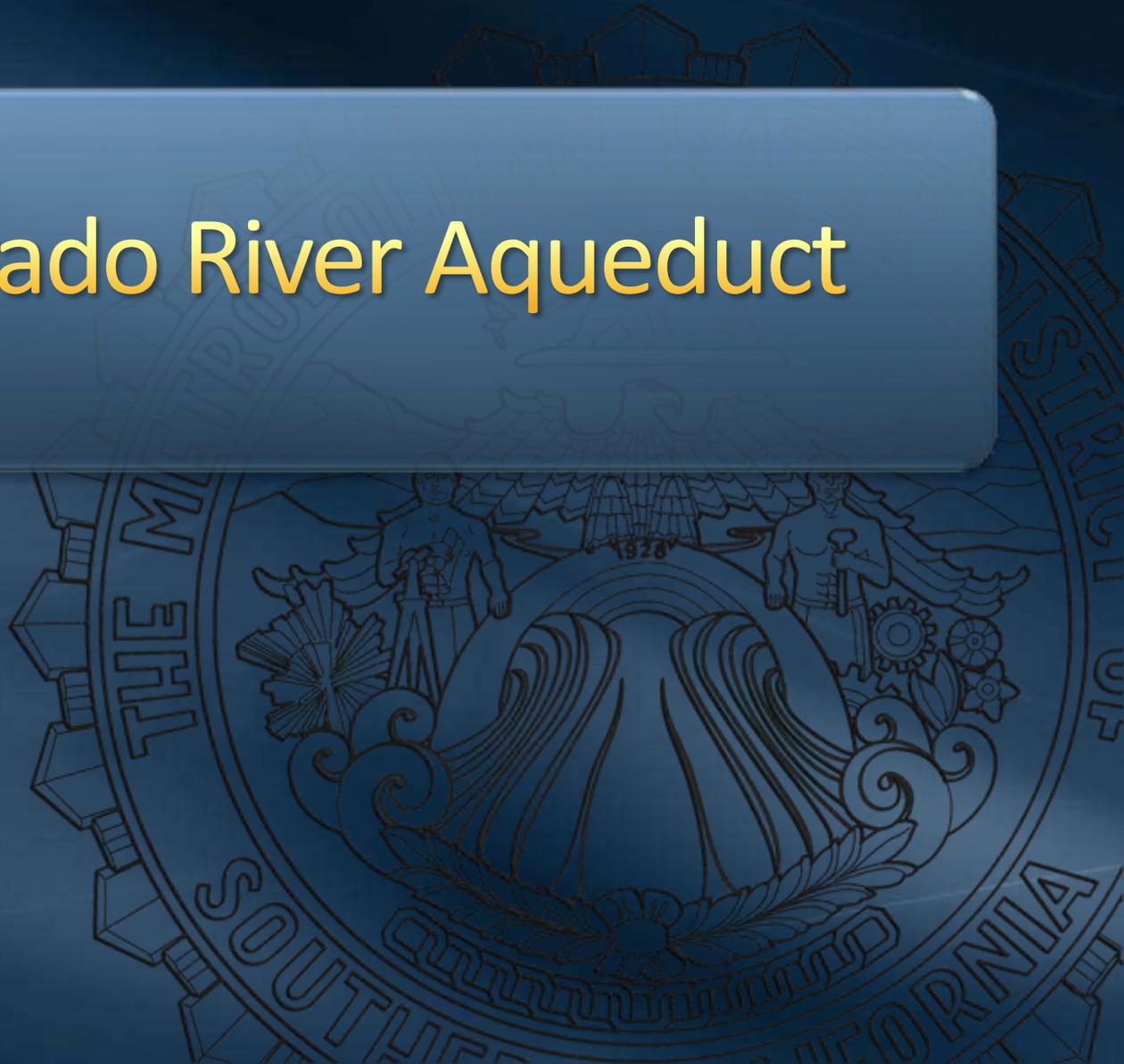
2010 IRP Target and 2015 Initial Forecast



Issues for IRP Technical Process

- Extended hydrology forecast
- Review of BDCP scenarios and refinements
- Future scenario with no BDCP

Colorado River Aqueduct



2010 IRP Update Target

CRA

- **Develop Dry-Year supply programs to fill the aqueduct when needed**

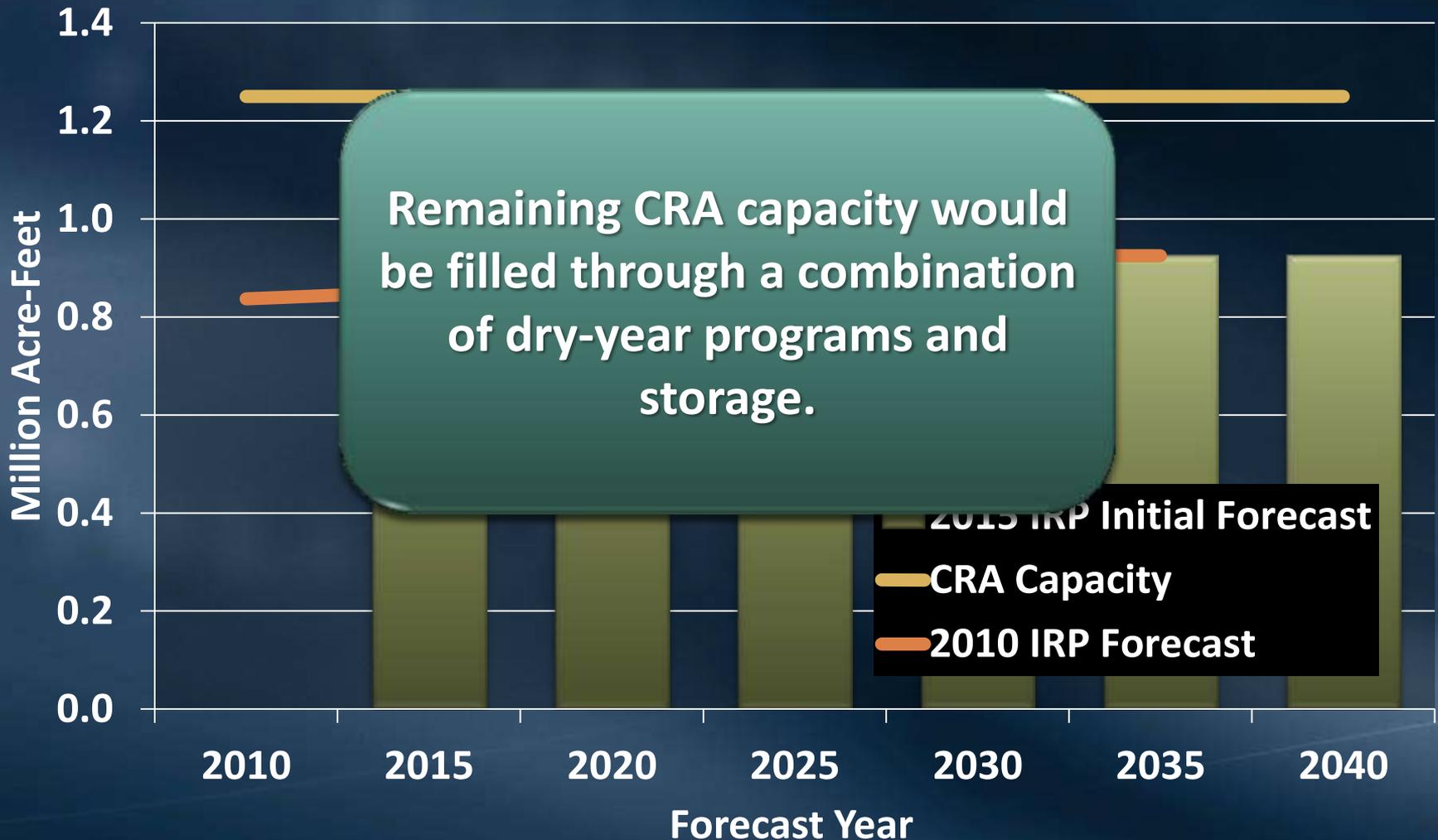
- Colorado River Aqueduct capacity assumed to be 1.25 MAF annually
- Dry-year forecast based on average of driest 10% of hydrology set
 - **Included Basic Apportionment, Surplus, current programs, and adjustments**
- Remaining capacity would be filled by dry-year program development and storage

Major Changed Conditions

- Updated near and long-term outlook for Colorado base supplies
 - CRSS initial conditions updated from USBR 24-Month Study as of January 2015
- Continued development of CRA programs and dry-year supplies

Colorado River Dry-Year Supplies

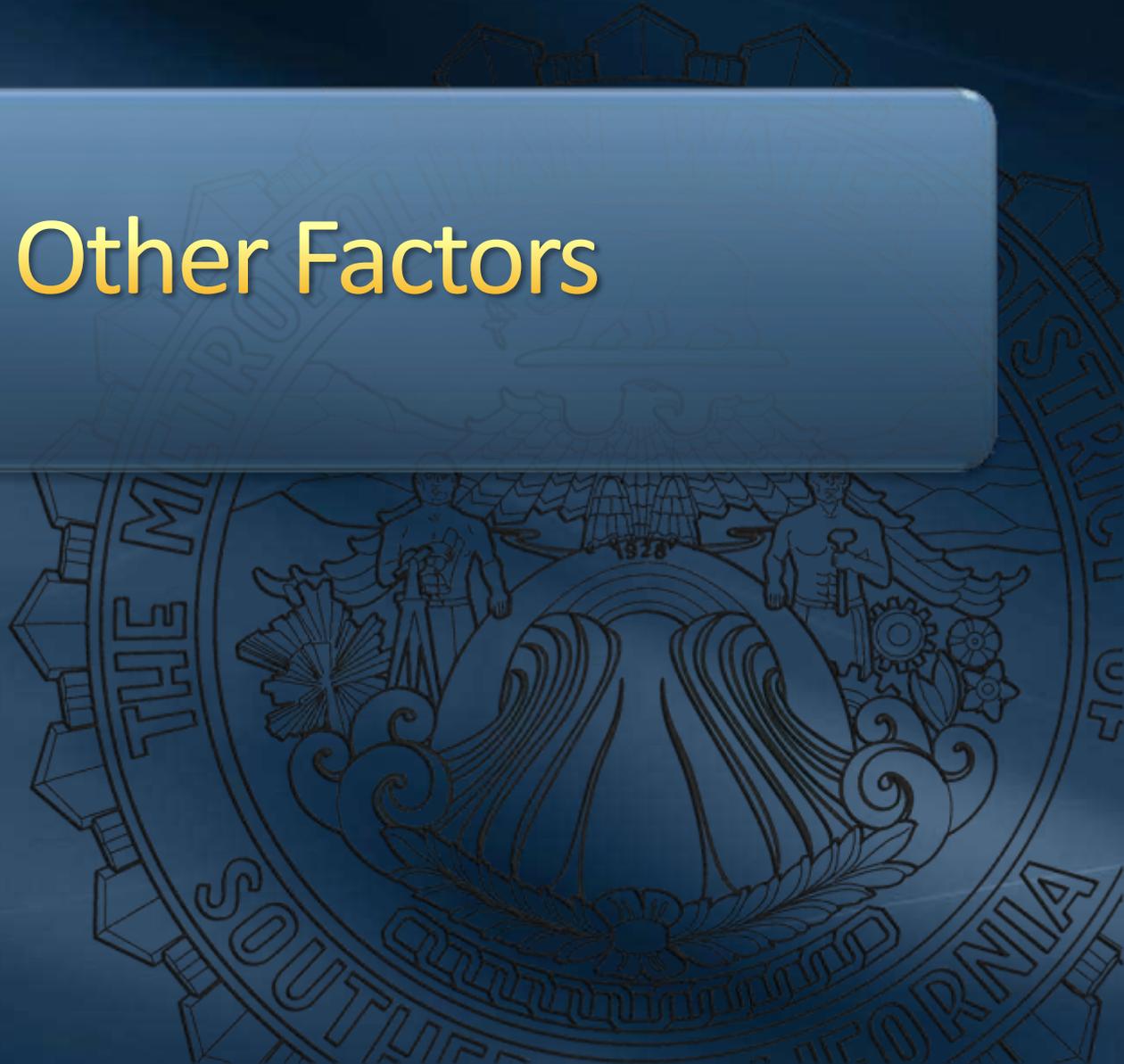
2010 IRP Target and 2015 Initial Forecast



Issues for IRP Technical Process

- Extended hydrology forecast
- Modeling of supplies that vary by hydrology

Other Factors



Other Important Areas to Consider

- Retail Demands
- Other local supplies
 - Groundwater
 - Surface water
 - Los Angeles Aqueduct
- Storage and Transfers

Major Changed Conditions

- Revised demographic projections
 - SCAG RTP 12 and SANDAG Series 12
- Declining local groundwater basin levels
- Reduced availability of supplies for groundwater recharge
- Updated Los Angeles Aqueduct forecast
 - Forecast provided by LADWP
- Updated surface water forecasts
 - Major reservoirs modeled based on hydrologic conditions

Issues for IRP Technical Process

- Update to SANDAG Series 13
- New retail demand modeling platform
- Review of groundwater basin production levels
- Implications of passive and active recharge availability
- New Los Angeles Aqueduct forecast with extended hydrology
- Updated assessment of local reservoir production

Storage and Transfer Targets

IRP 1996-2004

- In-Region Surface Water Storage
 - 620 TAF of dry-year storage capacity
- In-Region Groundwater Storage
 - 300 TAF of dry-year yield
- Central Valley/State Water Project Storage and Transfers
 - 300 TAF of dry-year yield

Summary

- Initial look at IRP targets and current conditions for 2015
- Technical process will look at each area in depth
 - Discuss related issues
 - Incorporate refinements
- Final forecasts to reflect Member Agency and Board input

