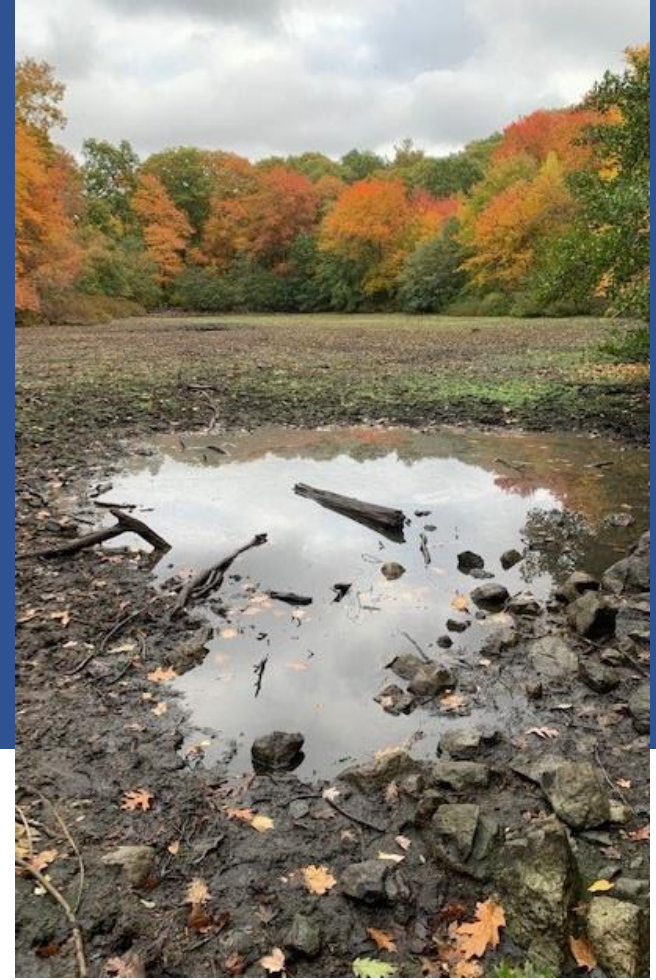


*Massachusetts*

# **Draft Local Public Water Supply Drought Management Plan Guidance**



**Massachusetts Water Resources Commission**

**December 12, 2024**



# Guidance Development

- 2017-2018 Working Group after 2016 Drought
- 2019 Update of MA DMP
- 2022-2023 Grant, Scope, RFP, CEI hired
- 2023-2024 Contract with CEI : Framework, Testing, Document
- 2022-2024 Steering Committee (Thank you members!)
- June 2024 Workshop Sessions (Thank you MWWA!)

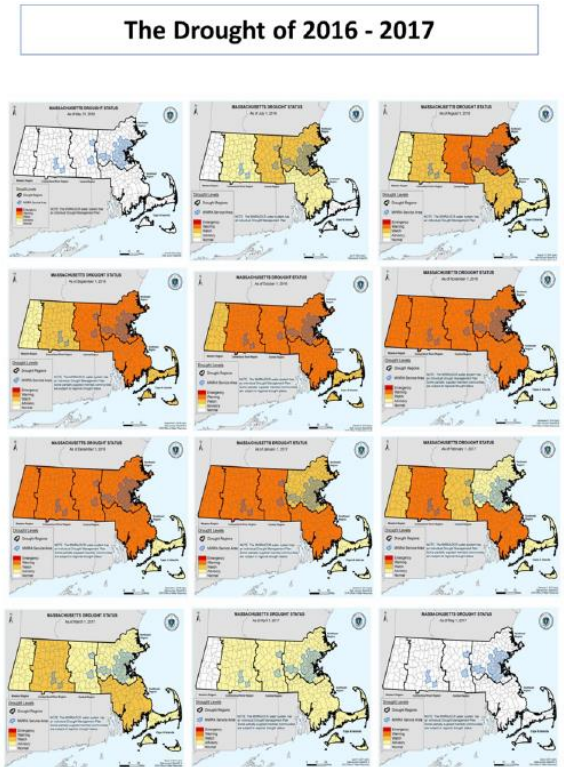
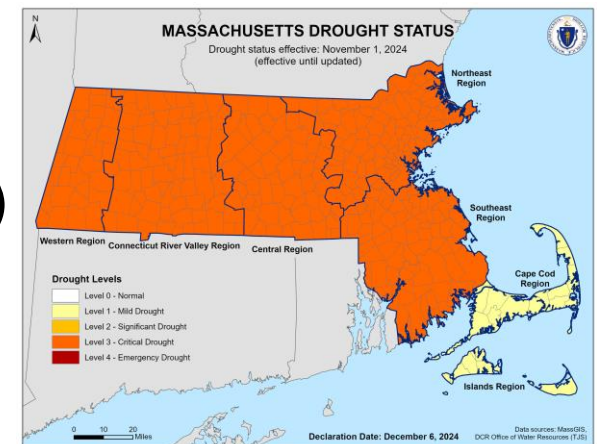


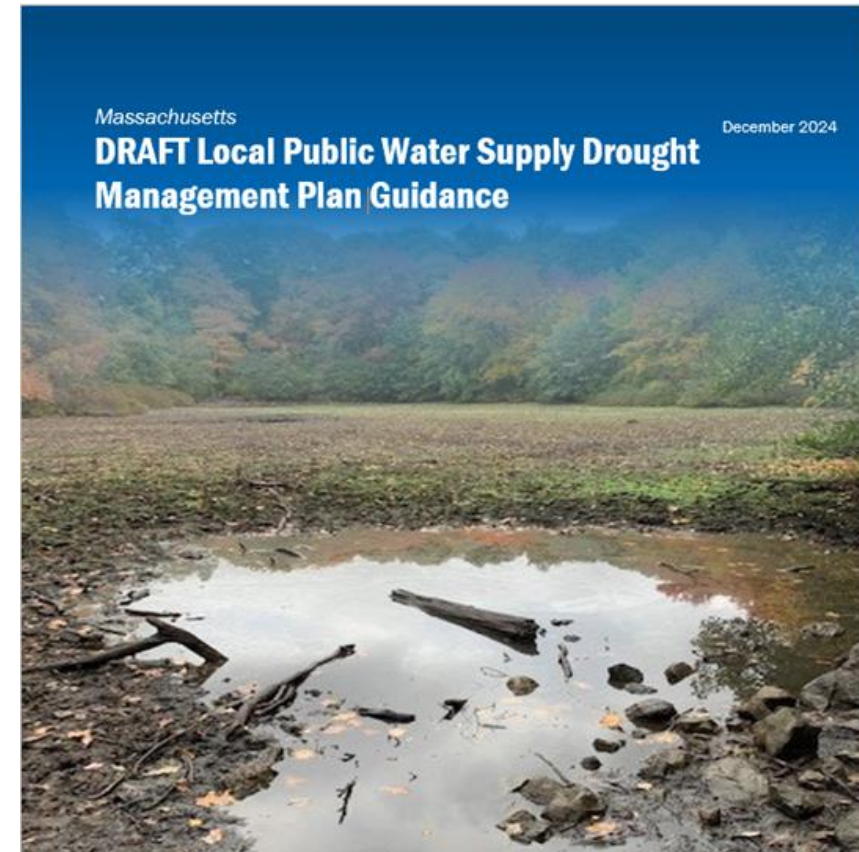
Figure 1. Series of maps displaying the drought's progression.



November 2024

# Guidance Introduction

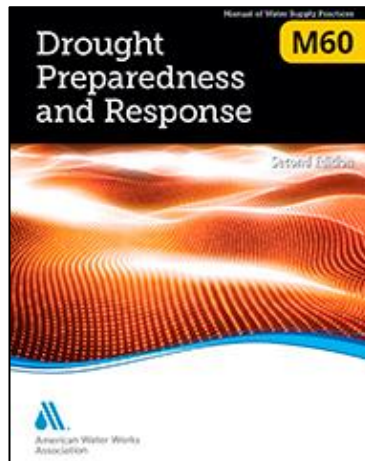
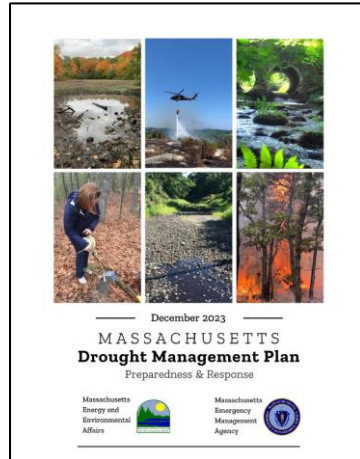
- ① Why was this document developed?
- ② What is the purpose of this document?
- ③ Who is the target audience?
- ④ How should this document be used?



# Guidance Overview



Based on



1

Form Drought Planning Team

2

Forecast Supply in Relation to Demand

3

Assess Methods for Balancing Supply and Demand

4

Establish Triggers and Action Levels

5

Develop Staged Response

6

Adopt Plan

7

Implement Plan

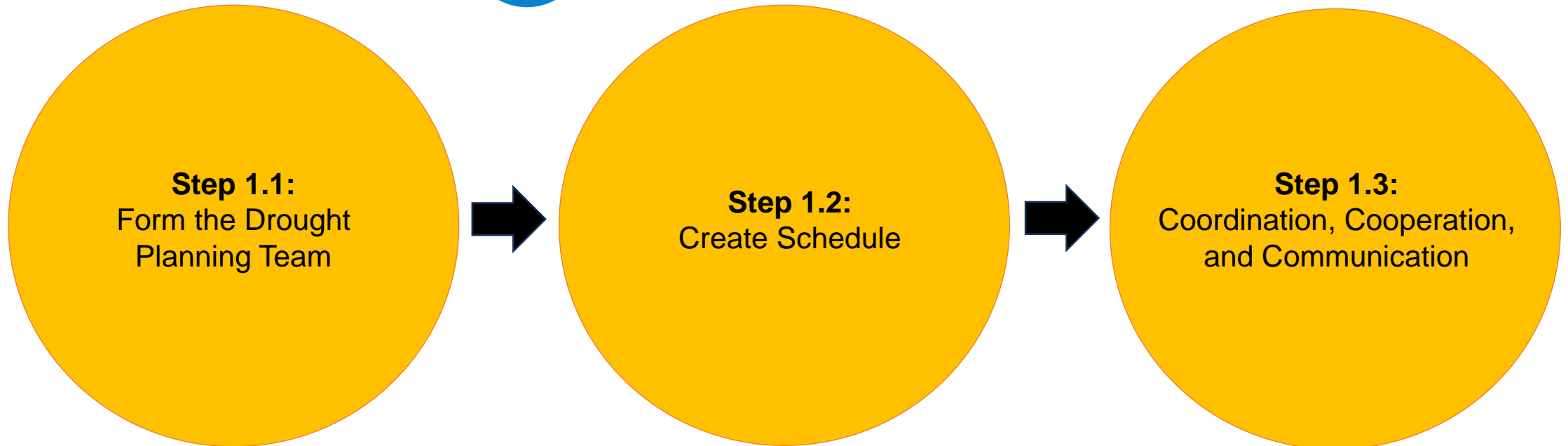


# 1 Form Drought Planning Team

**Objective:** Form a drought planning team to execute the actions involved in developing, adopting, and implementing a local DMP.

- 
- 1 Form Drought Planning Team
  - 2 Forecast Supply in Relation to Demand
  - 3 Assess Methods for Balancing Supply and Demand
  - 4 Establish Triggers and Action Levels
  - 5 Develop Staged Response
  - 6 Adopt Plan
  - 7 Implement Plan

*Summary of Steps:*

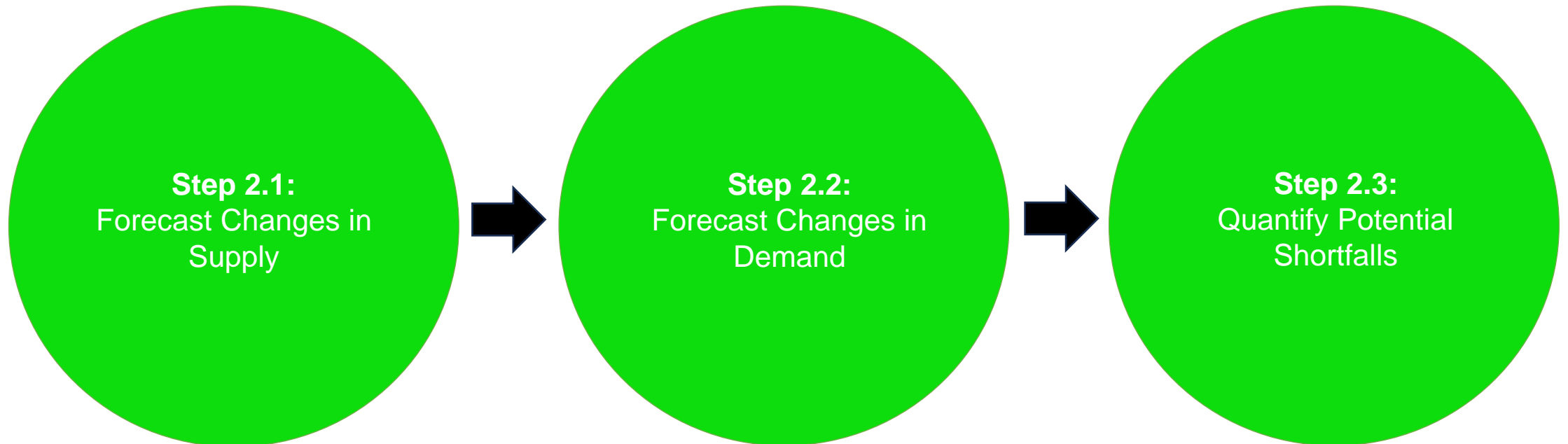


## 2 Forecast Supply in Relation to Demand

**Objective:** Develop a reasonable estimate of potential water supply shortfalls based on a range of supply and demand scenarios, including multi-year droughts.

- 
- 1 Form Drought Planning Team
  - 2 Forecast Supply in Relation to Demand
  - 3 Assess Methods for Balancing Supply and Demand
  - 4 Establish Triggers and Action Levels
  - 5 Develop Staged Response
  - 6 Adopt Plan
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### *Summary of Steps:*

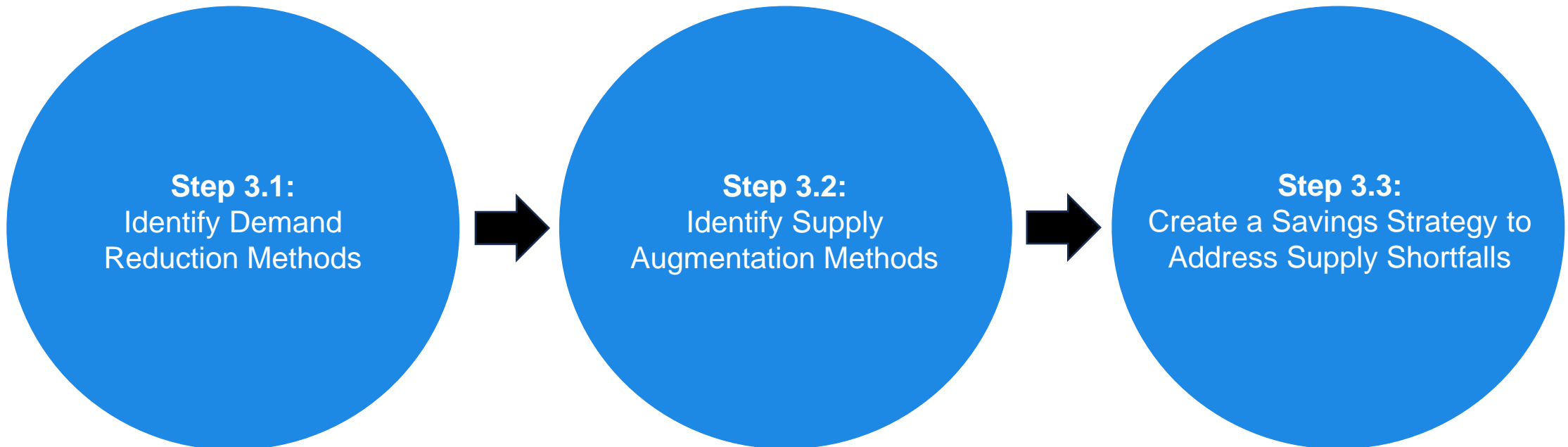


### 3 Assess Methods for Balancing Supply and Demand

**Objective:** Evaluate methods via demand reduction and supply augmentation to address potential water supply shortfall scenarios from **Step 2**.

- 1 Form Drought Planning Team
- 2 Forecast Supply in Relation to Demand
- ➔ 3 Assess Methods for Balancing Supply and Demand
- 4 Establish Triggers and Action Levels
- 5 Develop Staged Response
- 6 Adopt Plan
- 7 Implement Plan

#### *Summary of Steps:*



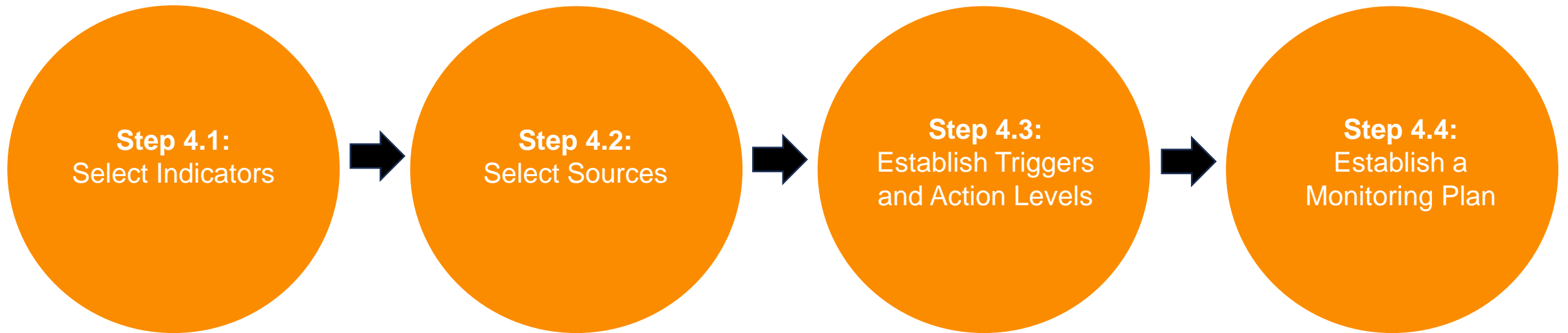
## 4 Establish Triggers and Action Levels

**Objective:** Establish indicators, triggers, and associated action levels to signal dry conditions and take meaningful action against potential supply shortfalls.

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- 2 Forecast Supply in Relation to Demand
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### *Summary of Steps:*





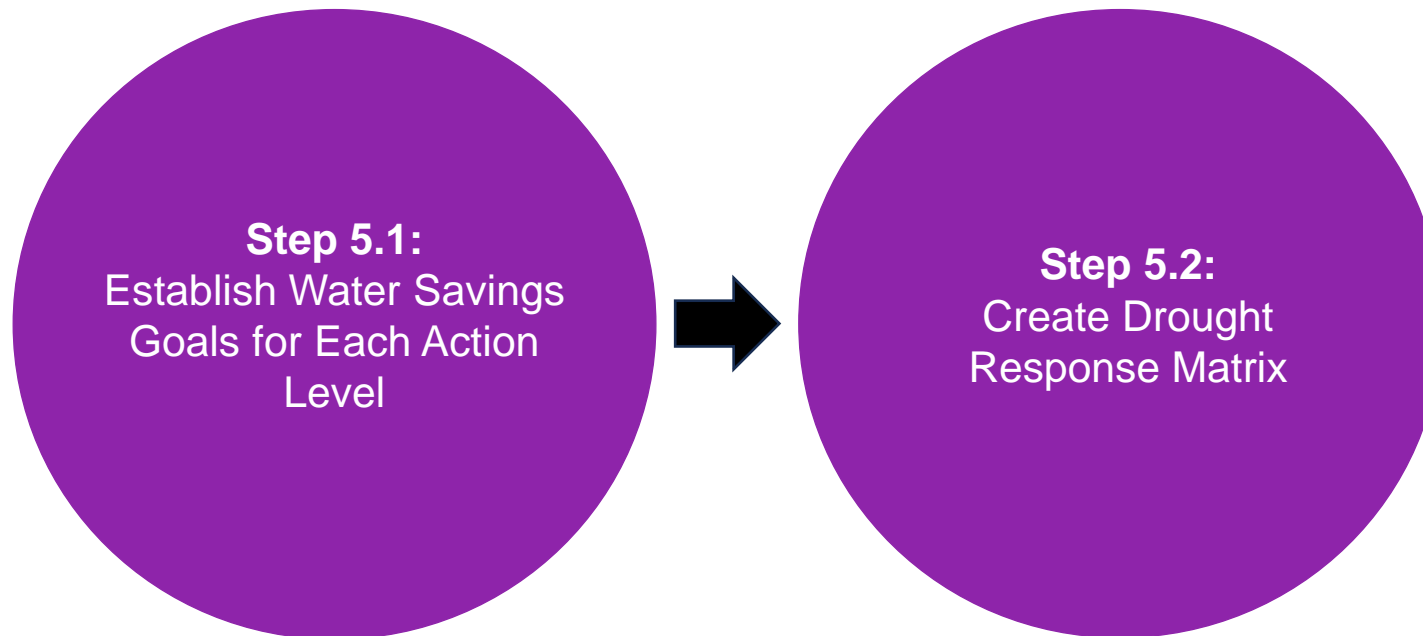
## 5 Develop Staged Response

**Objective:** Identify actions needed to meet water savings goals and address potential supply shortfalls.

- 1 Form Drought Planning Team
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- 6 Adopt Plan
- 7 Implement Plan



### Summary of Steps:



## 6 Adopt Drought Management Plan

**Objective:** Adopt the local drought management plan.



*Summary of Steps:*



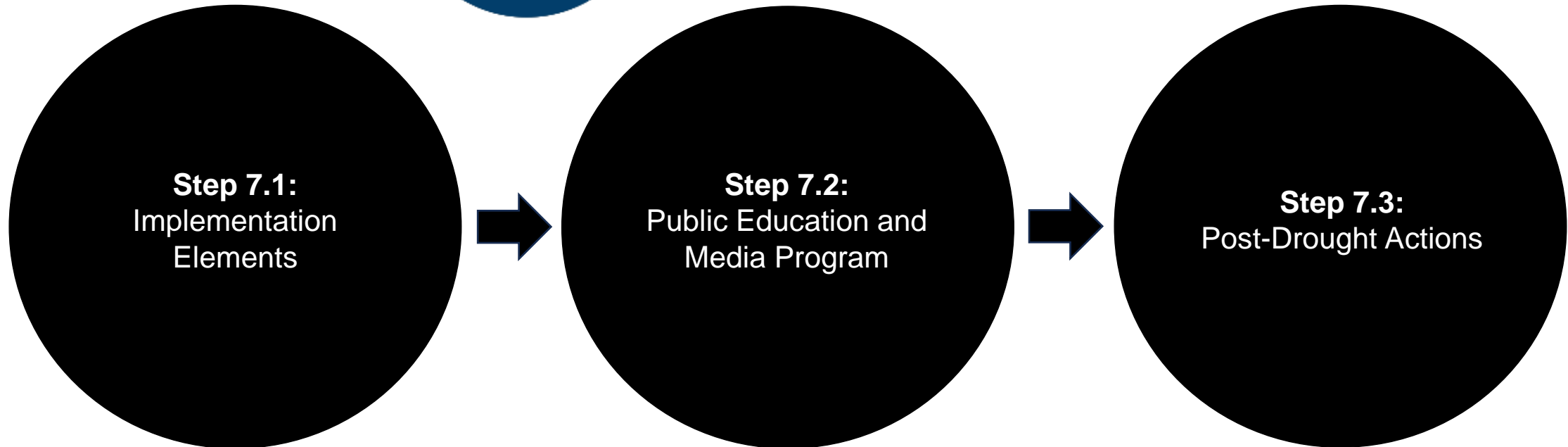
- 1 Form Drought Planning Team
- 2 Forecast Supply in Relation to Demand
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- 4 Establish Triggers and Action Levels
- 5 Develop Staged Response
- 6 Adopt Plan
- 7 Implement Plan

# 7 Implement Drought Management Plan

**Objective:** Implement the local drought management plan.

- 1 Form Drought Planning Team
- 2 Forecast Supply in Relation to Demand
- 3 Assess Methods for Balancing Supply and Demand
- 4 Establish Triggers and Action Levels
- 5 Develop Staged Response
- 6 Adopt Plan
- 7 Implement Plan

*Summary of Steps:*



# Additional Guidance Resources

- **Electronic Appendix A.** PWS-Specific Example Drought Management Planning Spreadsheet Workbooks (groundwater, surface water, combination)
- **Appendix B.** Additional Tools and Resources for Drought Planning (includes free resources)
- **Appendix C.** How to Perform a Bathymetric Survey- best practices for survey & curve development, RFP language



# Next Steps



- December 2024 - Finish internal review & formatting
- December 2024 – share document with WRC
- January/February 2025 - WRC vote on "Working Draft"
- Winter 2025 - Publish Working Draft and continue to get feedback from communities as they develop their plans
- Continue to refine working draft document, as needed
- Develop a checklist of elements for WRC staff review of a local DMP

# Questions/Comments

