

IRP Committee

Item #6a

Subject: Draft 2015 Integrated Water Resource Plan Update

Purpose: The purpose of this item is to transmit the Draft 2015 IRP Update report

## IRP Committee

Item #6a

### Summary








This oral report provides an overview of the Draft 2015 IRP Update. This overview includes a look at the structure and main message items of the Draft 2015 IRP Update report.



# Draft 2015 Integrated Water Resources Plan Update

Integrated Resources Planning Committee  
Item 6a  
December 7, 2015

# 2015 Draft IRP Update Report Outline and Content

-  Foreword and Executive Summary
-  Background, Challenges, Changed Conditions
-  Process of Regional Collaboration
-  Outlook of Demands and Supplies
-  An Adaptive Management Strategy
-  Closing Materials
-  Appendices

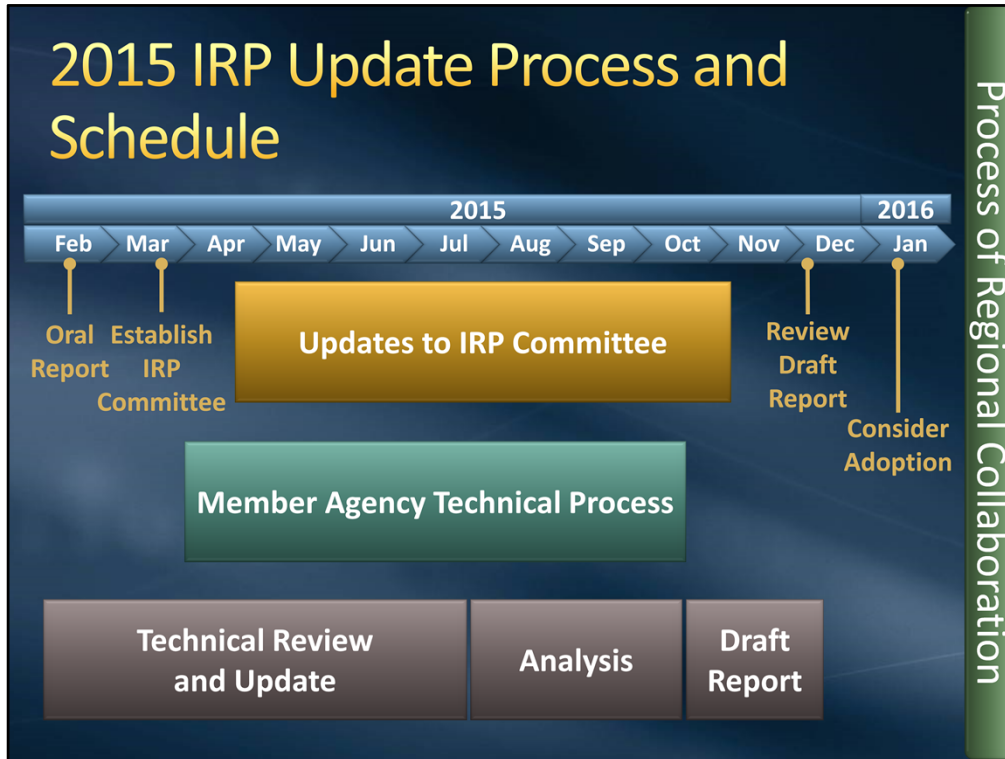
# Background & Changed Conditions

## Changes Since the 2010 IRP Update

- Demands
  - Lower demographic projections
  - Significant new conservation savings
- Local supplies
  - Some new supplies coming online
  - Major reductions in groundwater projections
- Delta fix
  - Projected yield of SWP is lower
- Additional risks to consider

# Process of Regional Collaboration

- The 2015 IRP Update Approach
- Board of Directors Oversight and IRP Committee
- Collaboration with Member Agencies
- Public Outreach



Internal Process –  
Ongoing

MA Technical Process –  
MA workgroup meetings twice a month April through August, as needed through October  
WUE meetings monthly standing meeting April through July

Board –  
Reporting in Feb and March (IRP Committee)  
Monthly Updates from MA tech process  
Wrapping up around the end of the year, head into Board Policy Process

Following slides breakdown activities at Board and MA levels

# Public Outreach

- Southern California Water Committee
- Southern California Water Dialogue
- Water Tomorrow Workshop
- Encouraging continued engagement

**WATER TOMORROW**  
Integrated Water Resources Plan

**WORKSHOP REMINDER**

**Thursday, October 22**

**9:30 a.m. – 3:30 p.m.**  
METROPOLITAN WATER DISTRICT HEADQUARTERS  
700 N. Alameda Street  
Los Angeles, CA 90012  
adjacent to historic Union Station

Forum to discuss  
Southern California's  
Water Future:

**WATER TOMORROW**  
Integrated Water Resources Plan

The Metropolitan Water District of Southern California is updating its water resources plan that guides the way supplies are developed and managed. **Water Tomorrow** will be a roadmap for securing the Southland's water supply reliability over the next 25 years.

Questions. Email [MWDIRP@mwdh2o.com](mailto:MWDIRP@mwdh2o.com)

Process of Regional Collaboration

SCWC – June “drought proof strategy” 150 people  
SCWC - August future of outdoor water conservation 125 people  
SCWD – September overview of IRP and technical analysis 75 people  
Workshop – 450 people

Continued engagement – public speakers for community and business  
Social media  
Innovation game

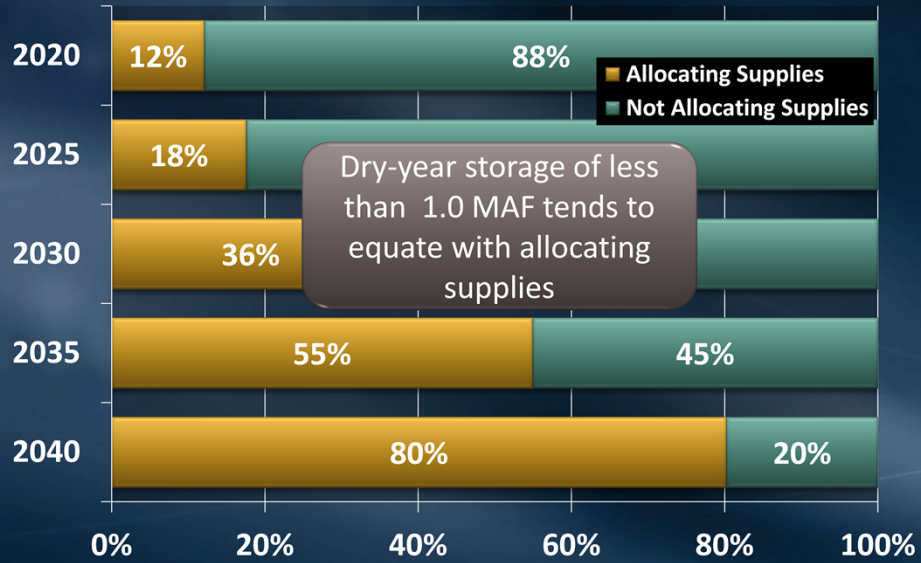


# Outlook of Demands and Supplies

- Description of Water Conservation
- Description of Regional Water Resources
- Forecasting the Regional Need
- Imported Supply Forecasts
- Remaining Need: The Regional Water Balance
  - Analysis of the “Do Nothing” Case

# The “Do Nothing” Case Results in Increasing Frequency of Allocations

Outlook of Demands and Supplies



# An Adaptive Management Strategy

- Resource and Conservation Reliability Targets
  - Reliability with Target Development: The “IRP Approach” Case
  - Transfers and Exchanges Strategy
- Additional Risk and Uncertainty
  - Potential development needed to meet risks and uncertainties
  - Future Supply Actions

# Draft 2015 IRP Update Targets

## Colorado River Aqueduct

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

CRA (MAF)	2016	2020	2025	2030	2035	2040
Minimum Diversion Target	0.90	0.90	0.90	0.90	0.90	0.90
Dry-Year Diversion Target	1.20	1.20	1.20	1.20	1.20	1.20

# Draft 2015 IRP Update Targets

## State Water Project

- Manage flow and export regulations through collaborative science-based approaches
- Pursue a long-term Delta solution through continued participation in the California WaterFix/California EcoRestore efforts

SWP (MAF)	2016	2020	2025	2030	2035	2040
Minimum Deliveries	0.21	0.23	0.23	0.31	0.31	0.31
Average Deliveries	1.20	0.98	0.98	1.21	1.21	1.21
Maximum Deliveries	2.02	1.70	1.70	1.86	1.86	1.86

# Draft 2015 IRP Update Targets

## Conservation

- Pursue additional savings through the State's Model Water Efficient Landscape Ordinance
- Continue device-based programs in support of achieving conservation targets
- Ensure consistency with 20x2020 goals

Conservation (MAF)	2016	2020	2025	2030	2035	2040
Total Conservation Target	1.03	1.10	1.20	1.31	1.40	1.52

# Draft 2015 IRP Update Targets

## Local Supplies

- Ensure that the total local supply production target is reached
  - 2.43 MAF by 2040
  - 230 TAF increase projected from 2016 to 2040
- Recognize risks and potentially develop additional supplies
  - 2014 actual local supplies were only 1.95 MAF

Local Supplies (MAF)	2016	2020	2025	2030	2035	2040
Total Local Supply Target	2.20	2.31	2.36	2.39	2.41	2.43

# Draft 2015 IRP Update Targets

## Total Supply Reliability

Total (MAF)	2016	2020	2025	2030	2035	2040
Retail Demands before Conservation	4.88	5.22	5.39	5.53	5.66	5.79
Total Conservation Target	1.03	1.10	1.20	1.31	1.40	1.52
Retail Demands after Conservation	3.84	4.12	4.19	4.22	4.26	4.27
Minimum CRA Diversion Target	0.90	0.90	0.90	0.90	0.90	0.90
Average Year SWP Target	1.20	0.98	0.98	1.21	1.21	1.21
Total Local Supply Target	2.20	2.31	2.36	2.39	2.41	2.43
Total Supply Reliability Target	4.30	4.19	4.24	4.50	4.52	4.54

An Adaptive Management Strategy



# The "IRP Approach" Case Resolves Most Need for Allocations

An Adaptive Management Strategy



# Transfers and Exchanges Strategy

- Develop a comprehensive strategy to address near-term needs and build storage
  - Focus on obtaining additional supplies in normal and wet years
- Ensure strategy works in conjunction with Metropolitan and local storage

Message, we are prepared for a dry year!

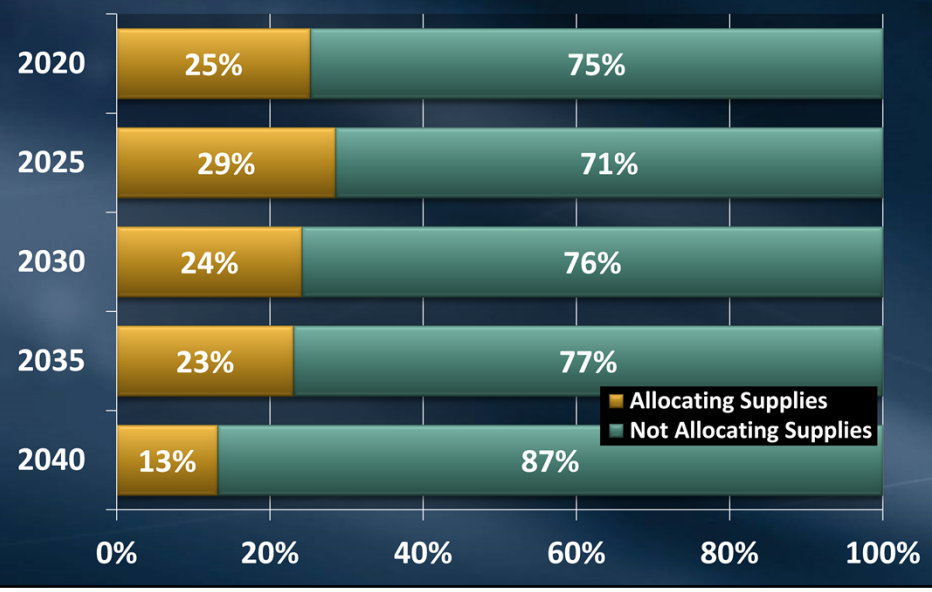
2013 ending balance - 2.353 MAF, rounds to 2.4 MAF

## Additional Risk and Uncertainty

- Climate change
- Water quality
- Regulatory and operational changes
- Project construction and implementation
- Infrastructure reliability and maintenance
- Demographic growth and uncertainty

# The "IRP Approach" Case with Local Supply Risk

An Adaptive Management Strategy



## Future Supply Actions

- Low cost/low risk actions to prepare for additional development as needed
  - Recycling, groundwater recovery, stormwater, seawater desalination
  - Formerly known as “Foundational Actions”
- Categories of Future Supply Actions
  - Public Outreach
  - Legislation/Regulation
  - Technical Studies/Support
  - Land/Resource Acquisition

# Closing Materials

- Information for Future Discussions
  - A Glance at Future Resource Development Costs
  - Monitoring Uncertainty and Identifying Vulnerability
- Findings and Conclusions

## 2015 Draft IRP Update Appendices

- Additional Background
- 2015 IRP Update Issue Paper Addendum
- Central Valley Storage and Transfer Programs
- In-Region Storage Programs
- Local Resource Projects
- Regional Demographic Projections
- Econometric Demand Model
- Demand Forecast Methodology

## 2015 Draft IRP Update Appendices

- Conservation Savings Model
- Imported Supply Forecasts
- IRPSIM Model
- Cost Data



## Next Steps

- Incorporate feedback back from today's IRP Committee meeting
- January 11, 2016 consider adoption of the 2015 IRP Update

