



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**

stated Metropolitan will “provide its service area with adequate supplies of water to meet expanding and increasing needs.”

- **Metropolitan Mission Statement**

Metropolitan will “provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs.”

- **IRP reliability goal**

“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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Regional Stakeholders Came Together to Discuss Integrated Planning

- Collaborative Process
 - Stakeholder Forums
 - Technical Workgroups
 - Board's Strategic Policy Review

- Stakeholder Feedback
 - Uncertainty
 - New Supplies
 - Partnerships

Board Oversight

IRP Steering Committee

Technical Process

Public Forums

Stakeholder Forums

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Section 1

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Section 6

Findings and Conclusions

A Number of Possible Roles Were Considered for Metropolitan

Imported Focus

- Limited role in regional reliability
- Focus on Delta Fix

Current Approach

- Maintain & develop resources
- Provide local resource incentives
- Complete Delta improvements

Enhanced Regional #1

- Maintain & develop resources
- Delta improvements not completed
- Develop large-scale local projects

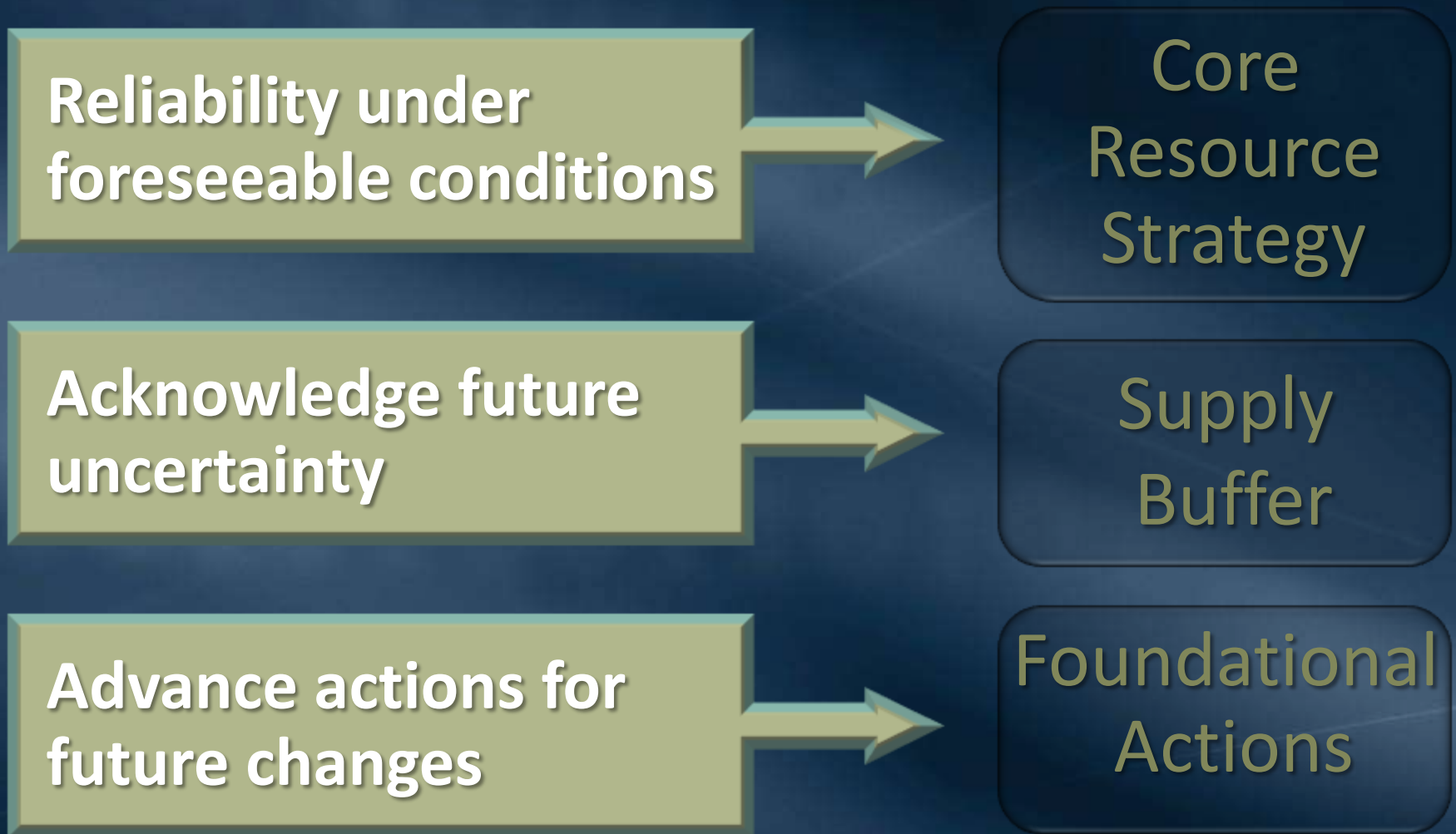
Enhanced Regional #2

- 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



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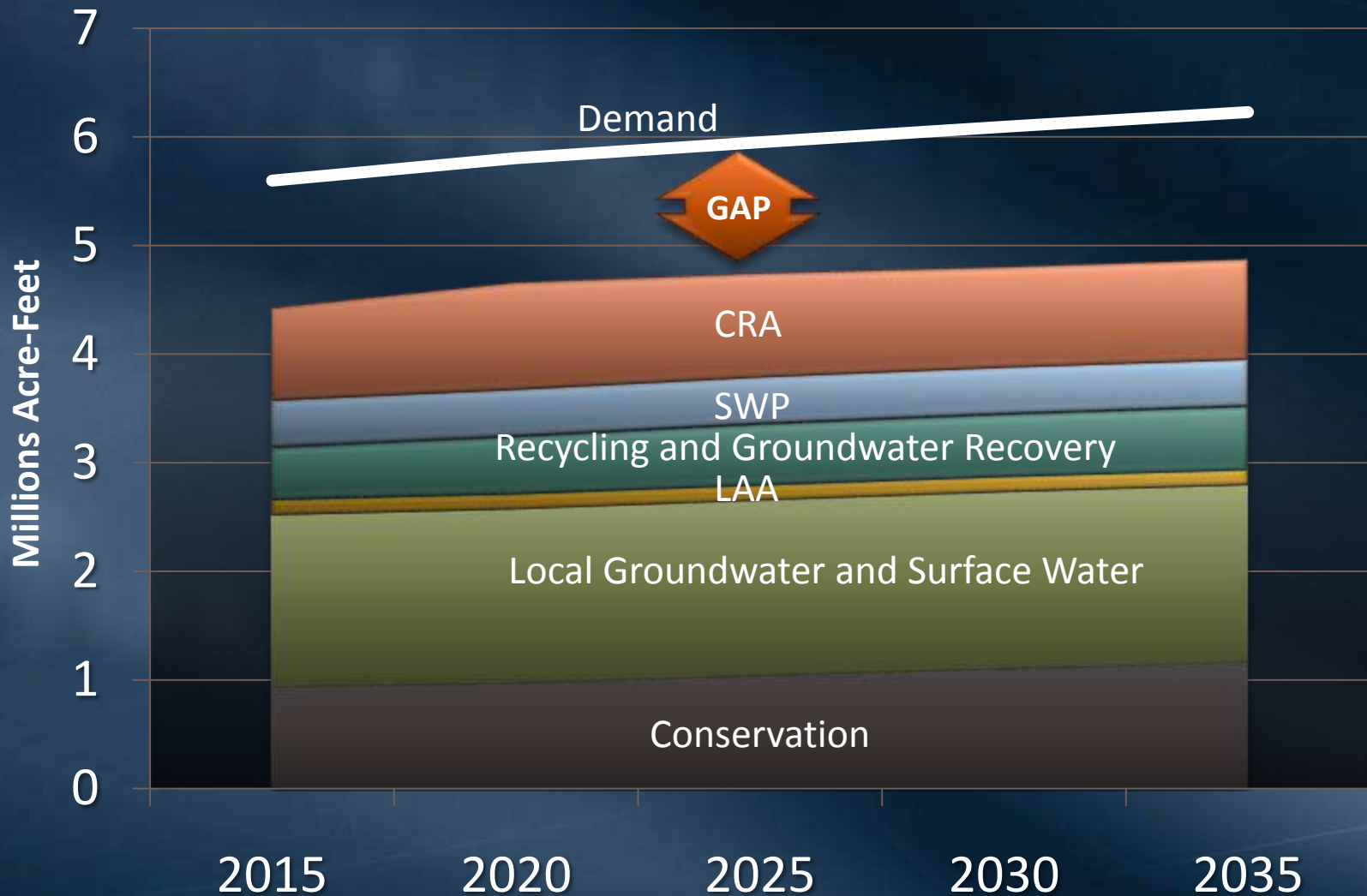
Section 5 Making an Adaptive Management Approach Work

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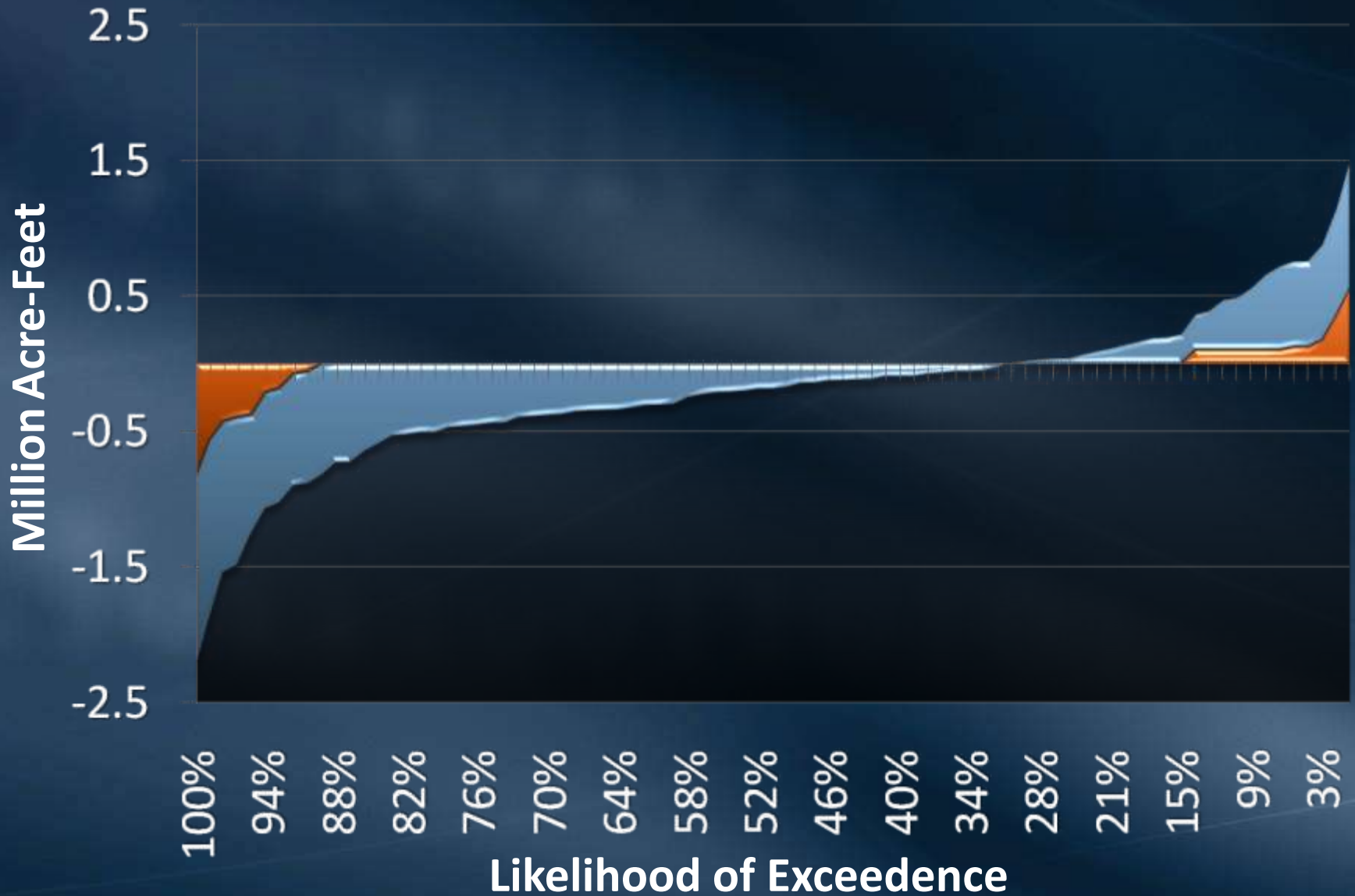
Region needs to develop
additional Core Resources



A Supply Gap Would Exist In Dry Years Under Existing Resource Development



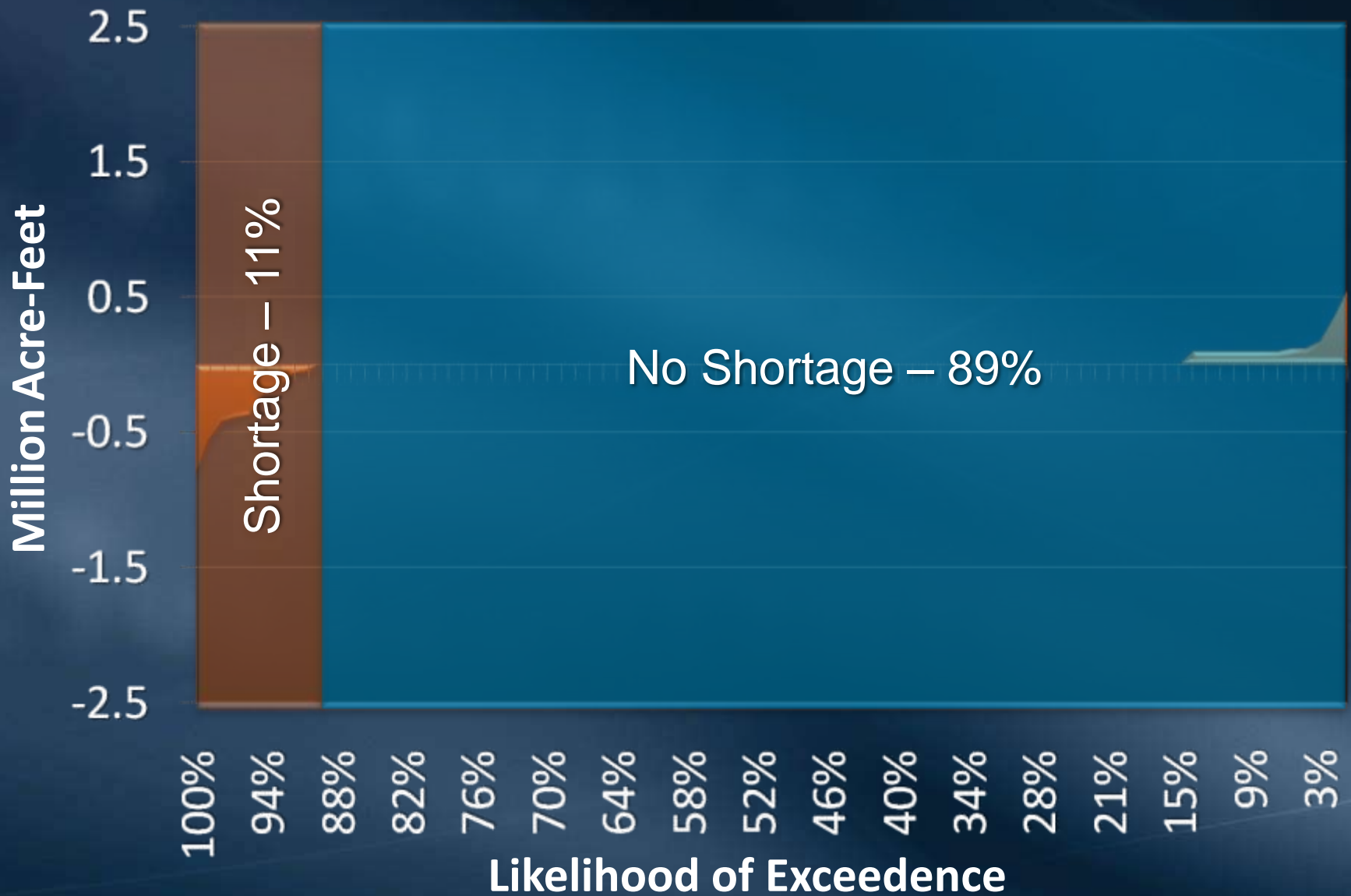
2015 Reliability Under Existing Resource Development



2015 Reliability Under Existing Resource Development After Storage Withdrawals

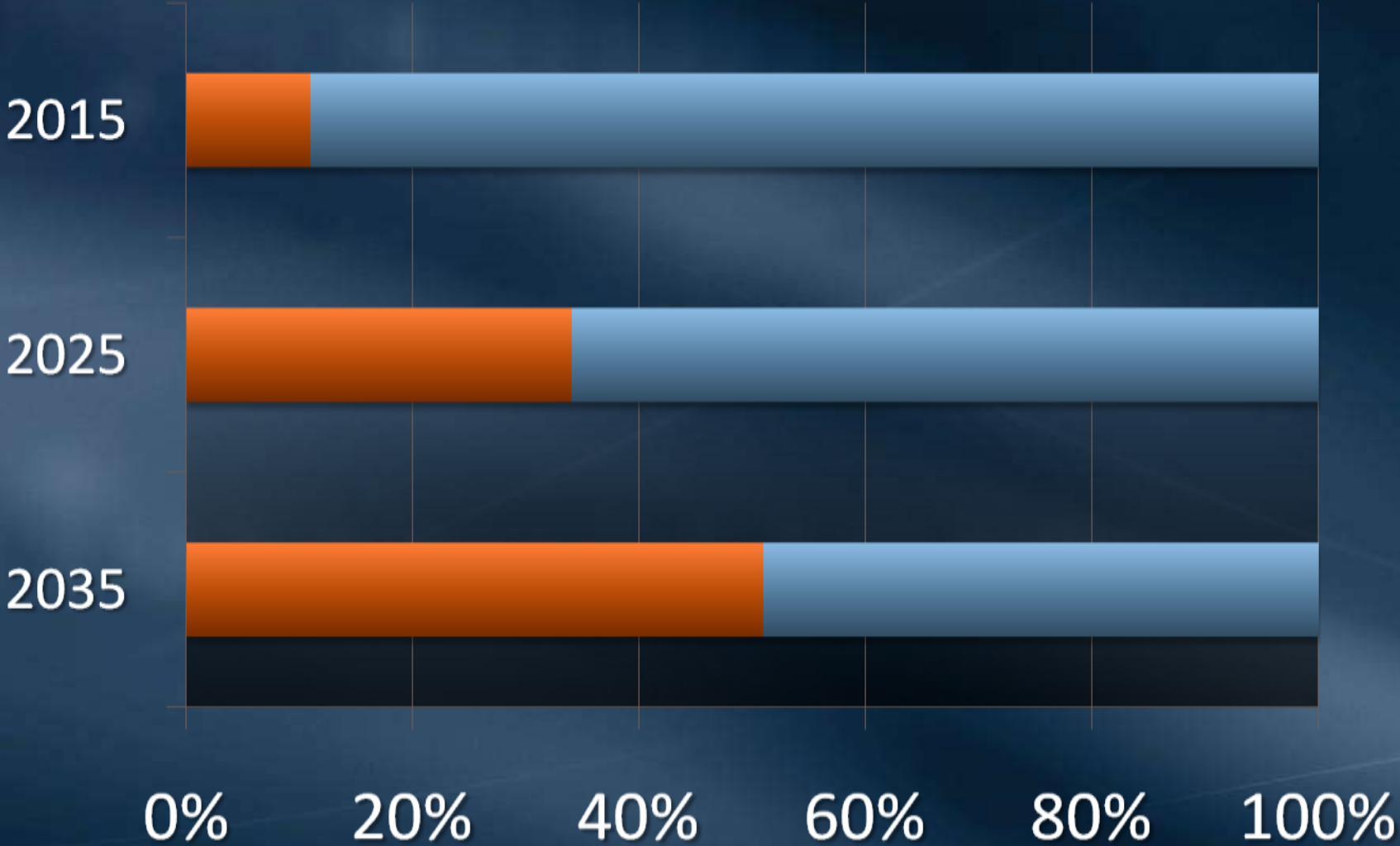


A Roughly One In Ten Chance Of Shortage



Without Further Investment, Reliability Would Get Worse

■ Shortage ■ No Shortage



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

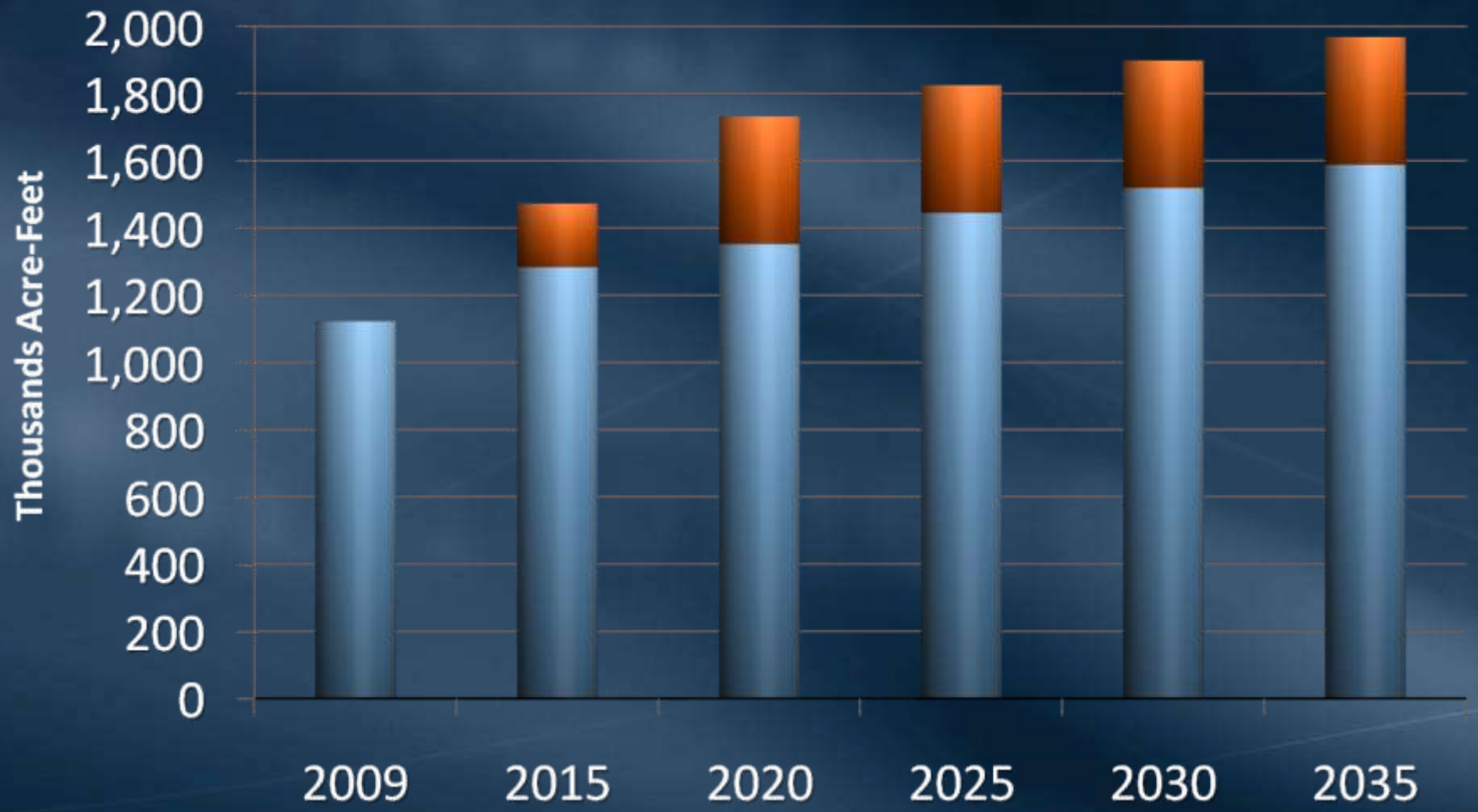


A Comparison of IRP Local Resource Development Targets for 2025



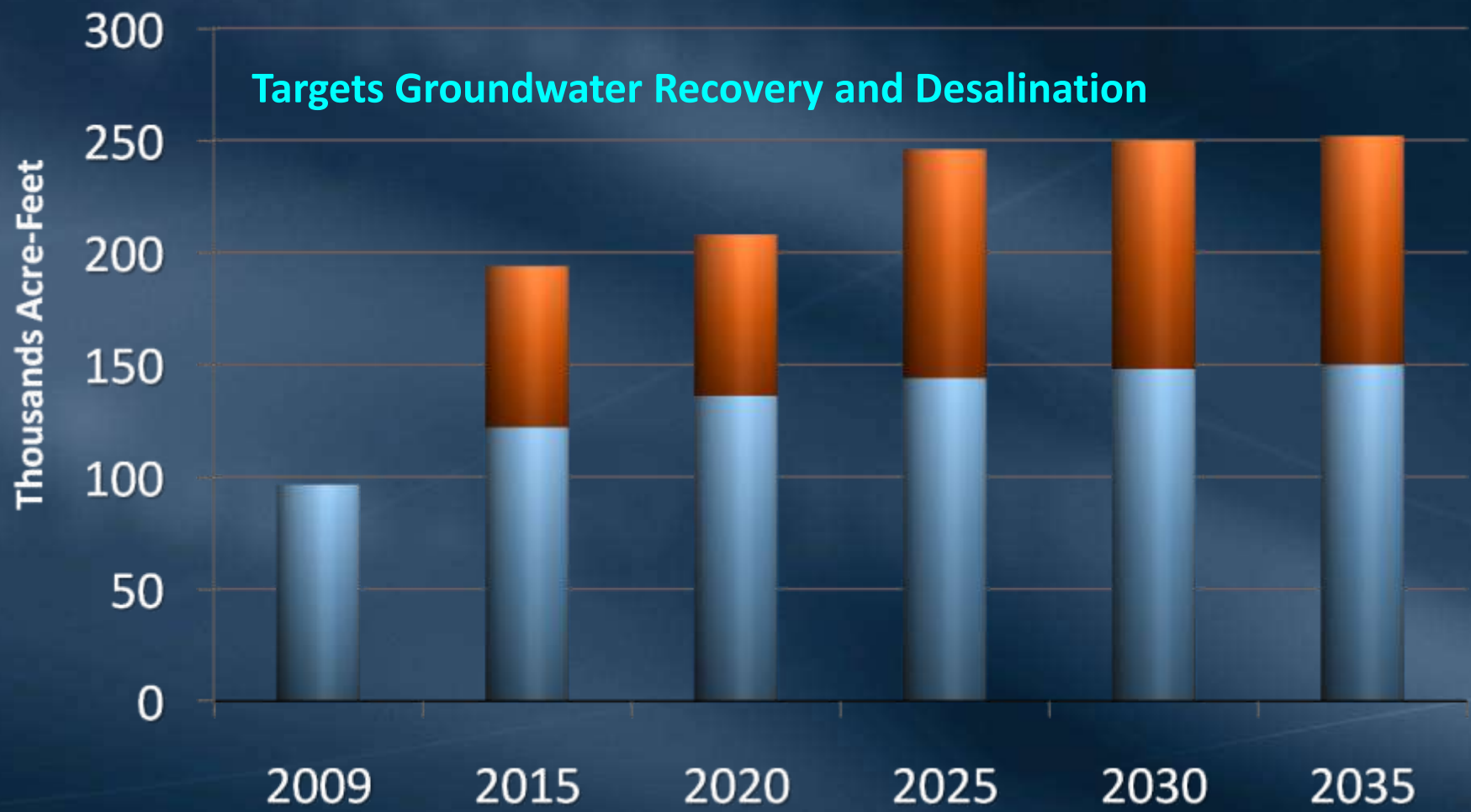
Water Use Efficiency Targets (Meeting the 20% By 2020 Retail Compliance)

Existing Programs Additional Development



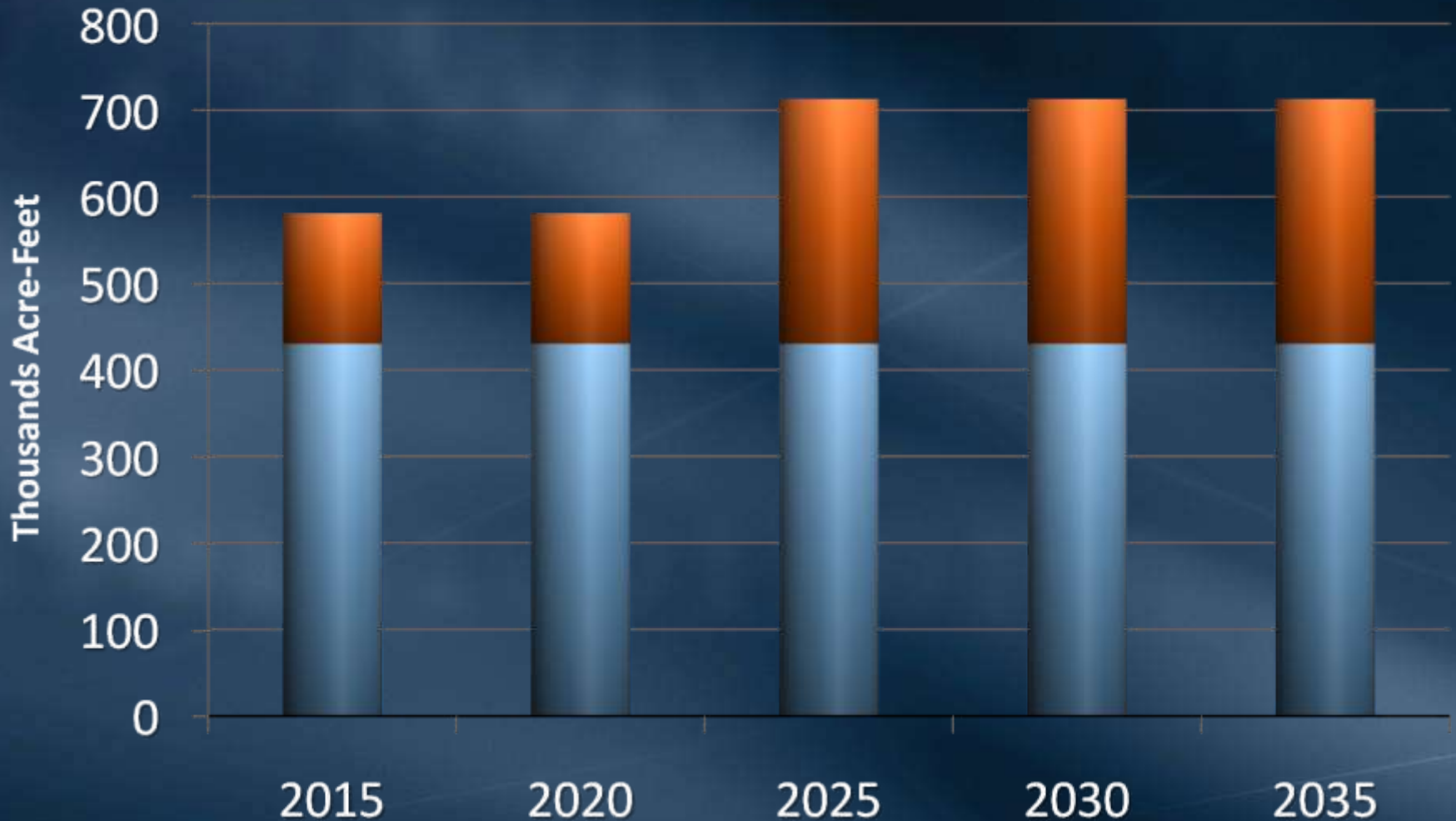
Local Resource Targets (Increasing Local Yield To Reflect Contracts)

Existing Programs Additional Development



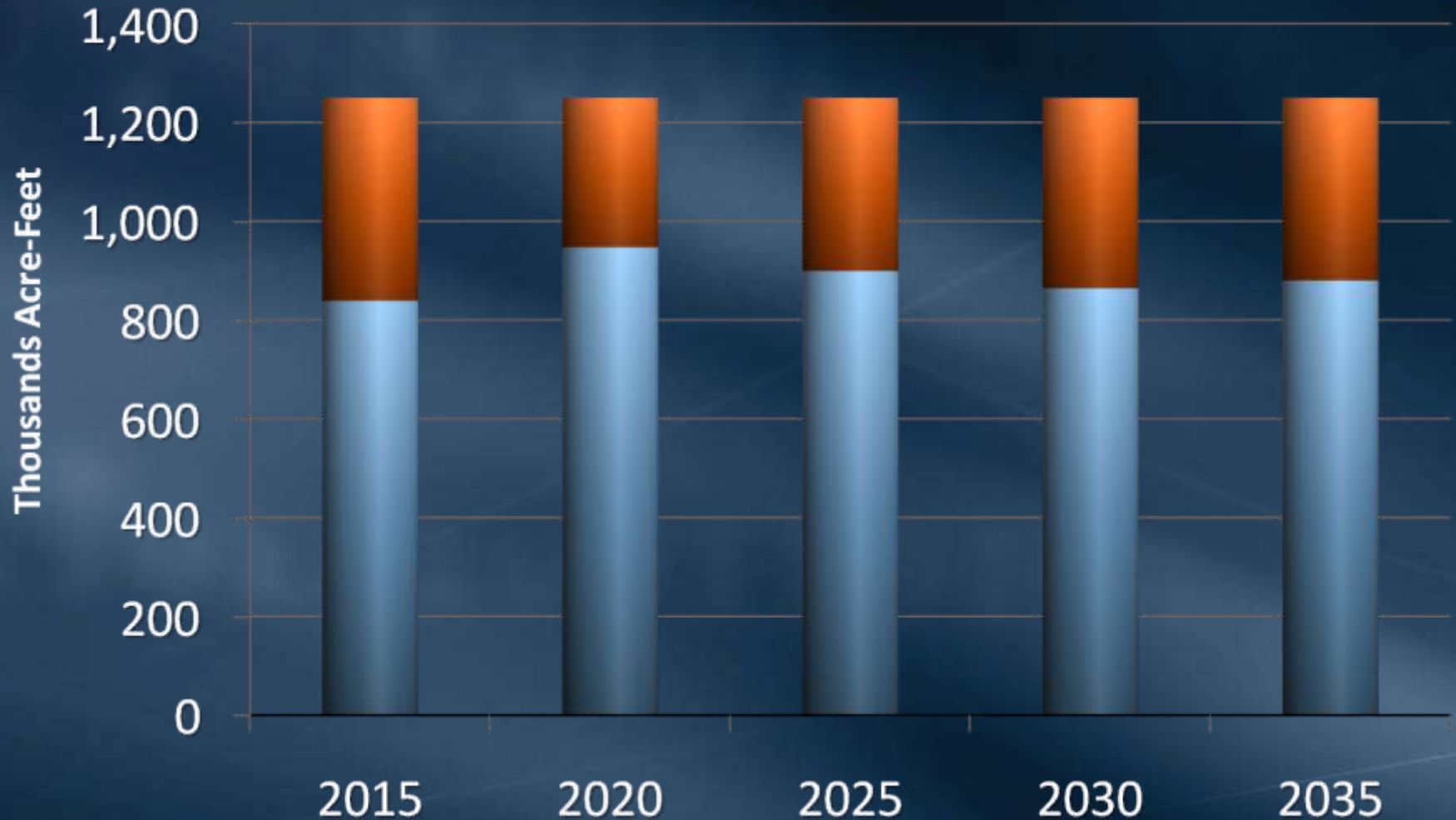
State Water Project Targets (Complete Delta Improvements)

Existing Programs Core Strategy



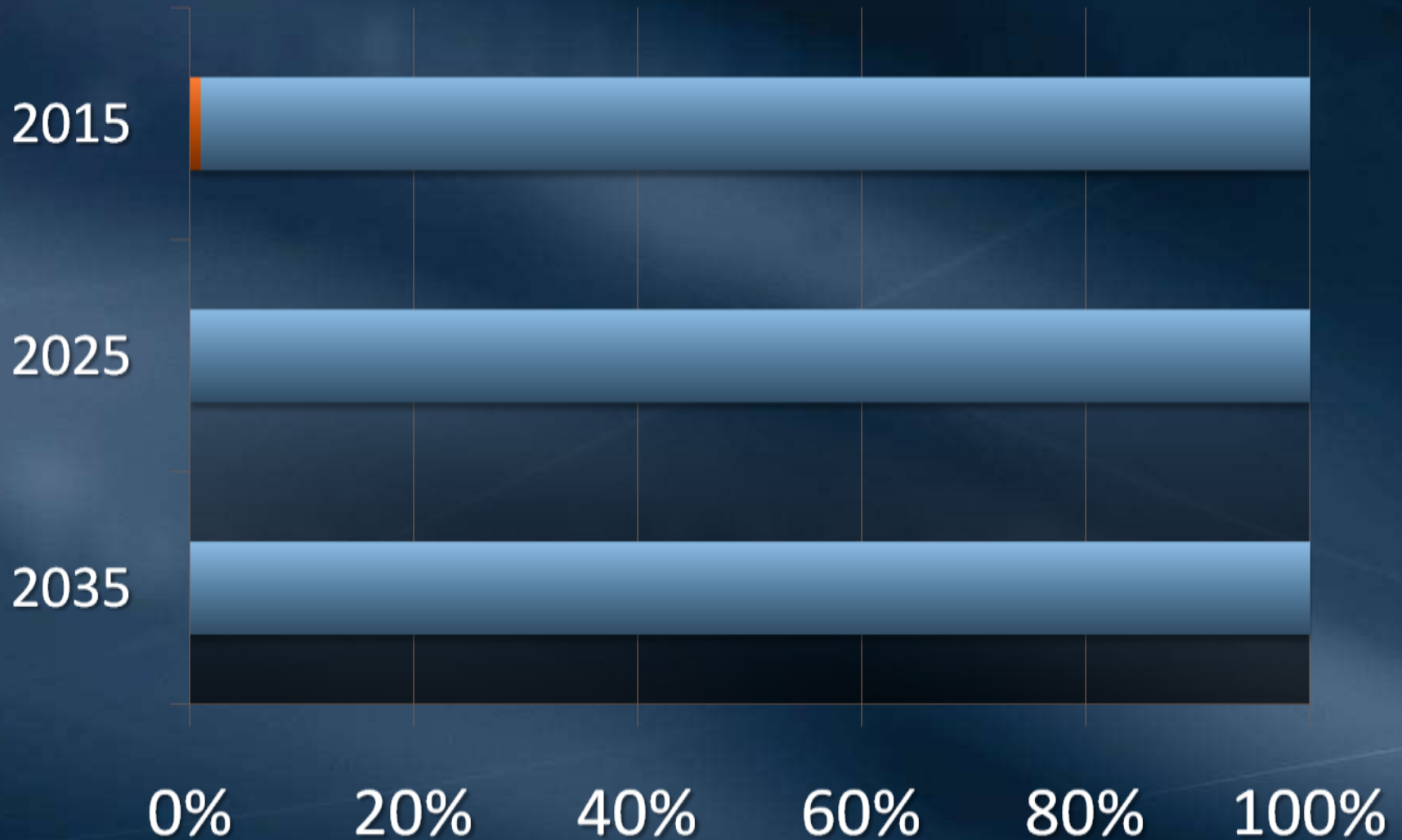
Colorado River Aqueduct Targets (A Full CRA In Dry Years)

Existing Programs Core Strategies

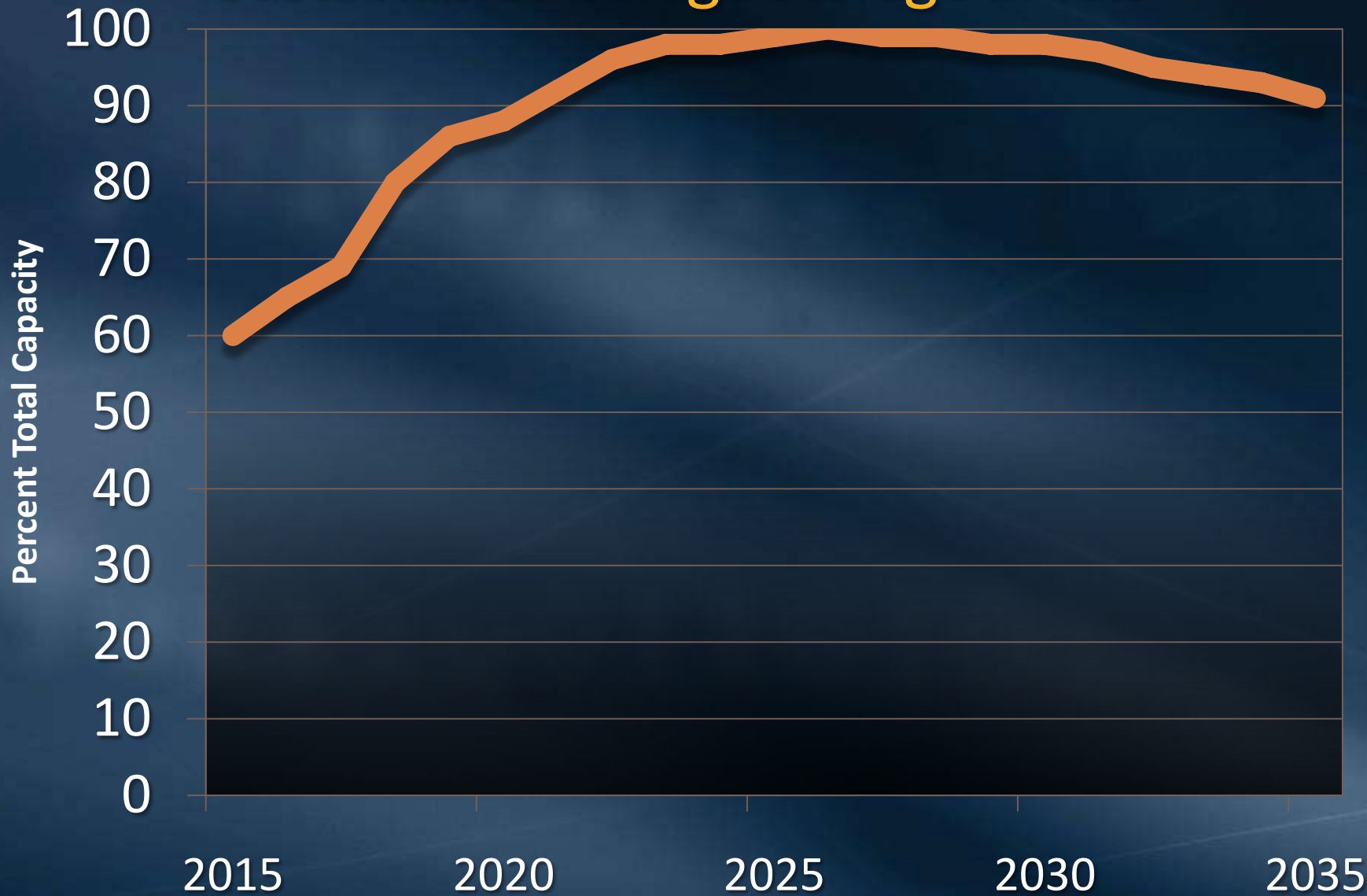


Reliability Improves Under Core Resource Strategy

■ Shortage ■ No Shortage



Core Resource Strategy Leads To Sustainable Average Storage Levels

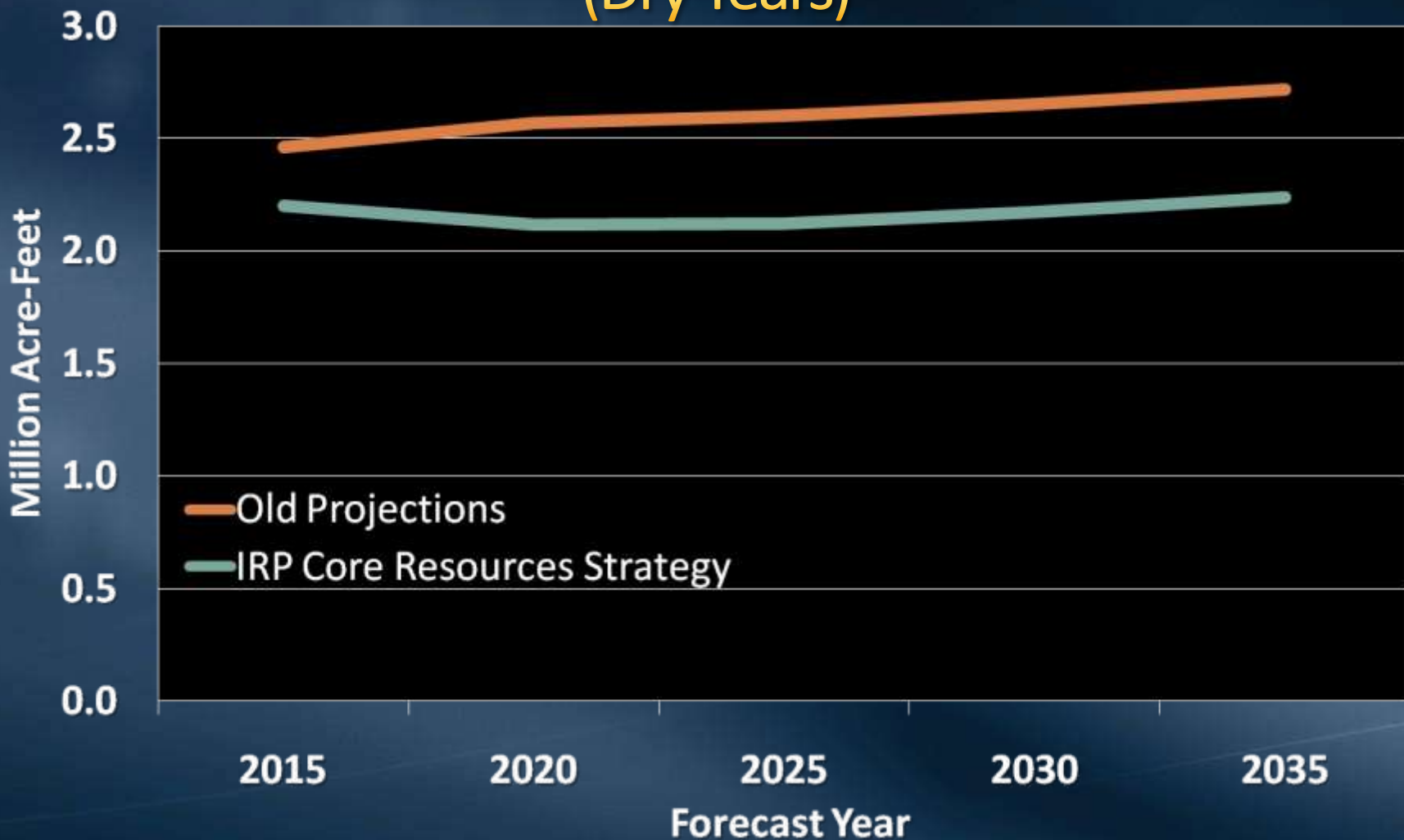


Core Resource Strategy Targets

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

How Does This Affect Demand For Imported Supplies? (Dry Years)



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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 with member agencies
 - 20X2020 conservation legislation
 - Adaptive actions on local supply development

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

- Metropolitan can work with regional stakeholders to improve the feasibility of potential supply alternatives
 - Ex. Stormwater capture, Graywater systems
- 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

Core Resources Strategy

- 20% by 2020 Compliance
- Fix the Delta
- Dry-Year CRA
- Local Projects



Buffer Implementation

- 20% by 2020 Regional Target
- Collaborative local resource development
- Water Transfers
- Up to 10% of retail demand



Foundational Actions

- Implement low-regret actions
- Monitor progress in Core Resources
- Initiate adaptive resource options if conditions justify

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.”

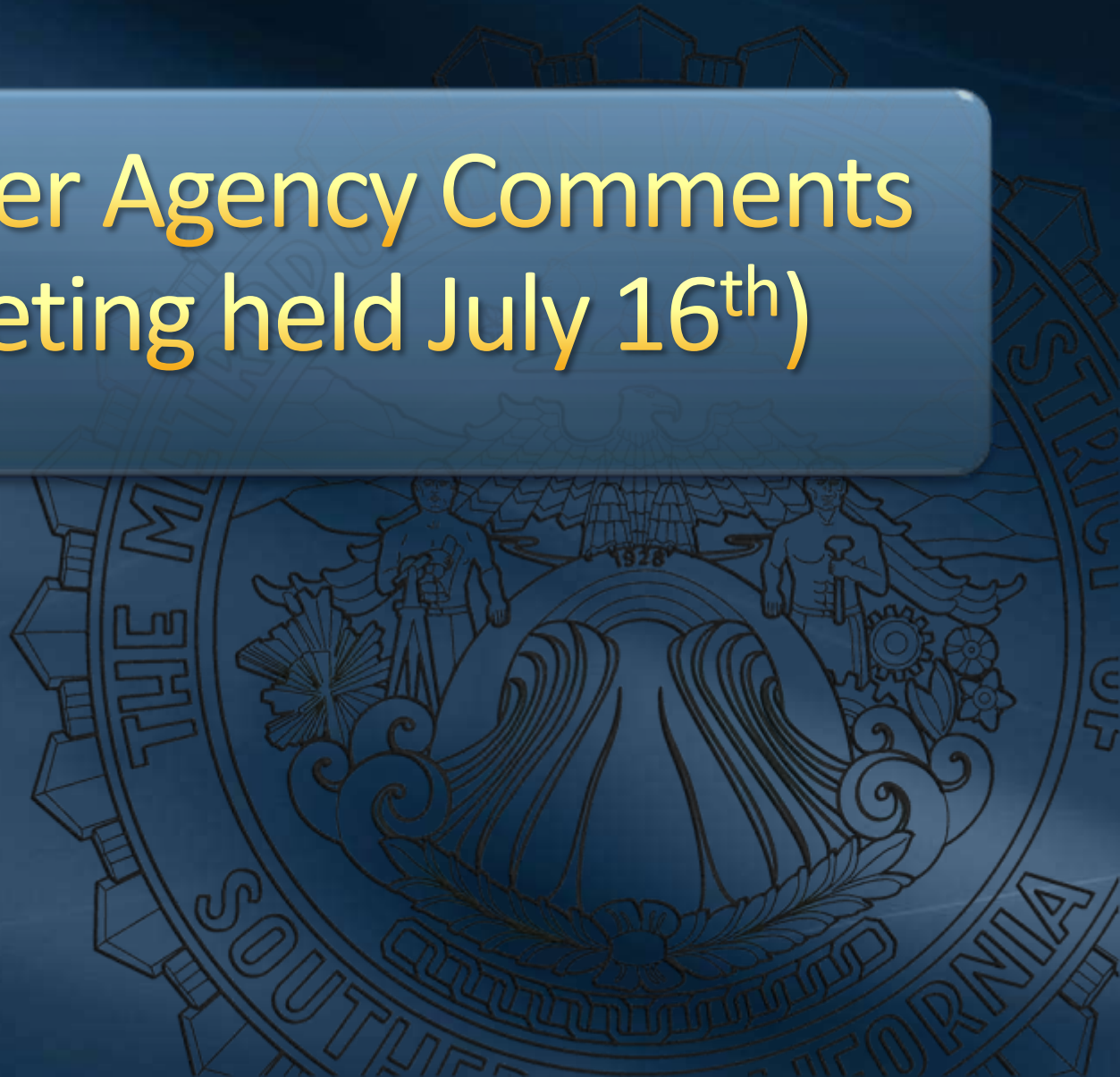
Implementation of a Buffer ensures:

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

Member Agency Comments (Meeting held July 16th)



MAMM Comments

July 16, 2010

- Rate impact should be discussed
- Buffer
 - Define what uncertainties are covered
 - Should it be local or regional responsibility?
 - Is the buffer necessary, if the Core Resources Strategy is achieved?
 - Some agencies may like the concept of the buffer (higher reliability), but they need to understand the cost (higher rates)

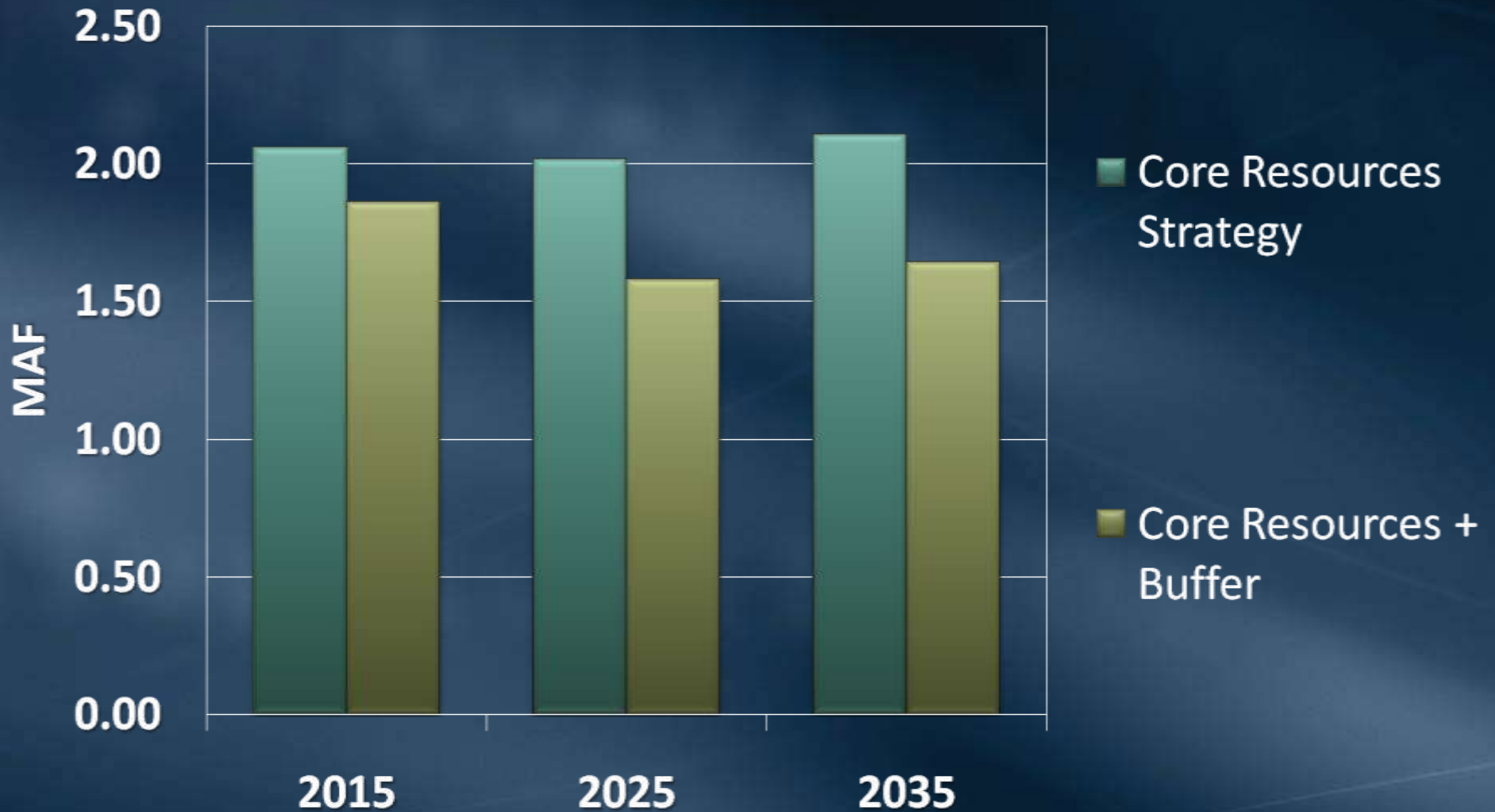
Preliminary Cost Analysis



Summary of Strategies

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

MWD's Average Sales Under Each Strategy



Summary of Rate Assumptions

2010 Dollars

	Water Use Efficiency 200 TAF	Additional Local Resources 300 TAF
Core Resources Strategy	NA	NA
Core Resources + Buffer (No local supply incentives)		No incentive or Sales Revenues

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

Average MWD Rate Under Each Strategy

Preliminary Analysis

	2015	2025	2035
Core Resources Strategy	\$865	\$1,281	\$1,545
Core Resources + Buffer (No additional incentives)	\$893	\$1,418	\$1,709

Policy Considerations



Major Areas Of Policy Consideration

- IRP reliability goal
- Rate impact of 2010 IRP
- Implementing the buffer
- Adaptive management approach

Next Steps

- Stakeholder Forums
 - August 3: Orange
 - August 5: Ontario
 - August 10: San Diego
 - August 12: Los Angeles
- August IRP Steering Committee
 - Review feedback from Stakeholder Forums
- On-going: Member Agency feedback
- September - Second Board Workshop
- October - Board consideration

