



Metropolitan Water District 2015 IRP Update

Upper District Water Policy Committee Meeting
January 27, 2016

2015 IRP Update Process and Schedule



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

2015 IRP Update Public Outreach

- Southern California Water Committee
 - Stormwater
 - Outdoor water conservation
- 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

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

Reliability Discussion



What Does Reliability Mean?

Nothing comes out the tap?



Limited outdoor watering?



Limits enforced by fines and penalties?

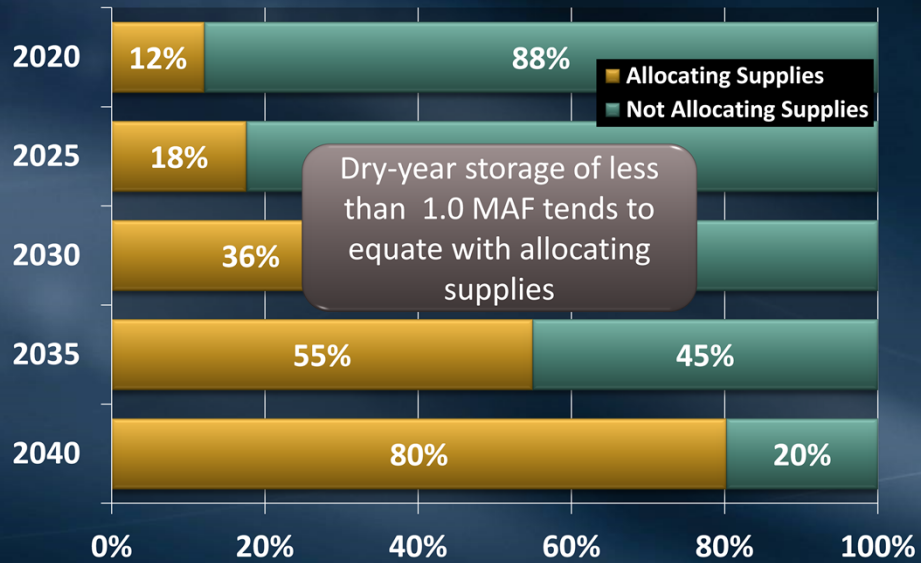
What is the Purpose of Reliability Analysis?

- Evaluates whether a supply mix meets demands in a manner consistent with reliability goals
- Serves as a test case
 - Tests supply and demand forecasts
 - Test ranges and variability due to climate and hydrologic factors sampled from 1922-2012
- Shows how many times out of 91 that there is no shortage, and what the resulting storage conditions are

2015 IRP Update Targets



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



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

The "IRP Approach" Case Resolves Most Need for Allocations



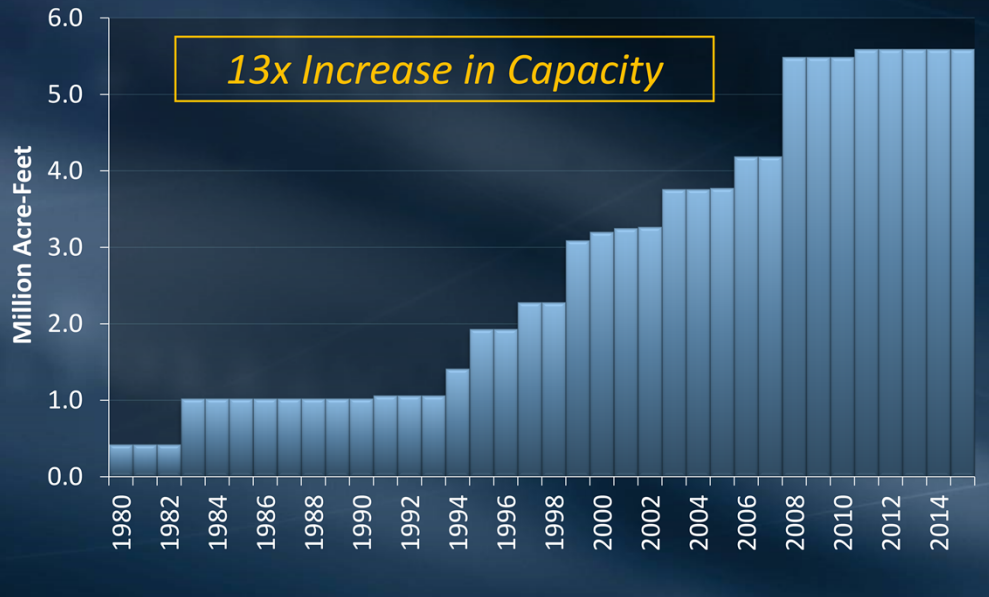
Transfers and Exchanges Strategy

- 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

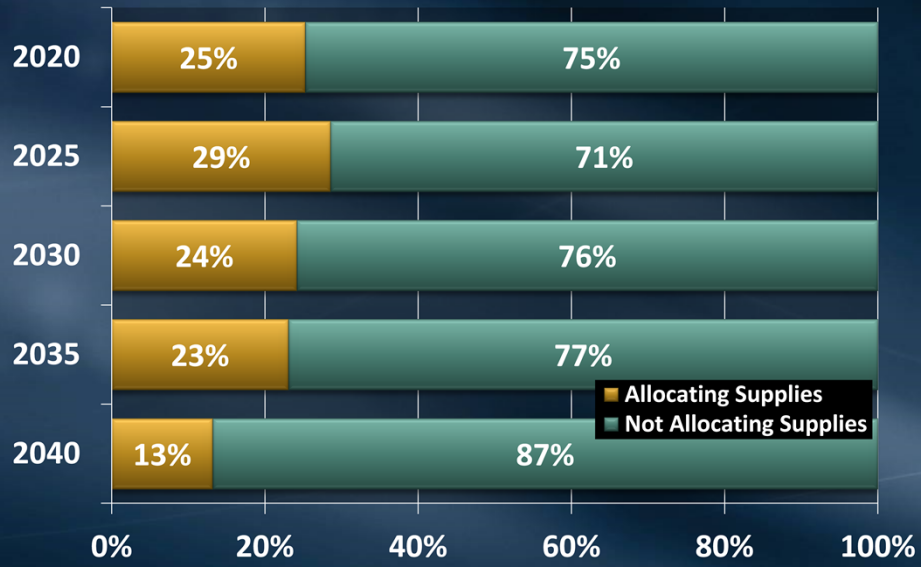
Metropolitan's Storage Capacity



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



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

IRP Next Steps: Policy Phase



Policy Issues Have Been Identified

- Policy issues were identified through IRP Committee discussion, IRP Technical Workgroup, IRP Issue Paper review, and public outreach
- Policy discussion and direction is needed to effectively implement IRP targets
 - Regional and retail water supply reliability
 - Conservation program and approach
 - Local Resources development and regional role
 - Storage management goals and operational framework
 - Transfers and Exchanges approach

Summary of Policy Questions

(Details Presented in December 2015)

- Regional and retail water supply reliability
 - Is reliability a guarantee?
 - What level of reliability should we plan for?
- Conservation program and approach
 - How do we achieve permanent reductions in outdoor water use in conjunction with MWELO?
- Local Resources development and regional role
 - What is the regional role in developing local water?

Summary of Policy Questions

(Details Presented in December 2015)

- Storage management and operational framework
 - How should regional and local storage work to meet reliability?
- Transfers and Exchanges
 - How can transfers and storage work together to improve reliability?

A Focus on Policy Principles

- Implementing the IRP Targets has been accomplished in the past through programs like the LRP and Conservation Credits Program
- Policy principles will help to guide in the review and reformation of program implementation
- Key Programs
 - Conservation Program
 - Local Resources Program/WSAP
 - WSDM Plan review for storage management
 - Water Transfers and Exchanges

Summary

- Metropolitan concluded a nearly one year technical update of the IRP with a January 2016 approval
- The 2015 IRP Update provides updated resource development targets
- Next steps include policy discussions to guide the implementation approaches

