WATER TOMORROW

2020 INTEGRATED RESOURCES PLAN

Southern California Water Dialogue

February 24, 2021

Presentation Overview

Integrated Resources Plan

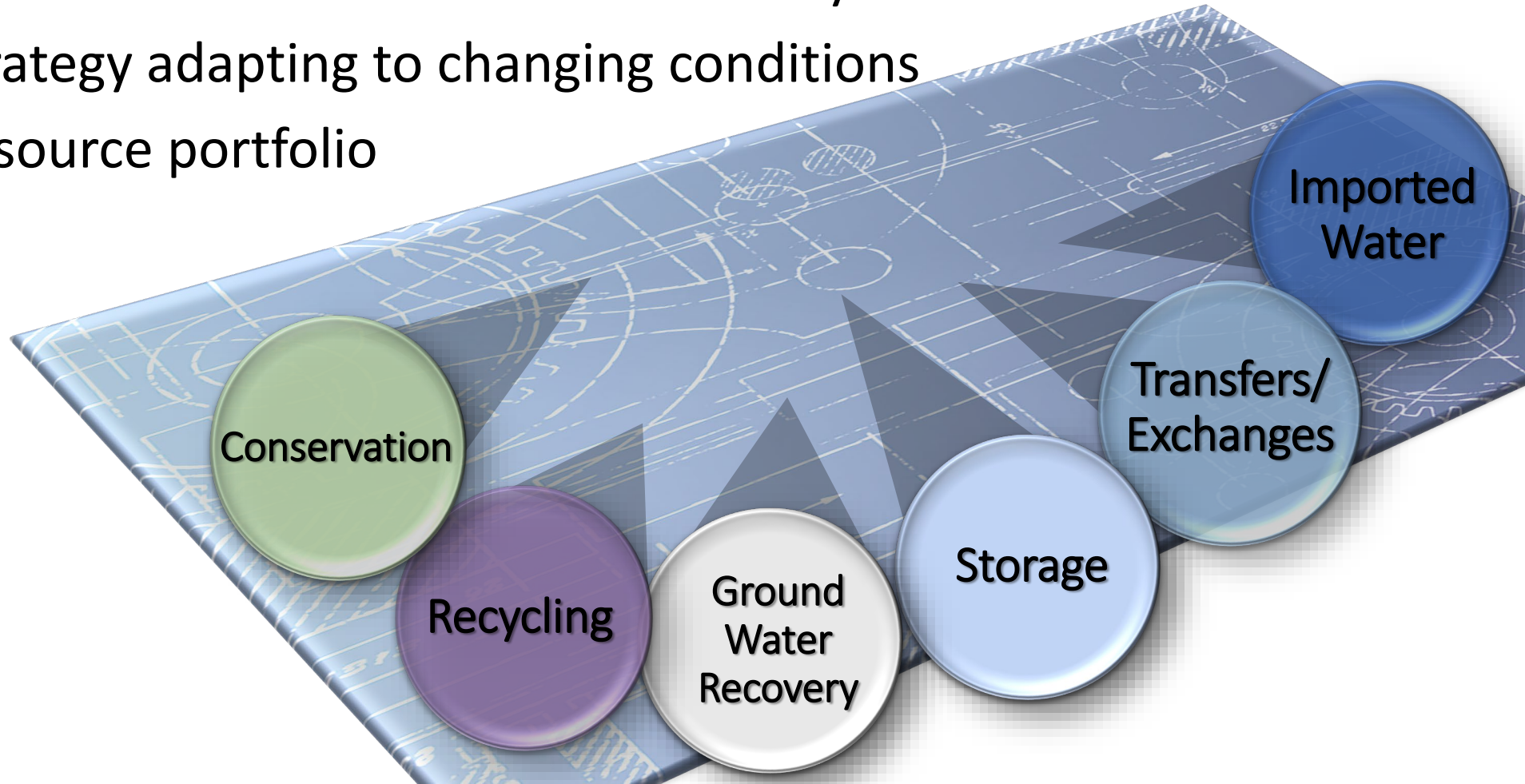
History of the IRP

Scenario Planning

IRP Progress & Schedule

Integrated Resources Plan (IRP)

- Blueprint for Southern California water reliability
- Long-term strategy adapting to changing conditions
- Diversified resource portfolio



History of the IRP

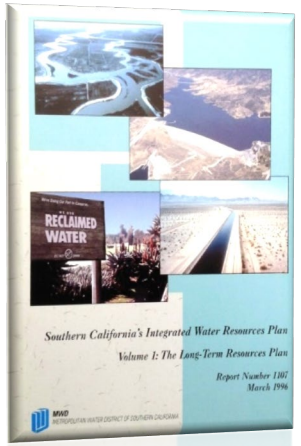
1987 – 1992 Drought

Colorado River Cutbacks

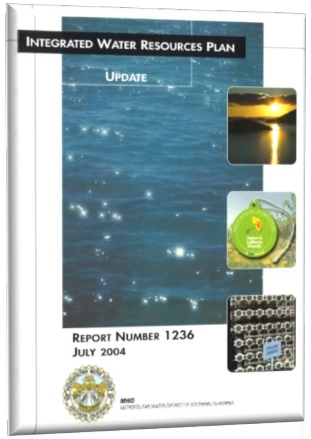
SWP Restrictions

Recession & Drought

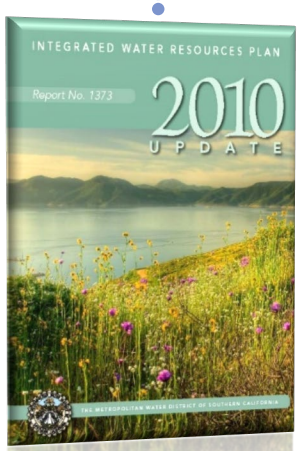
1996



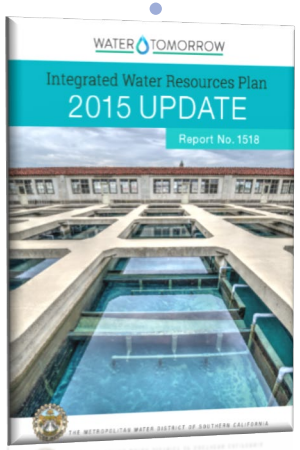
2004



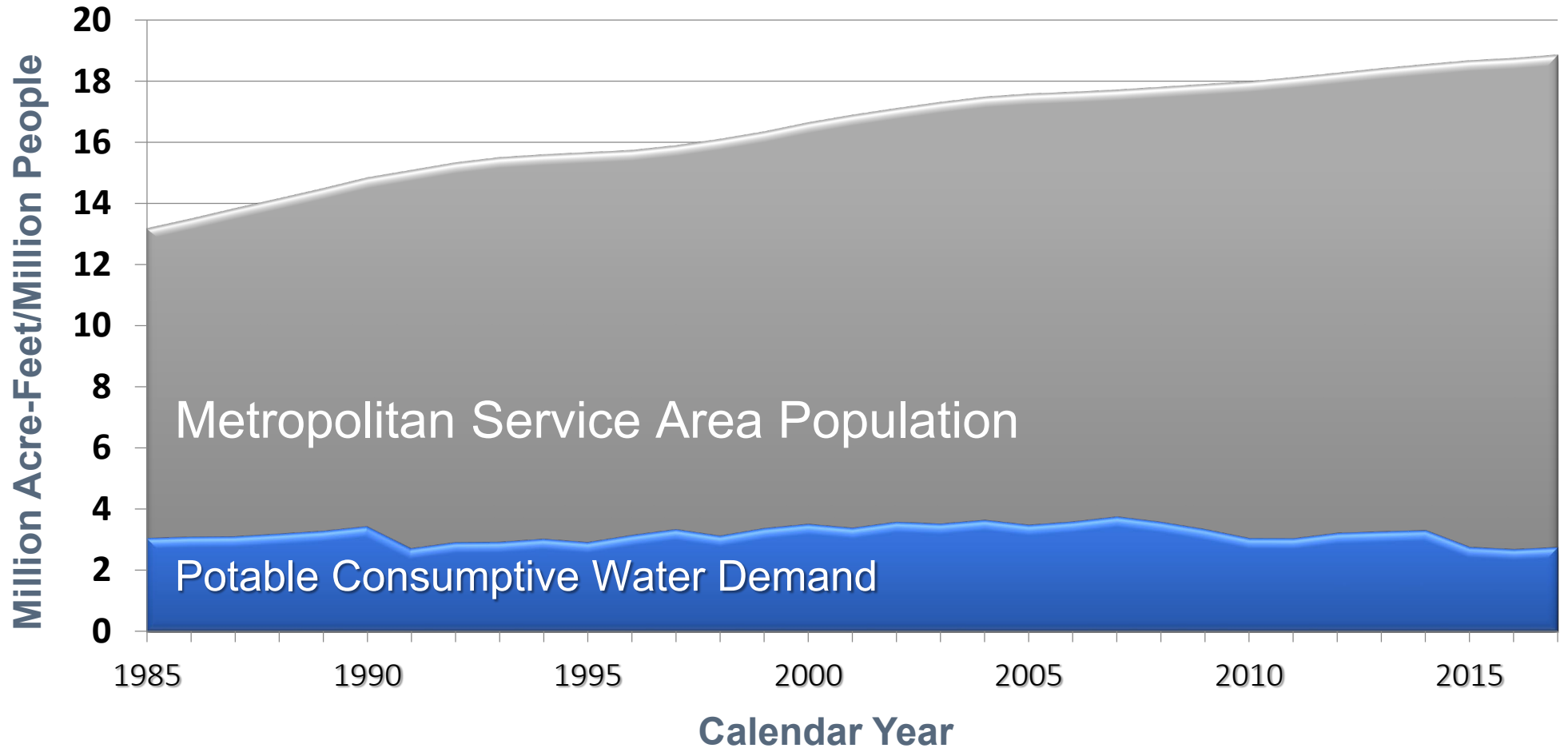
2010



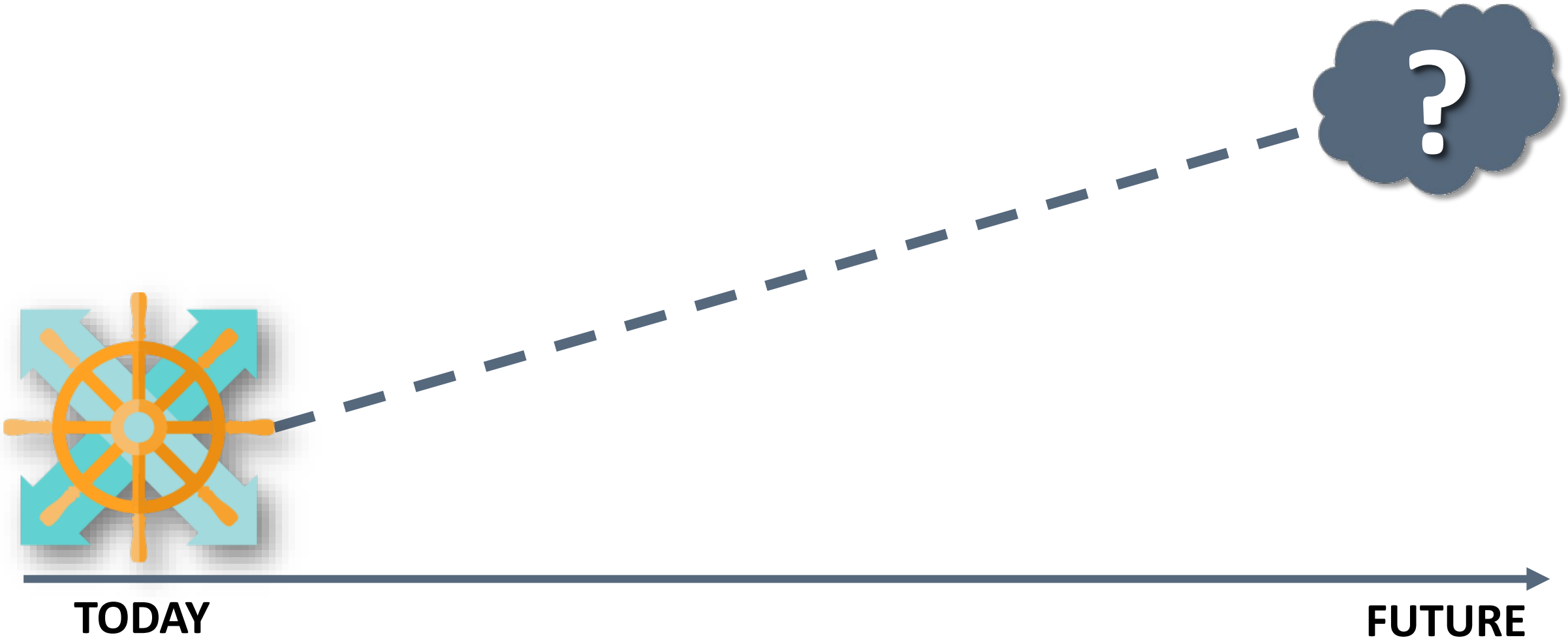
2015



Potable Water Demand Stable Despite Growth



The Future Is Not Predictable



Scenario Planning Approach To Examine A Range of Plausible Futures

TODAY

FUTURE

2020 IRP Roadmap

4 **Adaptive Management Strategy**

3 **Develop Resource Mix**

2 **Construct Learning Scenarios**

1 **Identify Drivers of Change**

Step 1: Drivers of Change

Identify Drivers of Change

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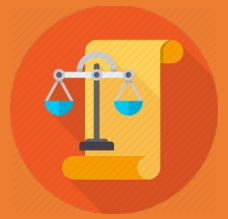
Identify Drivers of Change

- Sea level rise
- Rainfall
- Rising temperatures
- Recession or economic upturn
- Public's willingness to pay
- Population growth
- New technologies
- Stormwater expansion
- Emerging contaminants
- Delta issues

Climate Change

Politics and Regulations



Technological Advances

Economy and Demographics

Step 1: Drivers of Change Survey Results

Top 5 Survey rankings by cohort based on percentage of responses that were Extremely or Very Important

Board Members	%
Colorado River Cooperation	95%
Hydrologic Variations	90%
Stress on River Basins	90%
Emerging Regulations	86%
Direct Potable Reuse	76%
Outages and Disasters	76%

Member Agencies	%
Colorado River Cooperation	91%
Emerging Regulations	87%
Direct Potable Reuse	83%
Hydrologic Variations	83%
Groundwater Contamination	78%

Stakeholders	%
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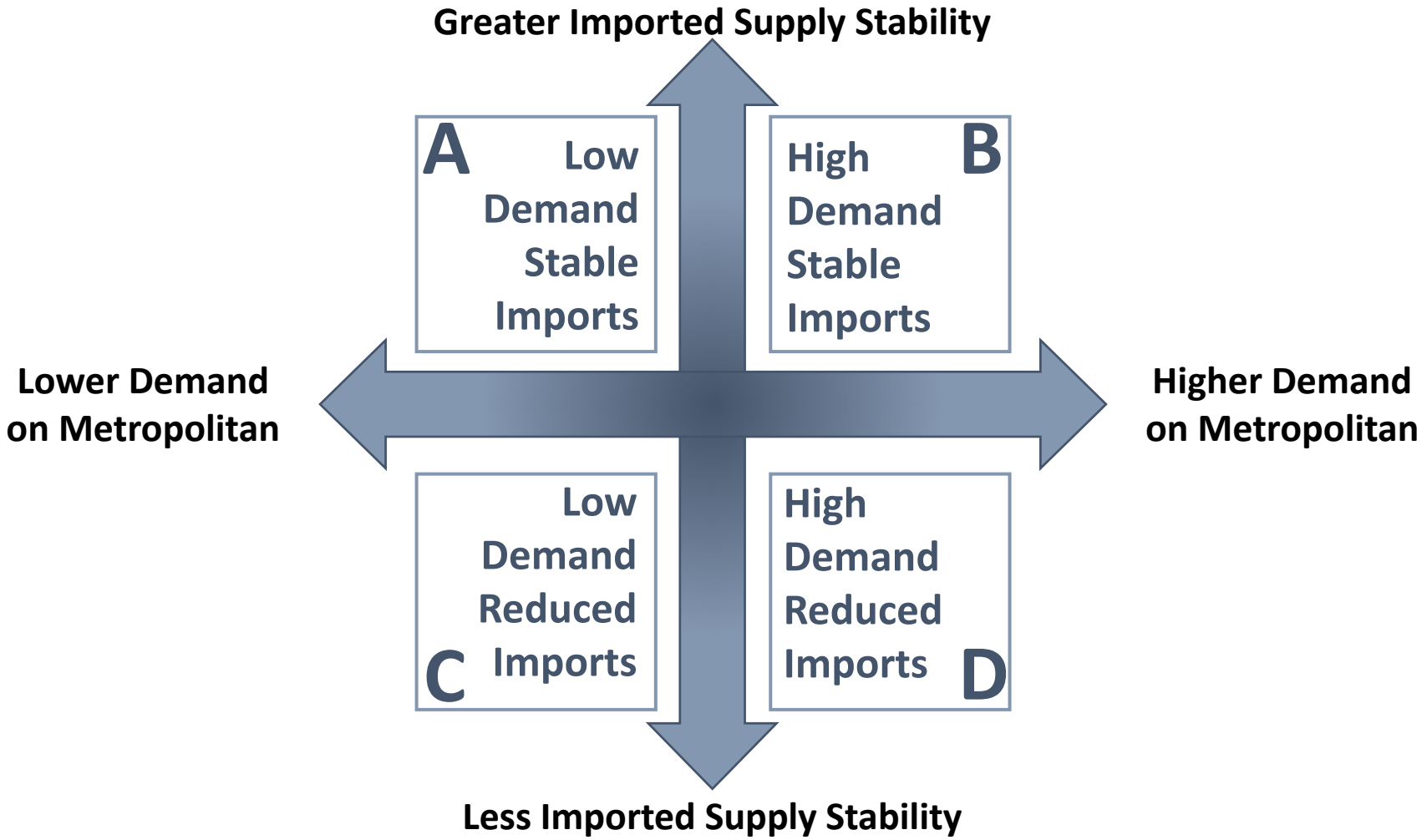
Step 2: Construct Scenarios & Refine Analysis

Created a supply – demand framework



Step 2: Construct Scenarios & Refine Analysis

Working assumptions for each Scenario

- Slower growing economy
- Least additional supply needed
- Fewest local supply projects included
- Gradual climate impacts/fewer regulatory requirements

A Low Demand Stable Imports

- Faster growing economy
- Additional supply needed for growing demands
- Additional local supply projects
- Gradual climate impacts/fewer regulatory requirements

B High Demand Stable Imports

- Slower growing economy
- Additional supply needed for loss of imported supply
- Additional local supply projects; prioritize projects with least investment needed
- Severe climate impacts/higher regulatory requirements

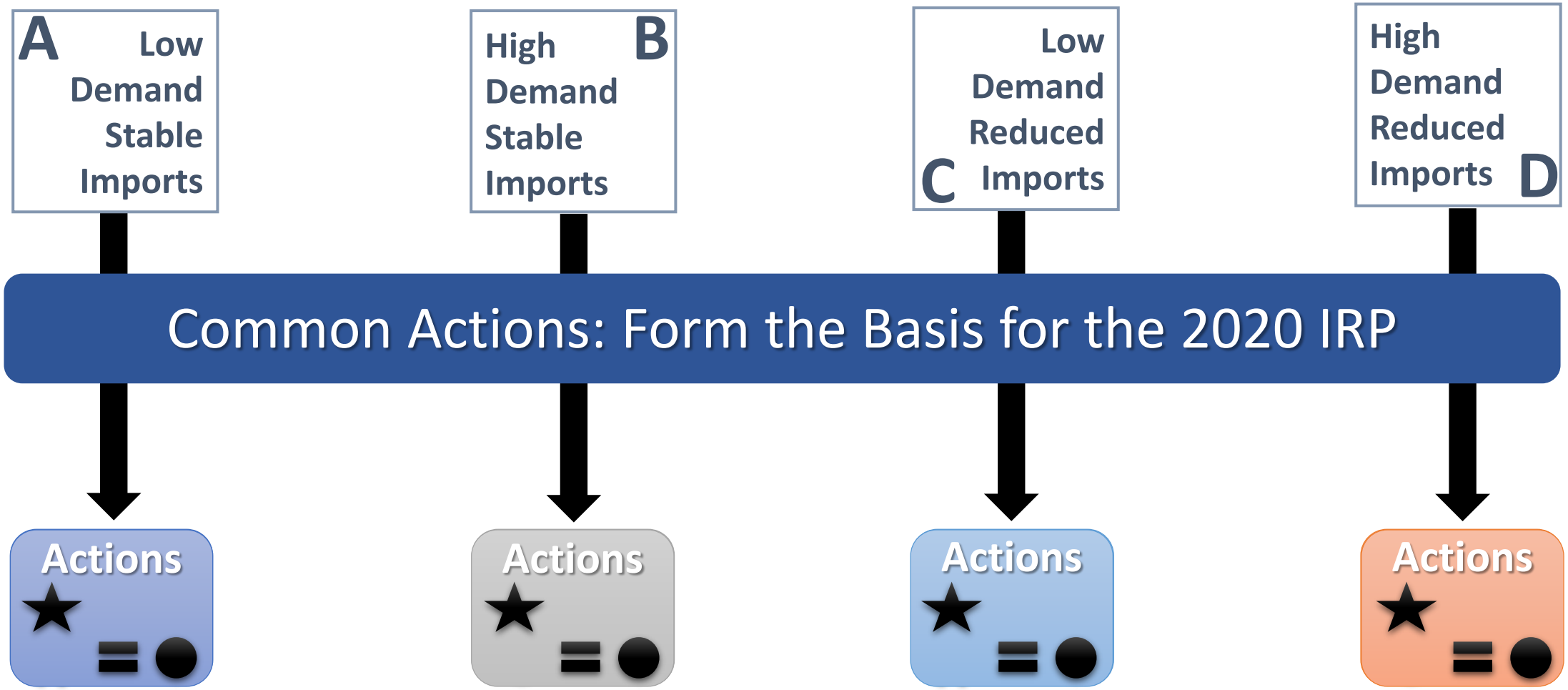
C Low Demand Reduced Imports

D High Demand Reduced Imports

- Faster growing economy
- Most additional supply needed for growing demands and loss of imported supply
- Most local supply projects included
- Severe climate impacts/higher regulatory requirements

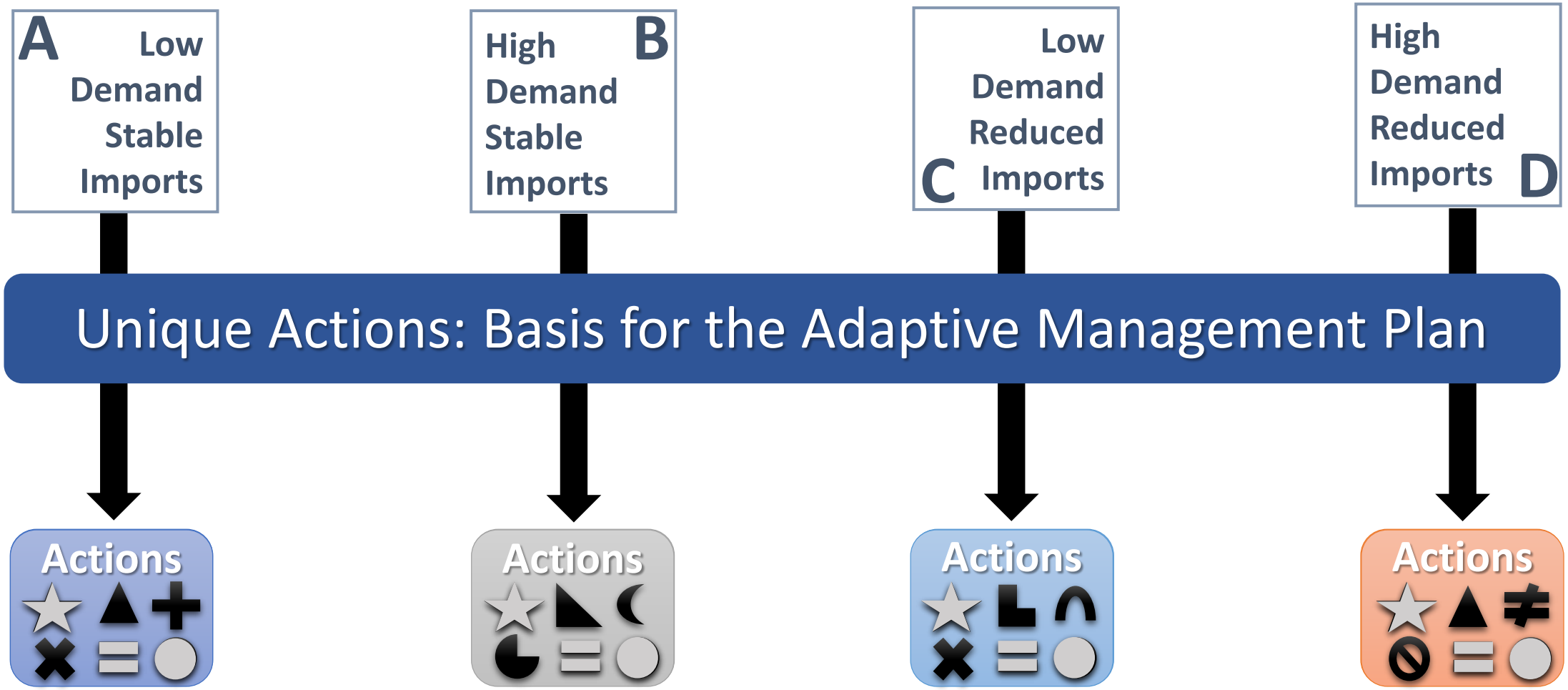
Step 3: Develop A Resource Mix

Identify Actions and Targets to Achieve Reliability



Step 4: Adaptive Management Strategy

Identify Signposts to Inform Policy Decision Makers



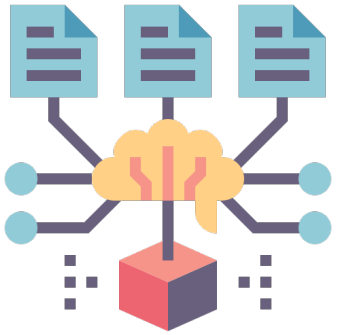
IRP Plan through April

Refine Scenario Assumptions and Gap Analysis

Research and Confirmation

Member Agency input

Consultation with Experts



Modeling for Gap Analysis

Board Policy Discussions

Scenario Assumption Refinements

Key Areas

Demands

Imported Supply

- ***Colorado River***
- ***State Water Project***

Local Supply

- ***Groundwater***
- ***Recycled Water***
- ***Seawater Desalination***
- ***Surface Water***
- ***Los Angeles Aqueduct***

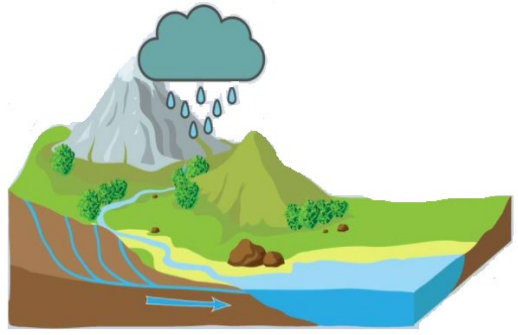
Demand Refinements

- Member Agency Feedback
  - Feedback received through various forums
    - Qualitative/Quantitative Assessment
    - Workshops and other meetings
- Engage with Demand Experts
  - Share feedback and pose questions to experts
  - Receive preliminary assessment of scenarios and input on issues raised
- Workshop with Board, Member Agencies, and Experts
  - Opportunity to review expert input and ask questions in March 2021

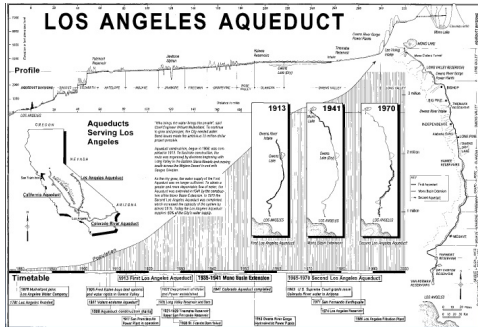
Imported Water Supply Refinements

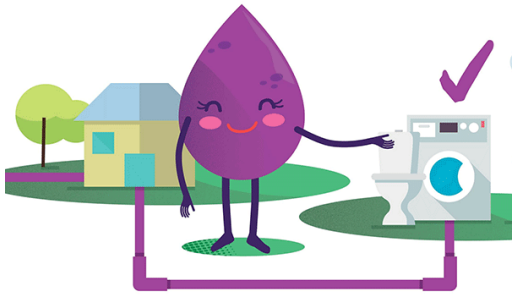
- Member Agency Feedback
  - Feedback received through various forums
    - Qualitative/Quantitative Assessment
    - Workshops and other meetings
- Engage with Climate Experts
  - Share feedback and pose questions to experts
  - Receive preliminary assessment of scenarios and input on issues raised
- Workshop with Board, Member Agencies, and Experts
  - Opportunity to review expert input and ask questions in April 2021

Local Supply Refinements



Local Supplies

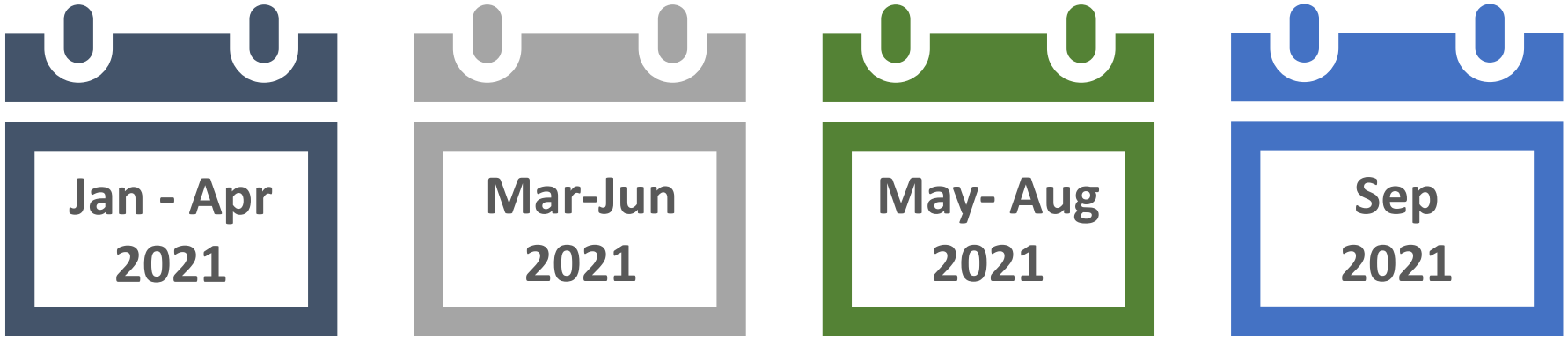




- Groundwater
- Surface Water
- Los Angeles Aqueduct
- Local Projects

- Engage member agencies about local supplies through 4 separate yet concurrent tracks
- Engage with Climate Experts

Tentative Schedule

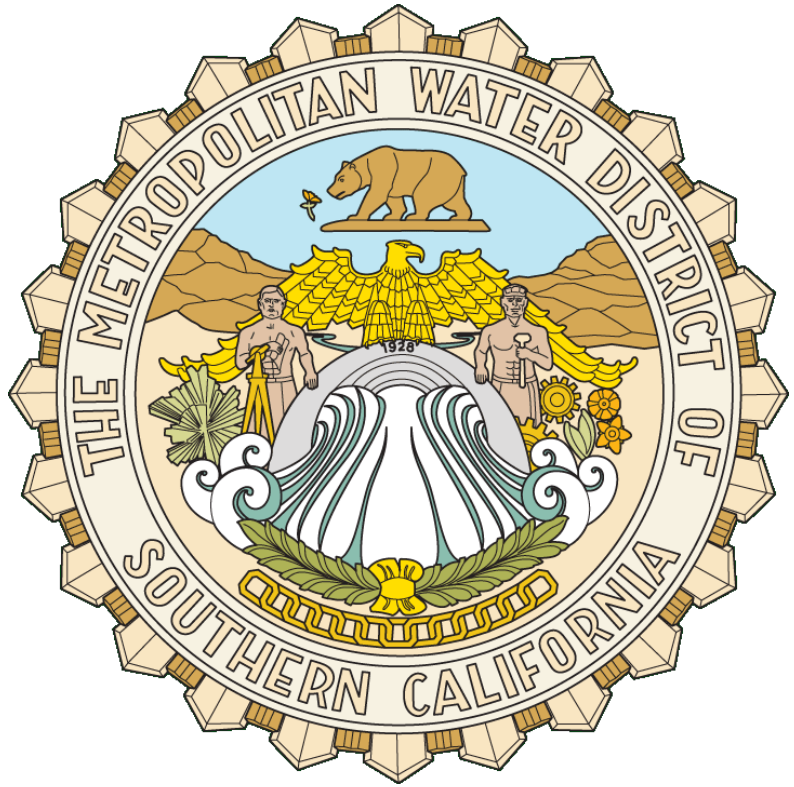


STEP 2
Refine Scenarios

STEP 3
Develop Resource Mix

STEP 4
Adaptive Management

Adopt IRP Report


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928