

# Wastewater Treatment and Disposal Upgrade

## Industry Working Group

### Meeting #9

August 8, 2012



City of Nampa  
Wastewater Division  
[www.cityofnampa.us/wastewater](http://www.cityofnampa.us/wastewater)



# Workshop Agenda

- Discuss City of Nampa Wastewater Fund Industrial Incentives Policies
- Review and discuss Cost of Service Study inputs and scenarios
- Next steps

# Workshop Objectives

- Receive IWG's feedback on:
  - City of Nampa Wastewater Fund Industrial Incentives Policy
  - Cost of Service Study assumptions and next steps



# **Draft City of Nampa Wastewater Fund Industrial Incentive Policies**

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**Bill Jarocki, Voltaic Solutions**

# Need for Comprehensive Policy

## Goals of this process:

- Capacity reservation policy compliments Nampa's economic development strategy
- The policy is an incentive for industrial development and existing industry expansion
- The policy is designed to maintain the financial integrity of the wastewater fund

**Addressed all recommended changes**

# Capacity Rights

- **Section 9: Wastewater System Capacity Rights**
  - Clarifies idea of a reservation of wastewater discharge capacity
  - Explains:
    - Capacity rights
    - Authority of the City regarding the capacity rights
    - Responsibility of those who acquire capacity rights
- Discussion
- Comments

# Status of Draft Incentive Policies

- Finalize policies with any changes from today
- Final policies will be submitted for legal review
- Policies presented to City Council on September 4th

# Feedback on Draft Incentive Policies

- Discussion:
  - How would you like us to represent your views on the Draft Industrial Incentive Policies to City Council?





# Cost of Service Rate Study

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John Ghilarducci, FCS Group

# Cost of Service Rate Study Result

- Foundation: Study will give **ACTUAL** cost of service for each customer class
- Independent of past precedents
- Study results for individual customer classes can vary significantly from current conditions

# Two Most Significant Analytical Steps

## 1. Determination of the revenue requirement

- Tells us the “size of the pie” in terms of revenue needs
- Test of rate sufficiency



## 2. Cost of service analysis

- Tells us how the pie should be sliced among the City’s customer types
- Test of rate fairness
- Rate design objectives

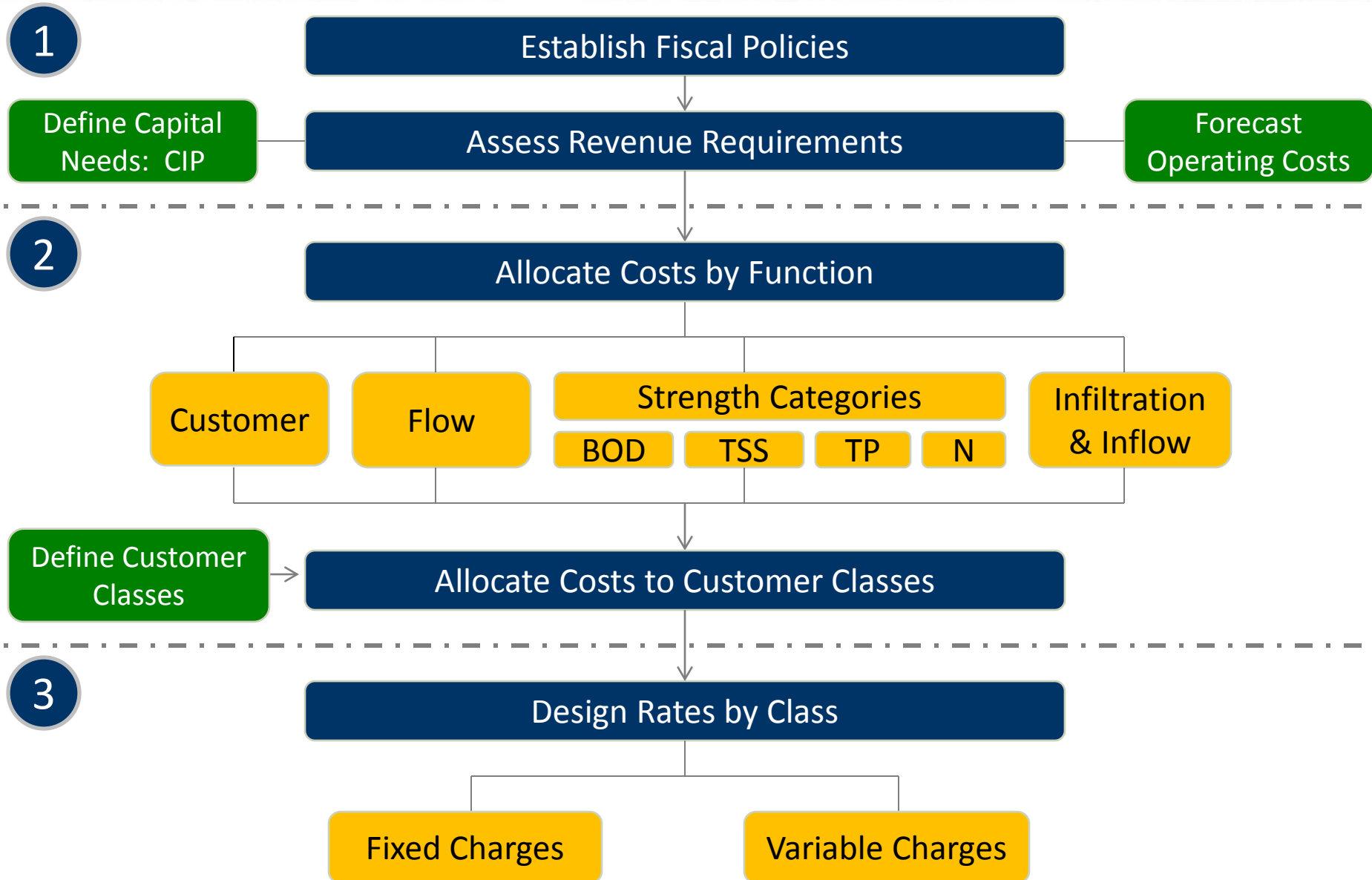


# Role of Cost of Service Analysis

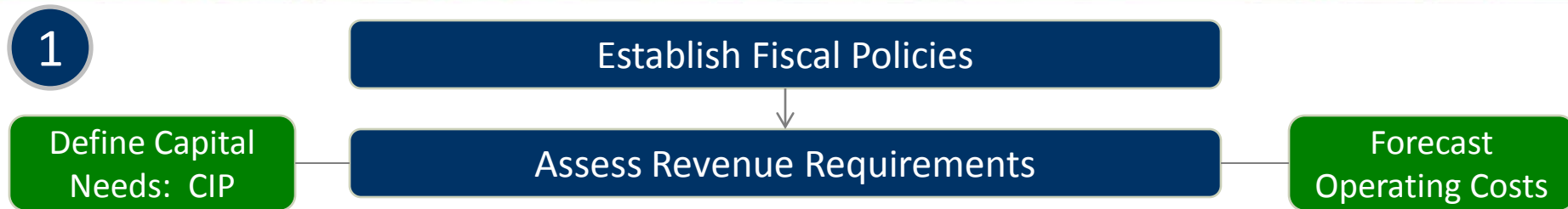
- Provides a rational basis for distributing calculated “Revenue Requirement” to each customer class
  - Distributes utility costs among customer classes according to the unique demand each class places on the system
- An equitable distribution of cost shares that considers utility-specific data:
  - Measures of usage and demand (levels and patterns)
  - Planning, engineering, and design criteria
  - Facility requirements (effluent strength, specific constituents, peaks in flow, etc.)

**End result: Total cost by class, Unit costs (\$ / customer, \$ / unit of usage)**

# Cost of Service Rate Analysis



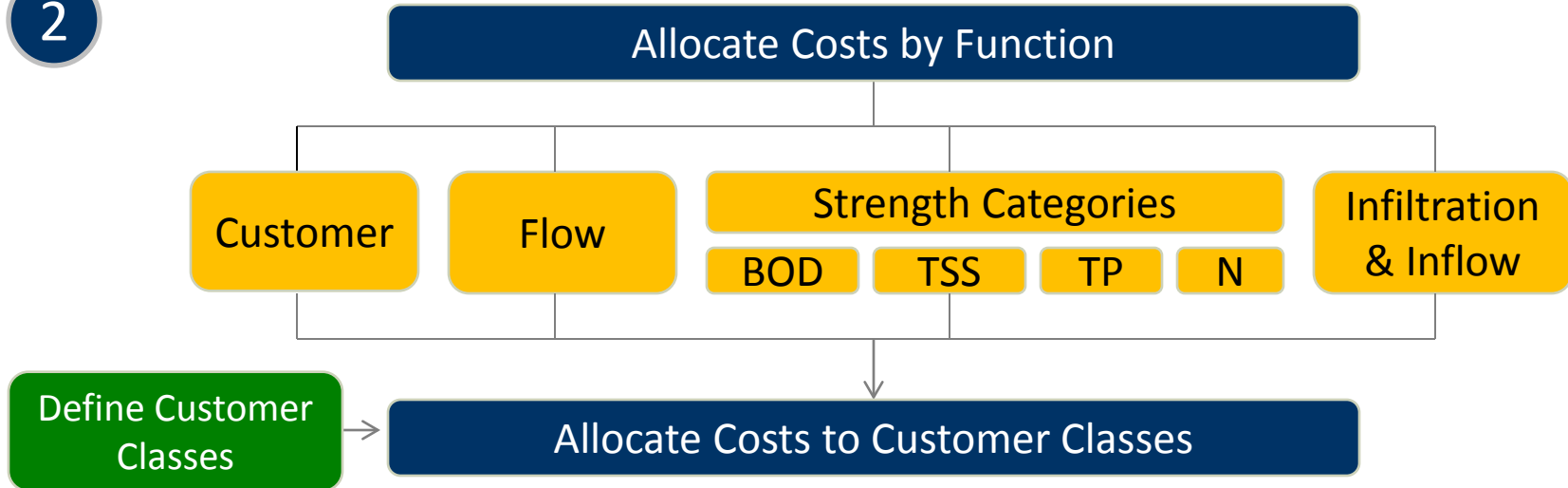
# Step 1: Develop Policies and Assess Rate Revenue Needs



- Compile / forecast program costs
  - Operating budget
  - System replacement needs
  - Capital improvement plan (CIP)
- Establish Fiscal Policies
  - Target reserve balances
  - Bond coverage
  - Funding ongoing replacement needs

# Step 2: Allocate Costs by Function and to Customer Classes

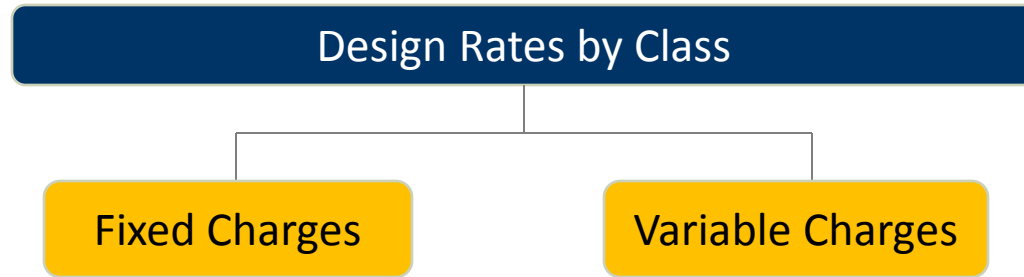
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- Allocate plant and expenses by function
  - Engineering data
  - Industry standards
- Define customer classes
  - Look for distinctions in demand and service
  - Define levels of demand by service component

# Step 3: Design Rates

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- Allocate costs to customers
  - Determine cost by customer class
  - Develop unit costs
  - Build rates to meet revenue requirements equitably and consistent with policy objectives





# Reminder: Cost of Service Rate Study Result

- Foundation: Study will give **ACTUAL** cost of service for each customer class
- Independent of past precedents
- Study results for individual customer classes can vary significantly from current conditions



# Rate Study Scenarios

- Key analytical scenarios:
  - Mix of cash vs. debt
  - Fixed vs. variable rates
  - Timing and pattern of rate increases
- Scenarios are not mutually exclusive
- Goal: Focus list of possible scenarios to present to City Council based on input from IWG and NWAG



# Scenario: Cash vs. Debt

	Cash	Debt
Advantages	<ul style="list-style-type: none"><li>• No interest costs so least costly over long-term</li></ul>	<ul style="list-style-type: none"><li>• Spreads cost over asset life; customers pay for what they use</li><li>• Reduces short-term rate impacts</li><li>• Smooths rate impacts over time resulting in less rate volatility</li></ul>
Disadvantages	<ul style="list-style-type: none"><li>• Causes rate spikes and associated volatility</li><li>• Charges current customers for assets that will serve future</li></ul>	<ul style="list-style-type: none"><li>• More costly long-term:<ul style="list-style-type: none"><li>• interest</li><li>• coverage</li></ul></li><li>• Limits cost control flexibility over time</li><li>• Requires public vote</li></ul>
Short-term Pressure on Rates		

# Scenario: Fixed vs. Variable

	Fixed	Variable
Advantages	<ul style="list-style-type: none"><li>• Predictable and reliable revenue stream</li><li>• Most utility costs are “fixed” in nature</li></ul>	<ul style="list-style-type: none"><li>• Increase conservation incentive</li><li>• Empowers users to control own costs</li></ul>
Disadvantages	<ul style="list-style-type: none"><li>• Does not reward conservers</li></ul>	<ul style="list-style-type: none"><li>• Revenue volatility which translates to potential rate adjustments</li></ul>
Short-term Pressure on Rates		

# Scenario: Timing & Pattern of Increases

	One Large Increase	Series of Smaller Increases
Advantages	<ul style="list-style-type: none"><li>• Requires only one political action</li><li>• Following years of minimal or no increases</li><li>• May result in investigation of alternative financing options</li></ul>	<ul style="list-style-type: none"><li>• Track better with actual costs increases</li><li>• Smooths out increases and minimizes rate shock</li></ul>
Disadvantages	<ul style="list-style-type: none"><li>• Potentially over-recovers in the short-term; under-recovers in the long-term</li><li>• Creates unreasonable expectations for future increases</li></ul>	<ul style="list-style-type: none"><li>• Additional staff effort required for multiple rate increases</li><li>• Potential for rate payer fatigue and frustration</li></ul>
Short-term Pressure on Rates		

# Key Assumptions

- Customer growth rates (per Nampa 2035 Comprehensive Plan):
  - 2.27% through 2015
  - 1.78% between 2015 and 2020
- Annual inflation rate: 3.06% [a]
- Construction cost inflation: 3.06% [a]
- Salary and wage inflation: 3.06% [a]
- Benefits cost inflation: 5.0%
- Funds earnings rate: 0.5% in 2013, 1.5% in 2014 and 2015, 3.0% thereafter
- Working capital target balances
  - Min. of 60 days of cash operating expenditures
  - Max. of 90 days of cash operating expenditures

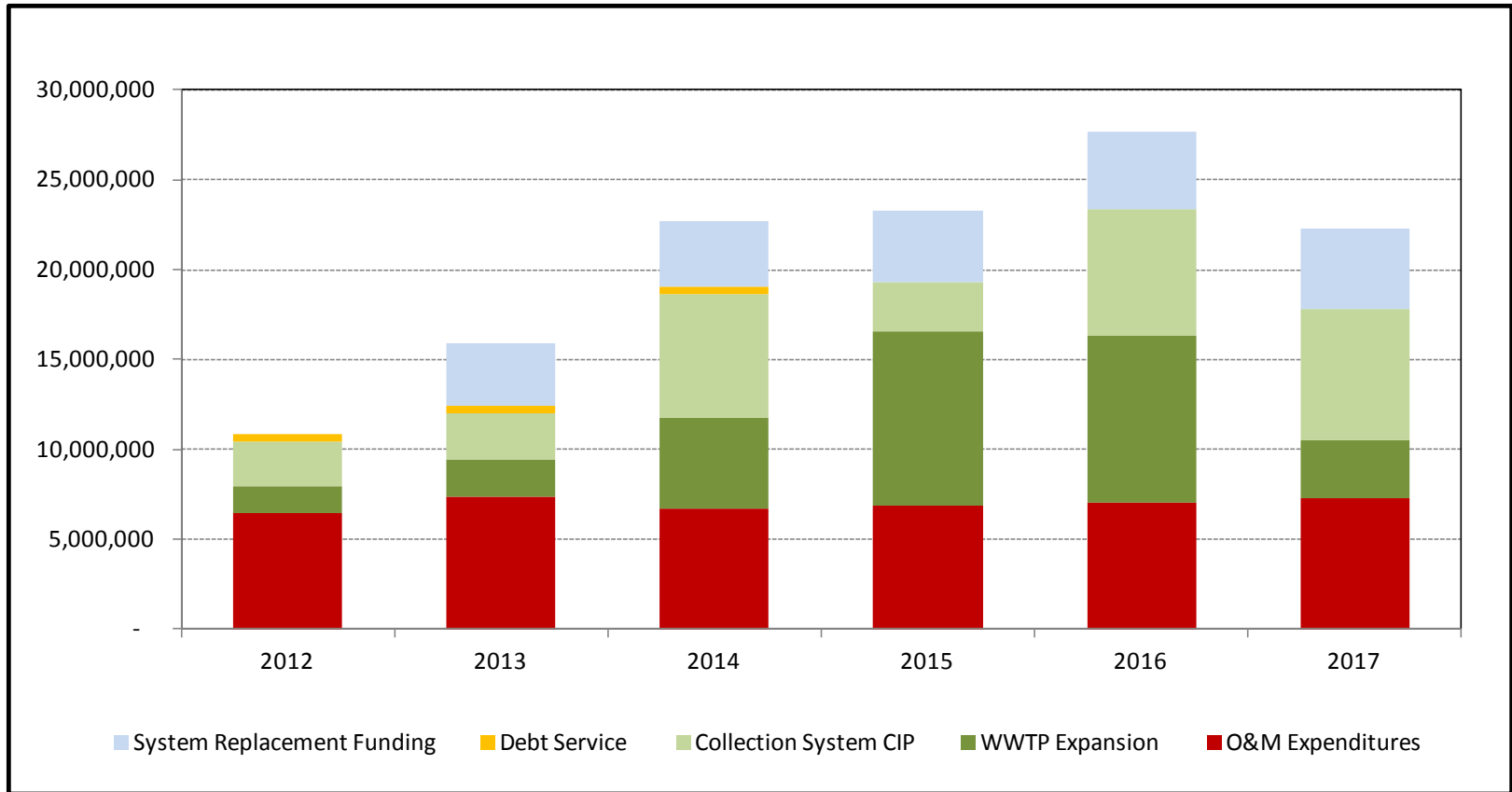
[a] Per Nampa Wastewater Program Management Plan, Technical Memorandum M-01.

# Key Assumptions

- Minimum capital fund balance target is set at 2% of the replacement value of the existing plant-in-service (target balance is approximately \$4.0 million on a \$199 million plant value).
- Rate funded system replacement policy is fully implemented starting in FY 2013, and funding amount is set equal to annual depreciation expense
- \$15.3 million revenue bond issue in FY 2015 with a net proceed of \$14.0 million.
  - 20-year term
  - Interest rate of 4.8%
  - 0.5% issuance cost
  - Debt reserve requirement is equal to annual debt service payment and funded through bond proceeds, and
  - 1.50 coverage requirement

# Total Needs

## Pay-as-you-go Scenario





# Timeline for Rate Adjustments

- Final Cost of Service Study – October 2012
- Public Hearings/Meetings – December 2012/January 2013
- Rates adopted – January 2013
- Residential rates increased – April 2013
- Industrial rates increased – June 2013



# What's Next

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Thank You

## Nampa Wastewater Advisory Group Workshop

Wastewater Program Update  
August 8, 2012

Questions?

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