



WATER  **TOMORROW**
2020 Integrated Resources Plan

Draft Scenario Framework and Strawman Assumptions

Member Agency Managers Meeting

September 18, 2020

OVERVIEW

- Recent Activity
- Draft Scenario Framework and Strawman Assumptions
- Next steps

2020 IRP ROADMAP



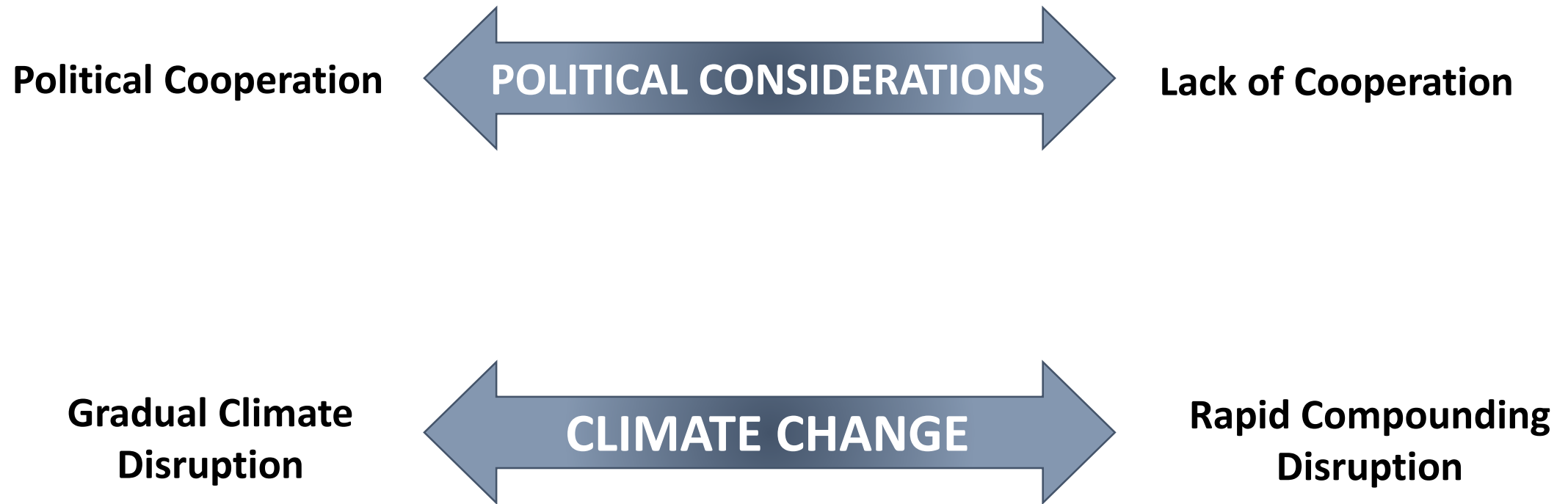
STEP 2 – CONSTRUCT SCENARIOS

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**

No/Small
Supply/
Demand
imbalance

Mid-Size
Supply/
Demand
imbalance

**Lower Demand on
Metropolitan**

**Higher Demand on
Metropolitan**





Mid-Size
Supply/
Demand
imbalance

Largest
Supply/
Demand
imbalance

**Less Imported
Supply Stability**

CONSTRUCTING SCENARIOS

Working Draft – Examining Drivers




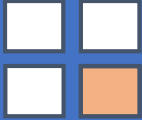
	Low Demand Stable Imports 	High Demand Stable Imports 	Low Demand Reduced Imports 	High Demand Reduced Imports 
Climate Change	Gradual impacts to imported and local supply	Gradual impacts to imported and local supply	Significant impacts to imported	Significant impacts to imported and local supply
Economic Impacts	Minimal growth, fewer jobs, flat housing	No/Small Supply/ Demand imbalance	Mid-Size Supply/ Demand imbalance	High growth, ag demand increases
Leg & Regs	Fewer groundwater mandates and Delta regs			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	Mid-Size Supply/ Demand imbalance	Largest Supply/ Demand imbalance	High desire to invest, but unsuccessful collaboration
Tech Advances	Off-grid technologies help wealthier communities			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

STRAWMAN ASSUMPTIONS




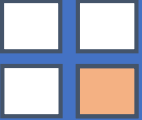
Straw man proposal - Wikipedia

*A **straw-man proposal** is a brainstormed simple draft proposal intended to generate discussion of its disadvantages and to provoke the generation of new and better proposals.*

STRAWMAN ASSUMPTIONS

	2020 IRP Low Demand Stable Imports 	2020 IRP High Demand Stable Imports 	2020 IRP Low Demand Reduced Imports 	2020 IRP High Demand Reduced Imports 
Colorado River Supply	<u>Hydrology</u> <ul style="list-style-type: none"> CMIP 3 (13.7 MAF) <u>Operations</u> <ul style="list-style-type: none"> DCP in place through planning horizon 	<u>Hydrology</u> <ul style="list-style-type: none"> CMIP 3 (13.7 MAF) <u>Operations</u> <ul style="list-style-type: none"> DCP in place through planning horizon 	<u>Hydrology</u> <ul style="list-style-type: none"> Stress Test (13.1 MAF) <u>Operations</u> <ul style="list-style-type: none"> DCP in place through planning horizon 	<u>Hydrology</u> <ul style="list-style-type: none"> Stress Test (13.1 MAF) <u>Operations</u> <ul style="list-style-type: none"> DCP in place through planning horizon
State Water Project Supply	Use hydrology and operating assumptions from the 2019 Delivery Capability Report	Use hydrology and operating assumptions from the 2019 Delivery Capability Report	Start with 2019 Delivery Capability Report and include the following : <ul style="list-style-type: none"> Additional climate change impacts More restrictive South Delta Increase outflow requirements 	Start with 2019 Delivery Capability Report and include the following: <ul style="list-style-type: none"> Additional climate change impacts More restrictive South Delta Increase outflow requirements

STRAWMAN ASSUMPTIONS

	2020 IRP Low Demand Stable Imports 	2020 IRP High Demand Stable Imports 	2020 IRP Low Demand Reduced Imports 	2020 IRP High Demand Reduced Imports 
Retail Demands	RTP 20 and Series 14 – Reduced (Less growth/improved WUE)	RTP 20 and Series 14 - Increased (More households/jobs - slight GPCD rebound)	RTP 20 and Series 14 - Reduced (Less growth/strong WUE/bad economy)	RTP 20 and Series 14 - Increased (More households/jobs - GPCD rebound)
Local Supply	<ul style="list-style-type: none"> Existing Project continue to yield Planned projects begin to perform 	<ul style="list-style-type: none"> Existing Project start to decrease in yield Planned projects do not perform as well 	<ul style="list-style-type: none"> Existing Project continue to yield Planned projects begin to perform 	<ul style="list-style-type: none"> Existing Project start to decrease in yield Planned projects do not perform as well

WHAT'S NEXT

- **Qualitative-Quantitative Assessment**
 - Confirm scenario framework working draft
 - Continue quantifying supply/demand links
- **September IRP Committee meeting**
 - Report on scenario framework discussed today
 - Provide preliminary assessment of key supply and demand impacts

