



Engineering, Operations, & Technology Committee

# Desalination Studies

Item 7-1

June 12, 2023

# Desalination Studies Water Portfolio

## Current Action

- Authorize agreements with AECOM Technical Services Inc. and CDM Smith Inc. each in an amount not to exceed \$800,000 for water desalination studies in Metropolitan's service area

# Background

- Metropolitan relies on water from the Colorado River & State Water Project
- Drastic changes in precipitation & large reservoir drawdowns may impact reliability of Metropolitan's water supplies
- Staff has initiated efforts to assess options for future supplies & maintain Metropolitan's water supply reliability



# Historical Background

- 1960s:
  - Investigated linking a seawater desalination plant to a nuclear power plant
- 1990s:
  - Operated pilot facility to research new desalination technologies
  - Funded conceptual designs of new desalination technologies
  - Conducted siting studies for desalination facilities
- Present:
  - Conduct conceptual studies of desalination technologies & potential sites
  - Investigate brackish & seawater facilities
  - Integrate findings in upcoming CAMP 4 Water analyses



Claude "Bud" Lewis  
Carlsbad Desalination Plant

# Desalination Studies Water Portfolio

## Alternatives Considered

- Staff considered utilizing in-house Metropolitan staff to perform the assessment
  - Insufficient engineering staff with current desalination technology expertise
- Selected Alternative – Use professional services agreements
  - Consultants will perform the studies
  - Staff will perform project review & oversight



# AECOM Technical Services Inc.

## New Agreement

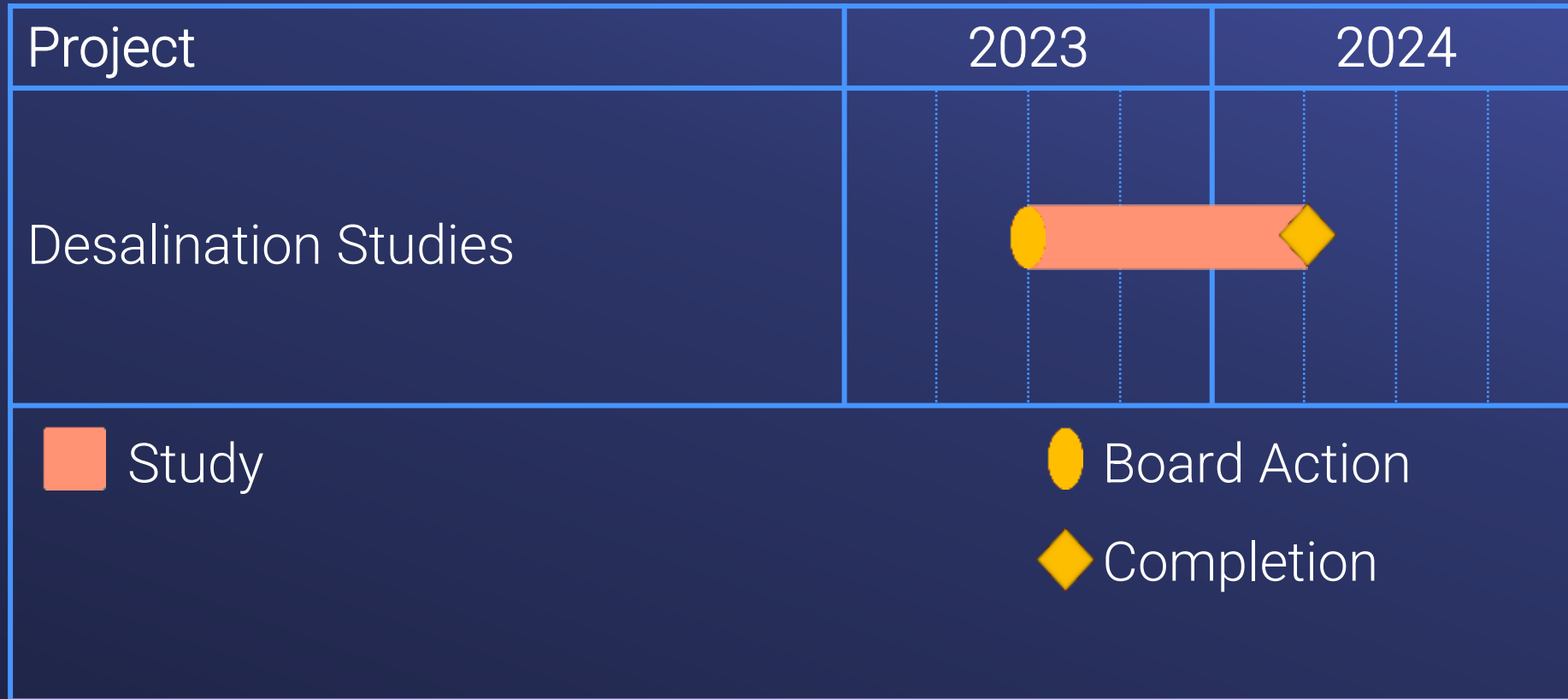
- Competitively selected under RFP 1327
- Scope of work
  - Brackish water resources inventory
  - Water supply suitability evaluation methodology
  - Assessing potential for advances in brackish water desalination technologies
  - Identifying water quality & regulatory requirements
  - Conceptual cost estimates & schedules
  - Developing project implementation options
- SBE participation level – 25%
- NTE amount – \$800,000

# CDM Smith Inc.

## New Agreement

- Competitively selected under RFP 1327
- Scope of work
  - Seawater desalination plant sites inventory
  - Water supply suitability evaluation methodology
  - Assessing potential for advances in seawater desalination technologies
  - Identifying water quality & regulatory requirements
  - Conceptual cost estimates & schedules
  - Developing project implementation options
- SBE participation level – 25%
- NTE amount – \$800,000

# Project Schedule





# Board Options

- Option #1

Authorize professional services agreements with AECOM Technical Services Inc. and CDM Smith Inc., each in an amount not to exceed \$800,000, to provide engineering services for water desalination studies in Metropolitan's service area.

- Option #2

Do not proceed with the project at this time.

# Staff Recommendation

- Option #1

