



Board Workshop

Draft 2010 Integrated Water Resources Plan Update

July 27, 2010

Draft IRP Report was released July 2, 2010

Section 1	History, Background and Status
Section 2	Developing a Collaborative Regional Process
Section 3	Integrating a Policy Approach for Metropolitan's Roles
Section 4	Core Resources Strategy
Section 5	Making an Adaptive Management Approach Work
Section 6	Findings and Conclusions

Water Supply Reliability Policies

- Laguna Declaration**
 that stated Metropolitan will “provide its service area with adequate supplies of water to meet expanding and increasing needs.”
- Metropolitan Mission Statement**
 that it will “provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs.”
- IRP reliability goal**
 that “Metropolitan and its member agencies will have the full capability to meet full-service demands at the retail level under all foreseeable hydrologic conditions.”

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A Number of Possible Roles Were Considered for Metropolitan

Imported Focus	Current Approach	Enhanced Regional #1	Enhanced Regional #2
<ul style="list-style-type: none"> Limited role in regional reliability Focus on Delta Fix 	<ul style="list-style-type: none"> Maintain & develop resources Provide local resource incentives Complete Delta improvements 	<ul style="list-style-type: none"> Maintain & develop resources Delta improvements not completed Develop large-scale local projects 	<ul style="list-style-type: none"> Maintain & develop resources Develop large-scale local projects Delta improvements complete

Evaluation of Metropolitan's Regional Role

Components	Imported Focus	Current Approach	Enhanced Regional #1	Enhanced Regional #2
Delta Fix	✓	✓		✓
Local Resources and Conservation Incentives		✓	✓	✓
New MWD Regional Supplies			✓	✓

Establishing Greater Adaptability in Water Resource Management

Reliability under foreseeable conditions

Core Resource Strategy

Acknowledge future uncertainty

Supply Buffer

Advance actions for future changes

Foundational Actions

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Section 1 History, Background and Status

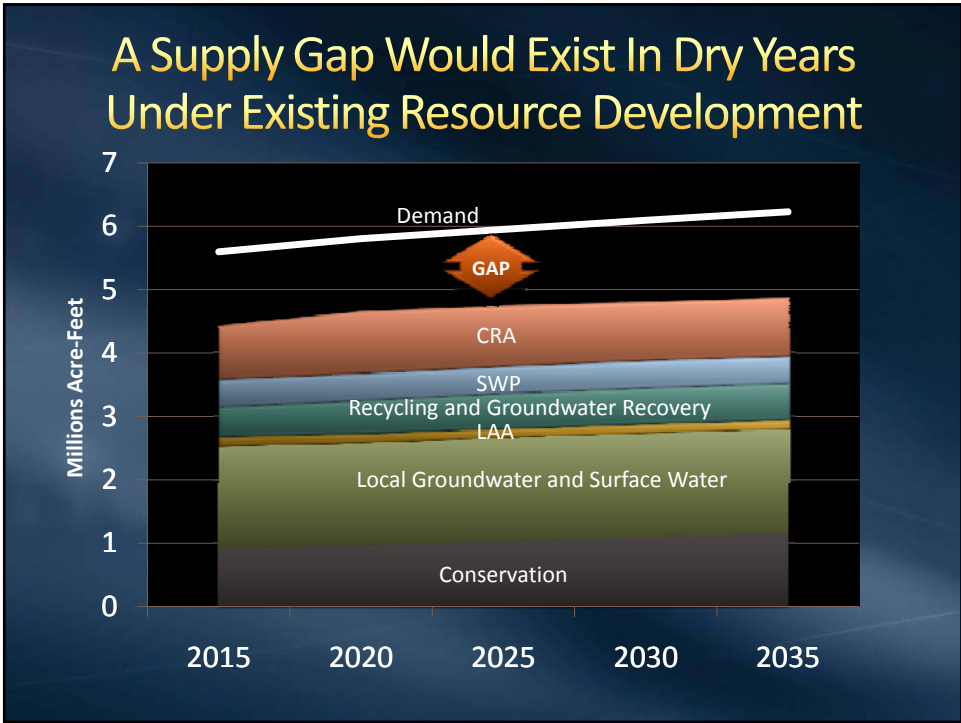
Section 2 Developing a Collaborative Regional Process

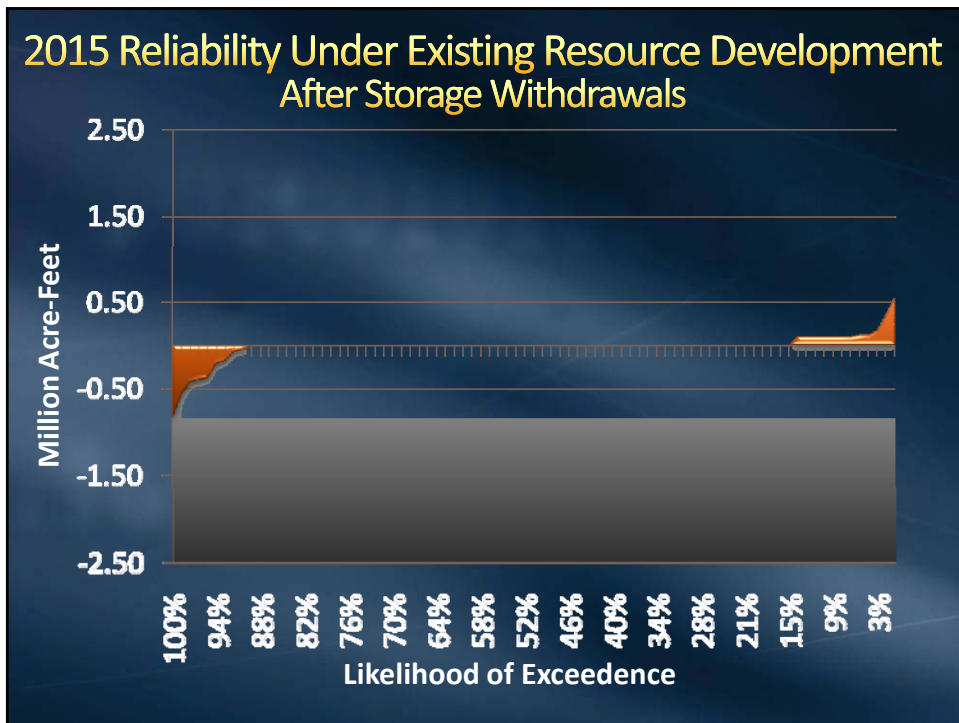
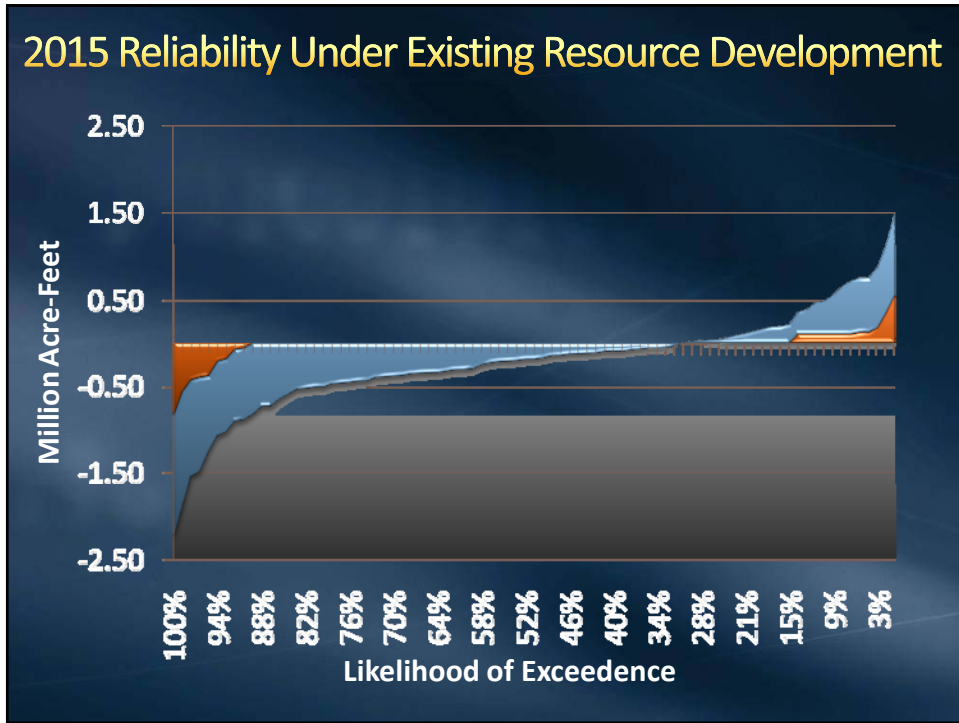
Section 3 Integrating a Policy Approach for Metropolitan's Roles

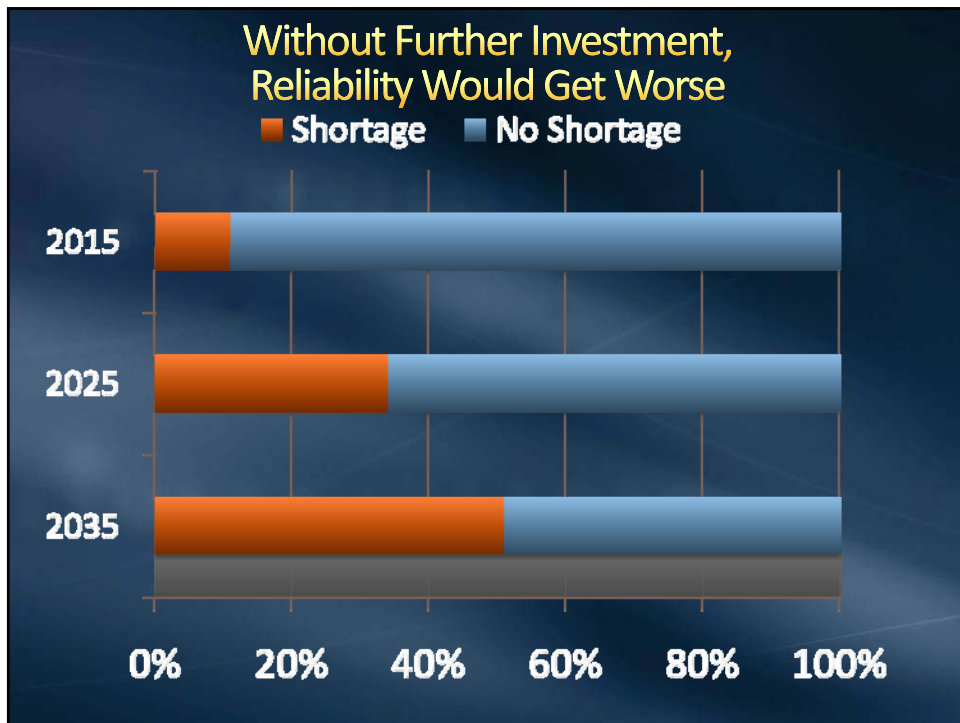
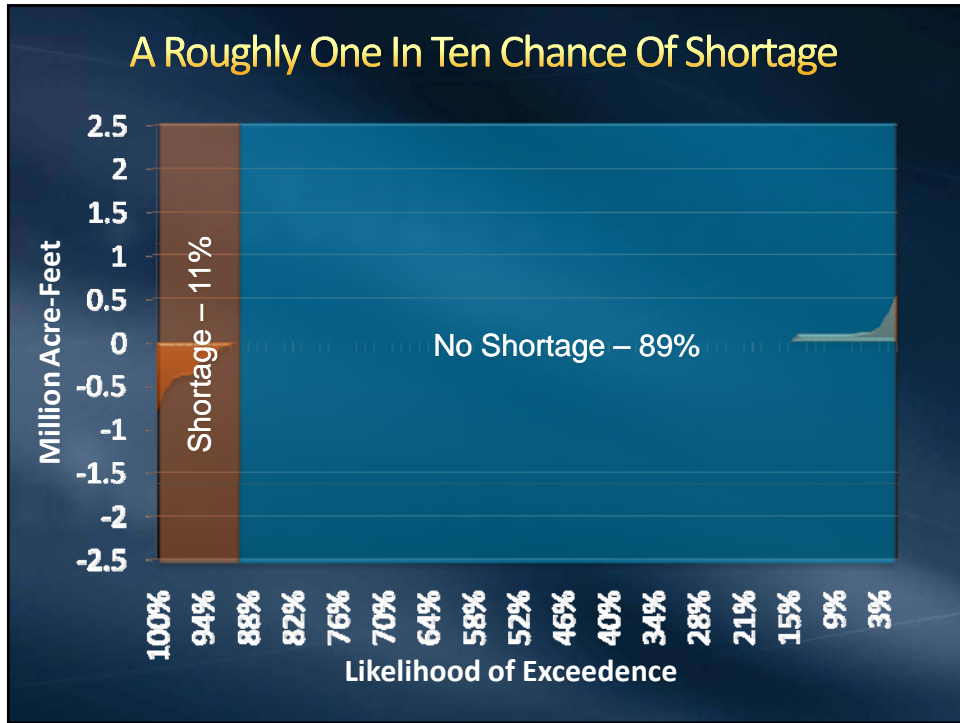
Section 4 Core Resources Strategy

Section 5 Making an Adaptive Management Approach Work

Section 6 Findings and Conclusions



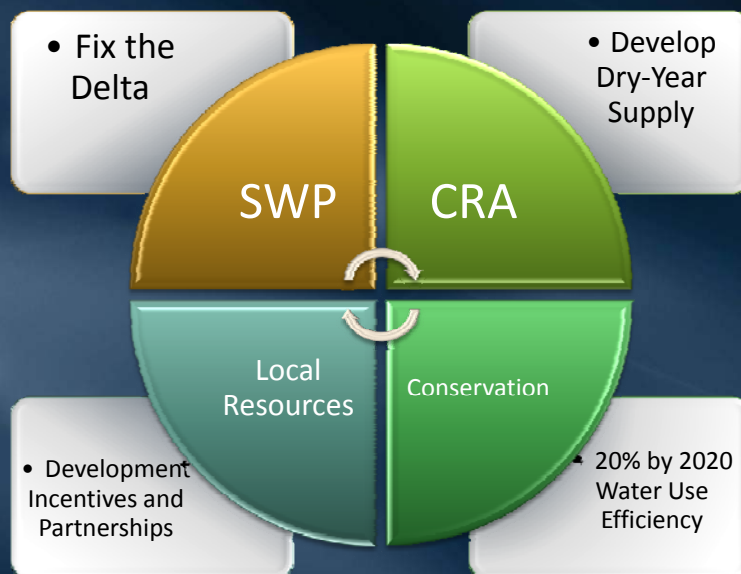


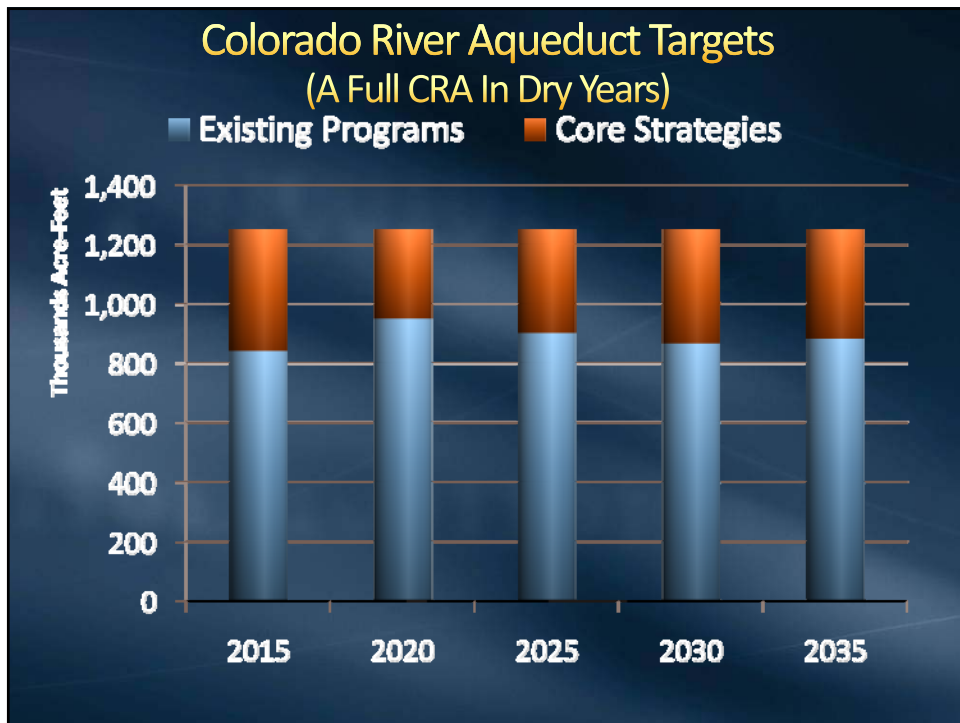
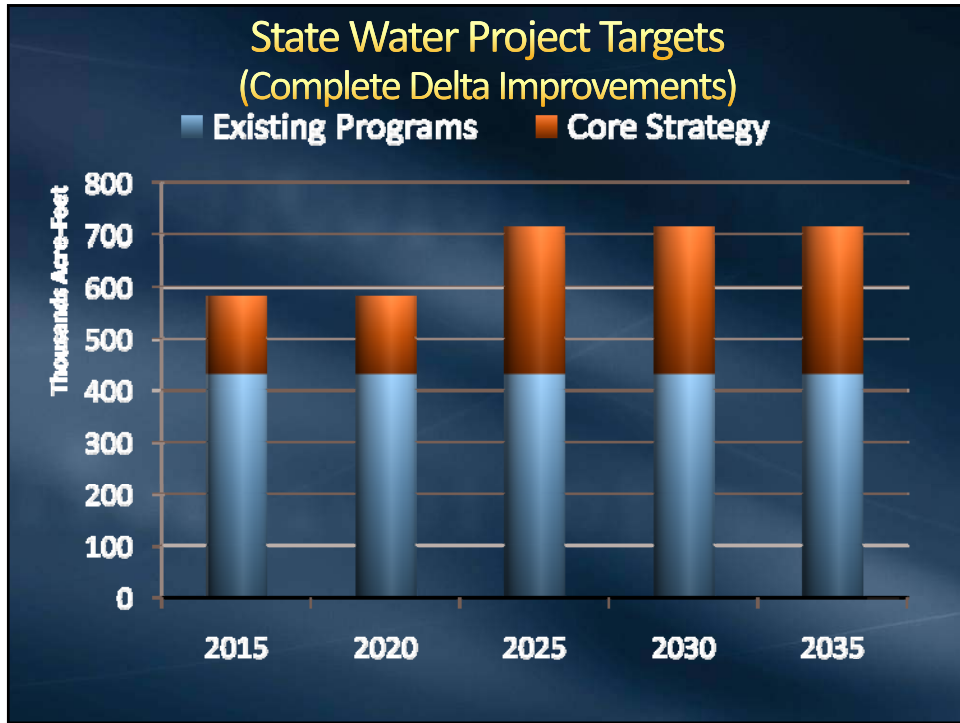


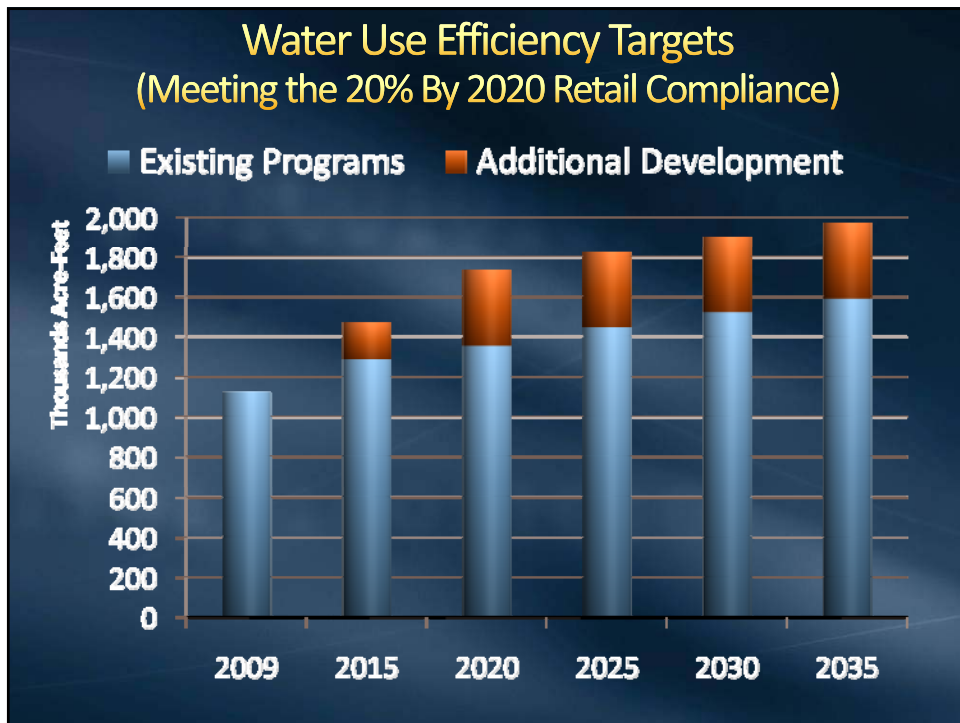
Existing Resources Under Future Uncertainties

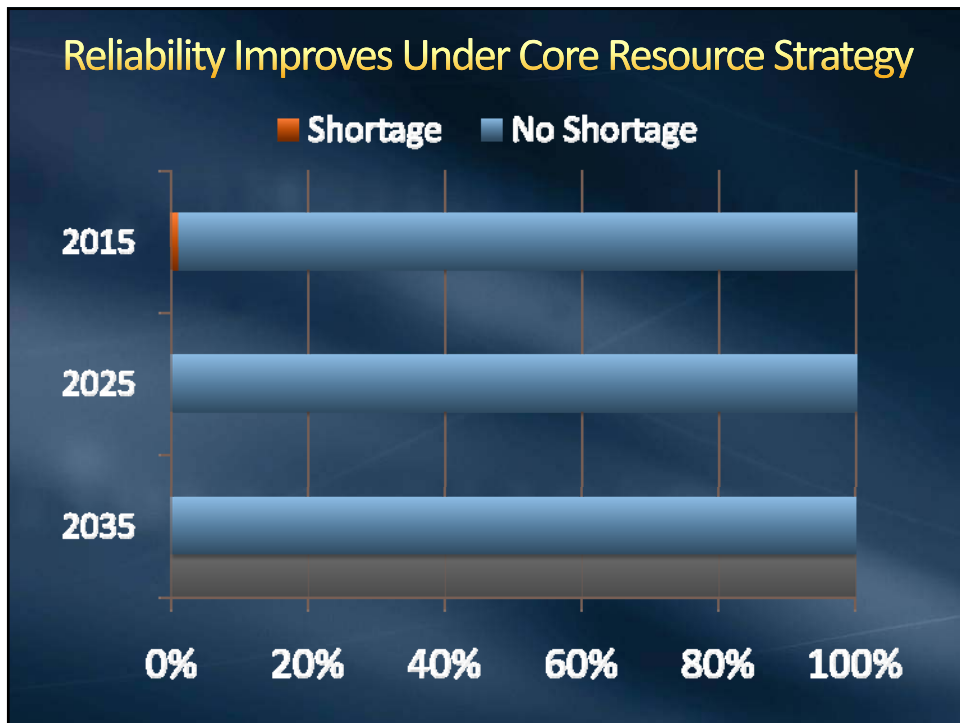
- Under the existing level of resource development without future efforts:
 - Metropolitan would not meet its reliability goals under various future scenarios
 - Local and regional storage would not be replenished
- Challenges and Changed Conditions
 - Climate
 - Statewide Initiatives
 - Endangered Species Act Restrictions
 - Economy

Core Resources Strategy to Provide Future Reliability





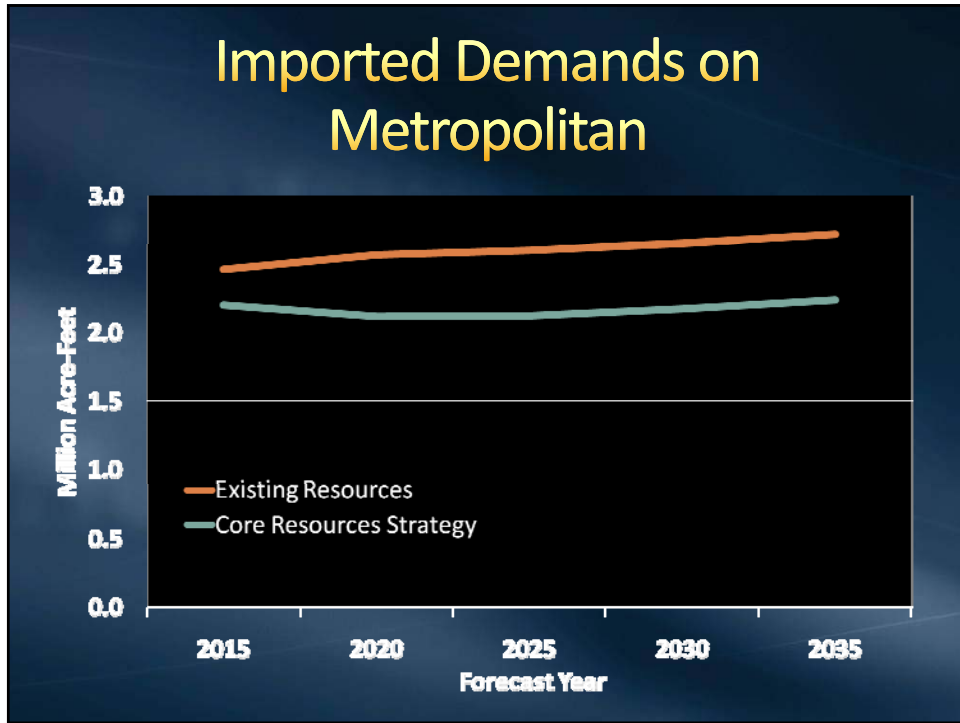






Core Resource Strategy Targets Total Production (Acre-Feet)

	2010 Actual	2015	2020	2025	2030	2035
20% by 2020 Water Use Efficiency	1,198,000	1,473,000	1,732,000	1,825,000	1,899,000	1,968,000
Local Resources Augmentation	112,000	194,000	208,000	246,000	250,000	252,000
SWP Dry-Year Supply	956,000	581,000	581,000	713,000	713,000	713,000
CRA Dry-Year Supply	1,100,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Total	3,366,000	3,498,000	3,771,000	4,034,000	4,112,000	4,183,000



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Supply Buffer

Uncertainty Comes In Many Forms

- Climate Change
- Policy & Permitting: Statewide Initiatives
 - Comprehensive Water Management Plan
 - Delta Improvements
 - "20 by 2020"
- Operations & Water Quality
 - Endangered Species Act Restrictions
- Demand & Economy

Implementing A Supply Buffer Can Manage Uncertainty

- 2004 Update
 - Planning Buffer: focus on identifying supplies, but not implementation
- 2010 IRP Update
 - Implement an Operational Buffer
 - Components of Adaptive Management Approach
 - 10% of total retail demand
 - Regional collaboration on 20X2020 conservation legislation
 - Adaptive actions on local supply development

Considerations

- Cap on total buffer
- Maximum amount of financial investment
- Open proposal process
- Periodical time-frame to accept and review proposals

Criteria

- Technical feasibility
 - Reliability
 - Water quality and salinity goals
 - Ability to move water
- Financial feasibility
 - Project cost and rate impact
 - Bond indebtedness

How Could A 500 TAF Buffer Be Implemented?

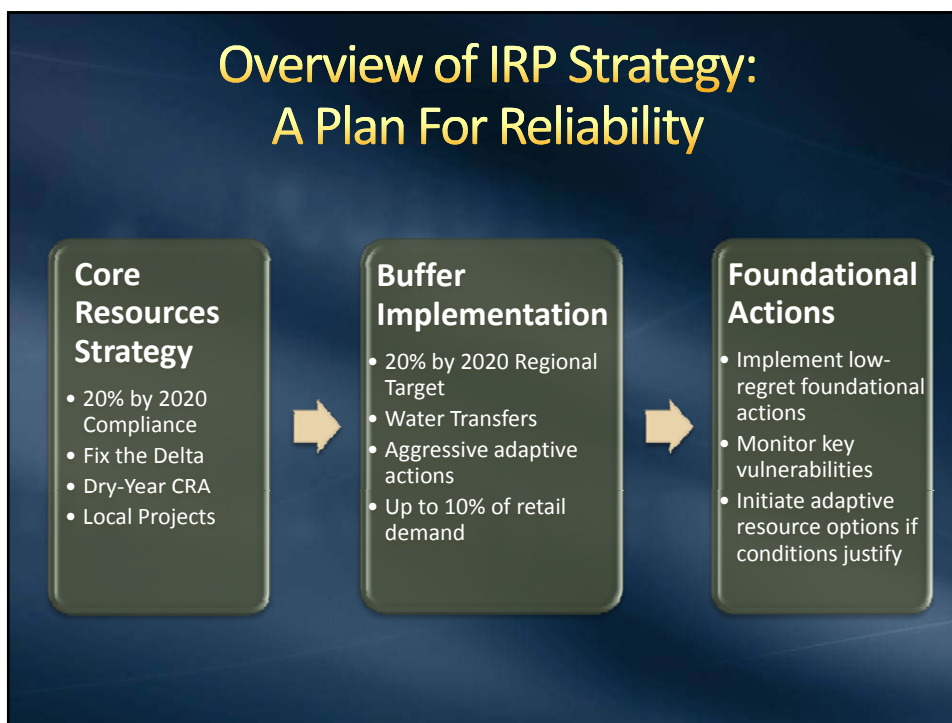
- Water Use Efficiency: Up to 200 TAF additional (Inc. Conservation and Recycling)
 - Create a goal to reduce regional per capita water use by 20% from a baseline
 - Saves an additional 200 TAF above retail compliance with 20% by 2020 requirements
- Local Resources: Up to 300 TAF additional (Inc. GW Recovery, Recycling, Desalination, etc.)
 - Investigate regional partnerships for local resource development
 - Review incentive programs and rate impacts
 - Bring new projects forward for Board consideration as required and as feasibility is assessed

Foundational Actions

Advancing Actions for Future Change

- Stormwater capture
- Graywater systems
 - Metropolitan can work with regional stakeholders to improve the feasibility of these potential alternatives
- Low-regret foundational actions
 - Improve regulatory environment
 - Potential pilot studies
- Help to prepare these alternatives for implementation, if needed in the future

Overview of IRP Strategy: A Plan For Reliability



The Plan Extends Reliability Goals and Planning

The Core Resources Strategy ensures:

That “Metropolitan and its member agencies will have the full capability to meet full-service demands at the retail level under all foreseeable hydrologic conditions.”

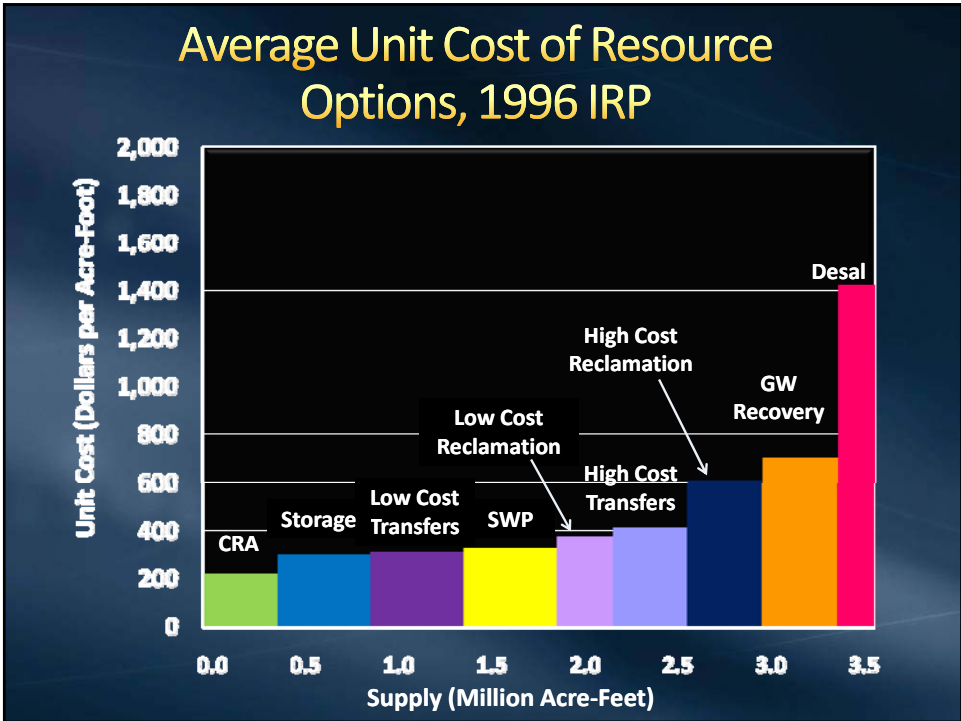
Implementation of a Buffer ensures:

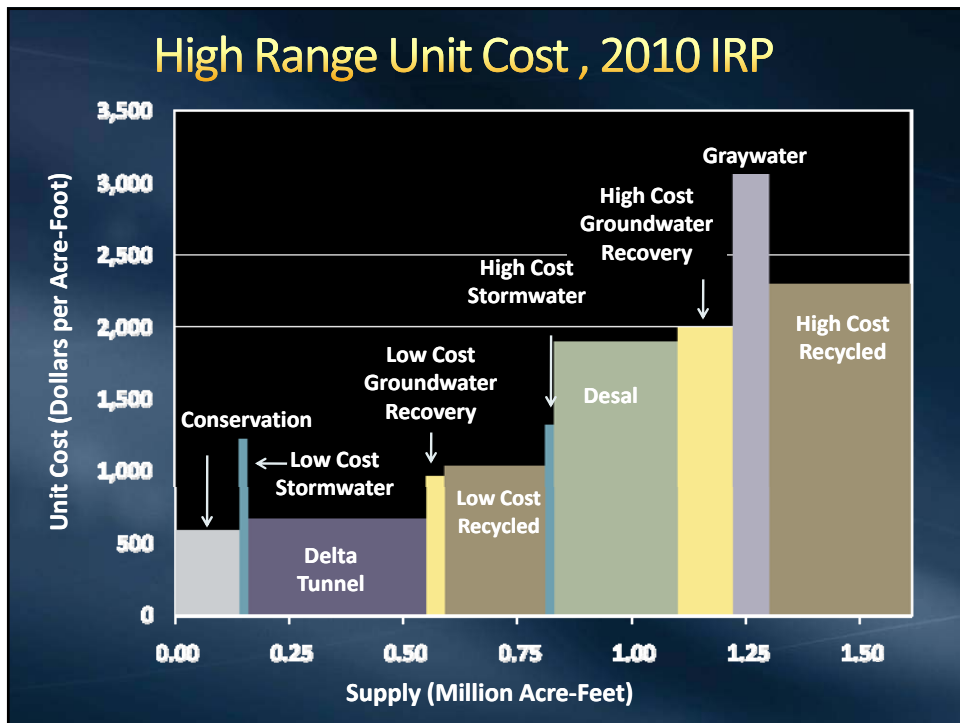
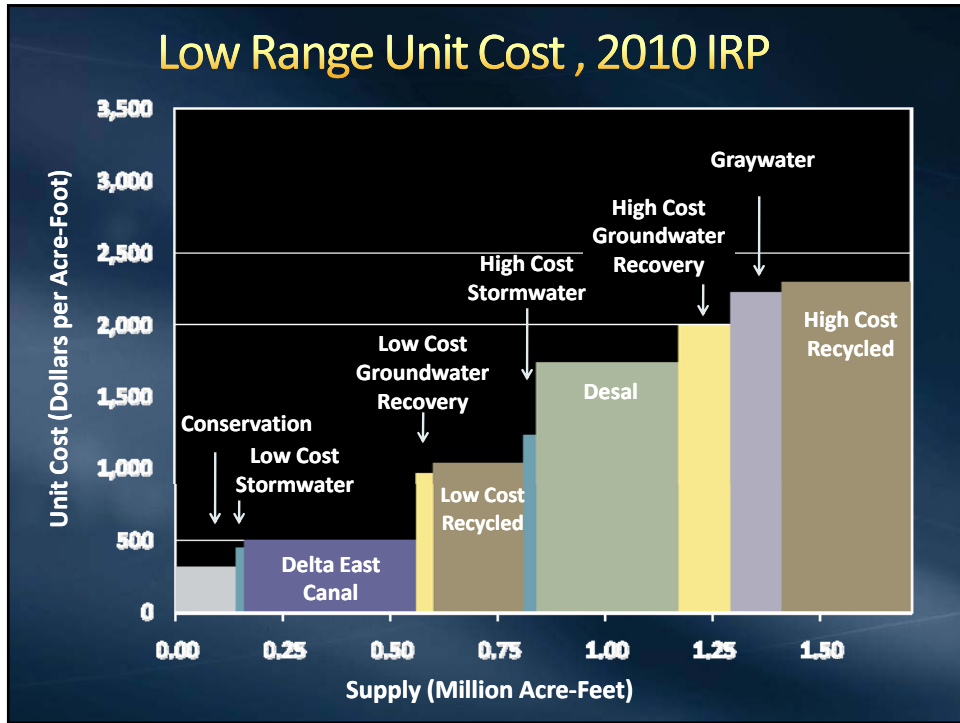
that additional resources will be developed to effectively manage new challenges and change

Foundational Actions ensure:

that Metropolitan and its member agencies can advance low regret actions to develop new supply options as needed to address future changes

Resource Costs





Resource Cost Considerations

- Relative costs can be useful
- Challenges exists in comparisons
 - Source
 - Distribution
 - Treatment
 - Yield
 - Other benefits or losses
- Cost impacts can be clearer in alternative analysis

Summary of Strategies

Strategy	Delta Fix	380 TAF 20 by 2020	200 TAF 20 by 2020	300 TAF Local Augmentation
Core Resources	✓	✓		
Core Resources + Buffer	✓	✓	✓	✓

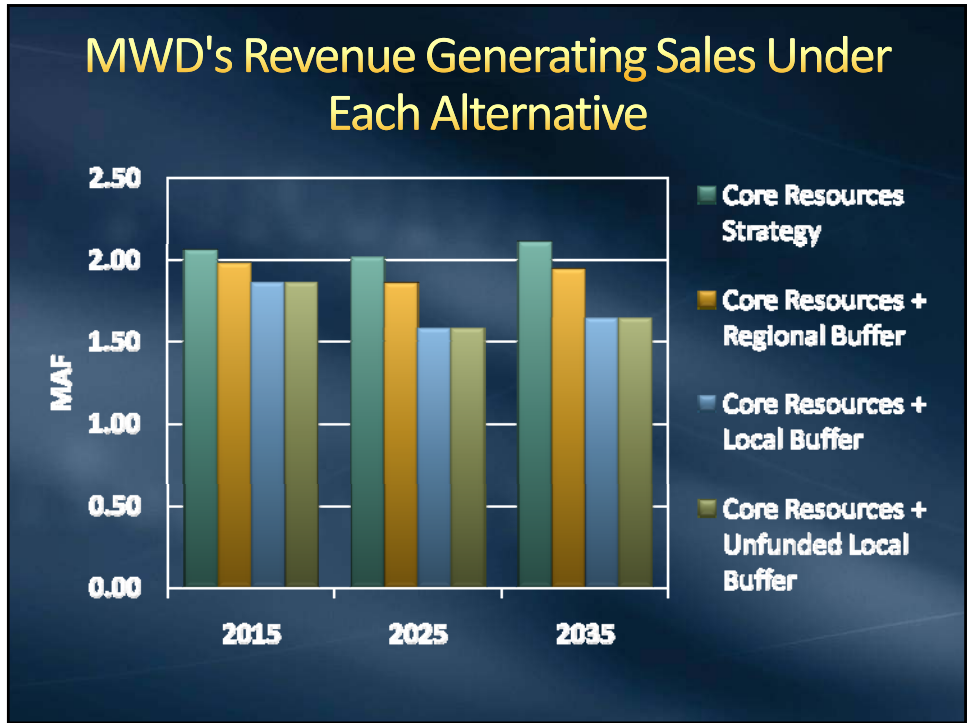
Summary of Rate Assumptions 2010 Dollars

	Water Use Efficiency 200 TAF	Additional Local Resources 300 TAF
Core Resources Strategy	NA	NA
Core Resources + Regional Buffer	\$195/AF	\$1,500/AF Sales Revenues
Core Resources + Local Buffer	\$195/AF	\$250/AF* No Sales Revenues
Core Resources + Unfunded Local Buffer	\$195/AF	No incentive or Sales Revenues

*this rate is fixed, all other costs are escalated at 3.5%

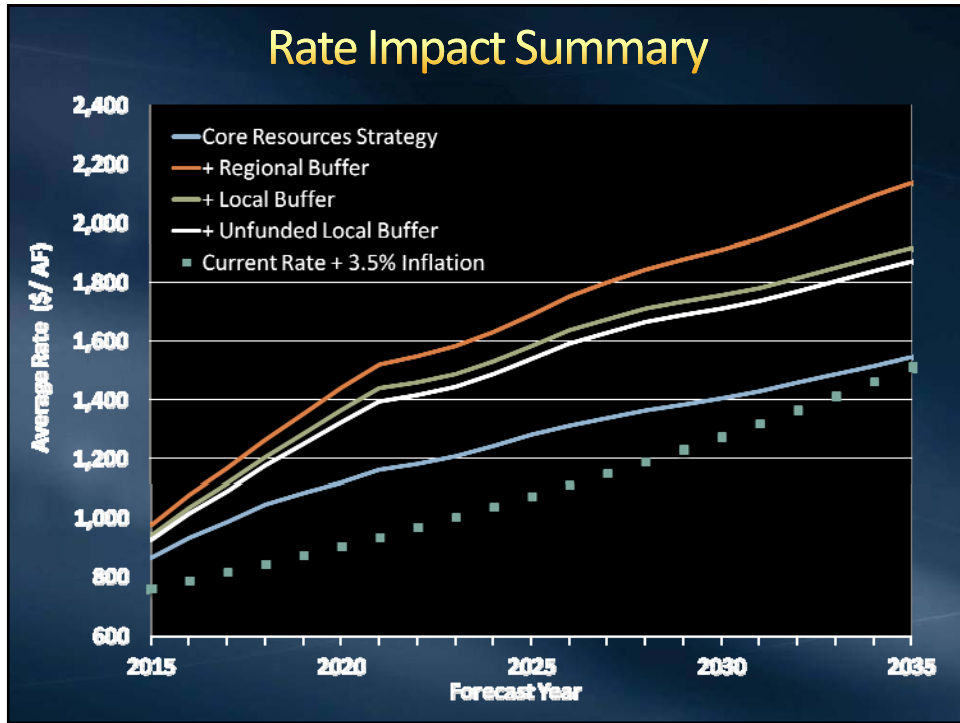
Cost Impacts Reflect An Average MWD Rate

- Average water rate across all MWD water sales & wheeling
 - Includes average of all rates & charges
- Rate is net of revenue offsets like property taxes, power generation & interest income.
- Rates would recover full cost of service
- Current FY2010 average rate is about \$640/AF (Does not recover full cost of service)



Average MWD Rate \$/Acre-Foot

	2015	2025	2035
Core Resources Strategy	\$865	\$1,281	\$1,545
Core Resources + Regional Buffer	\$976	\$1,689	\$2,135
Core Resources + Local Buffer	\$940	\$1,583	\$1,917
Core Resources + Unfunded Local Buffer	\$925	\$1,538	\$1,871



Average MWD Rate Percent Increase

	2010-2015	2015-2025	2025-2035
Core Resources Strategy	7%	4%	2%
Core Resources + Regional Buffer	10%	6%	2%
Core Resources + Local Buffer	9%	5%	2%
Core Resources + Unfunded Local Buffer	9%	5%	2%



MAMM Comments

July 16, 2010

- Cost information needs to be discussed
- Buffer
 - Better definition of what uncertainties will be covered by the buffer
 - Clarification on the implementation of the buffer, will it be local or regional responsibility
 - Opt-In, Opt-Out
 - Considering the Core Resources Strategy does the buffer make the region over plan

Policy Considerations

Policy Questions for the Board

- IRP Reliability Goal
- Buffer
- Buffer Implementation
- Adaptive Management Approach
- Opt-In, Opt-Out

IRP Reliability Goal

- What is the appropriate level of reliability for Metropolitan?
- Should the IRP Reliability Goal be amended?
- Should the IRP Reliability Goal address non-hydrologic conditions?

Buffer

- Is an operational buffer appropriate for the IRP?
- Is the size of the buffer appropriate?

Buffer Implementation

- What should be the timeframe for Metropolitan to begin adaptive actions for the buffer?
- What should be the roles and responsibilities of Metropolitan and the Member Agencies in implementing the buffer?
- How should buffer implementation be shared between Metropolitan and the Member Agencies?
- What is the willingness to pay for new supplies to provide a buffer against future uncertainties?

Adaptive Management Approach

- Should Metropolitan initiate Foundational Actions as soon as possible?
- How far should Metropolitan go when implementing Foundational Actions for “readiness-to-proceed”
 - educational campaigns
 - partnerships
 - feasibility studies
 - pilot projects

Opt-In, Opt-Out

- Should individual Member Agencies have the option to selectively invest or not invest in Metropolitan actions for regional reliability?

Next Steps

- Stakeholder Forums
 - August 3: Orange
 - August 5: Ontario
 - August 10: San Diego
 - August 12: Los Angeles