# UTILITY ADVISORY BOARD AGENDA

# Thursday, May 10, 2018 – 5:15 p.m. Lemon Creek Shop 5433 Shaune Drive

- I. CALL TO ORDER
- II. APPROVAL OF AGENDA
- III. APPROVAL OF MINUTES April 12, 2018 Draft UAB Meeting Minutes
- IV. PUBLIC PARTICIPATION
- V. ACTION ITEMS

#### VI. INFORMATION ITEMS

- i. Tabled Items from April 12, 2018 Meeting
  - 1. Pending Board Matters K. Buckland
    - a. UAB Pending Maters Example enclosed
  - 2. Policies and Procedures K. Buckland
- ii. UAB Annual Report presentation to COW K. Buckland and G. Larson
  - 1. Rate Study cost and timeline
    - a. 2014—Appendix A\_Scope of Work- enclosed
    - b. 2014-Appendix A Schedule 11x17- enclosed
    - c. 2014-PO Charges- enclosed
  - 2. Cost of Service Model cost and timeline
- iii. AWWA Utility Benchmarking K. Buckland
  - 1. AWWA Utility Benchmarking UAB 20180510 enclosed

### VII. NON-AGENDA ITEMS

VIII. ADJOURNMENT – Next Meeting, June 14<sup>th</sup>

# UTILITY ADVISORY BOARD DRAFT MINUTES

# Thursday, April 12, 2018 – 5:15 p.m. Lemon Creek Shop 5433 Shaune Drive

Board Members Present: Leon Vance – Chair; Geoff Larson – Vice-Chair (telephonically); Andrew Campbell; Janet Hall Schempf (telephonically); Grant Ritter; Kevin Buckland

Board Members Absent: Bryan Farrell

Staff Present: Roger Healy; Autumn Sapp; Holly Kveum

#### I. CALL TO ORDER

The meeting was called to order at 5:16 p.m. by Chair Vance.

#### II. APPROVAL OF AGENDA

Agenda was approved without amendment.

#### III. APPROVAL OF MINUTES

March 8, 2018 Draft UAB Meeting Minutes- Chair Vance motioned to approve the minutes with minor amendments. Motion passed with no objection.

#### IV. PUBLIC PARTICIPATION

None.

#### V. ACTION ITEMS

i. Annual Report: Chair Vance acknowledged the email edit requests from Vice-Chair Larson and requested for staff to include them in the final version of the Annual Report. Chair Vance reminded the Board that the report is scheduled to be presented at the April 30, 2018 Committee of the Whole. Mr. Campbell made a motion to approve the report with minor modifications. Mr. Buckland requested a roll call vote, noting the discussion at the previous meeting to include a Minority Report in addition the Annual Report: Mr. Buckland informed the Board that he had drafted a Minority Report to include for the Committee's review. Mr. Buckland then dispersed hard copies of the report. Chair Vance suggested that the Board have time to review the report before making a final motion for the draft Annual Report. Mr. Healy added that the two Board members who were participating telephonically did not have an electronic copy of the Minority Report to review, and if it was the Board's will to vote on the new information provided in the report that time should be allotted to do so prior to a vote. Mr. Buckland noted that he anticipated the report will still be in the minority. Ms. Hall Schempf added that this was a substantial deviation from past years' submittals, and she was uncomfortable that the language in the Annual Report was not satisfactory to all members. Discussion continued regarding the five-year rate increase recommendation, previous rate study recommendations, cost of service rate models, and the potential costs of borough-wide metering to achieve equitable rates. Mr. Campbell requested the Board continue with the roll call vote to present the Annual Report with minor modifications to the Committee of the Whole, adding that Mr. Buckland was within his rights to submit a Minority Report. Chair Vance commenced the vote as follows:

Yes	No
X	
X	
	x
X	
	x
Х	
	Yes X X X X X

The motion passed 4-2.

#### VI. INFORMATION ITEMS

- i. Tabled Items from March 8, 2018 Meeting
  - 1. Pending Board Matters Chair Vance turned the discussion over to Mr. Buckland, who gave a board overview to the Board of a standing packet item that would create a record of the goals and objectives of the Board. Discussion ensued regarding the format, intention, and responsibility of the document. Mr. Healy requested Mr. Buckland provide the Board and staff an example of the document at the next scheduled meeting.
  - 2. Policies and Procedures Mr. Buckland asked to table this item to the next meeting.
  - 3. Orientation Mr. Buckland told the Board that it was difficult to find information to "get up to speed" as a new member and that creating an orientation packet would be a helpful tool to avoid timely discussions regarding past decisions during regularly scheduled

meetings. Discussion ensued. Mr. Ritter asked that "Old Business" be added to future agendas.

- 4. Staff Liaison's Roles Mr. Healy informed the Board that there would be a change in staff liaisons, and that Autumn Sapp, John Bohan, and Mike Vigue would be the primary contacts for the Board until the newly hired Utilities Superintendent started in late May. Ms. Sapp then began discussion of staff vs. board duties, including: creation of the agenda, minutes, meeting notifications, etc. Discussion continued regarding which party should be responsible for minutes. Ms. Hall Schempf expressed caution should a Board member take minutes, as they wouldn't be able to be fully engaged in the meeting. Mr. Campbell agreed, adding that minutes were a very time consuming task for a volunteer and that he would prefer the CBJ fund this effort. Chair Vance asked staff to continue to look for options to supply this service, either through the budget or by providing an additional staff member to attend the meetings.
- ii. Comparison Information Chair Vance asked staff to include two articles, "Who is Paying to Fix Outdated Water and Sewer Systems? You Are" and "New York City's Sewage Shipment Runs Afoul in Rural South" as a reminder to the Board that while Juneau is an outlier in many ways, other cities are facing similar issues. Mr. Healy noted that the first article did not include EPA consent orders for many of the larger metropolitan areas that included rate increases and over-due improvements to the systems. Discussion ensued regarding the Board's function in reviewing the dryer. Chair Vance emphasized that the role of the Board is to be helpful to staff and the Assembly in making decisions to better the community. Mr. Buckland added that his intent with writing the Minority Report was to achieve that by focusing on fair and equitable rates. Chair Vance noted that the Board's priorities must be in line to achieve this. Mr. Campbell added that the Board could be dissolved if it's viewed as not aiding staff and the Assembly as originally intended. The Board then discussed the next meeting date and location, and the logistics of the Committee of the Whole presentation.

#### VII. NON-AGENDA ITEMS

None.

#### VIII. ADJOURNMENT

The meeting adjourned at 6:24 p.m.

### Utility Advisory Board Pending Board Matters (Information Item)

Date: May 10, 2018

Requestor	Task/Matter	Capture Date	Target Date	Completed Date
Buckland	Develop orientation	3/xx/18	x/1/19	
Buckland	Develop / Recommend Policies (e.g. target debt ratio)	5/10/18		
Buckland	Cost of Service Model & Rate Study	5/10/18		
Buckland	AWWA Utility Benchmarking	5/10/18		

"A schedule defends from chaos and whim." Annie Dillard

#### APPENDIX A: SCOPE OF SERVICES Water and Wastewater Rate Study Update Contract No. RFP E13-238

The following Scope of Work (SOW) identifies the tasks that FCS GROUP will perform for the CBJ's Water and Wastewater Rate Update:

### A. Study Foundation

Establish the underlying data needs and assumptions, and financial, cost-of-service, and rate policy objectives of the study to serve as the foundation for conducting the technical analyses and promoting an informed and effective stakeholder involvement process in support of overall study implementation.

#### Task A.1 | Data Collection & Validation

Provide a data request identifying financial and operational documents, and customer data pertinent to the performance of the study. Review, analyze, and validate data as necessary for use in formulating the technical analyses. In particular, we will review customer usage patterns / service requirements to inform the initial recommendation of customer classes and potential rate structure options. To facilitate a quick start to the study, we will submit the data request in advance of contract execution so readily available information can be received prior to the study kick-off meeting. In advance of this meeting, we will have conducted our initial review and will be prepared to discuss potential data challenges and provide requests for additional items or explanations as necessary.

#### Task A.2 | Study Kickoff Meeting

Prepare for and attend an onsite study kickoff meeting with CBJ representatives to review the study scope and schedule, confirm key milestones, discuss any data challenges, define anticipated deliverables, and establish communication and project management protocols. We will use this session to brainstorm with CBJ staff to create the list of key policy issues to be addressed throughout the study and strategize the public involvement process. Attendees should ideally include representatives from Public Works, Engineering, and Finance.

#### Task A.3 | Rate Methodology Review

Review the previous 2003 rate study report, rate models, subsequent rate adjustments, and current ordinances/codes for each utility to provide context for the rate study update. In particular, this will include evaluation of the current cost allocation methodologies, customer classes, and rate structures to assess potential areas for improvement. This could include interviews with key CBJ staff, the Utility Advisory Board (UAB), and members of the public.

#### Task A.4 | Fiscal Health / Policy Review

Evaluate the current financial condition of the utilities and review CBJ performance standards, type and amount of reserves (e.g. operating cash flow, capital contingency, and catastrophes); asset management / system reinvestment funding from rates; and debt management policies for consistency with CBJ goals, revenue needs, and potential rate impacts. A comparison of these policies to industry standards can help provide context in determining whether there are possible enhancements that would promote the financial health of the utilities. We will build upon the policy recommendations developed for the 2003 rate study, and gauge CBJs achievement of policy parameters in light of current conditions and utility goals. In particular, we will revisit the status of the 20-year phase-in strategy established for system investment funding from rates in the previous study. Sensitivity analyses will be performed to assess customer impacts and revenue risk for all policy implications.

#### Task A.5 | Public Involvement Plan

A critical element of this rate study update is the involvement of impacted stakeholders through an inclusive, transparent and appropriate public involvement plan. Stakeholder engagement in alignment with the rate study process will allow the CBJ to educate stakeholders, gain stakeholder input and perspective, and empower CBJ to make well-informed decisions in establishing equitable rate strategies. We will work collaboratively with CBJ staff to develop a public involvement plan (PIP) specifically aimed at:

- Ensuring the public is well informed about the purpose, goals, and schedule of the study;
- Conveying the importance of public participation in the study and encouraging constructive input from

affected stakeholders;

- Creating an open communication environment where stakeholders can freely discuss issues and ideas about proposed changes to existing rates; and
- Documenting PIP activities to ensure public input was heard and appropriately addressed in the study.

We suggest that multiple forms of communication be used to reach the widest audience, such as public meetings, bill stuffers, website postings, press releases, media strategies, etc. All related activities will be transparent, inclusive, respectful, responsive and accountable.

We will work with the CBJ to develop the PIP including identification of specific stakeholder groups, techniques and tools to be used in engaging and informing the various stakeholders, and potential forums/venues. We will assist in developing messages and materials, and coordinate meeting activities. We will provide meeting minutes describing stakeholder inputs and how responded to, and include documentation in the study report.

The level of effort budget for preparing the public involvement plan and materials is included within in this task. Actual meeting attendance is provided under H.2 Public Involvement Meetings.

#### Task A.6 | Project Management

Perform administrative / management procedures for efficient study performance. Prior to study commencement, a work plan, budget and preliminary schedule will be negotiated for inclusion in the Professional Services Agreement. The work plan and schedule will be reviewed at the kickoff meeting, with a final schedule of study milestones agreed upon. With our monthly invoicing, our managing principal will deliver written progress reports describing recent efforts; forthcoming efforts, including potential challenges and/or needs from CBJ staff, as well as status of the study progress, schedule and budget. We will stay in regular contact with the CBJ project manager via telephone and email to address issues as they arise.

#### B. Model Development and Training

Develop spreadsheet models for use in performing the technical analyses and providing summary graphics for use in reports and to inform the stakeholder process. As the foundation for this task, we will begin with the Excel-based rate models FCS GROUP developed for each utility during the 2003 Rate Study, then refine as necessary with transparency and ease of use in mind.

#### Task B.1 | Model Development

Confer with CBJ staff to determine if changes or enhancements to the original models are desired to improve user-friendliness and/or incorporate any revised accounting or policy parameters. At a minimum, we propose to integrate an introductory flow screen and dashboard module to enhance model navigation and "what if" scenarios. The dynamic dashboard module allows for various cost and policy alternatives to be simultaneously evaluated without corrupting the core data within the model. This functionality allows users to easily and quickly test custom scenarios which can serve as a powerful communication tool for internal management decisions and can provide summary level outputs for external users.

The models will be specifically tailored to perform the technical analyses for this study and to allow for future updates by CBJ staff as assumptions change over time. The models will be structured to include unique modules for Source Document Inputs; Study Assumptions; Revenue Requirements; Cost of Service; Rate Design; Customer Bill Impacts; and Tables and Graphics. This approach segments the model into easily identifiable areas that can be readily accessed and used by novice users with minimal training. The models will be flexible and stable enough to perform sensitivity analyses for various inputs and scenario development.

While the RFP stated integration of all components within the rate model, a suggestion for ease of use is to separate the model into two components: (1) financial planning and (2) cost of service / rate designs. We often find that utility staff members want to update the financial planning portion of models on an annual basis, but only re-evaluate cost of service and rate restructuring on a 3 to 5-year cycle. We will further discuss CBJ preferences at the kickoff meeting.

#### Task B.2 | User Guide & Training

Prepare a user guide for model operations and conduct a one-day training session with CBJ staff to demonstrate model operations and outputs.

### C. Revenue Requirement Forecast

Develop a 10-year revenue requirement forecast to determine annual rate revenue needs to fund capital financing impacts, operating and maintenance costs, fiscal policy achievement, and other financial obligations of the water and wastewater utilities over the study period. The objective is to determine if current revenues are adequate to fund the total costs of utility service, including infrastructure reinvestment and, if not, the level of rate adjustments necessary. This analysis will serve as the foundation for allocating "total" system costs to customer classes (discussed in Task D).

#### Task C.1 | Capital Funding Strategy

Review the current water and wastewater system capital improvement programs (CIPs). Discuss with CBJ staff to identify any additional capital costs and project timing that should be included for this study period. At a minimum, estimated capital costs for any potential meter installation program will need to be included. Incorporate annual capital projects and associated costs and escalate those costs to year of anticipated construction. It is our understanding that detailed capital plans are only available for the first five years of the 10-year study period. Rough order of magnitude annual capital expenditures will be used for the remaining five-years.

Design capital funding strategies based on a mix of available funding resources intended to feasibly execute the capital programs while providing smooth rate impacts to the extent practical. In particular, we will evaluate the combination of resources from cash reserves, proposed system reinvestment funding, the ADEC loans/grants program, municipal bonds, or other loans. Resulting debt service and other rate requirements for capital funding will be identified over the planning period. The financial impacts of executing the capital programs are often a major driver of utility rate increases. As such, we structure the capital funding analysis to allow for alternative priority and scheduling of projects to evaluate rate changes under different project costs, timing, and funding scenarios. Of particular note, the CBJ has historically received grant funding to supplement its capital programs. It is assumed that the future availability of grant funding is significantly diminished from previous levels and should not be relied on for meeting capital needs.

#### Task C.2 | Operating Expense Forecast

Forecast operating and maintenance costs of the water and wastewater systems over the study period. Current operating budgets will be used as the baseline for this forecast. Consideration will be given to incorporation of a "budget realization factor" if it is determined that historical expenditures have typically come in significantly higher or lower than adopted budgets. Establish economic factors for permanent customer growth, seasonal influx, and line item cost escalation. Incorporate additional O&M expenses for known or anticipated changes in operational or administrative requirements such as regulatory impacts, additional staffing needs, deferred maintenance, and/or new program initiatives. At a minimum, incremental costs could include additional meter reading, ongoing meter maintenance costs, and billing system / customer support costs required to administer any proposed metering programs.

#### Task C.3 | Revenue Needs Assessment

Integrate selected financial policy impacts, existing debt service, capital funding impacts, and the operating forecast to develop an operating cash flow for the water and wastewater utilities over the study period. Compare projected requirements against projected revenue under existing rates to determine annual rate adjustments needed to provide financial sustainability over time. Develop a multi-year rate adjustment strategy for each utility to fund all financial obligations over the planning period, while smoothing rate impacts to the extent practical. Sensitivity analyses will be performed to evaluate the impact of alternative capital financing strategies and other input parameters as appropriate. Specifically, scenarios will be developed to evaluate the relative impacts and associated risks to the City and utilities assuming adequate funding for the utilities is: (a) provided entirely by user fees, (b) provided by a combination of user fees and general fund or other outside sources, or (c) utilities are not adequately funded to meet current and future operational, capital / replacement needs.

#### Task C.4 | Reserve Analysis

Perform a cash reserve analysis for each utility to make certain that minimum operating, capital, catastrophes, and other cash balance policies (as identified in Task A.4) are maintained.

### D. Cost of Service Evaluation

Conduct the technical analyses necessary to provide a rational basis for allocating utility system costs, assigning cost shares to customer classes, and recommending rate structures that are grounded in best practice and consistent with stakeholder outcomes and CBJ goals for customer equity and pricing of utility services. The objective is to determine if current customer classes fairly apportion the expenses of the utilities and, if not, what changes are recommended to enhance customer equity.

#### Task D.1 | Functional Allocation

Determine appropriate cost allocation factors to allocate plant and expense items to functional cost components of the water and wastewater systems. These allocations will be guided by generally accepted principles, such as those documented by the American Water Works Association (AWWA) and Water Environmental Federation (WEF), tailored to CBJ's accounting records, system assets and design criteria, and other planning parameters. In general, industry standards express total utility costs in relationship to the following service functions:

- Water: Base Demand (average annual use), Peak Demand (peak season use), Fire Protection (pipe oversizing and storage capacity), and Customer (accounts and meter/service size).
- Wastewater: Flow (contributed volume and infiltration and inflow), Treatment (BOD, TSS), and Customer (accounts / units). Consideration will also be given for additional strength parameters to address fats, oil, and grease (FOG), and high protein, carbon, and phosphate.

#### Task D.2 | Customer Data Analysis / Usage Profiles

Perform a detailed customer data analysis to determine if CBJ's customer classes are being allocated their fair share of respective system costs. We will conduct a statistical analysis of historical customer billing system data to validate the current data set for use in evaluating potential shifts in cost recovery and collecting the correct amount of revenue through alternative rate structures. We will examine customer billing system data and calibrate billing records against actual rate revenues to prevent over or under estimation of the customer base. This is a critical step in setting appropriate and sufficient rates.

Estimating techniques will be employed to derive water usage patterns for unmetered customers. To accomplish this, we will draw upon CBJ's water production data, assumed system loss, metered customer data, and our significant experience in analyzing customer class water usage patterns for unmetered and/or partially metered systems.

To address the variable nature of water and wastewater rates, it is important to evaluate a multi-year trend to mitigate revenue risks associated with variances in usage patterns due to economic cycles, weather, and potential conservation impacts of transition from flat to metered rates. We suggest evaluating three years of CBJ's water production and consumption data to determine an appropriate usage profile for projecting future water and wastewater demands. Total customer demands will be evaluated against availability of supply / system capacities.

#### Task D.3 | Customer Class Designations

The CBJ categorizes its water and wastewater system customers as flat residential, metered residential, flat commercial, metered commercial, and bulk water. The majority of customers pay the same schedule of flat and metered rates, with the exception of large commercial and septage haulers. Several issues were identified in the previous study that warrant continued study and improvement for this update, including but not limited to:

- Evaluation of trailer park and multi-family residential customers separate from single family residential.
- Reclassification of certain customers.
- Evaluation of peak usage patterns for bulk water (cruise ships), seasonal influx, and other seasonal use.
- Evaluation of high strength commercial customers.

There may be some additional customer diversity to consider, such as public/private fire protection service; potential service area / regional differences; contribution to infiltration/inflow (I&I); and, additional strength parameters, including grey water discharge, etc. A review of customer class statistics, as well as input from CBJ staff, will be relied on to determine any alternative grouping of customers to better address unique service requirements and/or needs for special rate components (i.e., peak surcharges, extra strength surcharges, availability / demand charges, etc.). The rationale for recommended cost allocation methodologies will be

discussed and vetted with CBJ staff and stakeholders and thoroughly documented in the study report.

#### Task D.4 | Customer Class Distribution

Using the results of the functional cost allocation and summary customer statistics, we will assign cost recovery to the established customer classes in proportion to the estimated annual and/or seasonal demands each class places on the water and wastewater systems. We will summarize the resulting cost of service by customer class and compare to existing revenue recovery by class to determine potential shifts in costs between customer classes. To the extent any of the prior allocations or classifications were the result of a judgment call, the sensitivity of the cost burden shifts between customer classes can be tested against changes in those variables.

#### Task D.5 | Unit Cost Development

Derive unit costs of service for each customer class by functional cost component of the water and wastewater systems to serve as the building blocks for alternative rate structure designs. This will include identification of fixed and variable costs and assignment of those costs between fixed and variable rate components to promote revenue stability (further discussed in Task E).

### E. Rate Structure Design

Evaluate the performance of existing water/wastewater rate structures and develop alternative structures that might better address long-term utility needs and customer concerns. The goal is the development of a schedule of water and wastewater rates that can achieve a reasonable and practical degree of customer equity; remain consistent with local practices and conditions; preserve financial stability; and serve the best interest of the CBJ and community. Rate structures must be easy to understand and administer and remain compatible with CBJ's automated billing system.

#### Task E.1 | Rate Structure Evaluation

Review and evaluate the existing water/wastewater rate structures as a baseline for comparing recommended alternatives. Rates will be designed with metering practicalities and installation expenses in mind. Alternative structures for area-wide metered rate structures will identify associated requirements, incentives, and potential customer impacts. This will include identification of metering needs, billing, budgeting, and administrative needs, potential advantages and disadvantages, and revenue stability risks (such as conservation impacts). Preliminary rate structure options will be identified during the study kickoff meeting and further discussed through the public involvement process. We will summarize the performance of each alternative rate structure and provide a recommendation for a preferred structure for each utility, including implementation strategies for any significant changes from current practice.

#### Task E.2 | Ordinance / Code Review

Identify language or sections contained within the existing rate ordinances / codes that could be in conflict with alternative rate structures. Recommend modifications as necessary to align implementation and management of selected new rate structures.

#### Task E.3 | Customer Bill Impacts

For each rate structure alternative, we will analyze the potential rate impacts for each customer class based on a series of ballpark and/or historical usage patterns and attributes for typical customers. Resulting sample bills will be compared against other jurisdictions in Task F below.

#### F. Comparative Benchmark Analysis

Benchmark the financial condition and practices of the CBJ utilities in comparison with other utilities in similar cities. Metrics will include customer class categories and associated water/wastewater rates; water use and wastewater volumes; metering practices; asset replacement strategies and capital reserves; investment practices; O&M, overhead, and other utility costs; and other available relevant information. This analysis will be used to evaluate consistency of recommended rate structures with utility rate making in Alaska and other similar benchmarked communities.

When examining the results of the comparative rate analysis, it should be noted that it is not always simple to compare one agency to another, especially when focusing on one metric, such as rates. System attributes - such as age and type of infrastructure, demographics, treatment process and regulatory compliance issues - can

vary vastly by area and agency. Consequently, while end user rates are commonly used to benchmark an agency's performance, using rates as an isolated metric does not always provide a strong basis for comparison. Where data is readily available, we will provide content for this comparative rate analysis by including the background on each utility surveyed. This level of review can help explain discrepancies of rate levels between agencies.

#### Task F.1 | Industry Benchmark Survey

Select relevant benchmarks documented in industry published surveys such as the American Water Works Association (AWWA) and Water Environment Federation. Published benchmarks are typically categorized by region, population, and utility service. Collect required data from the CBJ to calculate selected performance measures and rank the CBJ against benchmarked categories and summarize overall utility performance.

#### Task F.2 | Alaska Communities Survey

Select local communities and/or other utilities in similar communities not included in the industry surveys and perform a direct survey of selected performance measures. Requests for data and phone interviews will be conducted to perform this task. It is important to note, that cooperation from selected utilities is critical to adequately and timely populate the survey data, calculate results, and provide meaningful comparisons. To effectively manage the process, we suggested that no more than five (5) communities be included in this survey. We will work with CBJ staff to identify appropriate communities.

#### G. Other Utility Service Charges

Review existing customer service fees and identify potential additional charges to appropriately recover unique utility costs that are not applicable to all customers on the systems. Examples include, but are not limited to turn on/turn off fees; plan review/inspection fees; late fees, etc.

#### Task G.1 | Assess Existing Fee Structure

Compile a list of existing and potential new charges and determine cost drivers to be recovered by each fee, such as staff labor time, materials, or policy, in order to select the appropriate analytical method for calculating the charges. For primarily labor-based fees, work with CBJ staff to determine a fully-loaded cost per productive labor hour. For primarily materials-based fees, we will rely on CBJ estimates for costs incurred to provide the service, plus any labor time involved in the service. For policy-based fees that seek to modify behavior, define intent of the fee and evaluate an appropriate level of charge.

#### Task G.2 | Calculate Charges

Obtain required information from the City to include an estimate of the average amount of time spent on each fee-related service, materials costs, etc. Calculate the appropriate level of charge for selected existing or new fees.

#### H. Meetings and Presentations

In addition to the study kickoff meeting, we propose to prepare materials for and facilitate the following meetings and presentations.

#### Task H.1 | Interim Staff Review Meetings

Confer with CBJ staff in up to two (2) onsite meetings and up to three (3)  $GoToMeetings^{TM}$  to review study results at key milestones. We anticipate the following meetings:

- One (1) meeting to review presentation materials for the first public meeting overview of rate study process (suggest GoToMeeting)
- One (1) meeting to review draft revenue requirement results (suggest GoToMeetings)
- One (1) meeting to review draft cost of service/ rate design results (suggest onsite)
- One (1) meeting to review final draft results prior to Committee presentation (suggest GoToMeetings)
- One (1) meeting to review final results prior to Assembling presentation (suggest onsite and combine with model training)

#### Task H.2 | Public Involvement Meetings

Attend onsite meetings to share information with the public and receive input on rate study issues, findings and

recommendations. It is anticipated that the following topics will be presented: an overview of the rate study process, draft revenue requirement results, and draft cost of service/rate design results. Each topical meeting will be held in three (3) different service areas to accommodate customers. It is expected that each set of service area meetings will be accomplished within a single 2-day trip.

We can accommodate additional meetings if needed using the approved contingency budget. Written authorization is required prior to use.

#### Task H.3 | Special Committee and/or Assembly Presentations

Prepare materials and present draft and final study results to special committees, such as the UAB, Committee of the Whole, and/or the CBJ Assembly in up two (2) onsite meetings

#### I. Documentation

Prepare drafts and final study reports summarizing data sources, assumptions, methodologies, findings, recommendations, and supporting data. Reports will include a combination of narrative, and tabular, schematic and graphical representation of data and findings suitable to inform CBJ staff, management, the Assembly, and other stakeholders.

#### Task I.1 | First Draft Report

Prepare and submit a draft report to the CBJ project manager for review and comment. The report will summarize data sources, assumptions, findings, and recommendations of the study. Appendices will include rate model outputs and records of public meetings. The report will be delivered in hard copy and electronic format. Electronic files will be delivered on CD-ROM in Microsoft Word 2010, Excel, or other formats approved by the City.

#### Task I.2 | Final Draft Report

Incorporate CBJ comments on the draft report and submit a final draft report, containing the same information and delivered in the formats noted above.

#### Task I.3 | Final Report

Incorporate CBJ comments on the final draft report and submit a final report, containing the same information and delivered in the formats noted above as wells as:

- One (1) comb-bound original report and one (1) unbound print-ready copy. The report will be single volume, printed on white paper, double-sided, and comb-bound with all appendices.
- One (1) electronic PDF copy, combining all elements of the report into one file.
- One (1) electronic copy of the report in its source files (i.e., Word, Excel).

#### APPENDIX A: SCHEDULE Water and Wastewater Rate Study Update Contract No. RFP E13-238

	J	une		J	uly				Augus	st			September October November December				January						Feb	rua												
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Notice to Proceed	$\bigcirc$																																			
A   Study Foundation																																				
Task A.1 Data Collection / Validation																																				Γ
Task A.2 Study Kickoff Meeting																																				
Task A.3 Rate Methodology Review																																				
Task A.4 Fiscal Heath / Policy Review																																			1	
Task A.5 Public Involvement Plan																																			1	
Task A.6 Project Management																																				
Task B   Model Development / Training																																				
Task B.1 Model Development																																			1	
Task B.2 User Guide / Training																																				
Task C   Revenue Requirement Forecast																																				
Task C.1 Capital Funding Strategy																																			1	
Task C.2 Operating Expense Forecast																																				
Task C.3 Revenue Needs Assessment																																				
Task C.4 Reserve Analysis																																				
Task D   Cost of Service Evaluation																			_																	
Task D.1 Functional Allocation																																				
Task D.2 Customer Data Analysis																																				
Task D.3 Customer Class Designations																																			1	Γ
Task D.4 Customer Class Distribution																																				
Task D.5 Unit Cost Development																																				
Task E   Rate Structure Design																																				
Task E.1 Rate Structure Evaluation																																				
Task E.2 Ordinance / Code Review																																				
Task E.3 Customer Bill Impacts																																				
Task F   Comparative Benchmark Analysis																																				
Task F.1 Industry Benchmark Survey																																				
Task F.2 Alaska Communities Survey																																				
Task G   Other Utility Service Charges																																				
Task G.1 Assess Exisitng Fee Structure																																				
Task G.2 Calculate Charges																																				
Task H   Meetings & Presentations																																				
Task H.1 Interim Staff Review Meetings																																				
Task H.2 Public Involvement Meetings																																				
Task H.3 Committee / Assembly Presentations																																				
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Task I.1 First Draft Report																																				
Task I.2 Final Draft Report																																				
Task I.3 Final Report																																				

Notice to Proceed Meetings & Presentations Report Deliverables



Remaining PO Ba	alance Report				
PO222 Date 05/08/18 Time 14:12		Company 1 - Remaining Purch	CBJ PO Company ase Order Balance - (.	Summary)	Page 1
PO Number	Vendor Name		Goods Total	Total Amount Matched	Total Open To Match
103791 0000	3876 FCS GROUP		205,205.97000	205,205.97000	00000.0
	Company Ship to Location <sup>1</sup>	Total 0001 Total	205,205.97000 0.00000	205,205.97000 0.00000	0.0000000.00000000000000000000000000000

# AWWA UTILITY **BENCHMARKING PROGRAM**

"An essential ingredient in advancing our performance." Brian Wheeler, Executive Director, Toho Water Authority



#### PROGRAM PARTICIPATION NOW OPEN

#### LEARN MORE ABOUT THE PROGRAM

Benchmarking utility performance indicators is an essential element of continuous improvement, allowing utilities to track their own performance and to compare their results to peers to identify areas that could be strengthened.

The AWWA Utility Benchmarking Program provides objective performance measures for utility leaders to track their organizational performance. See the complete list of indicators

AWWA Utility Benchmarking Program Participation is open to AWWA members and nonmembers.

Participants will utilize an online platform to input performance data from Fiscal Year 2017. Join utility peers nationwide in submitting your performance data by April 1, 2018.

#### Participating utilities will receive:

A free, individualized participant report that showcases your utility's confidential results relative to the aggregated results of utilities providing the same services (excerpt from an example report)

30% off the final publication (in addition to a member discount)

Thank you in advance for your participation! Please contact AWWA Benchmarking with any questions.

PARTICIPATE

**Read Case Studies from Program Participants** 

#### Get Access

Data Collection and Outputs

#### Testimonials Data You Will Need to Participate in the **Benchmarking Survey**

Decision-makers interested in improving performance should begin by determining which measures are most relevant to their utility and complete the corresponding data collection sections. Utility contacts will input into the online platform their fiscal year performance data based on series of utility operations questions. Not all sections are required to be completed to participate in the AWWA Utility Benchmarking program, however, we encourage utilities to provide as many data points as possible. The survey automatically calculates values for each performance indicator where data is entered.

All personal Utility Data is kept confidential, only the aggregated quartile ranges will be reported in the Performance Indicator report and final publication.

Utility data is collected in the following metrics sections:

Water Stats	Service Disruptions				
Wastewater Stats	Maintenance				
Staffing	Energy Consumption				
Organizational Development	Water Supply Planning				
Financial Information	Wastewater				
Billing	Operations				
Call Center	Stakeholder outreach				
Customer Service	Triple Bottom Line				
	Sustainability				

Following submission of performance data, utilities will have available an individual Performance Indicator report showing key Performance Indicator results for their utility based on metric data entered throughout the survey. Following the close of the Survey period, and data analysis, an Individual Participant Report will be posted to the Utility's Dashboard showing their individual performance relative to all participating utilities of the same service type.

# Introduction

AWWA's Utility Benchmarking Program continuously tracks utility performance indicators developed and applied by water industry professionals to provide a framework for improving both operational efficiency and managerial effectiveness for all utilities. The basis of this program is a system of well-defined and time-tested performance indicators specific to the water sector. These indicators were designed to help utilities providing water and/or wastewater services improve their operational efficiency and managerial effectiveness.

Survey questions collect utility performance data. i.e., metrics, which are used to calculate performance indicators categorized in the following five areas:

Organizational Development

**Business Operations** 

Customer Service

Water Operations

Wastewater Operations.

The full list of indicators in each category are as follows, new indicators to be reported in 2018 are highlighted below:

# Organizational Development

Oranizational Best Practices Staffing Levels Total FTEs FTEs by Job Category (%) Training (hours per employee) Emergency Response Readiness Training (hours per employee) Customer Accounts (accounts per employee) Employee Turnover (%) Retirement Eligibility (%) Employee Health & Safety Severity Rate Recordable Incidents of injury or illnesses *(new in 2018)* Near Misses *(new in 2018)* 

# **Business Operations**

Debt Ratio (%) Return on Assets (%) Days of Cash on Hand Debt-Service Coverage Ratio (2018 modified reporting) Days of working capital Operating Ratio (%) Bond Rating Insurance Claims (new in 2018) Severity of Insurance Claims (new in 2018) System Inspection (%) System Renewal/Replacement (%) Triple-Bottom-Line Index (%) Sustainability Nutrient Recovery Biosolids Reuse (%) Nonpotable consumptive use (%) Habitat/watershed protection goals Green Infrastructure planning Energy Optimization planning

# **Customer Service**

Service Complaints Customer Service Complaints/1,000 accounts Technical Service Complaints/1,000 accounts **Call Center Indicators** Average Wait Time (minutes) Average Talk Time (minutes) Abandoned Calls (%) Average Calls per Call Center Representative First Call resolution **Residential Service Charges** Residential Cost of Water Service (\$/month) Residential Cost of Wastewater Service (\$/month) Residential Cost of Stormwater Service (\$/month) Customer Service Cost per Account (\$/account) Billing Accuracy (errors/10,000 billings) Per Capita Consumption (gal/person/day) Service Affordability

4

Water Service Affordability (%) Wastewater Service Affordability (%) Stormwater Service Affordability (%) **Delinquency** rate Low-income billing assistance rate (2018 modified reporting) Stakeholder Outreach Index Customer service contgact Water Service Disruptions Disruptions of Water Service (outages/1,000 accounts) Planned by Event Duration (< 4 hr, 4-12 hr, > 12 hr) Unplanned by Event Duration (< 4 hr, 4-12 hr, > 12 hr) Average Time to Address Water Service Disruptions (hr) **Disruption Frequency of Water Service** Wastewater Service Disruptions Disruptions of Wastewater Service (outages/1,000 accounts) Planned by Event Duration (< 4 hr, 4-12 hr, > 12 hr) Unplanned by Event Duration (< 4 hr, 4-12 hr, > 12 hr) Average Time to Address Wastewater Service Disruptions (hr) **Disruption Frequency of Wastewater Service** 

# Water Operations

Regulatory Compliance–Water (%) Water Produced (MGD per employee) Water Supply Current Water Demand (%) Available Water Supply (years) Water Distribution System Integrity Leaks/100 miles of pipe Breaks/100 miles of pipe Combined Leaks and Breaks Hydrant effectiveness / out of service rate **O&M Costs for Water Services** (\$/account) (\$/MG) (\$/100 miles of pipe)Treatment O&M costs Distribution O&M Costs (\$/100 miles of pipe) **O&M** Percentage of Water Services Maintenance-Water Planned Maintenance (%)

Corrective Maintenance to Production (hr/MG) 20180510 UAB Me Planned Maintenance to Production (hr/MG) Corrective Maintenance to Distribution System Length (hr/100 miles of pipe) Planned Maintenance to Distribution System Length (hr/100 miles of pipe) Energy Consumption—Water (kBTU/year/MG) AWWA Water Audit Software

# Wastewater Operations

Regulatory Compliance–Wastewater (%) Wastewater Processed per Employee Non-Capacity Sewer Overfl ow Rate (per 100 miles of pipe) Capacity Sewer Overflow Rate (per 100 miles of pipe) Collection System Integrity (failures/100 miles of pipe) **O&M** Costs for Wastewater Service (\$/account) (\$/MG) (\$/100 miles of pipe)Collection O&M Costs (\$/MG) Treatment O&M Cost (\$/100 miles of pipe) **O&M** Percentage of Wastewater Services O&M Percentage of Stormwater Services Maintenance-Wastewater Planned Maintenance (%) Corrective Maintenance to Production (hr/MG) Planned Maintenance to Production (hr/MG) Corrective Maintenance to Distribution (hr/100 miles of pipe) Planned Maintenance to Distribution (hr/100 miles of pipe) Energy Consumption–Wastewater (kBTU/year/MG)



# AWWA Utility Benchmarking FY16 Data Set and Report for

Dedicated to the World's Most Important Resource™

# (Your Utility name) and data

# **ORGANIZATIONAL DEVELOPMENT**

	<b>•</b>	COMBINED UTILITIES							
Organizational Best Practices	Your Utility	75th Percentile	Median	25th Percentile	Count				
Organizational Best Practice Index (%)		86.2%	76.9%	69.2%	72				
Strategic Planning		5.0	4.0	4.0	72				
Strategic Plan Implementation		4.8	4.0	3.0	70				
Long-term Financial Planning		5.0	5.0	4.0	72				
Risk Management Planning		4.0	4.0	3.0	72				
Performance Measurement System Integration		4.0	4.0	3.0	72				
Optimized Asset Management Program		4.0	3.0	3.0	71				
Customer Involvement Program		4.0	3.5	3.0	71				
Governing Body Relations		5.0	5.0	4.0	71				

Drought response/Water shortage contingency





# **BUSINESS OPERATIONS**

			COMBINED Utilities								
De	bt Ratio (%)		75th Percentile	Median	25th Percentile	Count					
	Debt Ratio - Combined		18%	36%	51%	68					
	Debt Ratio - Water		18%	37%	54%	36					
	Debt Ratio - Wastewater		22%	34%	55%	35					
	Debt Ratio - Stormwater		4%	11%	17%	13					

#### Return on Assets (%)

Return on Assets - Combined	3.6%	2.5%	1.0%	71
Return on Assets - Water	4.1%	2.9%	0.9%	39
Return on Assets - Wastewater	3.6%	2.5%	1.3%	39