

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

