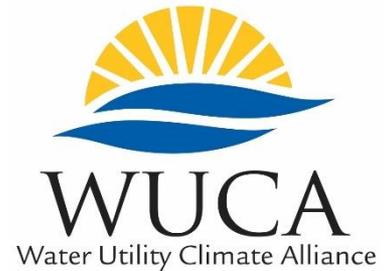


**Building Resilience to a Changing Climate:
A Technical Training in Water Sector
Utility Decision Support**



**Scenario Design: An Accelerated Introduction to
Scenario Planning**

Laurna Kaatz, Denver Water

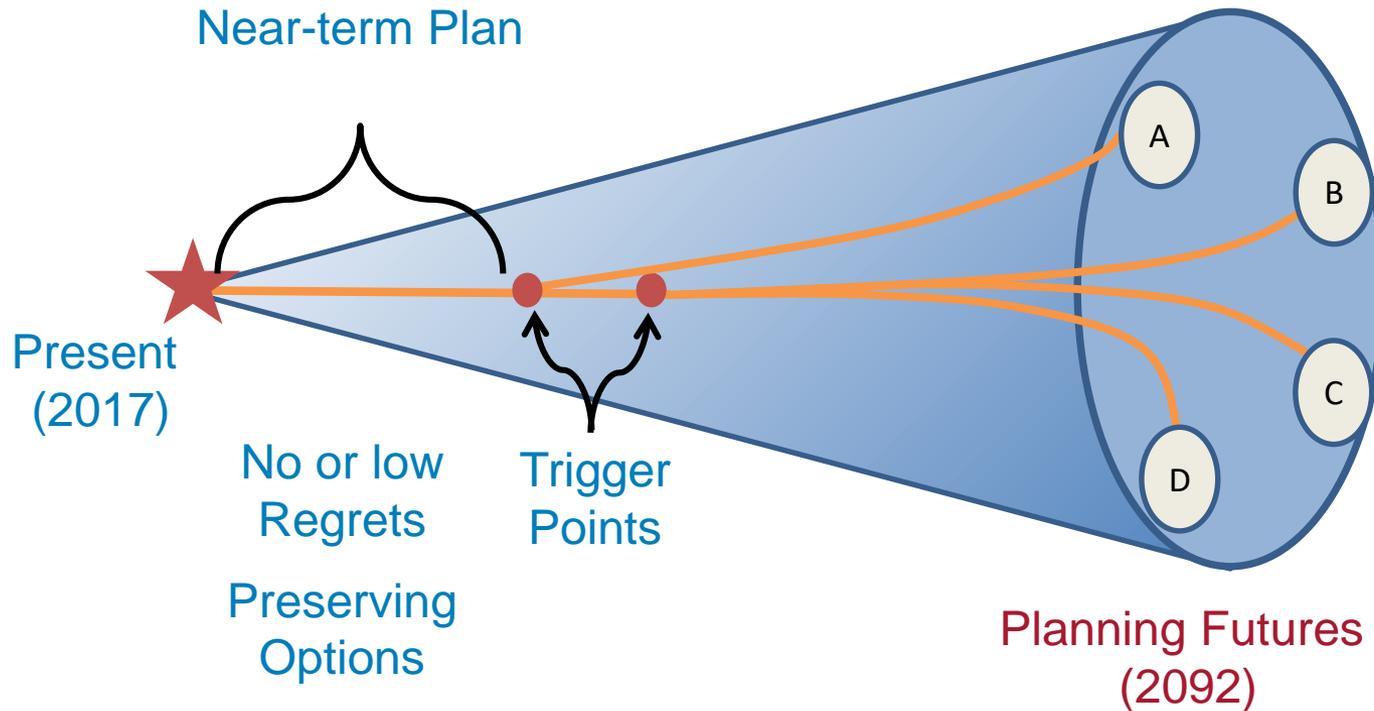
Keely Brooks, Southern Nevada Water Authority

Scenario Planning

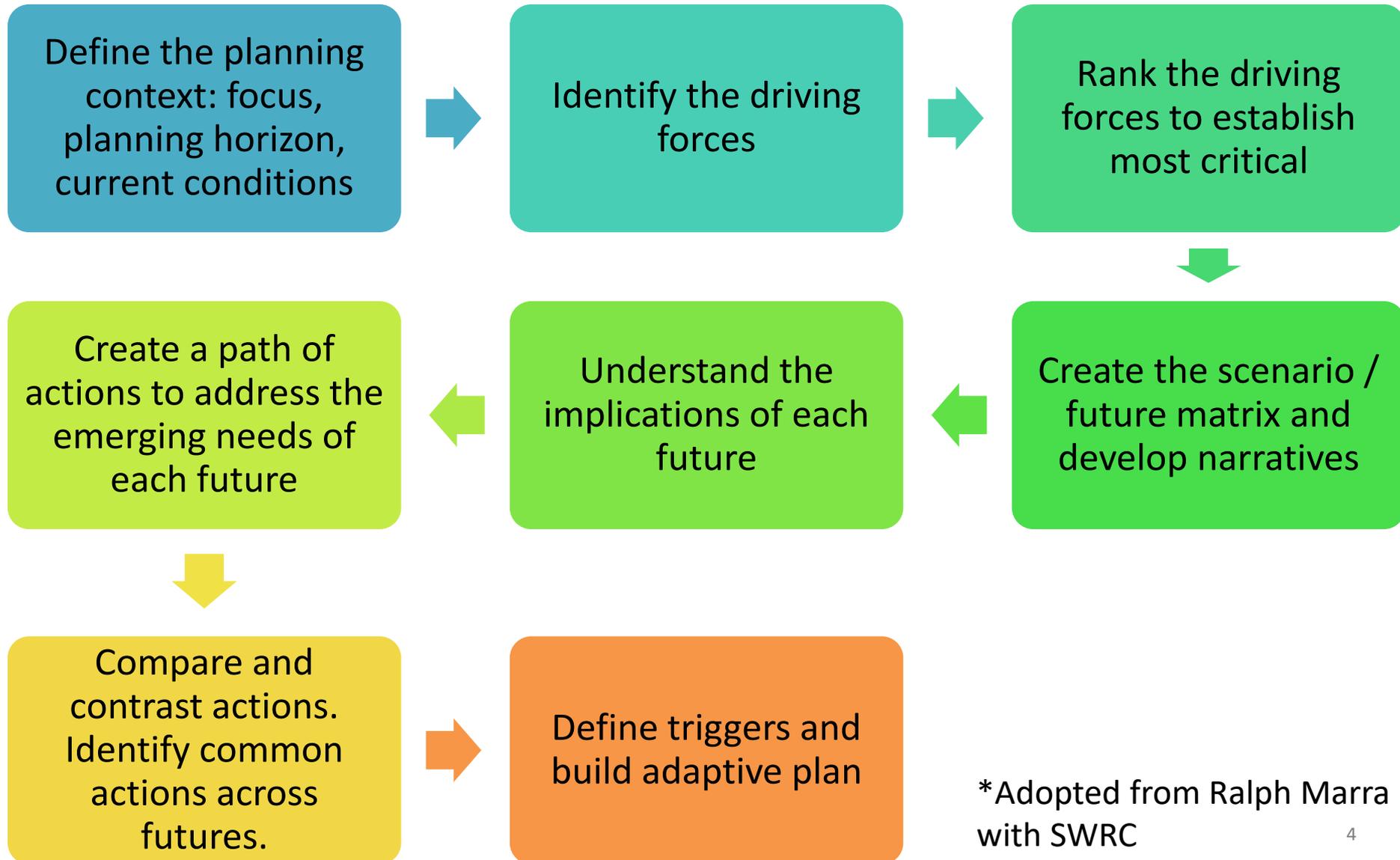
- Scenario Planning IS about being prepared for whatever happens in the future
- Scenario Planning is NOT about envisioning what we want to happen in the future or predicting what will happen in the future

Scenario Planning

Cone of Uncertainty



Scenario Planning Process*



*Adopted from Ralph Marra with SWRC

Western Water

Western Water is a

- Mid to large water utility
- Provides drinking water services only
- Located in the southwest, semi-arid region
- Surface and ground water supplies
- One of the fastest growing communities in the SW



Western Water

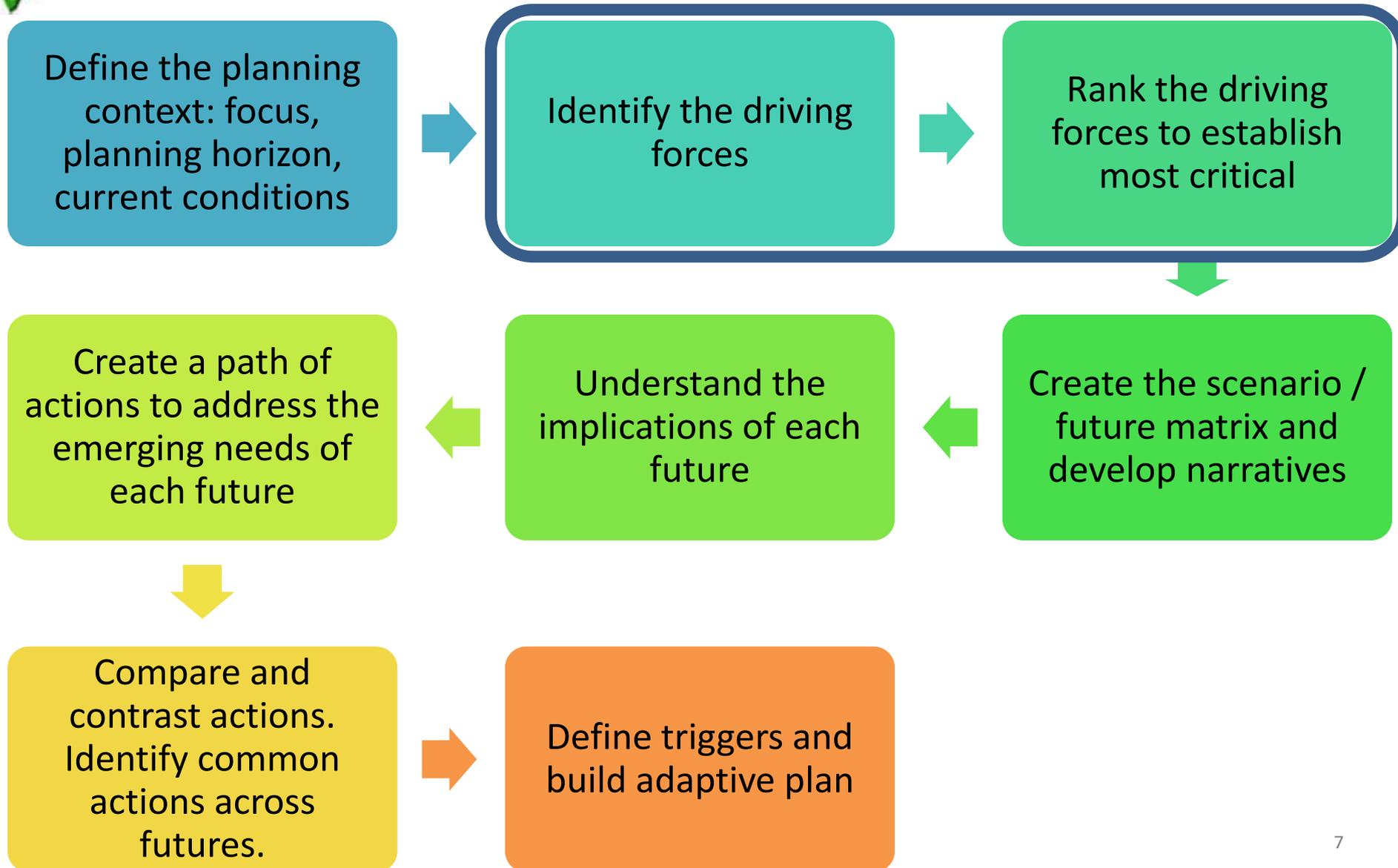
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- Mid to large water utility
- Provides drinking water services only
- Located in the southwest, semi-arid region
- Surface and ground water supplies
- One of the fastest growing communities in the SW



Focal Question: How can Western Water best prepare its water system and enhance its resources to meet customer water needs as future challenges and opportunities arise over the next 75 year?

Scenario Planning Process



Drivers of Change

- External factors that will influence the context of Western Water's future
- Things outside of WW's control
- Long-term challenges

Drivers of Change

- External factors that will influence the context of Western Water's (WW) future
- Things outside of WW's control
- Long-term challenges

Two minute Brainstorm:

As a Water Resources Manager for WW, what keeps you up at night?

Exercise

Step 1: Brainstorm Drivers of Change (table) – 15 minutes

What are the most critical issues that could impact Western Water's ability to meet long-term water needs?

Step 2: Select the top 3 most critical drivers (dots) – 10 minutes

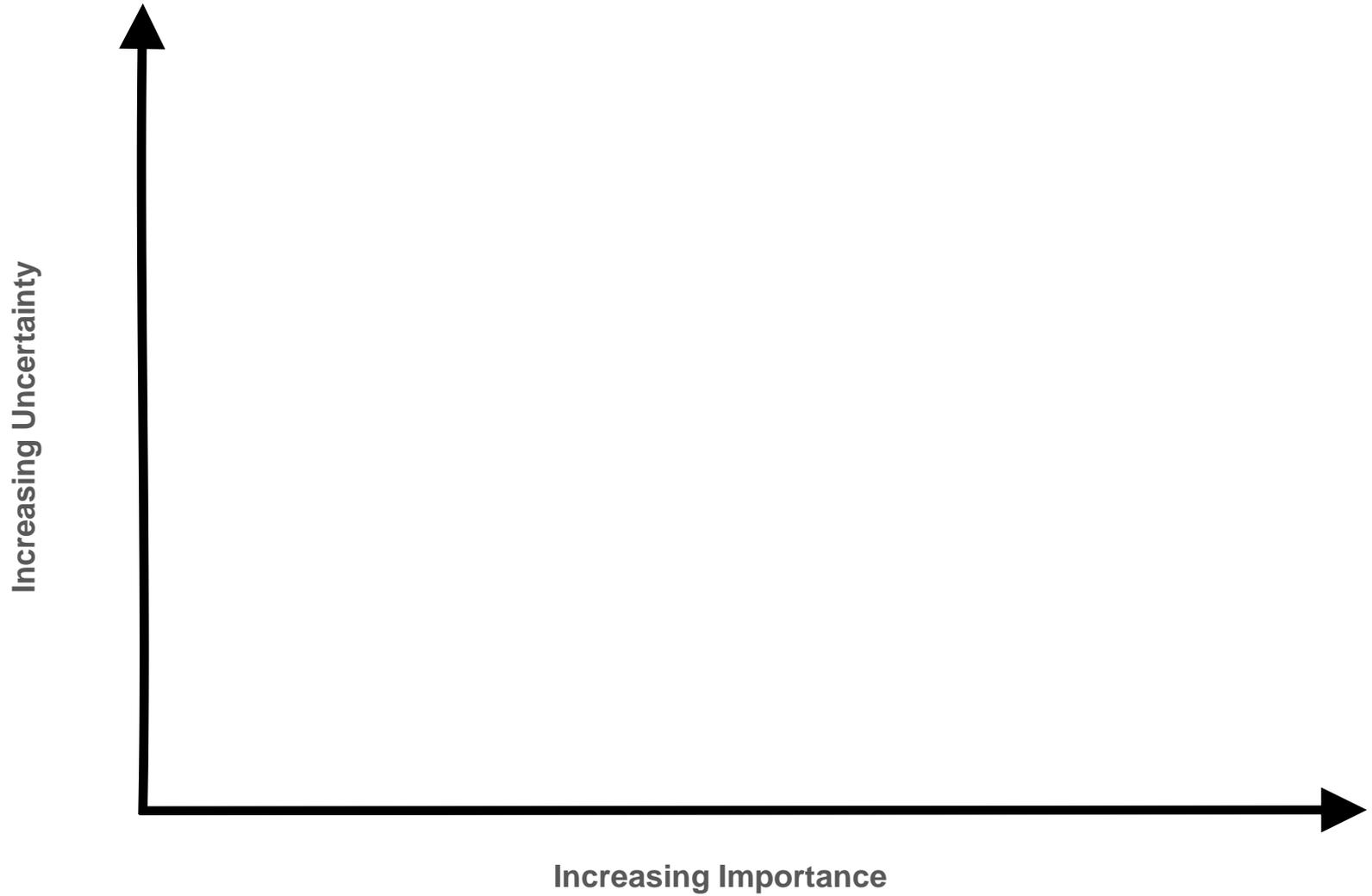
What are the most critical drivers to meeting the focal question?

Step 3: Rank the top 10 (graph) – 15 minutes

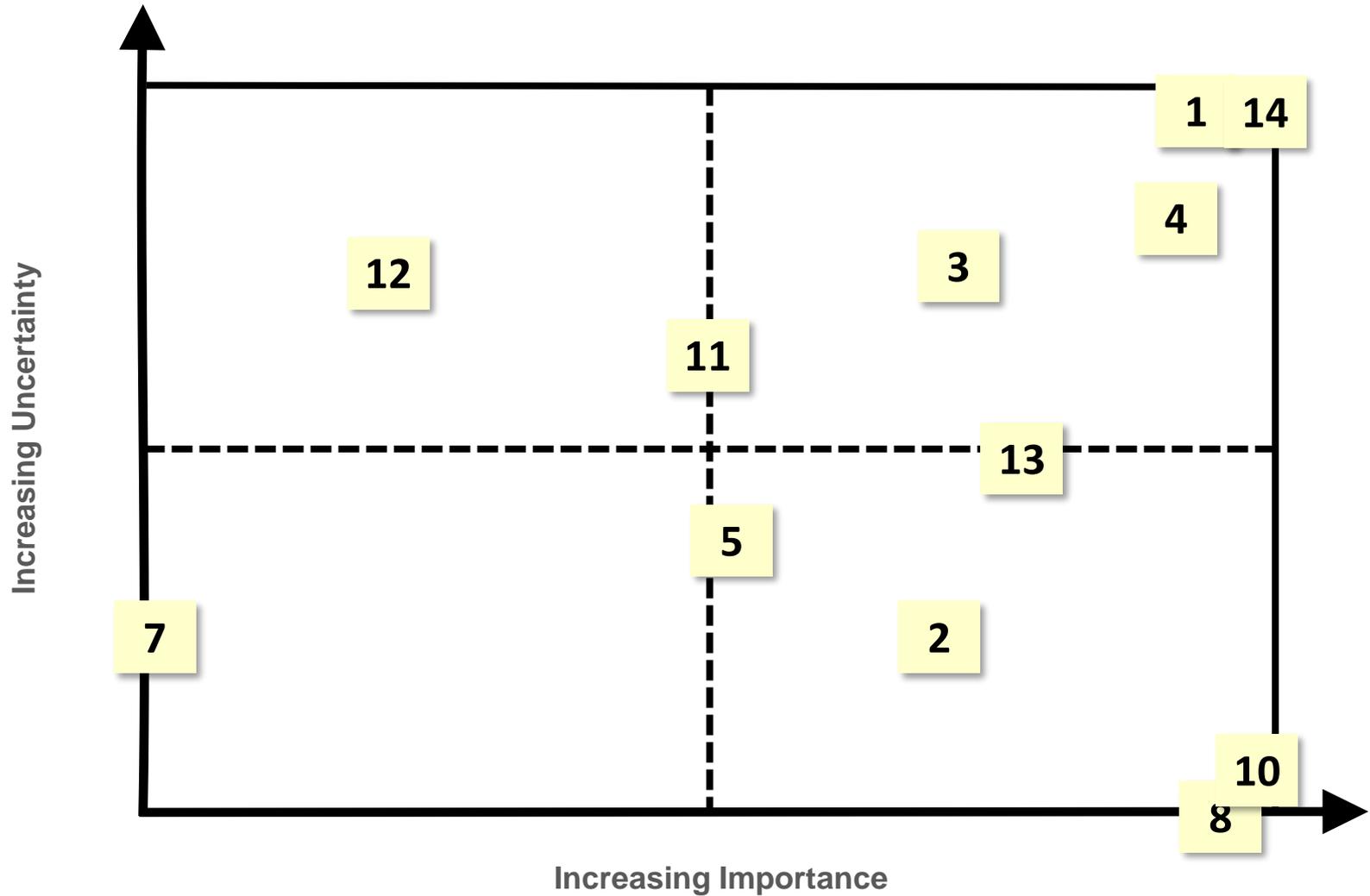
How 'important' is the driver?

How 'uncertain' is the driver?

Ranking the Drivers



Ranking the Drivers



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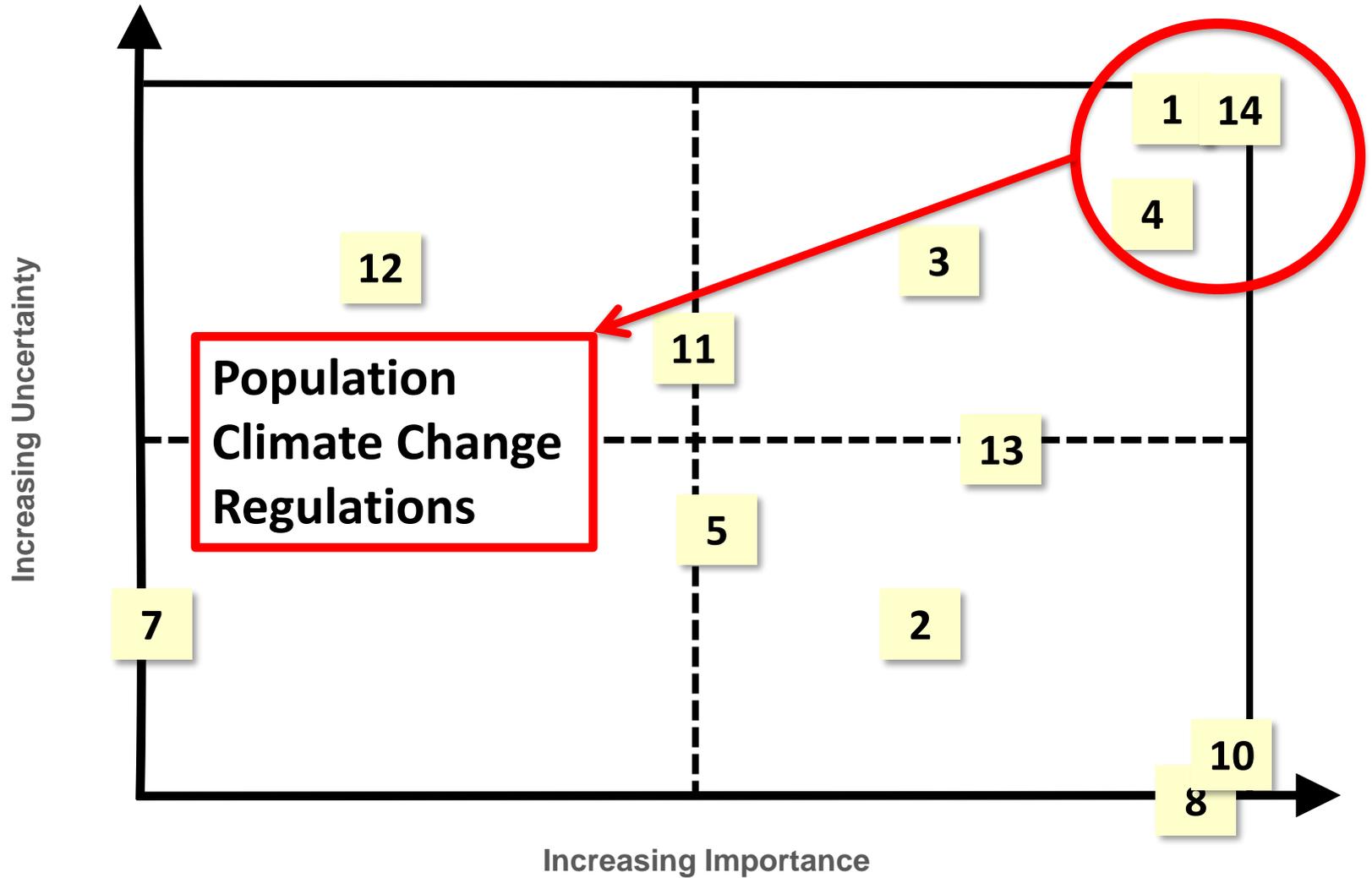
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How 'important' is the driver?
How 'uncertain' is the driver?

- External Drivers of Change
- External factors that will influence the context of the future
 - Things outside of control
 - Long-term challenges

Example: Ranking the Drivers



Personal Insights

1. No one-size-fits all approach
2. Pick the parts and pieces that work for you
3. Goal is adaptive planning

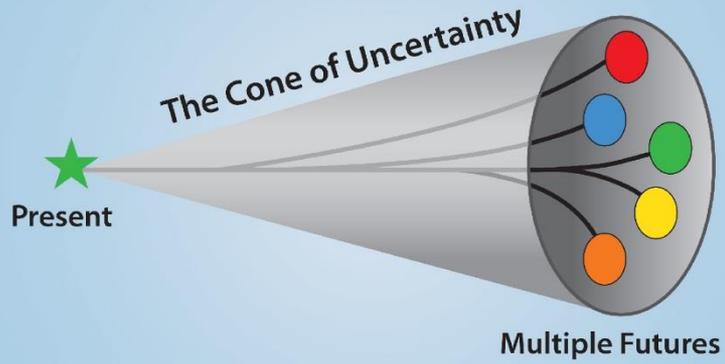
“In preparing for battle I have always found that plans are useless, but planning is indispensable.”

- Dwight D. Eisenhower

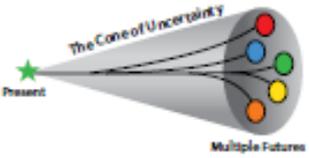
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- Association of Metropolitan Water Agencies (AMWA)

Project Manager: Laurna Kaatz, Denver Water

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