

# Draft 2010 Integrated Water Resources Plan Update

IRP Steering Committee  
July 13, 2010

# The 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 Role



Section 4 – Core Resources Strategy



Section 5 – Making an Adaptive Management Approach work



Section 6 – Findings and Conclusions

## Section 1 – History, Background, and Status



# 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.”



**Section 1 – History, Background, and Status**



**Section 2 – Developing a Collaborative Regional Process**



# 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



**Section 1 – History, Background, and Status**



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graph TD; A[Section 1 – History, Background, and Status] --> B[Section 2 – Developing a Collaborative Regional Process]; B --> C[Section 3 – Integrating a Policy Approach for Metropolitan's Role];
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**Section 2 – Developing a Collaborative Regional Process**

**Section 3 – Integrating a Policy Approach for Metropolitan's Role**

# 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			✓	✓

**Section 1 – History, Background, and Status**

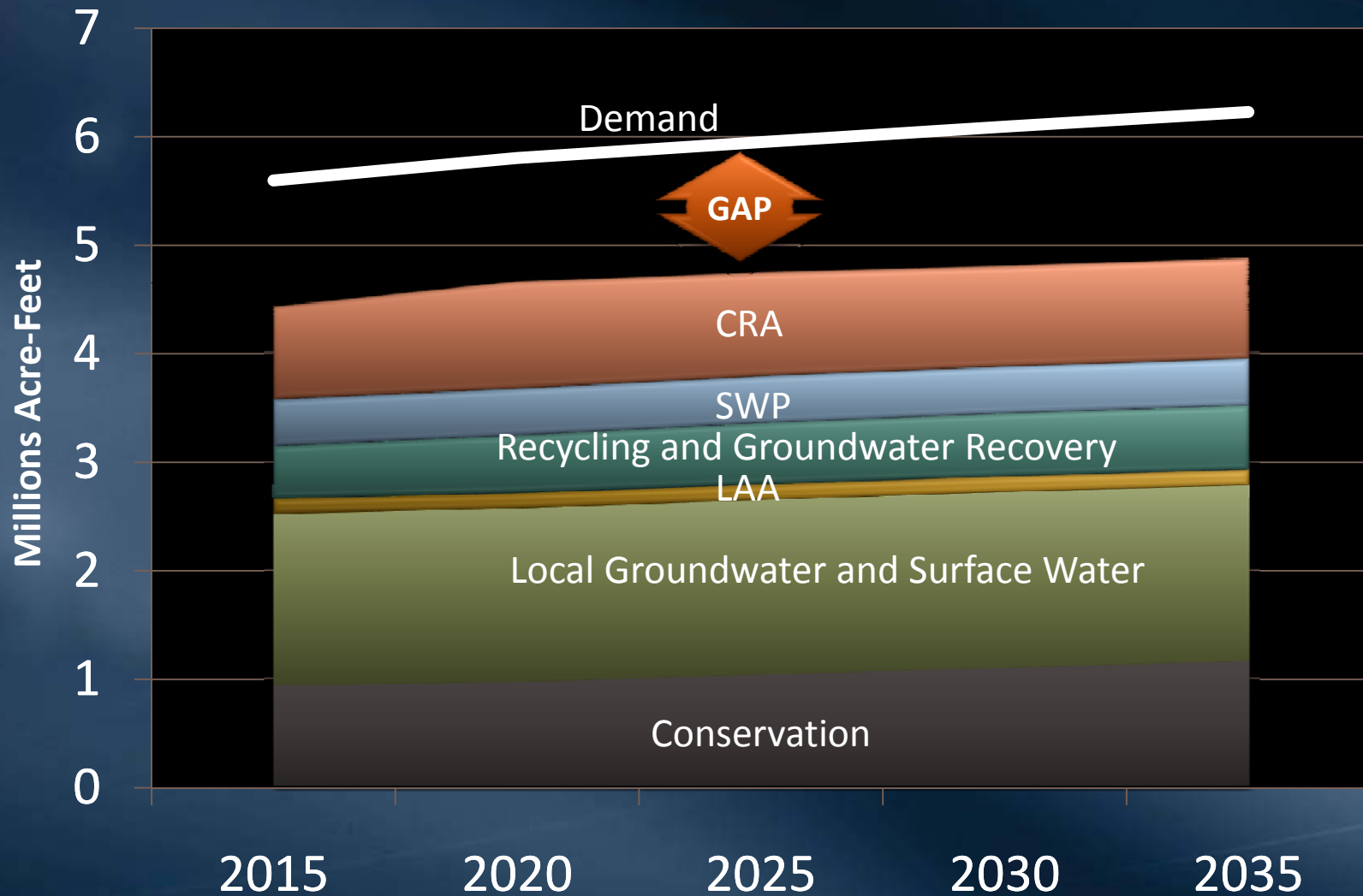
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graph TD; S1[Section 1 – History, Background, and Status] --> S2[Section 2 – Developing a Collaborative Regional Process]; S2 --> S3[Section 3 – Integrating a Policy Approach for Metropolitan's Role]; S3 --> S4[Section 4 – Core Resources Strategy];
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**Section 2 – Developing a Collaborative Regional Process**

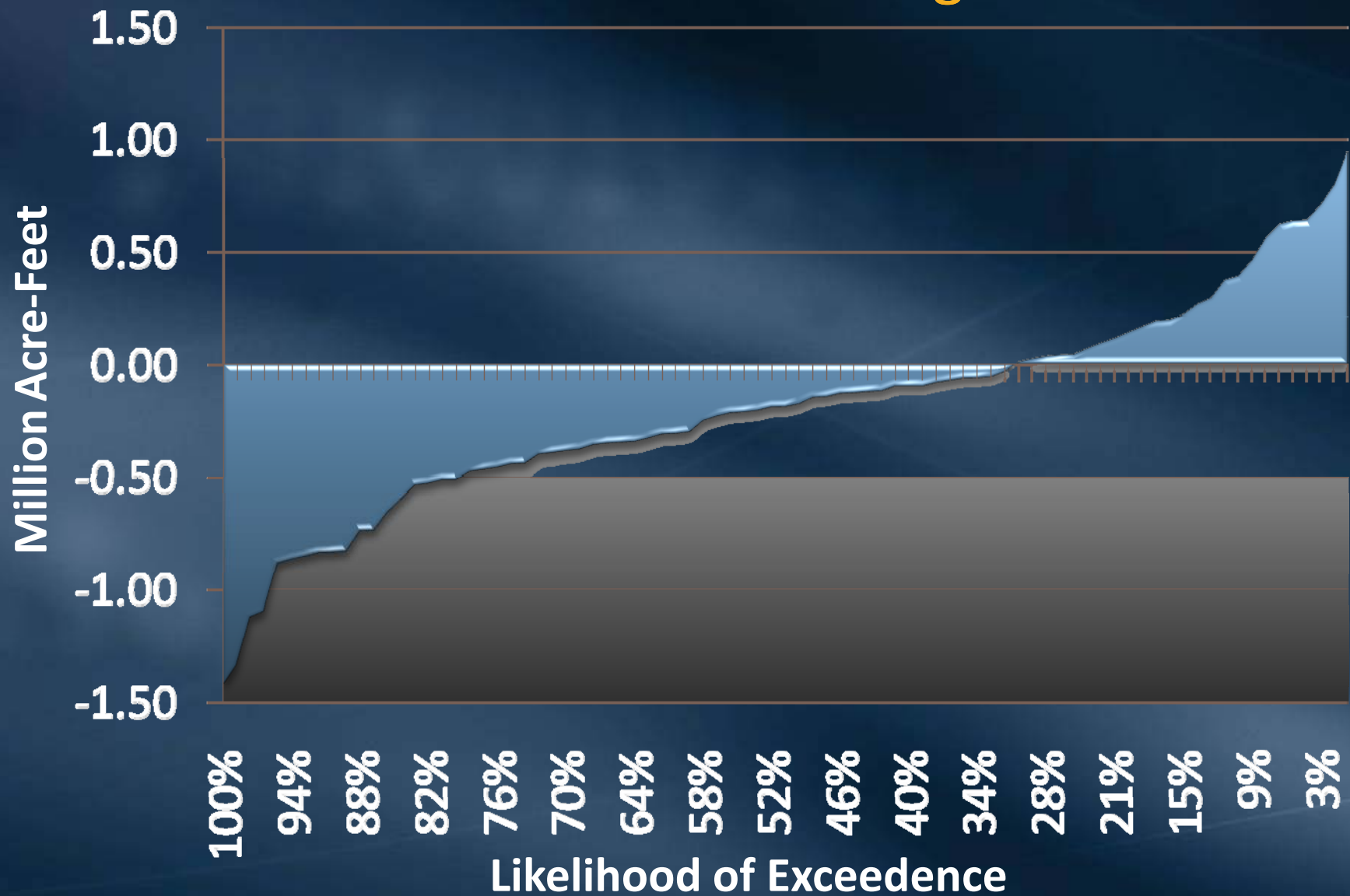
**Section 3 – Integrating a Policy Approach for Metropolitan's Role**

**Section 4 – Core Resources Strategy**

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

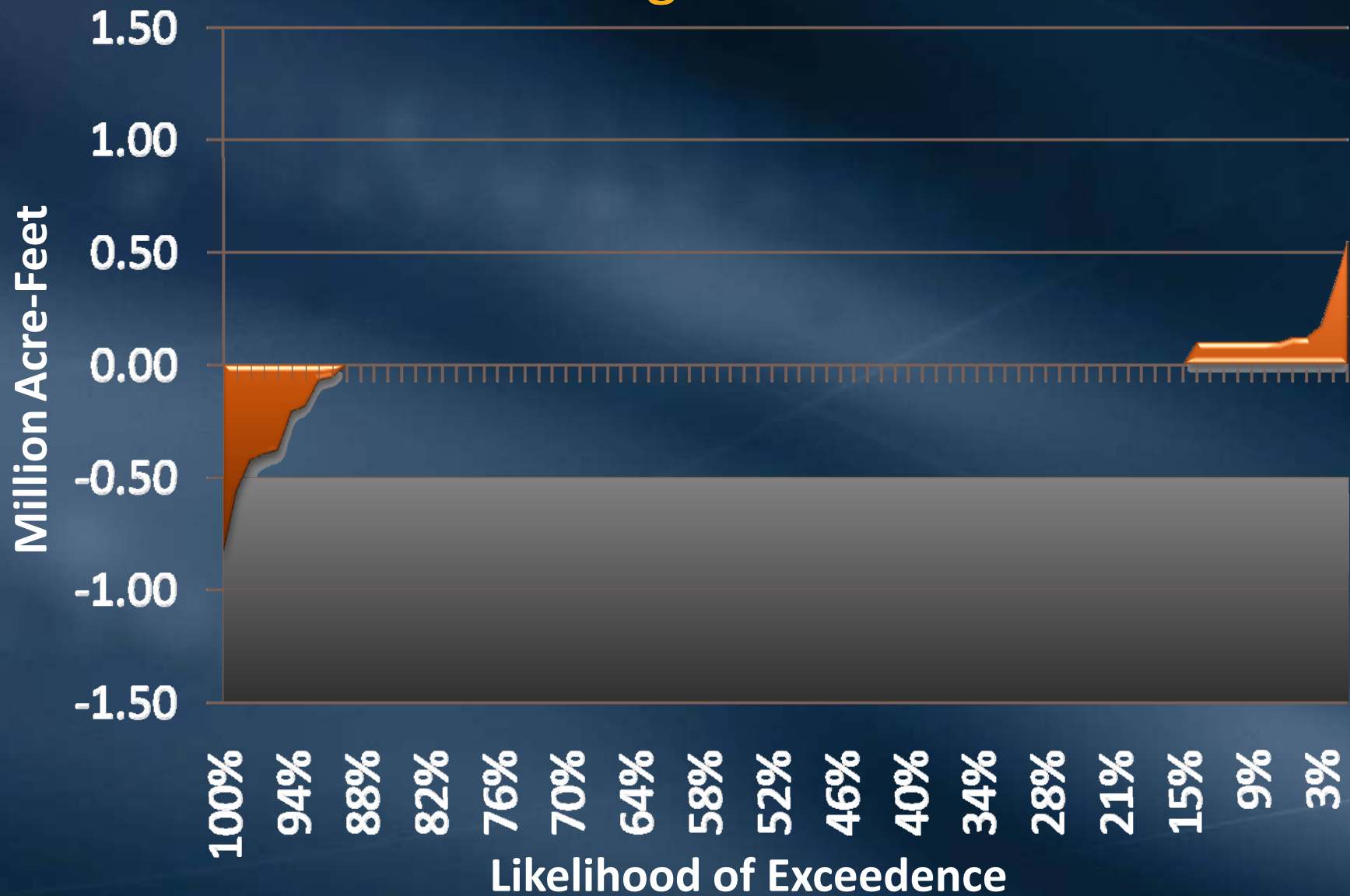


# 2015 Reliability Under Existing Resource Development Without Use Of Storage

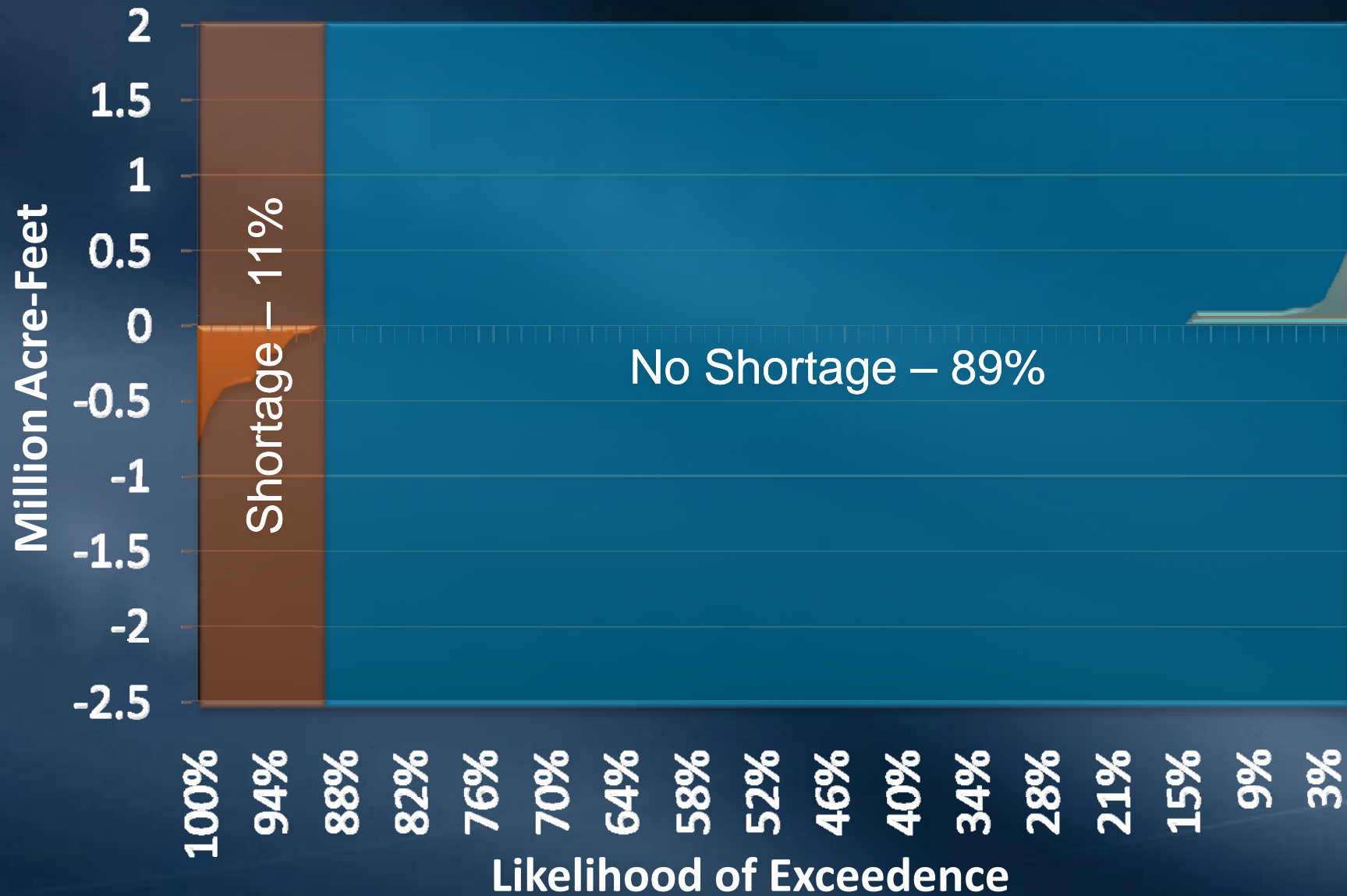




# 2015 Reliability Under Existing Resource Development After Storage Withdrawals

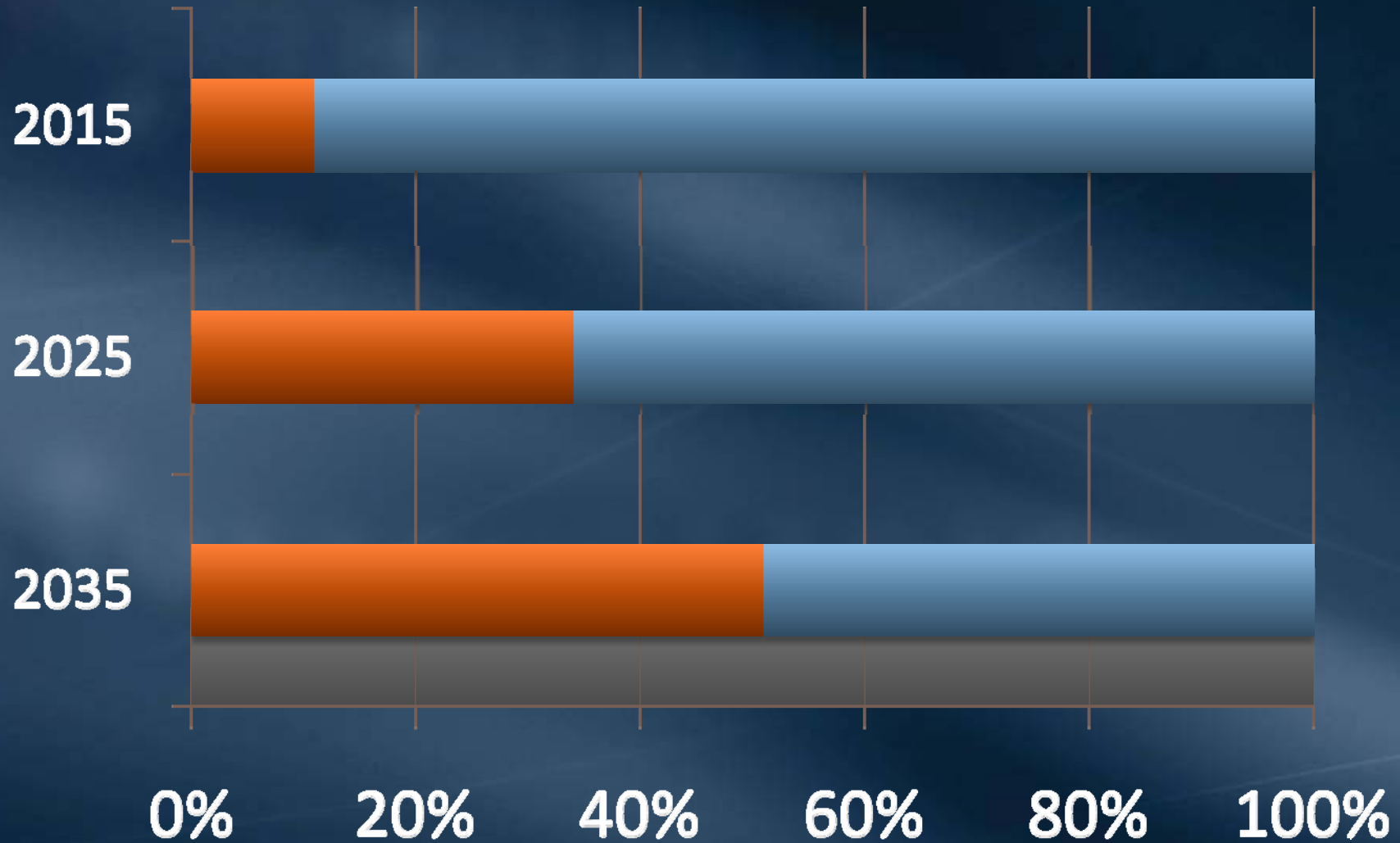


# A Roughly One In Ten Chance Of Shortage



# Without Further Investment, Reliability Would Get Worse

■ Shortage   ■ No Shortage

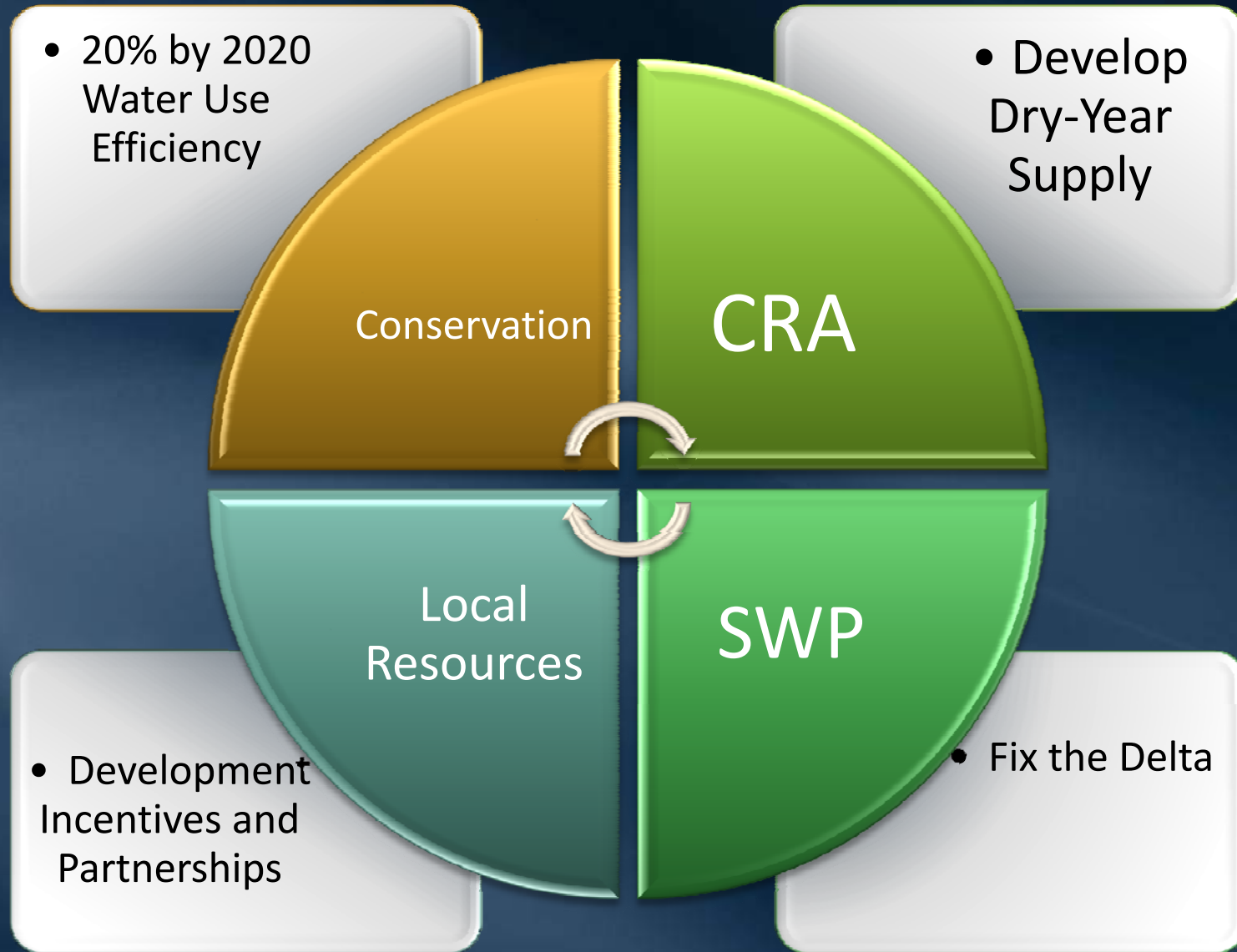


# Existing Resources Under Future Uncertainties

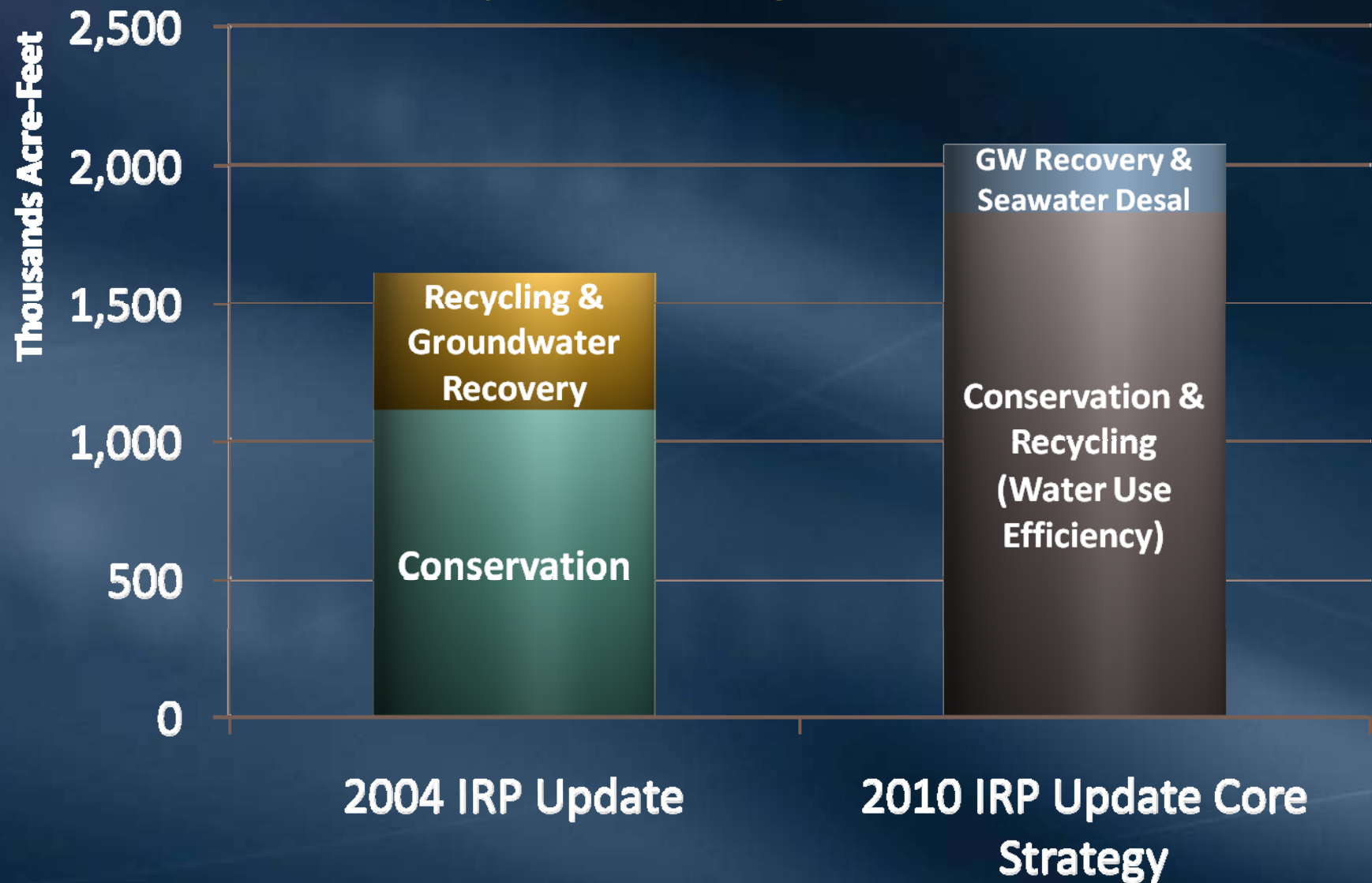
- Under the existing level of resource development without future efforts:
  - Metropolitan would not meet its reliability goals under various future scenarios
  - Local and regional storage would not be replenished
- Challenges and Changed Conditions
  - Climate Change
  - Bay-Delta
  - Endangered Species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

A Core Resources Strategy Can  
Provide Reliability

# Core Resources Strategy to Provide Future Reliability

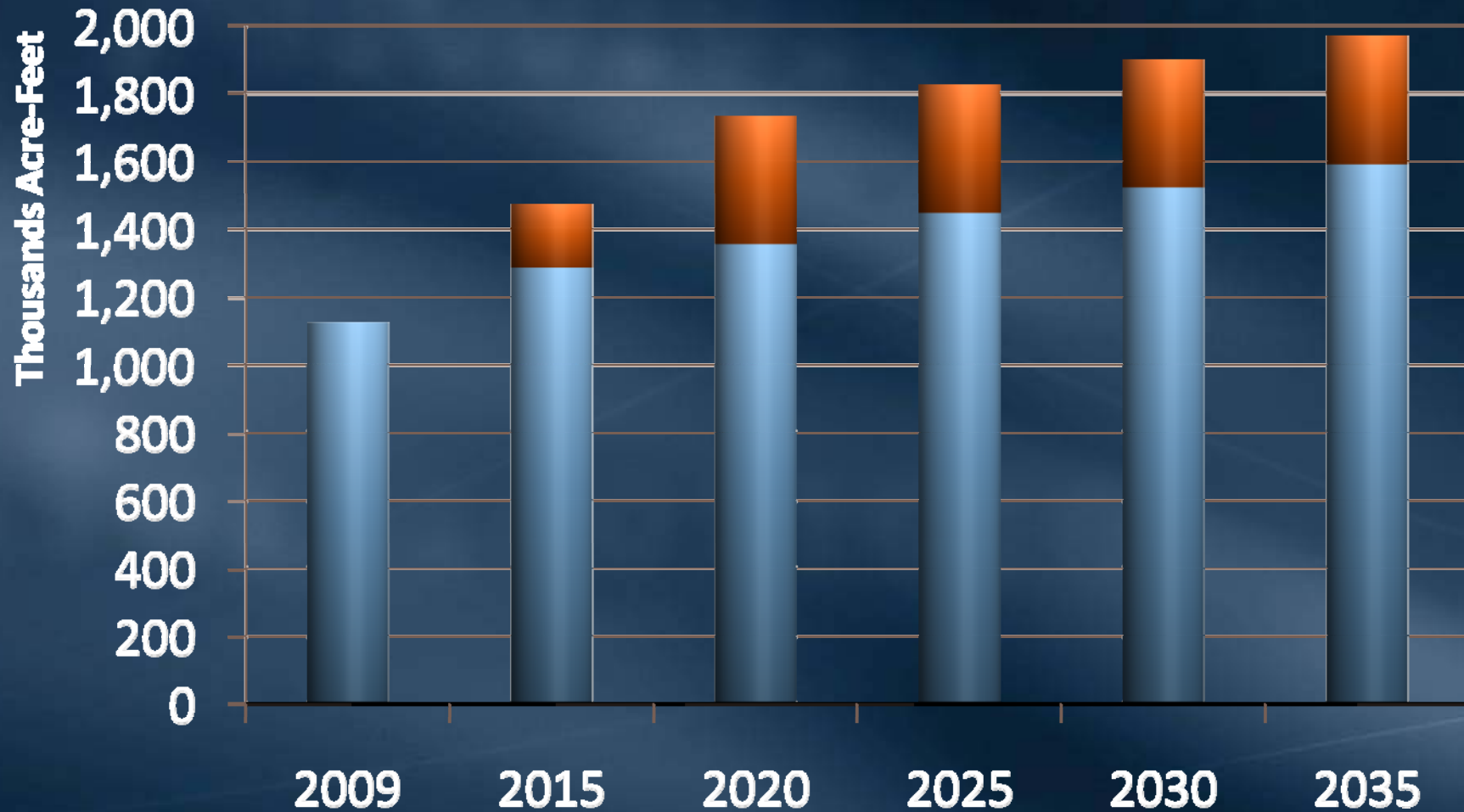


# A Comparison of IRP Local Resource Development Targets for 2025



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

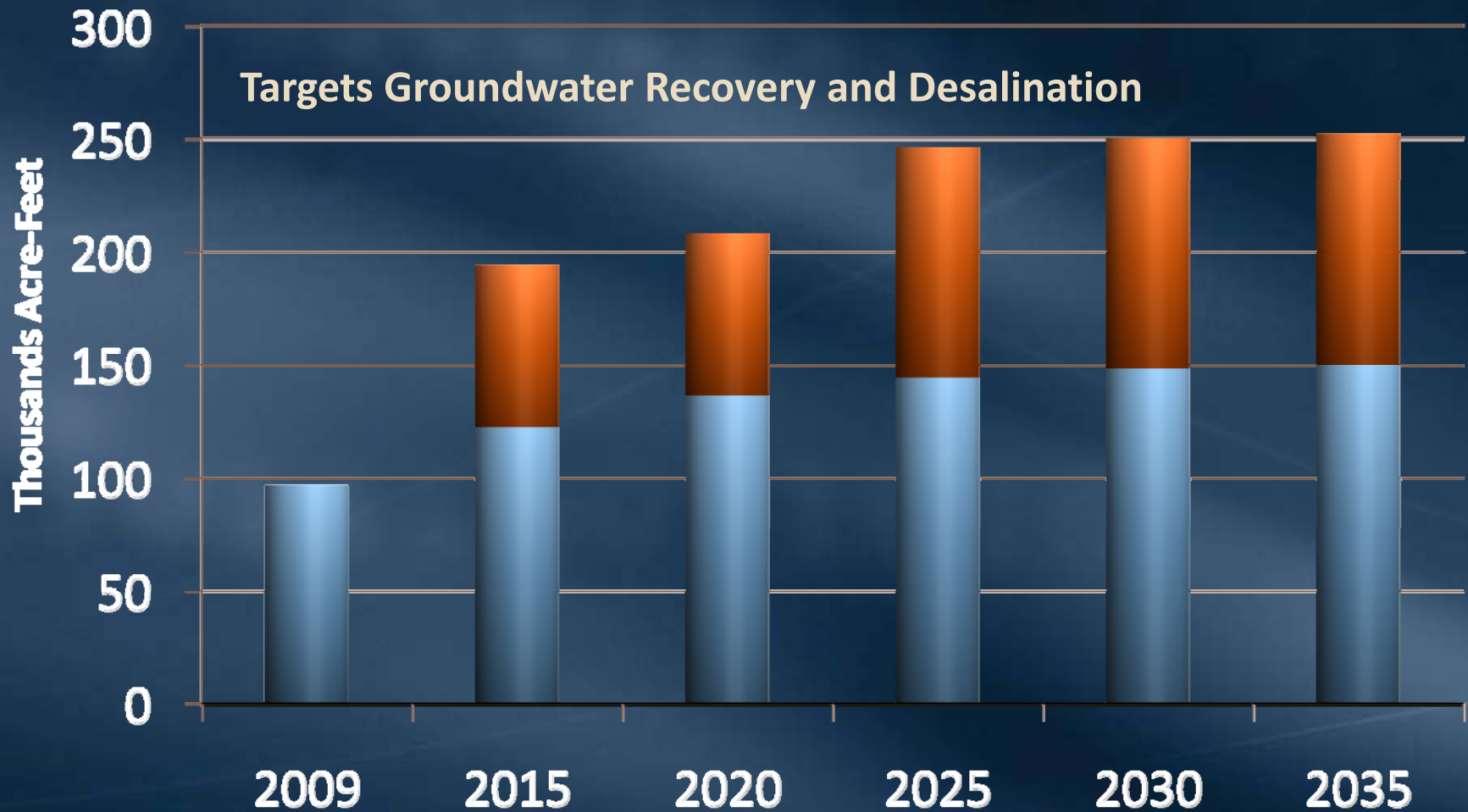
Existing Programs    Additional Development





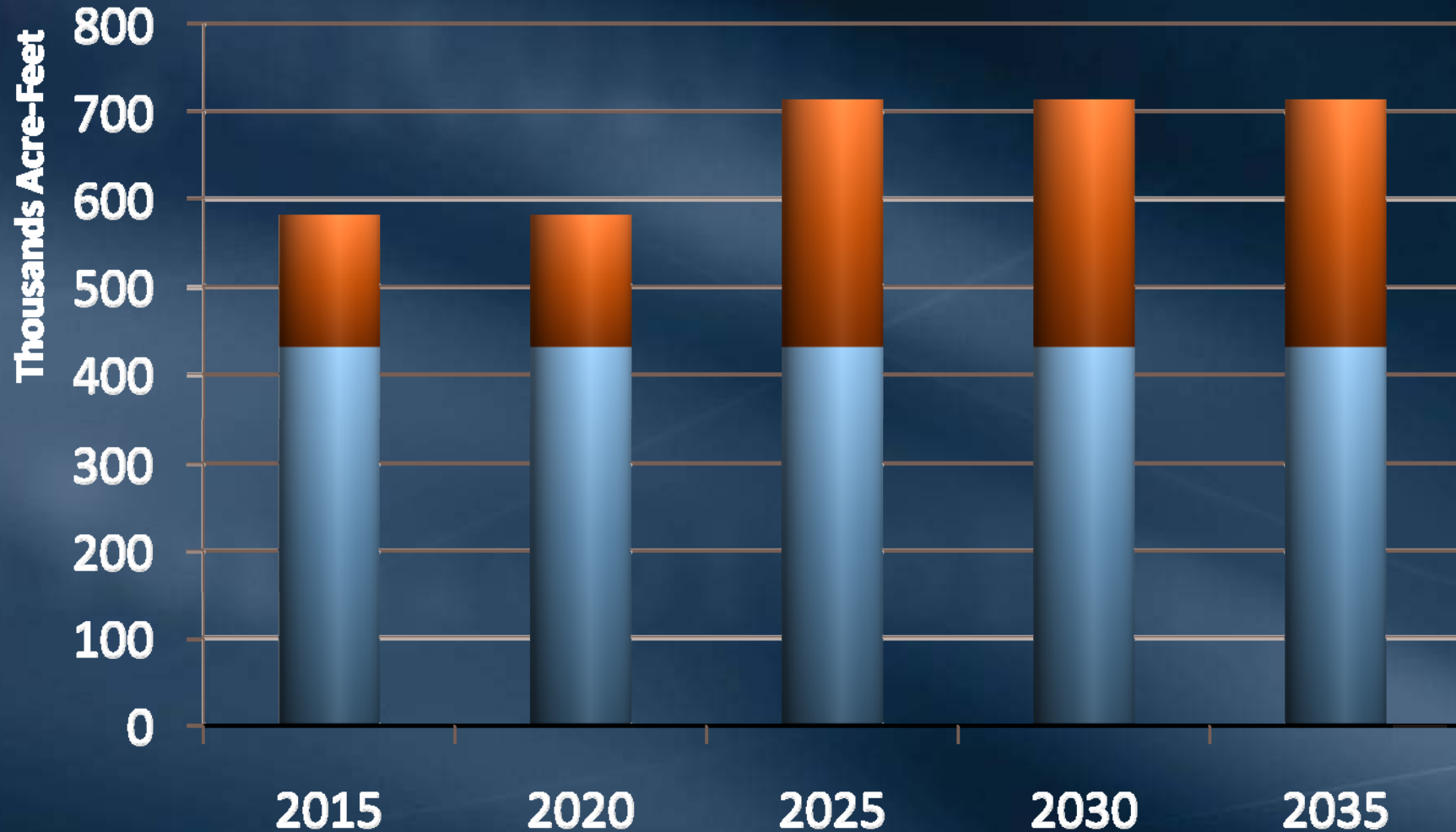
# Local Resource Targets (Increasing Local Yield To Reflect Contracts)

Existing Programs      Additional Development



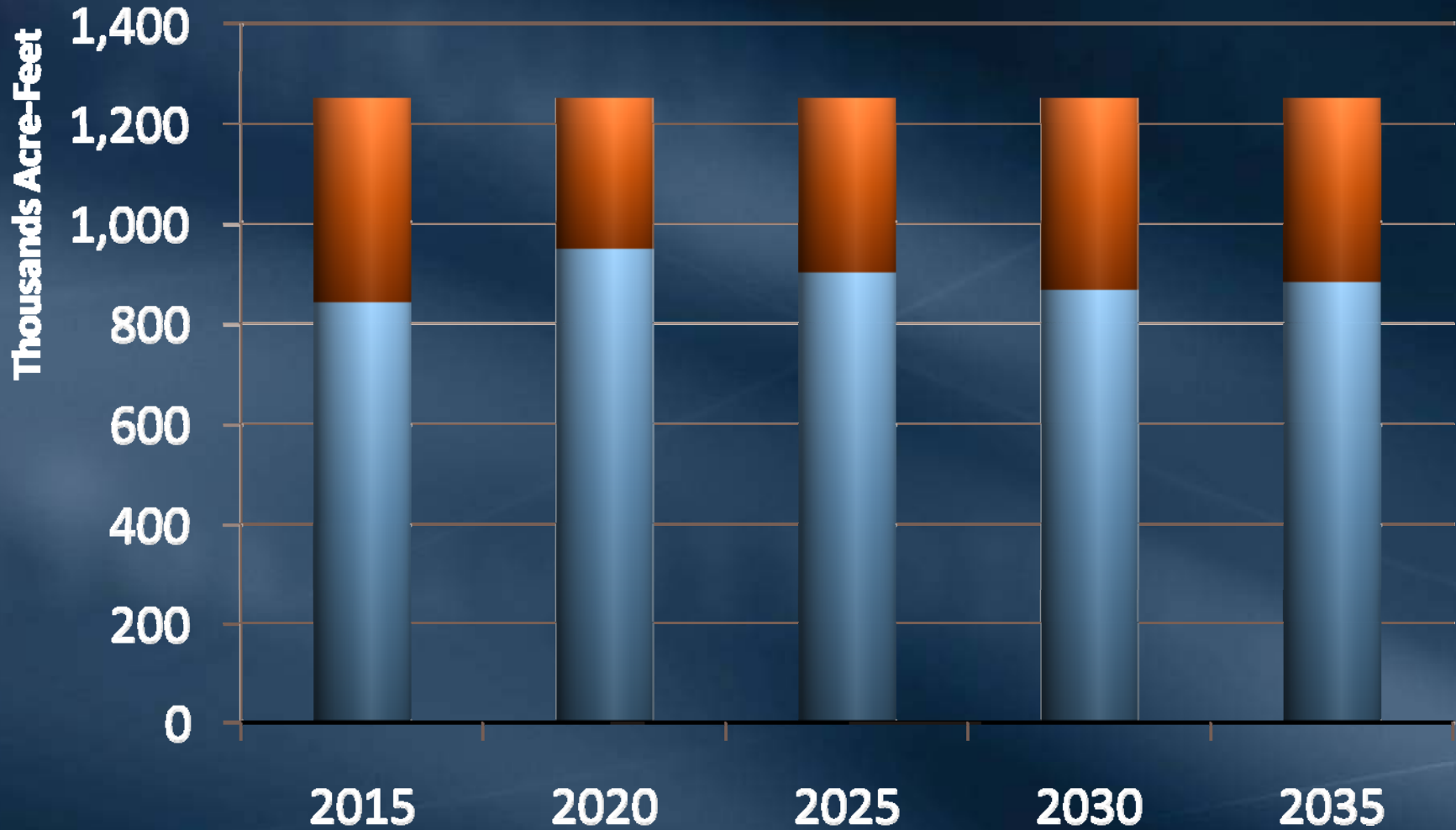
# Dry-Year State Water Project Targets (Complete Delta Improvements)

Existing Programs      Core Strategy



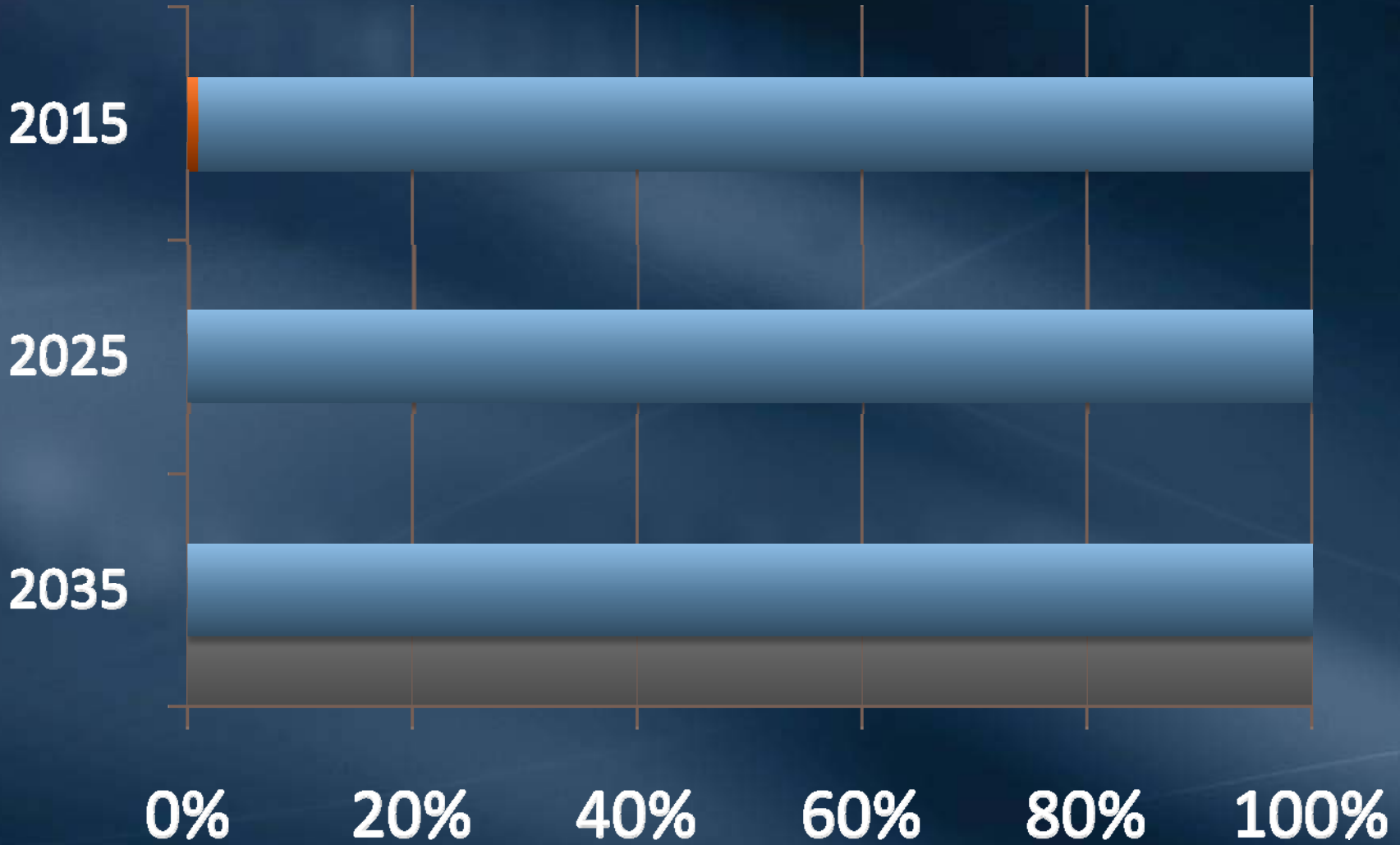
# Colorado River Aqueduct Targets (A Full CRA In Dry Years)

Existing Programs      Core Strategies

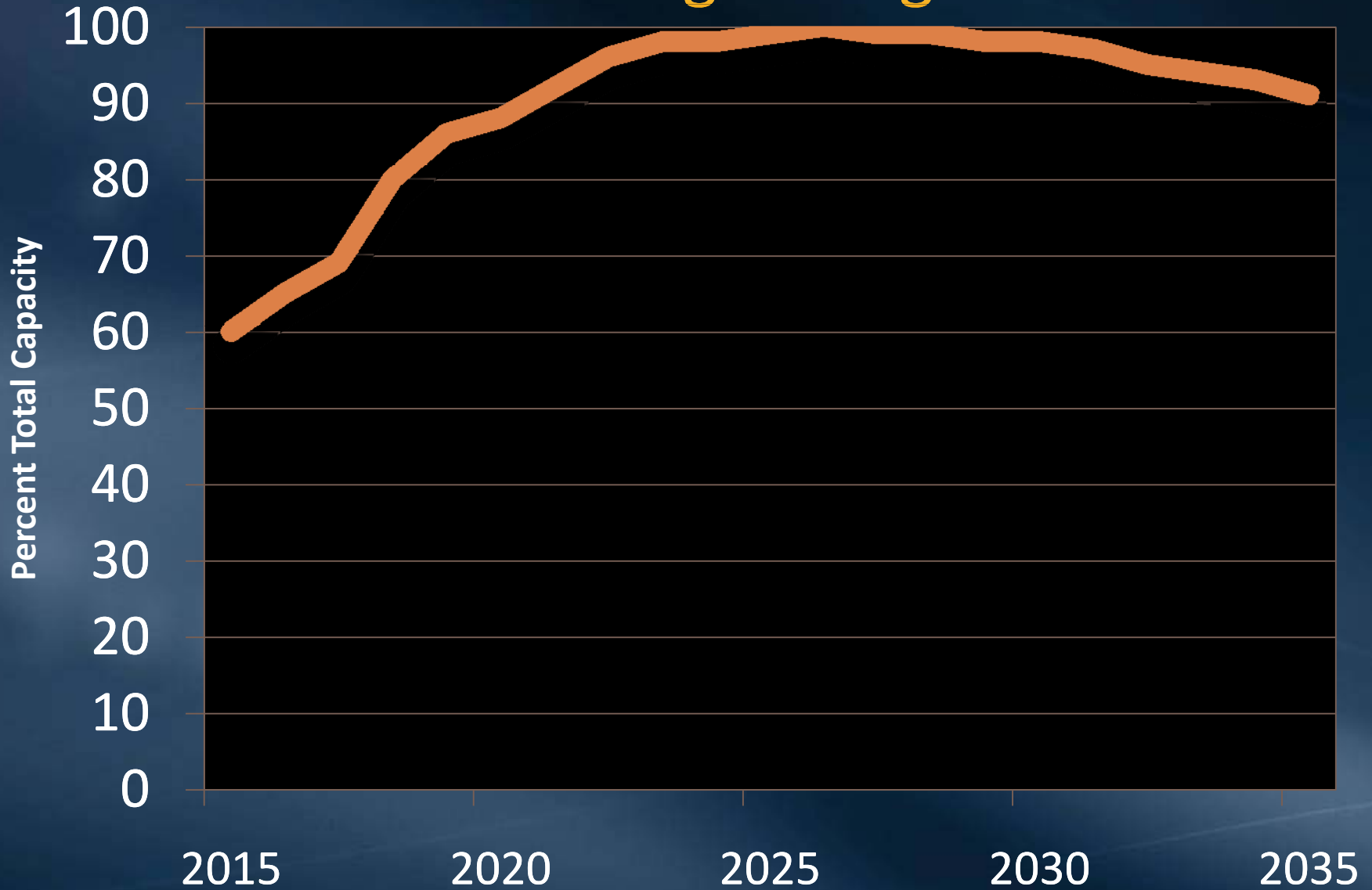


# Reliability Improves Under Core Resource Strategy

■ Shortage ■ No Shortage



# Core Resource Strategy Leads To Sustainable Average Storage Levels



\* Based on total storage capacity of about 5 MAF

# Core Resource Strategy Targets

## Total Production (Acre-Feet)

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

The Future Is Uncertain:  
Beyond Forseeable Hydrologic Conditions

# Uncertainty Comes In Many Forms

- Climate Change
- Statewide Initiatives
  - Delta Improvements
  - “20x2020”
- Endangered Species Act Restrictions
- Economy



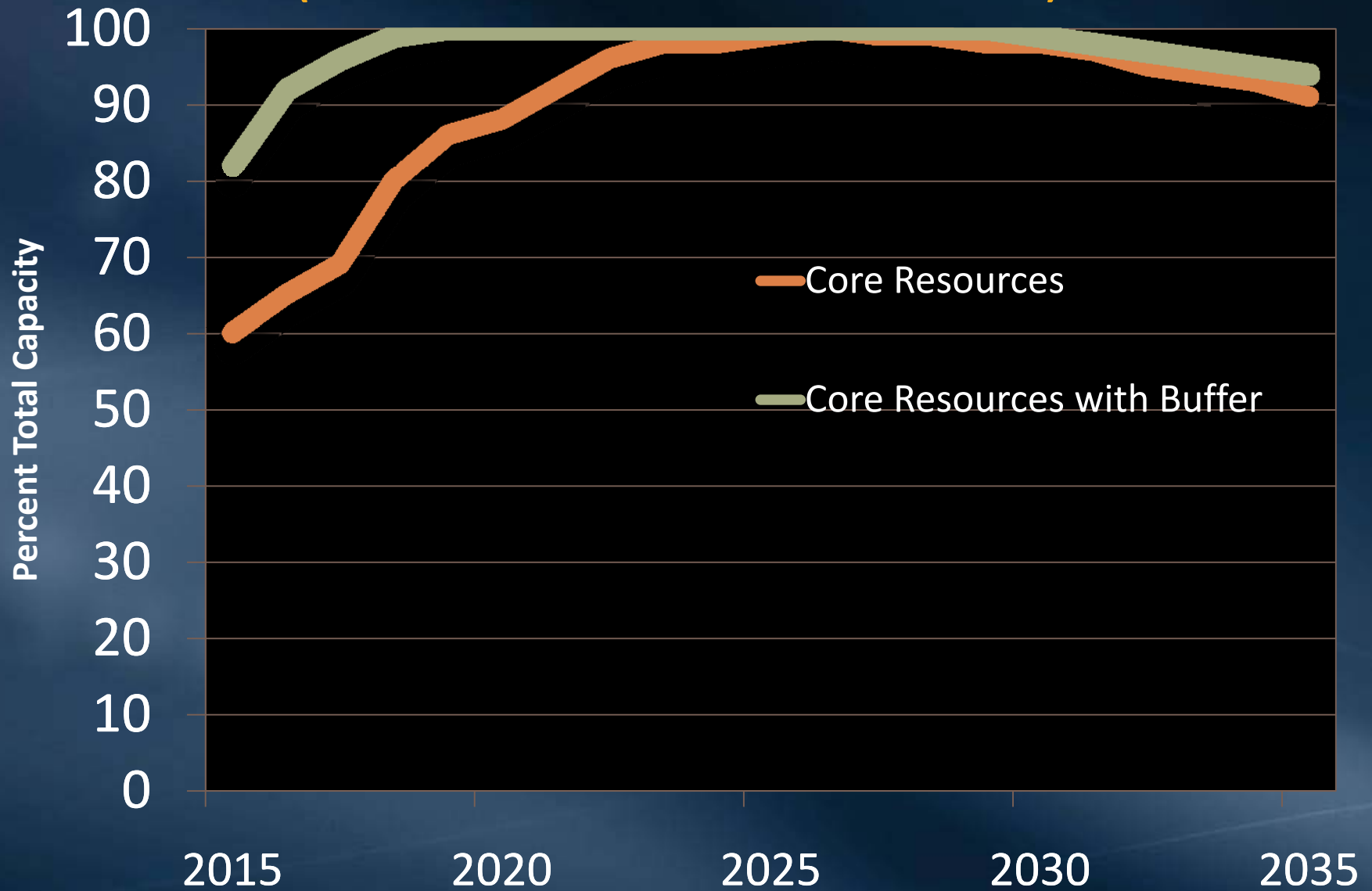
# Implementing A Supply Buffer Can Help Manage Uncertainty

- 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

# 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

# The Buffer Would Create A Storage Reserve (If No Unforeseen Events Occur)



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**Adaptive Management Is Needed**

# Advancing Action Plan for Future Change

- Storm water capture
- Gray water 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

## Component 1

### Core Resources Strategy

- *20% x 2020 Retail Compliance*
- *Fix the Delta*
- *Dry-Year CRA*
- *Local Projects*

## Component 2

### Buffer Implementation

- *20x2020 Regional Target*
- *Water Transfers*
- *Aggressive adaptive actions*
- *Up to 10% of retail demand*

## Component 3

### Foundational Actions

- *Implement low-regret foundational actions*
- *Monitor key vulnerabilities*
- *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



# Next Steps – Near Term

- Today: IRP Committee overview of Draft 2010 IRP
- July 16: Overview with member agencies
- July 21: Comments due from stakeholders
- July 27: Board Workshop on Draft 2010 IRP
- August 3-12: Stakeholder Forums