

UTILITY ADVISORY BOARD AGENDA

Thursday, September 13, 2018 – 5:15 p.m.
Lemon Creek Shop
5433 Shaune Drive

- I. CALL TO ORDER**
- II. APPROVAL OF AGENDA**
- III. APPROVAL OF MINUTES**
 - a. June 14, 2018 Draft UAB Meeting Minutes
- IV. PUBLIC PARTICIPATION**
- V. ACTION ITEMS**
 - a. Proposal of quarterly meeting schedule
 - i. Meeting location
- VI. INFORMATION ITEMS**
 - a. Introduction of Utilities Superintendent
 - b. Dryer Update – B. McGuire
 - c. Wastewater Collections Shop Warehouse – M. Vigue
 - d. 10 year CIP based on asset condition/known needs – M. Vigue
 - e. Rate Study/Asset Valuation Update – A. Sapp/M. Vigue
 - i. Staff Report – pg. 5
 - ii. Cost of Service Model
 - f. Board Activities/Priorities Brainstorm – M. Vigue
 - i. Pending Board Matters – pg. 12
- VII. NON-AGENDA ITEMS**
- VIII. ADJOURNMENT – Next Meeting, _____**

UTILITY ADVISORY BOARD- DRAFT MINUTES

Thursday, June 14, 2018- 5:15 p.m. – Lemon Creek Shop 5433 Shaune Drive

Board Members Present: Leon Vance-Chair; Geoff Larson- Vice-Chair; Janet Hall-Schempf; Grant Ritter, Kevin Buckland; Bryan Farrell

Board Members Absent: Andrew Campbell

Staff Present: Mike Vigue; Autumn Sapp; Breckan Hendricks; Nathan Coffee

I. CALL TO ORDER

The meeting was called to order at 5:20 p.m. by Vice-Chair Larson.

II. APPROVAL OF AGENDA

Reviewed and approved

III. APPROVAL OF MINUTES

May 10, 2018 Draft UAB Meeting Minutes- Chair Larson motioned to approve the minutes with minor amendments. Motion passed with no objection.

IV. PUBLIC PARTICIPATION

None.

V. ACTION ITEMS

None.

VI. INFORMATION ITEMS

- i. **Dryer Update-** Mr. Coffee presented an update of the progress of the dryer. Mr. Coffee stated that the old building has been demolished and a new structure built in its place. The dryer is located inside the structure and all of the large pieces of equipment were placed before the roof was completed with the exception of the condenser. The condenser will be built inside. Mr. Coffee explained that some of the site work requires the ground to thaw for utility work and that the testing of equipment is

estimated to occur in mid-October. Mr. Coffee stated it is undetermined what will happen with the waste product when it's done and that DEC has been focused on odor control, emissions and complaints from the neighborhood.

Mr. Farrell asked if there would be opportunity for public comment. Mr. Coffee stated there would be a plant tour scheduled at a later date. Vice-Chair Larson requested notification when a tour was scheduled and Ms. Hall-Schempf requested a mailed notification. Staff will follow up once more details are known.

Vice-Chair Larson inquired on the storage area. Mr. Coffee said that there has been some discussion of purchasing land that is housing pieces of the dryer.

Mr. Buckland asked if there was a budget breakdown and staff referred Mr. Buckland to the dashboard reports.

Mr. Ritter asked what the life expectancy of the dryer was and asked for clarification if the vendor and contractor have a say in the materials used. Mr. Coffee stated that he is open to suggestions which do not affect the durability or end product.

iv. **Rate Study/Asset Evaluation Update-** Mrs. Sapp reported on her conversation with W Wilks who worked on the rate study in 2014. Mrs. Sapp stated that W Wilks was very familiar and recalled the rate study very well. Mrs. Sapp stated that when evaluating inventory and assets the project becomes very expensive and requires guessing of what the state of infrastructure is.

Mr. Ritter shared his concerns that CBJ has a price and depreciation on assets that does not add up to him and that we (CBJ) doesn't know what some of our assets are. Staff shared that CBJ now has Lucidly a software that can track inventory and assets. Vice-Chair Larson explained that the depreciation Mr. Ritter was referencing takes

into account certain assumptions that involve IT elements that do not last the same period of time that the materials do.

Mrs. Sapp shared that Scott Lester with FCS is also very interested and would need a months' time for an estimate and timeline.

Mrs. Sapp stated that Lucidly could recommend partners, but that they do not provided asset evaluations. Mr. Vigue clarified that there has been no direction from the assembly yet to do a rate study. Mr. Vigue stated that more information is required from FCS and it is undetermined when this will be presented.

Mr. Buckland shared his concern for UAB approving rate increases and not considering differentiated rates when previous studies have recommended them. Mr. Buckland encouraged that UAB recommend an updated study. Staff noted the need to collect the rest of information from FCS and see where the assembly wants to take it.

Vice-Chair Larson stated what we really want is a financially sound utility. How do we balance the strength and integrity of the utility? Are there other things that will help the utilities going forward? Staff encouraged this question to be discussed with the new Superintendent Brian McGuire when he is back in office.

ii. **AWWA Benchmarking-** Chair Vance asked to table the item regarding AWWA Utility Benchmarking. Staff to review the benchmark more thoroughly and to review with Brian McGuire.

v. **Meeting Schedule-** Mr. Vigue stated that the next PWSC meeting is July 9, 2018.

VII. NON-AGENDA ITEMS

None.

VIII. ADJOURNMENT

Chair Vance confirmed the July UAB meeting will be canceled. The meeting adjourned at 7:00pm.



DATE: September 13, 2018

TO: Utility Advisory Board
Leon Vance, Chair

FROM: Mike Vigue, Engineering & Public Works Director
Brian McGuire, Operations Superintendent
Autumn Sapp, Engineering & Public Works Business Manager

SUBJECT: Staff Monthly Report

Companies Contacted Continued from 6/14/2018 meeting:

FCS Group **for definition of terms utilized by FCS see page 3*

Contact: Scott Lester
Project Manager Andy Baker

Rate Study

Full Rate Study

- Timeline – 7 months – 8.5 months
- Cost Estimate - \$160,000 - \$210,000

Revenue Sufficiency Analysis

- Timeline – 3 months – 3.5 months
- Cost Estimate - \$60,000 - \$90,000

FCS felt that since a full rate study was completed in 2014 and included a ten-year outlook, we shouldn't need another study unless our treatment requirements or customer behaviors have significantly changed.

That being said, they are available to perform the following updates to the 2014 rate study:

1. Revenue requirement study – the amount of revenue the utility needs for the current year and how far out can we reasonably predict. This revenue modification can be applied across the board – similar to what has done in the past where all users get the same increase.
2. Cost of service study - evaluation of how different users impact the cost of the system; which group of customers are driving the cost. Requires revenue requirement evaluation.
3. Rate design – based on the cost of service, what is the most equitable and effective way to recover the cost of service through rates. Requires revenue requirement and cost of service studies to be completed.

Please refer to page 3 of this document for FCS full overview. Things they would like us to consider, how much public involvement do we need?

Asset Management

Ben Holfman – Asset Project Management

Timeline – 4 to 6 months depending on time of year and scope of work

Cost Estimate - \$110,000 -- \$150,000 depending on number of line of business (Departments/Divisions/Groups) and Asset Management and internal knowledge and experience

Having a completed asset management system interfaces with a rate study by providing a more appropriate number for planning. Therefor it is preferred that it be completed prior to the rate study.

They do have the option of performing an asset management evaluation that gives different areas (financial, management, operations) a grade to help determine what area would be most beneficial to focus for evaluating our assets. This evaluation takes the information we have, including institutional knowledge, "plugs it in", and then evaluates what we have and what we need. It performs a gap analysis. By completing the asset evaluation, it creates a good base line and helps us understand what areas we have knowledge gaps.

For an asset program to be successful long term it needs to be kept up and all users need to enter the information including field crews as it happens.

Study Objectives

Based on our discussion, we understand that the City and Bureau is interested in a comprehensive rate study for its water and wastewater utilities, as well as an asset management evaluation.

The overall goal of a comprehensive rate study is to lay out a plan for the sustainable fiscal operation of the utilities through a long-range financial plan, while ensuring that the utilities are recovering revenues in a manner that is both equitable and consistent with the Juneau’s financial and operational policies and objectives. The key phases of a comprehensive rate study are as follows:

Revenue Sufficiency Analysis. The purpose of the revenue sufficiency analysis is to determine the level of revenues necessary to fund the ongoing operating and capital needs of each utility for each year of the study. A revenue sufficiency analysis differs from a utility’s normal budget process in that it is conducted over a long term – typically five to ten years. Conducting this analysis on a long-term basis enables the utility to avoid rate shock due to changing cash needs over time, as well as providing flexibility in planning for funding of capital expenditures. This long-range plan includes the development of a tailored model capable of evaluating the sensitivity of various assumptions for future revenues as well as future capital and operating expenditures. This provides Juneau with the ability to create and test different financial strategies and measure outcomes and key performance metrics under those various scenarios.

Key Inputs	Timeline & Effort	Deliverables & Outcomes
Actual operating cost history Demand and revenue history Audited cash balances Capital improvements plan Proposed operating budgets Debt service schedules Financial goals and objectives Growth expectations Future planning assumptions	Approximately 60 days to establish a baseline projection Another 30-45 (or more depending on level of board & council engagement at this stage of process) days to evaluate scenarios and select a preferred option	Excel financial planning model Reporting outputs for selected options Long-range estimate of future financial performance Total revenue required for next budget year and multiple future years Recommended "across-the-board" rate increases

Cost-of-Service Analysis. The objective of a cost-of-service analysis is to understand and quantify the fundamental cost drivers behind both the operating and capital costs of each utility. We apply an industry-standard approach to cost allocation, which provides a consistent and defensible basis for identifying the total cost to serve each class of customer that the utility serves. The steps involved include the following:

- Functionalizing all the line-item revenue requirements into the system function they support: transmission, storage, treatment, etc. for water; collection, treatment type, etc. for wastewater.
- Allocating those costs by system function based on individual cost components (annual usage, peak usage, wastewater strength, etc.).
- Distribute those allocated costs to each customer class based on the unit costs of service for each component

This cost-of-service process serves two important roles. It enables a deep understanding of the overall cost drivers for a utility – be they summer peak demands or looming replacement costs. Additionally, it makes it possible to set equitable rates that will, for each customer class, recover their cost-of-service, as well as design rates that are consistent with costs in terms of rate structure. Cost-of-service analysis is the industry standard for forming the reasonable, rational bases required by most legal standards. In other words, if you want to have the strongest justification for differences in rates between and among your customers, the cost-of-service analysis is the right tool.

Key Inputs	Timeline & Effort	Deliverables & Outcomes
Revenue requirements from previous task System demand history in terms of avg. day, max day, peak hour; treatment plant influent and wastewater strength No. of customers served and metered connection census Fixed assets Functional description of system components Customer demands & billing records Fire flow requirements	Approximately 45 days to reach draft findings Additional 15-20 days to evaluate findings and revise as needed	Excel cost-of-service model Revenue required for each identified customer class Comparison of existing revenue and costs to serve each class Identification of shortfalls and surpluses to address in rate design Justification for differences in rates based on cost to serve

Rate Design. The Rate Design step incorporates the findings from the first two steps and evaluates the alternatives for recovering the full cost of service. It is the portion of the rate study process where a utility has the most decisions to make with regards to balancing competing objectives: how much revenue to recover through a fixed monthly charge versus a volumetric rate, or whether to consider tiered rates to recover the cost of peaking on the system. Those choices can impact the utility in terms of its revenue stability, rate affordability, and ability to impact customer behavior. As it is policy-driven, this portion of the study requires significant engagement from key stakeholders (staff, advisory board, and council) to be successful.

Key Inputs	Timeline & Effort	Deliverables & Outcomes
Revenue requirements from previous task Cost-of-service from previous task Policy input and priorities	Approximately 30 days to reach draft findings Additional 30-45 days to evaluate findings and revise as needed	Excel rate design model Rate Design alternatives for each class Bill impact analysis for typical customers and edge-case customers

Rate Study Cost. While presented as three steps, a rate study can be conducted as either purely a Revenue Sufficiency Analysis, or a comprehensive full rate study. Many of our clients choose to use a Revenue Sufficiency Analysis when they have recently completed a full rate study, and have not had material changes in either customer usage characteristics or operational changes such as changes to treatment technologies or sources of supply. For a Revenue Sufficiency Analysis, the cost for both water and wastewater utilities ranges between \$60,000 and \$90,000 – with the range depending on the availability of input data and the amount of scenarios and iteration necessary to arrive at a final rate recommendation. For a full rate study, the cost ranges between \$160,000 and \$210,000 – again driven in large part by the number of scenarios and the amount of stakeholder engagement needed to arrive at a final set of recommendations.

Asset Management Evaluation. Having a good understanding of your capital requirements and the prioritization of projects based on new development demands is important. Less flashy and less exciting are the dollars that are allocated to R&R projects. This means that you need to be acutely aware of all fixed asset rehabilitation and replacement (R&R) needs. A sustainable balance of new projects to R&R project with quantifiable and objective data-driven decisions is required. Unfortunately for many utilities, the capital allocations of funds to the R&R tends to be a reactive approach (“run to fail”), rather than a proactive approach (“anticipate failure and repair/replace just before its anticipated end of life”). In order to shift from a reactive to a proactive approach, utilities must evaluate their current approach to asset management against industry best practices through a strategic evaluation process.

A strategic evaluation of your asset management program begins with an assessment of organizational readiness with key stakeholders. Program elements generally include:

- Evaluating the Board’s understanding of the importance of asset management and the critical support needed
- Developing a fully functioning asset management program

- Assessing the available and/or needed tools in place to align staff with strategic goals (e.g., ESRI/GIS, Financial/Accounting software, AMS Lucity, StreetSaver, Micropaver, etc.)

Performing this kind of evaluation succeeds not only in gaining an understanding of your current program and its gaps, but also educates staff and key stakeholders in asset management best practices. The output of this work is an action plan to strategically close gaps in various business/functional areas through actionable goals, and strategies and tactics—while be attentive to associated internal and external costs and/or risks.

The knowledge obtained through the evaluation process needs to be communicated through a structured plan that meets the needs of the organization, while also recognizing the impact of change. Successful communication plans optimize efficiencies and effectiveness in delivery of services and products to customers / constituents.

Timeline: 4 to 6 months depending on time of year and scope of work.

Cost Estimate: \$110K to \$150K depending on number of lines of business (Departments / Divisions / Groups) and Asset



DATE: June 14, 2018

TO: Utility Advisory Board
Leon Vance, Chair

FROM: Mike Vigue, Engineering & Public Works Director
Autumn Sapp, Engineering & Public Works Business Manager

SUBJECT: Staff Monthly Report

Rate Study/Asset Valuation Update-

Useful Terms-

Cost of Service – is the service of the utility recovering its direct cost, e.g. is residential water covering its cost to supply water and is it contributing to the overall fund balance of the utility.

Revenue Requirement Study – identifies the appropriate revenue requirements and assessing your existing rates to cover expenses and meet fund balance targets. It only allows rates to be adjusted across the board, but rates cannot be adjusted individually. This is the foundation to perform a cost of service study and rate design evaluation.

Rate Design – creates rates that haven't existed. It can also address policy issues (senior discounts).

Companies Contacted:

Parrish, Blessing, & Associates, Inc. ("PBA")

Contact: William Wilks

- Was FCS Manager for Alaska worked extensively on 2014 Rate Study for CBJ
- If we hire without needing an RFP will charge same amount from 2014 (\$214,978) will include:
 - Revenue study
 - Cost of service model
 - Rate Design
- Time frame would be 8 months
- Can also assist with phasing new rates in to avoid rate shock
- He suggests setting up a Continuing Property Records (CPR) system – A better CPR makes a better cost of service study.
 - In 2014 CBJ just had an excel spreadsheet with location and cost of installation (from treasury)
 - PBA can set up entire system
 - Provide updates
 - Provide guidance on partial closures of projects
 - Provide guidance for setting policies and procedures
 - Could include participation by utility managers to better understanding
- Asset valuation
 - Suggests we need a depreciation study not an asset valuation
 - Utility needs to identify what we are trying to accomplish with an asset valuation
 - Engineering valuation - if concerned with conditions of infrastructure including pipes we will need an engineer, they do partner with other firms to do this

- Just completed this Anchorage stormwater with Sentec. Cost \$200,000 for assessment of system and it wasn't enough money to complete a full assessment of the facilities.
- Benchmarking Analysis – see page X – X of previous work completed by FCS Group in 2013
 - Mr. Wilks believes the benchmarking analysis was a \$50,000 “waste of money”
 - Not comparable to other utilities since CBJ is so different. Comparing actual functionality is a “complete waste of money”
 - CBJ does secondary treatment of wastewater where most others do not
 - Can benchmark customer service representatives to total number of customers

FCS Group

Contact: Scott Lester

- Spoke with Scott he will provide an estimate and time frame for an update on the 2014 Rate Study and also will include suggested scope of service items to include in an RFP.
- FCS is also now doing asset valuations and he will speak to that division about getting information passed along as well.

Lucity (asset management software CBJ uses)

Left message

