

City of Sacramento

Legislation Text

File #: 2019-00832, **Version:** 1

Title:

Agreement: Sacramento River Water Treatment Plant Expansion: Conceptual Design, Environmental Review and Permitting [Published for 10-Day Review 07/11/2019]

File ID: 2019-00832

Location: Citywide

Recommendation:

Adopt a Resolution: 1) authorizing the City Manager or the City Manager's designee to execute a professional services agreement with Carollo Engineers to initiate Phase 1 Environmental Review and Permitting activities towards future expansion of the Sacramento River Water Treatment Plant (SRWTP), for an amount not-to-exceed \$3,459,940; and 2) approving budget related transfers.

Contact: Brett Ewart, Project Manager (916) 808-1725; Michelle Carrey, Supervising Engineer (916) 808-1438; Dan Sherry, Engineering & Water Resources Division Manager, (916) 808-1419; Department of Utilities

Presenter: None

Attachments:

- 1-Description/Analysis
- 2-Agreement
- 3-Resolution
- 4-Supply Alternatives Executive Summary

Description/Analysis

Issue Detail: Staff recommends Council approve an agreement with Carollo Engineers to perform Phase 1 - Conceptual Design, Draft Environmental Impact Report (EIR), Permitting, and Public Outreach activities for a future expansion of the SRWTP. The conceptual design effort will culminate in a Basis of Design Report (BODR) and a Project Description that will be used as the basis for the Draft Environmental Impact Report (Draft EIR), regulatory permits, and a public outreach plan.

The availability of surface water treatment capacity for existing and future customer demand is forecasted to reach its limits within approximately 15 years, which is the same timeline necessary to fully plan, permit, design, and construct the necessary improvements. These forecasts consider city growth estimated in the General Plan, conservation performance, sustainable groundwater management activities, and the various rules governing water diversions from the rivers.

Policy Considerations: City Council approval is required for professional service agreements of \$100,000 or more per City Code 3.64.020.

Additionally, City General plan policy U 2.1.3 (*Water Treatment Capacity and Infrastructure*) states that the City shall plan, secure funding for, and procure sufficient water treatment capacity and infrastructure to meet projected water demands. This action also addresses General Plan Policy U 2.1.9 (*New Development*), which states that the City shall ensure that water supply capacity is in place prior to granting building permits for new development.

The Sacramento City Code Section 4.04.020 and Council Rules of Procedure (Chapter 7, Section E.2.d) mandate that unless waived by a 2/3 vote of the City Council, all labor agreements and all agreements greater than \$1,000,000 shall be made available to the public at least ten (10) days prior to council action. This item was published for 10-day review on July 11, 2019 as required.

Economic Impacts: None.

Environmental Considerations: This report concerns administrative activities that will not have a significant effect on the environment and does not constitute a “project” as defined by the California Environmental Quality Act (CEQA) [CEQA Guidelines Sections 15378(b)(2 and 5) and is therefore, not subject to CEQA [CEQA Guidelines Section 15060(c)(3)].

Sustainability: The proposed project is consistent with the 2035 General Plan as it addresses the need for reliable access to water supply for future residents of the City.

Commission/Committee Action: Not applicable.

Rationale for Recommendation: On June 25, 2013 City Council approved the selection of Carollo Engineers for a multi-phase effort to evaluate options for adding water treatment capacity to meet the City’s future water needs. The selection process also included their experience in providing design, environmental, and permitting experience. These phases are generally broken into included 1) alternatives analysis, 2) conceptual design/permitting/CEQA, and 3) full design. The Council awarded a project to Carollo Engineers for the initial phase, which was limited to initial assessment and alternatives selection, but also described an intent to return to City Council for approval of preliminary design activities following completion of the alternative selection (2013-00417).

The alternatives analysis was completed in February 2018, and included a preliminary schedule recommending that the City budget approximately 15 years to accomplish the full range of activities needed to expand surface water supplies. These include permitting, CEQA, design, public outreach, funding plans, construction, and startup activities.

This item represents a continuation into the next phase of project development.

Concurrently, the latest forecasts for needing additional surface water treatment capacity to support growth projections identified in the 2035 General Plan and to actively manage groundwater resources suggest the City could need additional treatment capacity within the same 15-year period.

To ensure the City continues to have adequate water supply in place prior to the demand for water, staff believes initiating preliminary activities now is a prudent first step. Recognizing the evolving nature of General Plans, development, and water use habits.

Prior to full Council consideration of this item, staff presented the recommendation to begin the next phase of surface water expansion to the City Council Water Committee on March 26th, 2019. Staff intends to provide updates to the Committee as the project develops.

Financial Considerations: The proposed agreement is for an amount not-to-exceed \$3,459,940. Staff recommends a budget transfer of \$4,000,000 from the Water Development Fee Fund (fund 6001) balance to the SRWTP Improvement Program (Z14190100) for Phase I of the project. Phase I includes the initial work to draft the Draft EIR and initiation of permitting that is being considered with this action. Phase II Work includes completing the Final EIR and public outreach, and staff will return to City Council for consideration.

Local Business Enterprise (LBE): Carollo is an LBE.

Background: The City's two surface water treatment plants are the SRWTP and the EA Fairbairn Water Treatment Plant (EAFWTP).

SRWTP was initially constructed in the 1920's and has seen various improvements and upgrades over the years. Most recently the facility was rehabilitated to regain a peak treatment capacity of 160 million gallons a day (mgd). As a consideration for the future, the replacement of the early 1920's infrastructure included space planning for potential expansion.

EAFWTP was originally constructed in 1964 and expanded in the early 2000's to provide a permitted treatment capacity of 160 mgd. Current environmental restrictions and agreements associated with low flows in the American River, aka the Hodge flow criteria, limit American River diversions into EAFWTP. In June, July, and August, the typical months when the maximum demand for water occurs, the Hodge criteria can limit EAFWTP diversions to just 100 mgd when river flows are low.

Period	Maximum Diversion, MGD
January through May	77.6
June through August	100
September	77.6
October through December	64.6

Approximately half of the existing infrastructure at EAFWTP remains from the original 1964 construction and is still in service. The components are over 50 years old, which is a typical useful service life.

The initial contract with Carollo Engineers (C2013-0626) was conducted between 2013 and 2018 and provided for an alternatives analysis that considered various options and costs for recovering the capacity lost at EAFWTP during Hodge events, addressing the increasingly unreliable 1964 aspects of the plant, and whether the improvements should be located elsewhere in light of the durable aspects of regulatory limitations on diversions from the Lower American River. Amongst multiple alternatives, the primary options selected for detailed study were: 1) expansion of SRWTP; 2) a new facility and river diversion off the Sacramento River north of the City limits; 3) fully rebuilding the 1964 aspects of EAFWTP, and building a new intake and pipeline from the Sacramento River to the facility “Pumpback Project”; and 4) A hybrid of the aforementioned options.

This executive summary of the Carollo Engineers initial study is provided in this staff report as **Attachment 4**. A summary of the study findings are as follows:

- A new intake would be required on the Sacramento River rather than an expansion of the existing intake. Cost, maintaining operations through construction, and preserving architectural elements were driving factors.
- Exploring the potential for adjusting permit conditions at the SRWTP Intake should be explored as this could significantly delay the need for a new intake. Any changes in permits at the existing facility would still lead to significant modification of the facility.
- Expand SRWTP rather than construct the “Pumpback”. Expansion of SRWTP requires less upfront cost and thus a more favorable cash flow to track with development and is ultimately a more scalable project to mitigate against overbuilding capacity considering uncertain future water demands. Another driving factor was the difficulty in comingling and treating two completing different sources of water with differing chemistry at EAFWTP.
- Continue to evaluate collaborative the benefits of a North Natomas Water Treatment Plant (currently known as River Arc). If the project becomes viable, consider the flexibility to pivot towards a hybrid project (reducing the size of SRWTP, and adding capacity at River Arc). Water Quality impacts of delivering water from location well north of City water

demands, habitat concerns north of the City limits, cash flow concerns, and placing too much reliance on regional partnerships were driving factors in not selecting this alternative as the sole solution.

- At minimum, maintain a reliable 100-120 MGD at EAFWTP to provide for reliable diversions under all river conditions and to provide for existing contract wholesale water when Hodge river conditions are not in effect. Improvements should include, at minimum, applying a sealant to the concrete surface of the newer portion of the plants treatment basins and replace filter media in the newer filters. Testing of the filter improvements would direct future considerations for additional treatment and filter rehabilitation.

Currently, under separate contract, the City is replacing filter media at EAFWTP. Upon testing of the improvements, future recommendations will be made to City Council for further improvements at EAFWTP.

The purpose of the project being recommended in this staff report is to begin laying the groundwork for the future design and construction of expanded water supply facilities at the SRWTP per conclusions of the initial investigation. Permitting and CEQA require certain levels of conceptual or predesign parameters be identified and are included in this scope of work.

The initial predesign work on the Project will be completed in two phases. Phase 1 will be performed under this contract being recommended to City Council for approval. The future Phase 2 is provided in this document for reference, to define the scope and to support identified funding needed for that work. Staff anticipates returning to the Water Committee and full City Council prior to any future project development phase. Updates will include an assessment of work performed to-date, and updated forecasts on future water demands.

- **Phase 1 - Conceptual Design, Draft EIR, Permitting, and Public Outreach.** The conceptual design effort will culminate in a Basis of Design Report (BODR) and a Project Description that can be used as the basis for the Draft EIR, a portion of applicable permits, and a public outreach plan.
- **Phase 2 -10 Percent Design, Final EIR, Permitting, and Public Outreach** (*Not included in pending Council contract recommendation*). In this future phase the Final EIR will be developed and the preliminary design completed. The potential scope of service is included as informational.