



WATER  TOMORROW
2020 Integrated Resources Plan

Draft Scenario Framework and Narrative Summaries

Member Agency Technical Workgroup Meeting

September 16, 2020

OVERVIEW

- Recent Activity
- Draft Scenario Framework and Narrative Summaries
- Next steps

2020 IRP ROADMAP



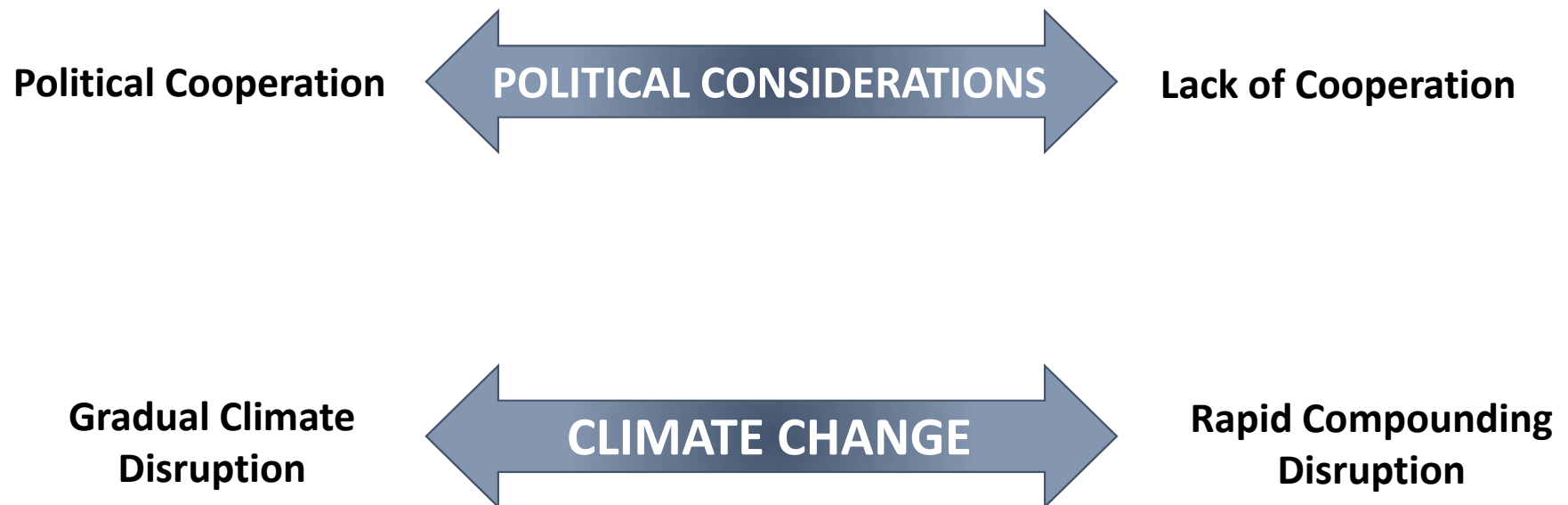
STEP 2 – CONSTRUCT SCENARIOS

Recent Activity

- Jul 15 – MA Technical Workgroup Mtg. #3
 - Screening Process and objective of Qual/Quant Assessment
- Aug 5 & 12 – Workshops on Qual/Quant Assessment
 - A forum to answer questions and clarify purpose
- Aug 18 – IRP Committee
 - Mock Scenario to illustrate type of analysis and analytics
- Aug 21 – Member Agency Managers Meeting
 - Preliminary 2020 IRP scenario framework

PRELIMINARY SCENARIO FRAMEWORK

Using Specific Drivers of Change



PRELIMINARY SCENARIO FRAMEWORK

Using Specific Drivers of Change

**Feedback received
resulting in a new
scenario framework
approach**

Political Cooperation

operation

Gradual Change
Disruption

Compounding
Disruption

NEW SCENARIO FRAMEWORK APPROACH

Using Key Outcomes to MWD



CONSTRUCTING SCENARIOS

Working Draft

**Greater Imported
Supply Stability**

**Low
Demand
Stable
Imports**

**High
Demand
Stable
Imports**

**Lower Demand on
Metropolitan**

**Higher Demand on
Metropolitan**

**Low
Demand
Reduced
Imports**

**High
Demand
Reduced
Imports**

**Less Imported
Supply Stability**

CONSTRUCTING SCENARIOS

Working Draft

**Greater Imported
Supply Stability**

This scenario reflects increasing retail demands across the region resulting from population growth and a strong economy. Fortunately, climate change impacts have been manageable and imported supplies have remained stable. Increased reliance on Metropolitan resulting from groundwater contamination has also driven up demands for imported water.



**Lower Demand on
Metropolitan**

**Higher Demand on
Metropolitan**

This scenario is driven by a combination of plentiful regional and local supplies, a struggling economy, low population growth, and a strengthening water use ethic across the state. Member agency efforts to reduce their dependence on Metropolitan have succeeded.

















This scenario combines slow population growth and a weak economy with successful efforts among member agencies to manage water use behavior and drought-proof their local supplies. It couples a struggling economy with the rapid onset of climate change impacts that have affected imported supplies more drastically than less-vulnerable local systems

This scenario is driven by severe climate impacts affecting both imported and local supplies. Demands on Metropolitan are increasing due to the loss of local groundwater supply as well as impaired yield on the LAA. Losses in regional imported supplies are equally dramatic. All this is occurring during a period of population and economic growth

**Less Imported
Supply Stability**

CONSTRUCTING SCENARIOS

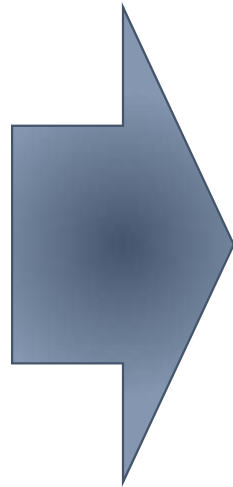
Working Draft – Examining Drivers

	Low Demand   Stable Imports  	High Demand   Stable Imports  	Low Demand   Reduced Imports  	High Demand   Reduced Imports  
Climate Change	Gradual impacts to imported and local supply	Gradual impacts to imported and local supply	Significant impacts to imported	Significant impacts to imported and local supply
Economic Impacts	Minimal growth, fewer jobs, flat housing	High growth, ag demand increases	Minimal growth, fewer jobs, flat housing	High growth, ag demand increases
Leg & Regs	Fewer groundwater mandates and Delta regs	Moderate local regulatory requirements	Expanding leg. and reg. on imported supply	Meeting regs reduce available supplies
Demographics	Slow pop growth, less suburban sprawl	High pop growth, less crowding	Slow pop growth, more infill, strong WUE ethic	High pop growth, conservation fatigue
Fed & State	Limited regional, state, and federal help	More cooperation and collaboration	Delta and Colorado River turmoil, every state for itself	High desire to invest, but unsuccessful collaboration
Tech Advances	Off-grid technologies help wealthier communities	Continue investment in local and regional infrastructure	Local investments redirected to repairs and rate relief	Less acceptance of DPR and SW not able to supplement water recycling
Aging Infrastructure	Deferred maintenance with manageable impacts	Keeping up repair and maintenance	More frequent unplanned outages from lack of funding	More frequent unplanned outages from system stress

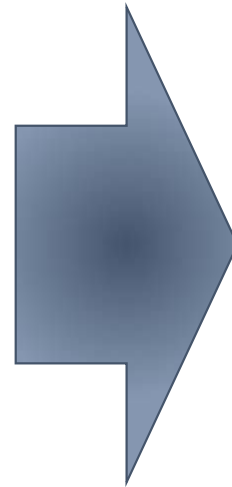
QUANTIFICATION PHASES

Quantifying Supply-Demand Links

**Professional
Judgment**



**Evidence
Based**



**Quantification/
Modeling**

WHAT'S NEXT

- **Qualitative-Quantitative Assessment**
 - Confirm scenario framework working draft
 - Step through quantification phases
- **Member Agency Manager Meeting**
 - Summarize MA Technical Workgroup discussion
- **September IRP Committee meeting**
 - Report on scenario framework discussed today
 - Provide preliminary assessment of key supply and demand impacts

