City of Nampa

Wastewater Treatment and Disposal Upgrade

Wastewater Advisory Group

Meeting #9 Summary

August 29, 2012♦ 4 – 6 p.m.
Nampa Civic Center
311 3rd St. South Nampa
Nampa, Idaho

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Overview

The City of Nampa must implement an extensive program to upgrade how it treats and disposes its wastewater in order to meet anticipated stricter regulations.

The purpose of the Nampa Wastewater Advisory Group (NWAG) is to provide guidance to the City of Nampa on how best to upgrade its wastewater treatment and disposal system. Nampa must make upgrade decisions by early 2012.

NWAG Meeting #9 Agenda and Format

The City of Nampa hosted the ninth Nampa Wastewater Advisory Group (NWAG) meeting on Wednesday, August 29, 2012 at the Nampa Civic Center.

The meeting objectives were to:

- Review and discuss
  - City of Nampa Wastewater Fund Industrial Incentive Policies
  - Cost of Service Study
- Provide input on policies that can influence Nampa's sewer bill rate increase

Agenda:

- Welcome and workshop objectives – Michael Fuss, P.E., Public Works Director, City of Nampa
- Upgrade Update – Steve Burgos, Senior Associate, Brown and Caldwell
- Draft City of Nampa Wastewater Fund Industrial Incentive Policies – Bill Jarocki, Voltaic Solutions
- Cost of Service Study – John Ghilarducci, FCS Group
- Other Policy Considerations – Steve Burgos, Brown and Caldwell
- Next steps – Rosemary Curtin, RBCI

Each attendee was provided the following handouts:

- Agenda for NWAG Meeting #9
- PowerPoint presentation for NWAG Meeting #9
- Comment Form for industrial incentive policies
- Comment Form for revenue requirements
- Comment Form for financing options
- "Long-Term Options Ranking" comment form

Presentation Summary

Welcome and workshop objectives – Michael Fuss, P.E., Public Works Director, City of Nampa

Michael Fuss thanked all meeting attendees for participating in the Wastewater Advisory Group (NWAG) process. Michael then began the meeting with the following remarks:

- The cost of service study will be presented, as well as an update on the program, infiltration and industrial incentive policies. The methodology for the cost of service study will be presented. We'll talk about some of the policy decisions about how to implement the cost of service study.
- The Wastewater Project Management Team will be meeting with the Nampa City Council on September 11th. During this meeting information will be presented about the cost of service study, industrial incentive policies and input from the NWAG and Industry Working Group.
- The NWAG has been given a copy of the PowerPoint presentation and a copy of the industrial incentive policies. It's important that we capture your comments and input about these policies and we would greatly appreciate your feedback so your input can be presented to City Council.

Upgrade Update – Steve Burgos, Senior Associate, Brown and Caldwell

Steve reviewed the work that has been accomplished since the previous NWAG meeting:

- The City is making good progress on the overall wastewater management program. The decision making processes have been moving forward. Nampa's City Council has approved Phase 1, which will include the cost of service study.
- The NWAG will be presented financing and rate information today. Technical evaluations are continuing.
- In regards to regulatory coordination, the City has begun meeting with EPA Region 10. The next meeting is scheduled for early October to begin negotiating on criteria that should or should not be included in Nampa's permit.
- The Project Management Team has been meeting one-on-one with members of the Industry Working Group to gather their input on the draft incentive policies.
- In 2018, the City is expecting that the interim phosphorus limits will become effective. This is one of the main drivers of the schedule for the wastewater program. To meet these regulations, the City must have the upgrades in place and operational by 2018 to meet the new phosphorus discharge limit of as low as 0.5 mg/L.

- In order to construct the upgrades, the City needs to raise revenue. The cost of service study will establish how much rates will need to be increased to raise the necessary revenue.

- By 2018, it will be decided how to upgrade the wastewater treatment system to meet the expected final phosphorus limit, which could be as low as 0.07 mg/L. Update on Phase 2 decisions:

- Update on Infiltration:
    - The City has been investigating 3 possible infiltration sites.
    - A meeting will be held with the DEQ on September 10th to talk specifically about total dissolved solids criteria and the state Ground Water Rule.
    - The City wants to try to get the DEQ's approval on some issues that are specific to infiltration such as TDS. The City is also working on determining which of the three possible sites is the most preferred for infiltration.
- Update on Treat and Offset:
    - The City of Boise received its permit. Boise is currently in negotiations with the EPA to get the Dixie Drain treat and offset project approved. It is looking more favorable that this project will get approved, but a final decision has not yet been made.
    - Nampa's investigations of treat and offset will depend on the outcome of whether or not Dixie Drain is approved.
- The title of Treat to EPA levels has been changed to Tertiary Filtration. This option is to conduct all treatment at the plant to lower the phosphorus limits before discharging into Indian Creek. No additional investigation is needed in the short-term for this option.

- Status of Phase 1:
    - The City Council has approved the Phase 1 upgrade, which will include upgrading the wastewater treatment plant to meet the expected 0.5 mg/L phosphorus limit by 2018.
    - The Facility Plan has been updated to account for the Phase 1 decision. The updated Facility Plan has been submitted to the City and will be submitted to DEQ in the near future.
    - Preliminary design will begin once the updated Facility Plan is finalized. Preliminary design will establish what Phase 1 will look like, it will include evaluating major equipment, the site layout and construction sequencing.
    - It is anticipated preliminary design will occur between September 2012 and April 2013. The Phase 1 upgrades will be constructed and operational by 2018.

Draft City of Nampa Wastewater Fund Industrial Incentive Policies – Bill Jarocki, Voltaic Solutions

- It is beneficial for the City to maximize the capacity of the wastewater treatment plant that is used. To that end, the purpose of the incentive policy is to create a situation where industries want to come to Nampa or want to expand their operations in Nampa.

- Industrial customers are allocated approximately 41 percent of the biochemical oxygen demand (BOD) of Nampa's wastewater treatment plant and approximately 33 percent of the total nitrogen use.

- The Nampa City Council requested that a policy such as this be developed for industrial customers. Over the past several years, every time an industry has come to the City to receive capacity, it has been a negotiation process. The policy will lay out to everybody guidelines for what the City will do for industrial customers.

- Very few communities around the country have consolidated their industrial wastewater policies like Nampa has recently done.

- The goals of the industrial incentive policy are to:
    - Compliment the City's economic development strategy
    - Optimize use of Nampa's wastewater capacity
    - Provide real value to industrial development/existing industry expansion
    - Balance costs and benefits to prevent degradation of the financial integrity of the Wastewater Enterprise Fund
- The policy has several major components. The policy allows for the transfer of capacity between industries. The City has the ability to:
    - Lend excess capacity to industries on a short-term basis
    - Lease capacity
    - Sell capacity
- The policy has a sunset clause, so it will be evaluated in the future by Nampa's City Council to determine if it has worked. Based on this evaluation, it will then be decided whether to extend the policy or modify the policy. The City Council will also have the right to modify certain terms.

Questions about industrial incentive policies

- **Does the City have the first right to buy capacity back?**
  The City would be a customer just like anyone else would be a customer.

- **So theoretically the rates are right. But if the rates are wrong and they are too low, would the original entity that had taken advantage of that low rate be allowed to keep that rate in perpetuity and then make their living by being able to sell the capacity?**

  The rate issue is actually different then the capacity issue, they are two different charges. You buy capacity at whatever the market rate is at that time.

- **So you're not selling the capacity at a rate, your just selling the capacity?**

  You're selling the reservation to discharge. It's similar to a connection fee.

- **Is the connection fee a one-time fee?**

  Yes, it is a one-time fee.

- **Does everyone pay the same price for the connection fee? If it varies, how is the difference in price determined?**

  The connection fee is determined by the amount of wastewater treatment plant capacity the industry would like to use. The fee is same for all customers per unit of capacity (equivalent dwelling units).

- **In Gresham, or a neighboring community in Oregon that had a similar situation where they sold a lot of capacity upfront, then the user didn't come online for awhile. Then five years later, the headaches, upgrade the plant…and now you have these users that have this capacity but they didn't really buy their share of the current plant, they bought their share of the old plant. How do you deal with that? Has this issue been thought of? This is an issue that could be a real problem with pre-selling capacity…**

  One thing that we've observed is that you could create a situation where people could speculate on what capacity costs, then buy a bunch of it and hold onto it. But we have provisions in the policy where they cannot not use their capacity. There is a fee for not using all the capacity that they own.

- **Looking at the recall policy, the loan appears to be free, but the option is there to recall that loan with 120 days' notice, at which point the company either has to release the capacity or purchase the capacity. If I'm looking to start a company and I'm planning my two-year finances and it's really tight, that's going to scare me to death. How would an industry handle this situation?**

  As a business owner, you would take that risk into consideration before deciding to receive loaned capacity from the City.

- **This looks like a pretty risky situation with the potential to be abusive on the City's side. For example, if there is someone at the City public works that is having trouble balancing his budget, but he's got capacity on loan he would have the ability to call the loan in and get the lease money. I see all kind of potential for problems with it written that way.**

There's no reason why the City wouldn't share the information of what capacity is available, what do we have and what is available to loan. The company could petition the City and the City could decide whether or not it was a good loan in the first place.

- **Could you negotiate a longer loan period?**
  No. The City Council has the discretion to grant a longer loan period, but the policy as it stands would be two years maximum.

- **Under what circumstances do you envision the loans being used for?**
  Short term circumstances. It would give businesses the opportunity to get their feet on the ground. It's a business decision that is totally negotiated.

- **Might this also offer the City a competitive advantage over another city?**
  That's why it is an incentive.

- **Does the value of the short-term loan outweigh the risk of it being recalled?**
  The industry would have to consider that risk.

Cost of Service Study – John Ghilarducci, FCS Group

John Ghilarducci explained the Project Management Team has been working on a cost of service rate study. He presented the following information about this analysis:

- The result of the cost of service rate study will be an actual cost of service by customer class. It is what we need from each customer class in rate revenue to meet all of the financial obligations of the utility.
- A cost of service analysis doesn't look backwards, it only looks at what customer demands are right now and what the needs of the utility are now and going forward. It won't look at past rate structures; it will only look at who should be paying what right now.
- As a result, what you may find when you do a cost of rate study, is the impacts on different customer classes are dramatically different
- There are two major steps to a cost of service rate study. The first step is the determination of the revenue requirement. The revenue requirement is how much money is needed from rates in order to meet all of the financial obligations of the utility. The revenue requirement tells us the "size of the pie" in terms of revenue needs.
- The second step is the cost of service analysis. This determines how the rates should be divided among the City's customer types.
- The result of the cost of service analysis will be a distribution of the costs among the different customer classes, based on their unique demands for the functions of the Nampa wastewater system (e.g., customers that require more treatment for their effluent would pay a higher rate).
- When determining who should pay what, the analysis looks at volumes of wastewater, strengths of wastewater by customer class, facility requirements, how the treatment plant

is going to be sized, etc. The analysis is a very complex process to make these determinations.

- There are several inputs into the revenue requirement of the utility. In establishing this value, the financial obligations of the utility are considered. The financial obligations include costs such as capital projects and operations and maintenance.
- Fiscal policies are also considered in the revenue requirement. Fiscal policies are recommendations about utility management such as how much of a balance the utility should carry on an ongoing basis to handle emergencies, how much contingency should be built into the capital, etc. Overall, the fiscal policies are smart policies the City has implemented that will keep the utility fiscally healthy.
- In the initial numbers, some of the assumptions include projected growth and inflation. All of these variables are included in the spreadsheet analysis to accurately forecast the revenue requirements.
- The revenue requirement also takes into account the funding of system replacement, which is termed "system reinvestment." The City keeps a minimum fund balance in the capital account of 2 percent of total assets of the sewer system for this purpose.
- After the revenue requirements are established, the next step is to allocate all of the costs, line item by line item, to the different major functions of the wastewater facility (e.g., customer service, flow, BOD).
- The costs allocated in the flow category represent costs associated with dealing with the total flow of wastewater, such as collection system sizing.
- Costs allocated to the strength categories have to do with the different treatment processes for components such as BOD, TSS, TP and nitrogen. The costs are associated with how much it costs to treat those different effluents.
- The next step is to look at the customer class and their demands for the different functions. Residential effluent doesn't demand as much treatment when compared to some industries, so residents may pay fewer of the strength-related costs. This is how rates are built that vary by customer class.
- We have some leeway in designing rates, in terms of how much of the costs are to recovered in the fixed portion of the rates, which are the ongoing monthly charges that don't vary monthly. Currently residents in Nampa pay $14.47 a month for the fixed charge and an additional $1.70 for every hundred cubic feet of water used in a house.
- The City is considering multiple financing options and implementation methods. A large decision facing the City is whether or not to use a bond to finance the Phase 1 upgrades.
- If the City were to issue bonds, and that would require a public vote in support of these capital costs, if they are revenue bonds the City would have to collect not only the amount of the debt service, there would also be the debt coverage.
- One of the scenarios is mix of debt and cash funding of Phase 1 of the treatment plant improvements. In that case the analysis is forecasting about a $14 million debt issue.

- Part of the issue that we're dealing with in the cost of service rate study is totaling all the expenditures versus total required revenue over the same period. The wastewater utility generates $9.1 million in fiscal year 2011 and $9.2 million in fiscal year 2012.
- The Collection System capital costs are broken down between developer costs and city costs. The developer costs have been taken out of the analysis because those will be developer contributions as development occurs. The City's portion of Collection System needs is a little over $7 million up until 2015 and after 2015 it would be about $9.1 million.
- The short-term collection system needs are about $660,000 per year between now and 2015. After 2015 it will be about $2 million per year.
- Nampa needs to come up with a financial strategy that meets the costs, and does it in a way that is not a shocking increase in rates. One alternative would be to set a rate that would recover the costs in each of the years, but that result in a rate that bounces up and down. We would like to set a rate that requires either one initial jump or increases gradually over time.
- Customers are classified by the strength of their wastewater effluent. Residents fall into the classification SE2. Residents are by far the largest customer class.
- We look at the existing wastewater system, the fiscal plan, and the assets and allocate them among the functional categories. The collections system is a substantial cost. Some of the costs are based entirely on volume and flow, but there are other components that are allocated depending on what they do to different strength related functional categories.
- The end result is percentages that are weighted averages for the whole fiscal system. When you apply those percentages to the capital portion of the revenue requirement in order to create costs for each of the functions that are related to the capital portion of the revenue requirements. Ultimately those end up as the rates by customer class.
- The percentages are the end result that the analysis produces. Those percentages are then applied to dollars for the revenue requirement and cost pools for each customer class.
- If the Council were to adopt the result of the cost of service study it would mean that different classes will have different impacts, some more than others.
- When designing rates we do have some discretion, even though most of the costs of the wastewater operation are fixed costs, that doesn't necessarily that has be reflected in the rate. We do have some discretion, even within the cost of service guidelines, on how to recover the base rate.

Questions about cost of service study

- **What customer class are car washes categorized in?**
  They are usually SE1 or SE2.

- **It seems like this whole project is really focused on upgrading the BOD to treat for phosphorus. Could you possibly look at allocating based on phosphorus use and the equipment necessary to treat for those parameters only, instead of looking at the entire system?**
  These allocators apply only to the existing plant service. We also looked at the treatment plant improvements and did different allocation on those plant improvements and those are weighted more heavily.

Other Policy Considerations – Steve Burgos, Brown and Caldwell

- The City is considering three main options to fund the upgrades:
  1. Cash – Single rate increase
  2. Cash – Stepped rate increase
  3. Cash and Bonding – Single rate increase
- Scenario 1 (cash/single rate increase) would require only one rate increase until Phase 2. Revenue would potentially be over-collected in the short-term and under collected in the long-term. This scenario would result in a large rate increase for customers.
- Scenario 2 (cash/stepped rate increase) would require that sewer rates be raised twice (2013 and 2104). This rate increase would be larger because of the revenue lost in 2013. This scenario would require two actions from City Council and obligate future city councils. Public education might be needed prior to the second rate increase in the 2014.
- Scenario 3 (cash and bonding/single rate increase) would require only one rate increase until Phase 2. This scenario would minimize rate increase and better spread the cost over current and future customers. This could result in larger overall costs when financing costs are considered. This scenario would require a bond election and simple majority vote.

Questions about other policy considerations

- **Is this is rate increase just for Phase 1?**
  Yes.
- **Do any of the choices we make now affect what happens in 2018?**
  By phasing the upgrade, the decision of which long-term option to choose will be made by 2018 rather than now.
- **What does history tell us about one large increase vs. two increases?**
  What I have heard about the City of Nampa is that the city likes to do one large increase and then go flat.
- **How long would it take the City to pay off this bond?**
  Twenty years.

- **What if we go with scenario 3 (cash and bonding) and the bond doesn't pass?**
  The City would need to pay cash (choose from scenario 1 or scenario 2).

- **What percent of the revenue is from residential?**
  Residential customers are in the SE2 class – that is about 98% of the accounts and 68% of the revenue.

What next – Rosemary Curtin, RBCI

- Based on input from the NWAG and Industry Working Group, the Program Management Team will provide recommendations to Nampa's City Council on September 11th.
- Nampa's City Council will need to make key decisions regarding the draft industrial incentive policies and the cost of service study.
- Input from the NWAG will help the City Council make more informed decisions as the wastewater upgrade process moves forward.
- The next NWAG meeting will possibly be held at the end of September.
- Please fill out and return your comment forms to Kate Nice at RBCI. You can email comments to kate@rbci.net or mail your comment form to 1945 Wildwood, Boise, ID 83713.