

Metropolitan's Integrated Resources Plan Discussion Series #8



September 2, 2020

The IRP is "A Process and a Plan"



IRP Committee

Item 6a Slide 3

August 17, 2020



The IRP “As a Plan”

- 💧 **Guideline for investments**
 - 🔥 Does not pre-determine future decisions

- 💧 **Reference point for**
 - 🔥 Assessing progress
 - 🔥 Understanding changing needs
 - 🔥 Determining how to cost-effectively address needs

- 💧 **Common basis for evaluating a portfolio**



IRP Targets vs. Program Implementation

- 💧 **Reliability gap is made up of diverse portfolio of actions**



IRP Targets vs. Program Implementation

- Adaptive management example

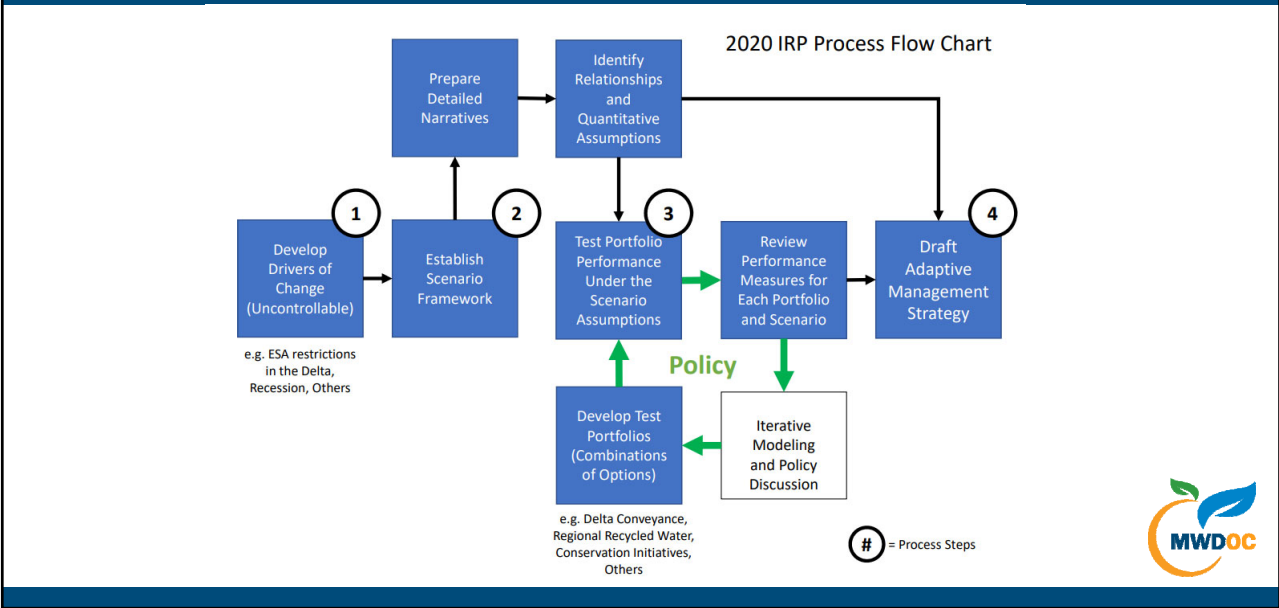


The IRP Looking Forward

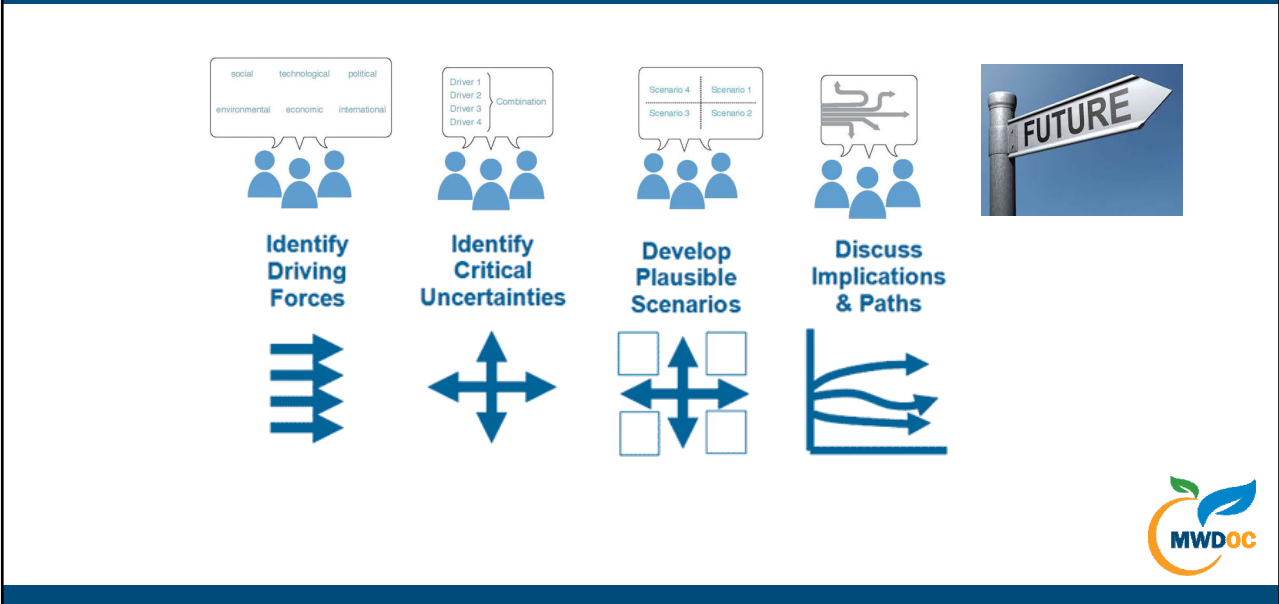
- Metropolitan and Member Agencies face decisions on a future water portfolio
 - Takes a long-range view of future needs
 - Informs Board decision-making under uncertainty
- 2020 IRP will evaluate current options and actions under different future scenarios
 - Identify “signposts” that signal certain actions



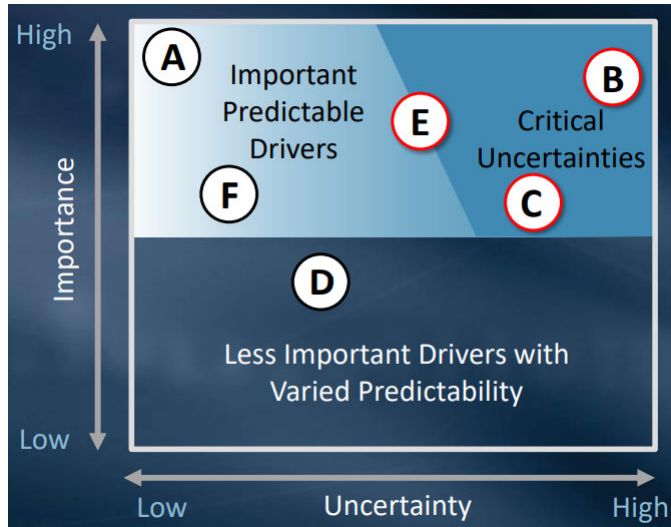
2020 IRP Process



Where we are in the process



Setting up a Scenario Framework

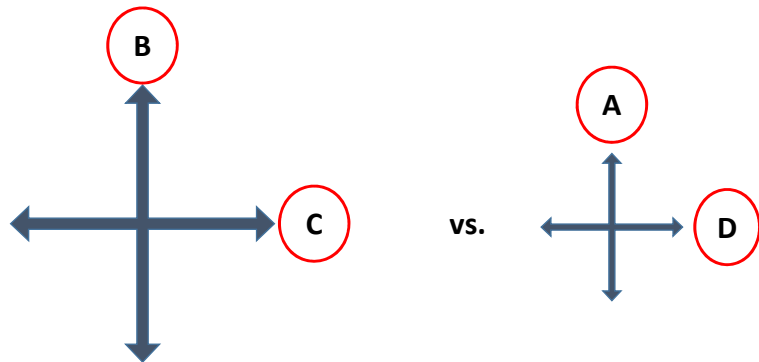
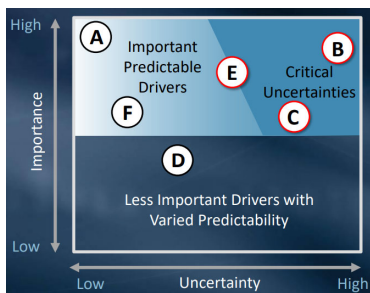


- 💧 All drivers are evaluated to determine high levels of:
 - 🔥 Uncertainty
 - 🔥 Importance
 - 🟢 (based on scale of impact)

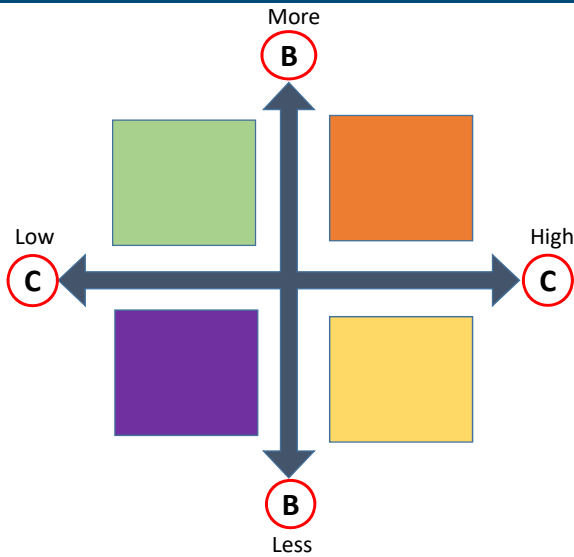
- Categorical Drivers**
- Climate Change
 - Economic Impact
 - Legislation & Regulation
 - Demographics
 - Federal & State
 - Tech. Advances
 - Aging Infrastructure

Setting up a Scenario Framework

- 💧 Risk of picking the wrong framework drivers:
 - 🔥 Shorten the range for analysis of the sub-drivers within scenarios

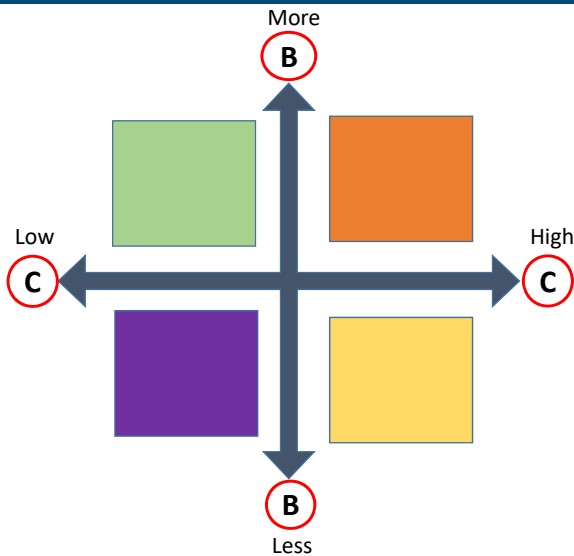


Establishing four Scenarios



- ▶ Framework drivers are:
 - ▶ Generally independent of each other
 - ▶ Have a big impact as well as interaction with other sub-drivers
- ▶ All the other drivers are now sub-drivers analyzed within the context of the framework
 - ▶ There should be internal consistency of sub-drivers within each of the scenarios

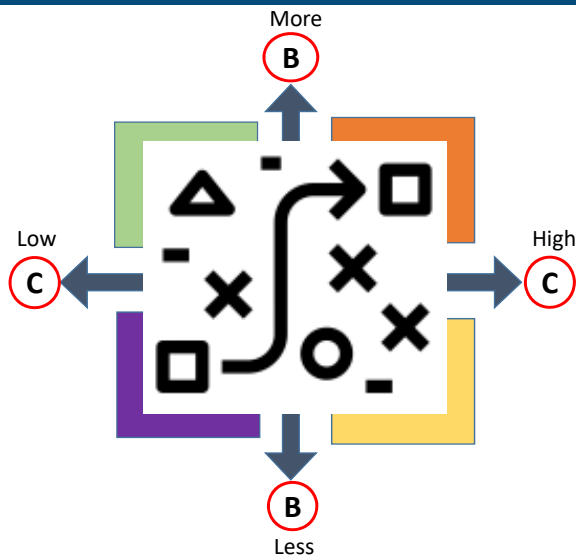
Example of four Scenarios – and impact on Supply-Demand Gap for each driver category



Categorical Drivers

- ▶ Climate Change
- ▶ Economic Impact
- ▶ Legislation & Regulation
- ▶ Demographics
- ▶ Federal & State
- ▶ Tech. Advances
- ▶ Aging Infrastructure

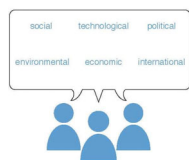
How does adaptive management fit in?



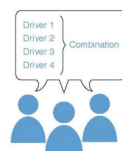
Categorical Drivers

- 💧 Climate Change
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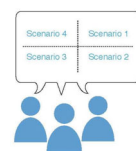
How does adaptive management fit in?



Identify Driving Forces



Identify Critical Uncertainties



Develop Plausible Scenarios



Discuss Implications & Paths



So that we can adapt as needed, what signposts or output do we need from each scenario's analysis?



What's Next

💧 September – Start Discussing Potential Scenarios

- 🔥 Qualitative and quantitative assessment of drivers ongoing
- 🔥 Collaboratively identify scenarios helpful for policy discussions

💧 October – Refine Scenarios

- 🔥 Demand drivers
- 🔥 Climate change impacts

**Scenario planning
allows the Board to
consider a wide
range of challenges
to future reliability.**

