# City of Bend Sewer Rate Design Workshop Meeting Notes

The Bend City Council participated in the Sewer Rate Design workshop called to order at 1:00 pm on Wednesday, September 24, 2014 at the North Fire Training Center. Present were Bend City Councilors Jodie Barram, Scott Ramsay, Mark Capell, Doug Knight, Sally Russell and Mayor Jim Clinton. Also present were Temporary Committee Members A.J. Tyvand, Mike Riley, Lynn Putnam, Nikki Roemmer, Zhai Logan, Keith Wooden, Kris Scholl and David Rathbun. From FCS Group, rate consultants, Angie Sanchez Virnoche, John Ghilarducci, and Sergey Tarasov attended. The meeting was facilitated by Eric King, City Manager and Gillian Ockner, Senior Policy Analyst.

The audio recording of the meeting along with the presentation slides are available at www.bendoregon.gov\utilityrates

A summary of the presentation and discussion is provided below with the "parking lot" questions imbedded in the appropriate sections.

#### 1. Welcome and Introductions

City Manager Eric King provided a brief background and history of how we came to today's discussion. Rate structure was put aside during the recession in order to look at revenue requirements, retool sewer and water master plans, and refine the costs of infrastructure projects. We now have a deep understanding of what the 20 year horizon revenue requirement looks like and clarity surrounding our master plans. Starting to look at rates a few years ago, suspending the Extra Strength charges (ESC) that were not fair or equitable, and moving to reduce quantity allowance of water have helped feed into the need for a larger discussion around both water and sewer rates. We wanted to create an opportunity for community groups, committees, and Council to come together for this discussion.

## 2. Rate Design Goals

Workshop participants were asked to share what they believe the goals of rate design are.

Councilor Barram: Equity, or fairness

Councilor Knight: Rate design that is accepted, and well-received by the community. If there is an increase, it should be a steady increase and consistent.

Committee Member Kris Scholl: Equity and fairness as well as making sure the design is a practical solution, with an understanding of fixed and variable costs of waste treatment facilities to apply equitably among residential and non-residential users.

Committee Member Nikki Roemmer: Equity and fairness based on use, or type of use.

Committee Member Dave Rathbun: Policy reflective of our values, with staying power, yet adaptable to changes we face. Both being equally important, there is a distinction between equity as being statistically driven and fairness being a social perspective, or how it affects people.

Committee Member Lynn Putnam: Revenue must cover cost, there needs to be additional reserves, and the ability to clearly justify the rate.

Councilor Ramsey: A communication plan that clearly explains to users the reasons for the design, and long term plan for inevitable growth (reserves).

Committee Member A.J. Tyvand: True cost factored in for non-residential sector, and a way for residential rate payers to have some level of control of their bill.

Councilor Capell: Rate design is a revenue-neutral process, not a way to collect additional revenue.

Mayor Clinton: Focus on cost of providing service for each individual customer, not customer class. Connection between cost of service and bill.

Committee Member Zhai Logan: Understanding the impact of rate structure design on how children are learning and bottom line impact in the long term to stable funding for classrooms. Predictable rates for planning.

Councilor Russell: Consideration of those not on sewer, up to 33 percent of Bend, and policy that acknowledges the value of capturing those people in Bend not on the sewer. Also, incentives for reduction of waste water including bonuses for things that would extend the capacity of existing infrastructure.

Committee Member Keith Wooden: Special considerations for people's income, potential discounts for people impacted with very fixed incomes, and a way to offer a discount.

Committee Member Mike Riley: Building reserves, price signals toward conservation, and some level of stability. Rate should be calculated based on full cost first, and once established find ways to assist those in the community that need help. It is too complex to build those in up front.

These goals largely matched up with the following Rate Policy Objectives identified at the outset of this rate modernization process, which include:

- Equitable
- Affordable
- Promote efficient use
- Revenue stability
- Rate stability
- Publically acceptable
- Administratively feasible

#### 3. Sewer Cost of Service Results

The total revenue requirement for the City of Bend sewer utility was calculated and agreed upon by Council including a rate increase of 9%. The cost of service analysis defines cost differences in providing service across customer classes to determine how to divide up that total revenue requirement equitably. Sewer customer classes for the City of Bend include: Single Family (SF), Multi-

Family (MF), and Non-Residential (NR) which includes the categories of Standard Low, Standard High, ESC Low, ESC Medium, ESC High, and ESC Super High. Costs are allocated based on function such as the total annual flow from the class, the strength of waste in terms of concentration of Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS) attributed to the user type, and the number of customer accounts in the class.

A few workshop participants (Clinton and Scholl, primarily) expressed a desire to see how the City arrived at the Cost of Service by class. There was concern that without understanding the details of this analysis it was difficult to make decisions in this process. There was confusion between Cost of Service and fixed versus variable costs.

From the utility operations side, Ms. Sanchez of FCS Group said that approximately 95% of sewer utility costs are fixed regardless of the amount of sewer processed. Meaning, the sewer utility incurs 95% of the costs whether or not a customer discharges waste into the system. This is why a flat fee has a higher degree of revenue stability. Mr. Ghilarducci stated we don't allocate fixed and variable costs any differently in cost of service. Allocating by the function, the drivers of the cost, is the focus of the cost of service analysis.

Mr. King offered that this cost of service is a starting point based on a lot of data and engineering and effort, and is as objective as can be with the information we have. Looking into those decisions can be done, but will elongate the process.

The purpose of this workshop is rate structure design. Scenarios were developed for discussion of values, preferences and priorities with respect to rate objectives based on relative impacts of the scenarios on customer classes. Different scenarios presented to the group look at options for setting fixed versus variable portions of the rates by class. All scenarios are designed to collect the total revenue by class determined by cost of service.

Clarification on slide #8 – existing revenue is shown in the table broken out by ESC categories, but there is no ESC being collected currently. Existing revenue shows what we are currently collecting (before the 9% increase that will be implemented October 1<sup>st</sup>).

Mayor Clinton asked how to know how much effluent comes from a particular class. Mr. Ghilarducci explained that at the plant level, we only know what is coming in and use assumed strengths by class.

Public Works Director Paul Rheault provided on overview of some of the testing that was done to study strengths of different class. Bend has higher strength due to low water table in the city (not as much inflow and infiltration as other cities experience), use of low flow toilets and showers so that the waste is not diluted.

Mr. Scholl pointed out that the rates are dependent on number of users. Rates would double if population decreased by half even if the cost of operating facility didn't change.

Mr. Scholl voiced concern about Non-Residential class picking up more fixed costs of the system and how that will affect our ability to attract businesses to the area when we are trying to grow our industrial base.

Ms. Ockner referred back to the policy questions and how feelings around how different classes are burdened impact policy. Phases in implementing can be considered as we experience shifting from pure cost of service to realize some of the values expressed here. If there seems to be an unfair burden, how to spread it over time or share the cost. If we know that we are subsidizing a class and accept it, we can justify it as part of policy decision.

Mr. King added that the current structure not based on clear policy objectives. The cost of service number is a starting point.

#### PARKING LOT:

- What functions make up cost of service by class?
- What exactly does it cost to treat?

# 4. Single Family Residential

Single Family is defined as single family detached home. Ms. Sanchez offered four rate structure options for the Single Family Class in slides 13-19. All scenarios are collecting the same amount of total revenue for the Single Family class.

The "fixed only" scenario shows the flat fee for Single Family Residential class reduced by 13% (the proportional change resulting from the cost of service analysis. The "high fixed" scenario holds 95% of the charge as fixed with 5% as volume based, which reflects the sewer utility's actual high fixed costs (95% of costs are incurred whether or not a customer discharges). The "low fixed" scenario holds only 6% of the charge as fixed, representing the amount of cost attributable to customer service and billing, while the rest of the charge is based on volume. The "balanced fixed" scenario puts 50% of the charge in fixed and 50% in volume. All of the scenarios are designed to collect the proportion of the total revenue attributable to Single Family in the cost of service (approximately \$10.8 million).

The volume charge in these scenarios is calculated based on the average of the winter quarter average water consumption of the City of Bend Single Family water customers, which is approximately 540 CF. Volume is charged per hundred cubic foot starting from zero.

The group discussed snowbirds or those customers that can turn off everything except storm water charges when they are away in the winter. How to bill them, including for fire protection was put aside as a parking lot question. These accounts have been included in the analysis of winter quarter average water consumption. Support Services Lead Kris Trask offered that approximately 350 snowbird customers exist out of about 19,000 single family water accounts.

Mayor Clinton disagreed with some of the ranking on slide # 14 and it was discussed that the ranking is a judgment that could vary from person to person.

Ms. Putnam brought up the concern that the Low Fixed scenario could possibly hurt our bond rating because of low revenue stability.

#### PARKING LOT:

- What is the actual cost to treat residential waste per 100cf?
- What should we bill snowbirds?

- What do we use to assess/assign WQA for non-city water users?
- How do we address household changes within a given year and how it impacts the rate (WQA)?

## 5. Multi-Family

The MF class includes duplex and above. Presentation slides include #21-22. This class has been permitted to be billed in two ways: a flat fee per dwelling unit like SF residential and a flat fee per account + volume charge like non-residential. Combining these two subgroups into one class for cost of service results in an overall increase in the total revenue to be collected from MF. However, if we were to adjust the revenue collected from MF based on cost of service, those accounts that have been paying a flat fee per unit could see a reduction while those that have been paying based on volume could see an increase because they are receiving the benefit of the 1,000 cf allowance. According to Ms. Trask generally accounts larger than a four-plex are being charged for volume like non-residential so typically one bedroom apartments are not paying the \$44.37 flat fee.

The primary policy question is should all MF accounts be billed using the same rate structure? Mr. King pointed out that because sewer discharge from MF is more similar to SF residential than non-residential, perhaps they should be treated more like residential, but he would like to see that reconciled by Council's policy decisions.

Mayor Clinton thought that they would still be volume billed if there's variable component, using the same variable as in the residential case. We would send the bill to the building based on volume and fixed charge, based on number of units and use the same volume rate per unit as used for single family.

Councilor Barram brought up the issue that different square foot units, with different number of baths would vary in output and asked how we are being equitable for those users in a variety of situations. It may not feel fair to some even if the policy is statistically fair.

Ms. Ockner and Ms. Sanchez offered that there is a fixture unit measurement that could help mathematically determine cost and that current ordinance says that multi-unit buildings are contributing 80% of what a single family unit does.

#### PARKING LOT:

- If a building has 1 water meter, how will we bill volume?
- Can you really encourage efficient use in MF where the renter doesn't pay the utility bill?
   Keith Wooden says the way efficient use happens in MF is through installation of efficient fixtures.
- Should fixture count factor in to cost?
- What is the impact to affordable housing?

### 6. Non-Residential

Non-residential rate structure scenarios were provided as handouts and on slides #25-36. Non-residential is broken into two main sub categories: standard and extra strength categories. Standard is any business with discharge up to 500ppm, just like or less than household. While the

concentration of wastewater is relatively consistent for the standard category, flow from standard accounts varied widely. So, standard was broken into Standard Low and Standard High.

Ms. Sanchez stated that 20 thousand cubic feet of consumption was set as the cut-off for a Low Standard user, which may be acting similar to residential. However, on average NR standard accounts are contributing higher flow than a typical residential account. So, while the fixed charge is the same for NR standard as for SF residential under the "low fixed" and "balanced fixed" scenarios provided, the volume charge is higher. With cost drivers being cost, flow, and treatment they are allocated more costs because they have higher flow.

Most schools would fall into the standard high or low user category because they use a lot of water, but don't have high strength except for Bend High school where all the food prep is done in which case that campus falls into the ESC low category.

Ms. Eagan provided a summary of categories for Extra Strength categories and examples of each:

- Extra Strength Committee found that the average residential customer has a pollutant level in their water of 500 ppm (BOD, TSS).
- Industrial users –assume 500 threshold (same as regular household), only charge if over 500 ppm
- Low (restaurants, auto) 500-1000ppm
- Med (possible hospital, possible bakery) 1001-1500 ppm
- High (restaurant with unclean grease traps) 1501-2000
- Super High over 2000ppm Ms. Eagan noted that calculations for the breweries are based on water consumption and that we will need to look at how much is really going to outflow. Councilor Capell asked if that shouldn't be done for everyone to make it fair. Metered sewer is currently cost prohibitive.

Ms. Eagan explained that some businesses were categorized by really good sample data. Generally, we don't have sample for every business so we took the best information given by the North American Industry Classification system (NAICS code). The analysts used those numbers provided by businesses (i.e. from business license) to determine the typical discharge for the type of business.

Mr. King added as additional background that the City began looking at Extra Strength as a big issue and there has been an educational process to bring in high strength user so that there is an awareness that this is coming and that some shifting will have to happen. Mr. King said if a business is categorized higher than they feel they should be, there will be a program in place to provide sampling and verification, which will need admin charges as recommended to staff by the Extra Strength ad hoc committee.

Councilor Russell asked what we were collecting from Extra Strength categories before program was suspended, and what we have done during the interim period that has lasted longer than expected in terms of reallocating cost. Ms. Eagan explained that we were collecting \$120,000 to \$150,000 annually from 12 businesses in the original program in extra strength charges, and though they are not paying those extra strength charges, they are still paying flow.

Mr. Rathbun stated that from a business standpoint, businesses look to optimize and will look for incentives to operate the way the City needs them to for optimizing operations.

Ms. Eagan added that if we move toward rates that capture (in a year) what users impose on the system, then we can incent businesses toward behavior and send price signals that sophisticated businesses will respond to quickly.

Councilor Capell posed the problem of stabilizing bottom line revenue while offering incentives, and that tweaking the system leads to more adjustments because all rates may not be high enough due to the exceptions. Rates will have to be re-visited frequently.

Ms. Eagan agreed that even making sure initial tweaks don't impact the recovery that we need, if policy meets needs of all users, we will have to come back and revisit it annually or every other year.

Councilor Russell offered that giving businesses options to not increase flow might actually be saving wear on system, and extending the life of the system in long term.

Councilor Capell pointed out that most costs are in infrastructure which won't be impacted or reduced by incentives such as debt service. Won't see the savings in operating costs, but will be postponing the next expansion or capital expenditure.

Ms. Roemmer stated that although we have approved increases, it doesn't mean the community accepts it. People want to know what they are paying for.

Councilor Capell agreed that we want some volume pricing so people can affect their bill, however the revenue number we need for infrastructure over next 10 years isn't going to vary much based on usage.

Mr. Rathbun stated that we are back to the policy question of what we value more. Paying off fixed costs of the systems, or transferring some of that to the user based on strength or flow?

Mayor Clinton stated a preference for volume charges on sewer measured as dollars per pound of solid instead of the pound calculation including flow. Ms. Eagan pointed out that at this point we have a physical barrier to do that as there is no meter on sewer. Mayor Clinton requested to re-label or express unit cost more clearly.

#### PARKING LOT:

- Do we have classes identified correctly?
- What is the ability to pay? What is reasonable/acceptable?
- What are the key drivers of costs by customer class?

## 7. Phasing

Question posed was given the distance between the existing revenue and cost of service does council want to explore options to bring classes into alignment over time (phasing)? Slide #38 provides a possible phasing scenario over five years. It includes the 9% increase already approved and the financial forecasted 3% increase thereafter to keep pace with inflationary costs of things like energy, materials, and personnel. Missing from the revenue requirement equation at present is the reserves

needed to provide for cost sharing in connection of residents currently not on sewer (that are on septic) as well as any revenue stability reserves deemed necessary.

Councilor Knight expressed concern about an economic disincentive when looking at a huge increase for just a few users. He asked that we be very careful if to lower residential a few dollars per month over a large number of users, we are expecting a small demographic to make up the difference.

Mr. Riley, in reaction to the phasing idea and leaving SF residential static, felt some people will think the class that has been previously subsidized should have the increase.

Ms. Roemmer felt that the SF residential would still feel over charged under this phasing scenario knowing what cost of service says is the existing inequity.

Mr. Wooden stated that he likes the keeping the SF at 0% increase over time in this phasing scenario because there has already been increases.

Mr. Tyvand pointed out that there are winners and losers within an entire group. If we assume 70% of users don't see an increase, but as a group you may see an increase. Mr. Ghilarducci shared that more than half of single families use less than the average WQA so about 60% of these accounts could see a reduction under scenarios presented. Mr. Tyvand expressed that from a voter perspective the 0% increase for SF doesn't mean much.

Councilor Capell raised the concern that phasing in means adding politics because it will come before every Council, and different Councils may not support it.

Mr. Rathbun agreed with Mayor's original skepticism with the assumptions starting off the discussion, and agreed with Councilor Knight that for businesses to look at these numbers is unreasonable. Doing things within the Single Family class to protect revenue stability will need to be looked at, but for companies it is a huge increase. From fairness standpoint it may seem justified, but we will disincentivize industry within city limits. Somewhere in between the assumptions and the Single Family class and not shocking the business community is where we need to spend time. There is something else going on with the assumptions and the balance between flow and strength. He believes there is more room to maneuver in the Single Family class because there are so many of them.

Mr. King stated that Bend is unique without a big mix of businesses. We end up with extremes because the small amount of businesses do impact the treatment facilities.

Mr. Riley asked if there is an industry best practice that has been applied for the analysis for the cost allocation. Ms. Sanchez responded that the Water and Environment Federation has methodology that is an industry best practice. Taking that standard and applying Bend's characteristics and customer composition we looked at how many customers there are within each category, their flow, and their strength.

Mayor Clinton shared that he has researched what other cities have done in and outside of Oregon and found it cautionary to learn that it is all over the place with different places doing different things. More emphasis on volume is the trend and few are on the same structure as Bend is now. Some implement big changes at times, with new Council reversing previous ones.

Councilor Knight indicated that the cost allocation model is great way to introduce the subject, but may be too altruistic. We need to look at the ability to pay and the ability to collect. It is one thing to ask for certain amount, another to get it. Billing needs to be reasonable and acceptable and the 300% increase for businesses is probably not. He asked how the business community has received the ESC information so far. Ms. Eagan explained that the businesses want it phased in to make sure community sees economic value for providing employment. They previously saw a 400% increase number forecasted so they are aware of the order of magnitude of change proposed.

Ms. Logan stated that the increase in the non-residential costs represents a lot of teachers. Councilor Ramsey agreed that all businesses have a threshold and how it affects their bottom line.

Ms. Roemmer reviewed that we have added over 20 new breweries in the last few years and if they are not held accountable in the need to treat their waste in a certain way, will we have 40 in next few years.

Mr. Rheault shared that businesses do have big impact on utilities. One brewery may be 1000 homes in terms of equivalent impact on the system. They generate most capital improvement needs. Ms. Eagan noted that our data are not perfect, but we need to start the ESC program to collect better data.

#### PARKING LOT:

- What % change will Deschutes Brewery see between costs under the old ESC program and the proposed?
- What is the impact on cost of service if the outflow of wastewater is significantly different from the inflow on which the analysis is currently based?

## 8. Wrap-up

Some agreement (Capell, Knight, Riley) with using cost of service to apportion revenue across classes.

Some agreement with phasing (Knight, Barram, Capell, Riley). Need to stick to the plan from year to year.

Some agreement with moving away from flat fee for residential to include volume charge to allow more control over bill (Roemmer, Putnam, Tyvand).

Some agreement with accountability for what you use (use more, pay more).

## 9. Next Steps

Email group: notes, additional information on cost of service, and information for water workshop.

October 14th 1pm to 5pm - Water Rate Structure Workshop

November 5<sup>th</sup>, Council Work Session – recommendations for water and sewer rate structure design based on directions at workshops.