# **Task 2 Assumptions**

a. No changes will be made to the demand forecast projection parameters consisting of growth rates, conservation, system leakage, other authorized use, climate change, peaking factor, and existing large-scale consumer growth assumptions.

### **Task 2 City Deliverables**

a. Items listed in Subtask 2.1.

### **Task 2 Consultant Deliverables**

- a. Draft and final TM 1 Project Objectives.
- b. Draft and final TM 2 Potential Supply Options.
- c. Draft and final TM 3 Analysis and Implementation Roadmap.

## **TASK 3:** Cost of Service Study

### 3.1. Collect Data

- 3.1.1. <u>Request and Review Data.</u> Consultant's approach begins with gathering and reviewing the data necessary to complete the Cost of Service Rate Study (Study) for the City. That data includes but is not limited to:
  - 1) Current budgets and projections for future years.
  - 2) The latest system master plans and CIPs, including expansion, replacement, and improvement projects, and a description of the projects that are included in the plan.
  - 3) Customer billing records for the previous 3 years.
  - 4) Service area growth projections.
- 3.1.2. WS 301 Cost of Service Study Kickoff Workshop. During this task, Consultant and City staff will outline modeling assumptions such as growth and inflation factors, production and treatment costs, and capital funding inputs. This step presents an opportunity for Consultant to better understand the City's cost drivers and rate planning considerations before diving into the analysis. Consultant will also discuss its modeling approach with City staff during this task. Consultant's Microsoft Excel-based model will incorporate a user-friendly graphic user interface and scenario manager. Consultant will incorporate additional features and priorities as appropriate for the Study.
  - 1) Purpose: Discuss data transfer, outline goals for the project, and review any specific issues that may influence the results of the Study.
  - 2) Expected Consultant attendees: Project Manager, Financial Lead, Financial Analyst.
  - 3) Expected meeting duration: One hour.
  - 4) Location: Virtual.

### 3.2. Develop Financial Plan

- 3.2.1. <u>Analyze and Project Customer Usage.</u> Consultant will review the City's customer usage data and analyze it to understand relevant trends and customer profiles. This analysis will focus on:
  - 1) Summarizing total system usage on a customer class basis.
  - 2) Calculating peaking factors for individual customer classes.
  - 3) Identifying long-term usage trends.

As a quality management step, Consultant will perform a "price out" comparison of the City's recorded actual revenues against our calculated revenues from the usage information. Any deviation requires reconciliation.

Consultant will then forecast the customer account and usage assumptions for the study period (up to ten years).

- 3.2.2. Recommend Financial Forecast and Revenue Requirements. Consultant will develop a detailed financial forecast of revenues and expenses for the 10-year study period. Consultant will test the adequacy of revenues from the current rate structure to meet the City's policy objectives, beginning with three tests:
  - 1) Cash Flow Needs Review do revenues exceed expenses?
  - 2) Debt Coverage Test does the revenue structure provide enough revenues to meet debt coverage for any potential loans or bonds?
  - 3) Reserve Funds Review are operating and capital reserve fund balances projected to meet or exceed policy targets?

Consultant will review with the City any shortcomings on these tests and create a plan for funding through the study period.

- 3.2.3. <u>WS 302 Revenue Requirement Workshop.</u>
  - 1) Purpose: Present assumptions, analysis, and findings for the Financial Plan task.
  - 2) Expected Consultant attendees: Project Manager, Financial Lead, Financial Analyst.
  - 3) Expected meeting duration: Two hours.
  - 4) Location: In-person at City office.

# 3.3. Analyze Cost of Service

Consultant will complete a cost of service analysis consistent with industry standard practice. Our team will:

- 1) Identify the City's primary cost drivers based on operating and capital costs.
- 2) Identify what users are driving system investment and operations.
- 3) Create a clearly defined and defensible nexus between costs and system users.
- 4) Thoroughly document these findings in a way that is understandable and explainable for stakeholders.

These goals will be accomplished through the following subtasks.

- 3.3.1. Functionalize and Allocate Functional Costs to Cost Components. Consultant will allocate the City's O&M budget line items to one or multiple cost components based on the service requirements of that particular cost. The development of functional cost allocations will be consistent with guidance from American Water Works Association's M1 Manual: Principals of Water Rates, Fees and Charges. This allocation will recognize base or volume related costs, maximum day and maximum hour capacity or demand costs, fire protection costs,, and customer service costs.
- 3.3.2. <u>Develop Units of Service</u>. Consultant will develop an estimate of the units of service associated with each of the cost causative elements for water service. For instance, customer service-related costs will be converted to units of service on a per account basis, while volumetric categories will be on a per hundred cubic feet (HCF) basis.
  - The units of service will be estimated based on the service characteristics identified for each customer class. These units of service will be developed recognizing customer usage analysis, most recent and best available data, and engineering judgment regarding customer class service requirements. At the completion of the units of service analysis, the Consultant team will align the functional allocation of revenue requirements with the determined units of service. Consultant will organize this units of service classification based on fixed and variable costs.
- 3.3.3. <u>Distribute Costs to Customer Classes</u>. Consultant will allocate the total cost of service for each customer class based on how many units each class demands. The relative responsibility of each customer class will be specifically determined based on each class' or user's estimated service requirements.
- 3.3.4. WS 303 Cost of Service Workshop.
  - 1) Purpose: Present assumptions, analysis, and findings for the Cost of Service task.
  - 2) Expected Consultant attendees: Project Manager, Financial Lead, Financial Analyst.
  - 3) Expected meeting duration: Two hours.
  - 4) Location: Virtual.

### 3.4. Design Rate and Fee Schedules

- 3.4.1. Recommend Water Rates. Consultant will design water rates to generate sufficient revenues while meeting the City's objectives. Consultant will review and evaluate up to three potential rate structure alternatives that promote an equitable allocation of costs among customers, including but not limited to, fixed charge allowance, uniform rates, and tiered rates. The proposed rate structures for residential and nonresidential rates may vary.
  - Consultant will calculate the bill impacts for various customer classes and usage levels to compare the existing rates to the proposed rates.
- 3.4.2. Analyze Affordability. Consultant will evaluate the affordability of the City's existing rates and the alternative rate designs from Task 3.4.1 using up to three affordability indices. Consultant will compare the affordability of customer bills at various usage levels in a summary table and/or chart for ease of understanding. Based on the results of the affordability analysis, Consultant will recommend adjustments to the existing rate structure to address affordability concerns.
- 3.4.3. <u>Update Connection Fees</u>. Consultant will review the existing connection fee methodology and make recommendations, as appropriate, for modifications to the approach. If desired by

the City, Consultant will update the connection fee calculations using the recommended approach. Consultant will also recommend an approach for increasing connection fees (i.e., multi-year phase-in of recommended increase, indexed annual increases). Any recommended increase to connection fees will be reflected in the revenue requirements in Task 3.2 to offset projected rate increases.

# 3.4.4. WS 304 – Rate and Fee Design Workshop.

- 1) Purpose: Present assumptions, analysis, and findings for the Rate and Fee Design task.
- 2) Expected Consultant attendees: Project Manager, Financial Lead, Financial Analyst.
- 3) Expected meeting duration: Two hours.
- 4) Location: In-person at City office.

# 3.5. Develop Rate Model

- 3.5.1. <u>Develop Cost of Service Rate Model</u>. Consultant will develop a customized cost of service rate model for use by City staff to determine revenue requirements, allocate costs to customer classes, and design rates. The model will include a user-friendly dashboard interface, which will allow the user to easily run various scenarios.
- 3.5.2. <u>Provide Model Training Session</u>. Consultant will develop user guides and provide up to six hours of model training to City staff. Training will cover the Water System Plan CIP Tool and Cost of Service Rate Model. CIP Tool training will cover adding new projects and updating existing projects. Cost of Service Rate Model training will cover inputting updated financial and operational data, running scenarios, viewing results, and troubleshooting common issues.

### 3.6. Document and Present Cost of Service Study Results

- 3.6.1. Cost of Service Report. Consultant shall prepare a draft, final draft, and final report outlining inputs and assumptions, methodology and calculations, and final recommendations and rate tables. This report will document the nexus between rates and cost of service. Following City staff feedback on the draft report, Consultant will revise the report and deliver a final draft report for City Council and/or committee review. Following integration of the City's comments and feedback, Consultant will finalize and deliver the final report to the City.
- 3.6.2. <u>Stakeholder Meeting Support</u>. Consultant will support City staff's presentation at one stakeholder engagement session. Consultant will work with City staff to outline the approach and recommendations of the Study and contribute to presentation materials for this meeting. Consultant will not attend this presentation.
- 3.6.3. <u>City Council Presentation Support (OPTIONAL)</u>. If requested, Consultant will support City Staff's presentation at up to two public City Council meetings. Consultant will work with City staff to outline the approach and recommendations of the Study and contribute to presentation materials for these meetings.

### 3.7. Evaluate Additional Rate Design Alternatives (OPTIONAL)

If desired, Consultant will evaluate up to two additional rate structure alternatives for water rates and calculate the bill impacts for various customer classes and usage levels to compare the existing rates to the proposed rates.

# **Task 3 Assumptions**

a. None.

### **Task 3 Consultant Deliverables**

a. Draft, Draft Final, and Final Cost of Service Report.

#### **PHASE II OUTLINE – ANALYZE**

Phase II is not part of this scope of work. It will be scoped after Phase I is complete. This outline of Phase II is for informational purposes only.

### TASK 4: Analyze Supply Options

The analyze phase of the Source Development Planning project consists of first developing supply portfolios that are a combination of the feasible supply options identified in Phase I, second gathering more information and analyzing the portfolios, and finally comparing the portfolios to recommend a preferred supply portfolio and develop a roadmap for implementation.

### 4.1. Develop Supply Portfolios

Group the feasible supply options into portfolios that meet the supply purpose and need.

# 4.2. Analyze Supply Portfolios

- 4.2.1. Evaluate Water Rights Availability.
- 4.2.2. Evaluate Hydrogeological Feasibility.
- 4.2.3. Analyze Hydraulics.
- 4.2.4. <u>Develop Life-cycle Cost Estimates.</u>
- 4.2.5. Evaluate Permitting Implications.
- 4.2.6. Evaluate Environmental Implications.
- 4.2.7. Evaluate Constructability.
- 4.2.8. Evaluate Water Blending.
- 4.2.9. <u>Evaluate Conservation Opportunities.</u>