Building Utility Financial Sustainability

Glenn Barnes September 21, 2021





Our Presenter



Glenn Barnes

Director Water Finance Assistance



Objectives

- Describe a way to identify all the expenses of a utility
- Explain how rates can generate sustainable revenue
- List available federal funding sources for water infrastructure
- Analyze your utility's financial sustainability

Utility Financial Sustainability

• Your utility has the funding it needs to provide safe and reliable water for generations to come



Utility Financial Sustainability Benefits

- A well-maintained utility
- Dependable, safe drinking water
- Fewer service interruptions
- Happier customers
- Better access to grants and loans



Budgeting 101



Annual Budgets

- Best practice is to prepare a budget every year with the following items:
- Day-to-day (operating) expenses
- Capital expenses
- Debt service payments, if you have any
- Reserve funds in the bank

Where to Account for Expenses

- Some expenses are clearly entirely for drinking water
- Some expenses need to be split between drinking water and other utilities
- Some expenses need to be split between drinking water and general activities/general government

Why is This Important?

• Rate setting

• Applying for infrastructure funding



Tracking Your Financial Performance

- Track your actual expenses and revenues throughout the year
- Update your governing board on finances at least quarterly, ideally monthly

Utility Financial Sustainability Assessment

1. Does your utility prepare an annual budget?

- 2. Does your utility budget for each utility service (water, wastewater, solid waste, etc.) separately?
- 3. Does your utility track your actual expenses and revenues throughout the year?
- 4. Do utility staff update the governing board on utility finance at least once per quarter?

The Costs of Providing Safe Drinking Water

QUESTION: What are your utility's primary expenses?

Write them into the chat box please!



Three Big Categories

• Infrastructure—the assets we need to deliver safe drinking water

 Expenses—all the things that we need to pay for to keep the water system operating day in and day out

 Human Inputs—the knowledge, skills, and abilities that we need from staff or from contractors to keep the water system operating day in and day out



Water Source







Water Source

INTER-GOVERNMENTAL AGREEMENT

BETWEEN

THE CITY OF POULSBO

AND

PUBLIC UTILITY DISTRICT NO. 1 OF KITSAP COUNTY

FOR WATER SALES

THIS AGREEMENT is made and entered into this <u>ub</u> day of <u>1995</u>, by and between the City of Poulsbo, a municipal corporation, hereinafter referred to as "City" and Public Utility District No. 1 of Kitsap County, hereinafter referred to as "PUD".

WHEREAS, pursuant to Chapter 54.04 RCW, the purpose of the PUD is to conserve the water resources of the county for the benefit of the people thereof, and to supply public utility service, including water for all uses; and

WHEREAS, pursuant to Chapter 54.16 RCW, the PUD may make survey, plans, investigations or studies for domestic and industrial water supply and for matters and purposes

Infrastructure

- Well or surface water
- Intake pump
- Pumphouse or well house
- Fencing
- Backup generator



Expenses

- Withdrawal permit
- Electricity
- Water purchases



Human Inputs

- Administrative
- Operations
- Electrician
- Construction
- Lawyers





Treatment







Treatment





4. POLL QUESTION

What water treatment(s) do you use? Choose all that apply

- Chlorine
- Filtration
- Softeners
- RO
- UV
- We purchase treated water





Treatment







Treatment



Infrastructure

- Well or surface water
- Intake pump
- Pumphouse or well house
- Fencing
- Backup generator
- Chlorinator
- Filter tanks
- SCADA

- RO system/UV system
- Onsite energy generation
- Treatment plant building

Expenses

- Withdrawal permit
- Electricity
- Water purchases
- Chlorine
- Softeners
- Membranes
- Filters
- UV bulbs
- Mortgage on treatment plant

- Cybersecurity
- Property insurance
- Liability insurance
- Testing supplies
- Uniforms
- PPE
- Training
- Certification
- Professional dues

Human Inputs

- Administrative
- Operations
- Electrician
- Construction
- Lawyers
- SCADA expertise
- Plumbing
- Laboratory









Infrastructure

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- Distribution pumps
- Storage tanks

Expenses

- Withdrawal permit
- Electricity
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- Softeners
- Membranes
- Filters
- UV bulbs
- Mortgage on treatment plant

- Cybersecurity
- Property insurance
- Liability insurance
- Testing supplies
- Uniforms
- PPE
- Training
- Certification
- Professional dues
- Security

Human Inputs

- Administrative
- Operations
- Electrician
- Construction
- Lawyers
- SCADA expertise
- Plumbing
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Distribution









Distribution





Distribution






Infrastructure

- Well or surface water
- Intake pump
- Pumphouse or well house
- Fencing
- Backup generator
- Chlorinator
- Filter tanks
- SCADA

- RO system/UV system
- Onsite energy generation
- Treatment plant building
- Distribution pumps
- Storage tanks
- Transmission mains
- Booster pumps

- Hydrants
- Manholes
- Valves
- Heavy machinery
- Vehicles
- Roads

Expenses

- Withdrawal permit
- Electricity
- Water purchases
- Chlorine
- Softeners
- Membranes
- Filters
- UV bulbs
- Mortgage on treatment plant

- Cybersecurity
- Property insurance
- Liability insurance
- Uniforms
- PPE
- Testing supplies
- Training
- Certification
- Professional dues
- Tools
- Safety equipment

- Traffic cones, etc.
- Auto parts
- Tires
- Fuel
- GIS
- Leak detection

Human Inputs

- Administrative
- Operations
- Electrician
- Construction
- Lawyers
- SCADA expertise
- Plumbing
- Laboratory
- Line repairs

- Traffic conducting
- Vehicle maintenance
- Heavy equipment maintenance
- Road repair
- Mapping/GIS















Infrastructure

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- Hydrants
- Manholes
- Valves
- Heavy machinery
- Vehicles
- Roads
- Service lines
- Curb stops
- Meters

Expenses

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- Traffic cones, etc.
- Auto parts
- Tires
- Fuel
- GIS
- Leak detection
- Lab testing
- Meter testing

Human Inputs

- Administrative
- Operations
- Electrician
- Construction
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- SCADA expertise
- Plumbing
- Laboratory
- Line repairs

- Traffic conducting
- Vehicle maintenance
- Heavy equipment maintenance
- Road repair
- Mapping/GIS
- Meter reading







CAPITAL IMPROVEMENT PROJECTS







RVICE ADDRESS:

1 100901 PREVIOUS READING 847	10/12/2020 PRESENT READING 854	10/1/2020 UNITS USED 7	10/31/2020 Previc PAYMEN	30 DESCRIP us Balance	10/31/2020 TION
PREVIOUS READING 847	PRESENT READING 854	UNITS USER	Previc PAYMEN	DESCRIP Dus Balance	TION
847	854	7	Previc PAYMEN	us Balance	-
			7 Previous Balance PAYMENT ** THANK YOU ** MONTHLY SERVICE FEE Quantity 0\$7.9700/CCF MONTHLY SDWBA FEE		
Netered use is from Se CDWBA=Safe Drinking Wa	ept 1-30 ater Bond Act				
nam jou tot jour pro	mpe paymente.			AMOUNT DUE	AFTER DUE DAT \$176.



PLEASE RETURN THIS PORTION WITH PAYMENT







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- Office

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- Auto parts
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- Fuel
- GIS
- Leak detection
- Lab testing
- Meter testing
- Office overhead
- Printing

- Postage
- Billing software
- Bank fees
- Credit card processing fees
- Website
- Computers
- Office supplies
- Annual financial audit
- Reporting
- Planning & analysis
- Contingencies
- Debt service

Human Inputs

- Administrative
- Operations
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- SCADA expertise
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- Line repairs
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- Vehicle maintenance
- Heavy equipment maintenance
- Road repair
- Mapping/GIS
- Meter reading
- Billing
- Customer service
- Budgeting
- Board and management
- Human resources

Expenses

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- Salaries
- Benefits
- Contract services

We made it!!!!





Except...



The Revenues to Providing Safe Drinking Water

Historical Tribal Water Finance

- Tribal Government funds including revenue from business enterprises
- Federal loans and grants



The Problem with The Way Things Have Always Been Done...

- Revenue sources may be unstable
- Does not lead people to value water
- May infringe on Tribal sovereignty



A Third Source of Revenue

- Tribal Government funds including revenue from business enterprises
- Federal loans and grants
- Rates charged to customers





Rates charged to customers

Federal loans and grants

Tribal Government Funds

- Often comes from Tribal business enterprises
- These revenues can change year-to-year



Tribal Government Funds



AH-TAH-THI-KI M U S E U M A PLACE TO LEARN, A PLACE TO REMEMBER.





ABOUT | SUPPORT | STORE | COLLECTION GALLERY

We are currently closed to the public until further notice but in the meantime we are open 24/7 online!

CORONAVIRUS (COVID-19) UPDATE

Until further notice Glacier Peaks Hotel & Casino and Glacier Lil Peaks Casino will be closed. We remain committed to the health and safety of our employees, patrons and community. Check the Glacier Peaks Hotel & Casino website and our Facebook page for future updates. Thank you for your patience and support.





HOTEL

The Star is temporarily closed

Santa Ana Star Cacino Hotal is the parfact balance of condictication and affordability

COVID Impacts

COVID-19 pandemic brings furloughs, layoffs, hour reductions to Tribal government

Posted on: April 3, 2020



PUYALLUP TRIBE OF INDIANS

April 3, 2020

COVID-19 pandemic brings furloughs, layoffs, hour reductions to Tribal government

Tribal Council: 'We value and care about each and every employee, and these decisions were very difficult to make'

With both Emerald Queen Casino locations temporarily closed amid the COVID-19 pandemic, the Puyallup Tribe's governing council has decided on a range of actions to conserve the Tribe's resources and ensure vital services are provided to the community.

"Without incoming revenue from the casinos, the financial situation is serious," the seven-member Puyallup Tribal Council said in a statement to the membership earlier today. "Council unanimously agreed to take pay cuts. We have turned over every stone we could find. But in the end we have had to make hard decisions that affect our valued employees."

The decisions include furloughs, layoffs and hour reductions for Tribal government's workforce of over 600 people: About 40 temporary and emergency-bire employees have been laid off

Source: http://news.puyalluptribe-nsn.gov/covid-19-pandemic-brings-furloughs-layoffs-hour-reductions-to-tribal-government/



Rates charged to customers

Federal loans and grants

Rates Charged to Customers

• Payments to the utility directly from the end users of the water and wastewater systems





• Water is sacred. Water is life...

How can we charge for water?



Rates Charged to Customers

• Yes, water is sacred. Yes, water is life. And it literally falls from the sky. But...

• You need skilled employees, electricity, chemicals, and infrastructure to deliver safe and reliable water to homes. That **service** costs money

Benefits of Charging Rates

- Allows the utility to be self-sufficient
- More control over finances
- More stable revenue
- Better able to access grants and loans

Many Tribal Utilities Charge Rates

• Increasingly, Tribal utilities are charging rates to their customers



Appropriate Level of Revenue from Rates

- Cost of Operations
- + Cash Payments for Infrastructure
- Debt Service
- Contributions to Reserves

Infrastructure

- Well or surface water
- Intake pump
- Pumphouse or v house
- Fencing
- Backup generat
- Chlorinator
- Filter tanks
- SCADA

• RO system/UV

Human Inputs

- Administrative
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- Traffic conduct

- Withdrawal permit

Expenses

Manholes

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Reserve Funds

• It's up to you, but at least 90 days of operating expenses is a good place to start

• You may have requirements if you have borrowed money

The Magic Number

• There is a single number you can calculate that is the appropriate level of revenue for your water system in a given year. That's data.

• But <u>how</u> you get there is where you have choices
Two Basic Elements of Rate Structures

• Flat rate: charge to each customer every billing period regardless of usage

• Volumetric rate: charge based on the amount of water consumed

Volumetric Rates

- Uniform—rates per unit of billing don't change based on usage level
- Increasing block—rate per unit of billing goes up as usage goes up
- Decreasing block—rate per unit of billing goes down as usage goes up

The Magic Number

Annual Budget: \$345,055

Customers: 365

Volume of Water Sold: 29,400,000

Bill Payment Rate:90%

* Monthly Billing





All customers pay \$28.00 per month for unlimited water use

Simple

Moderate



Customers are charged per gallon used, and the rate per gallon goes up as usage goes up

Moderate

Simple



Different rates for residential, small businesses, government buildings, and agriculture







Collections

- If you charge rates, you need written collection and shutoff policies
- They must be enforced consistently without favoritism
- You can design programs to help customers who are less fortunate

Reviewing Your Rates

• At least every other year, if not every year, check to see whether your current rates bring in enough revenue to cover your expenses

 If you haven't changed rates in 5 years or more, they are likely not adequate

Utility Financial Sustainability Assessment

- 5. Does your utility charge rates to your customers?
- 6. Does your utility charge a rate to your customers based on the volume of water they consume?
- 7. Does the annual revenue *from your customers* cover your day-to-day expenses?
- 8. Does your utility examine whether your rates generate enough revenue to cover day-to-day expenses at least once every other year?

Utility Financial Sustainability Assessment

- 9. Has your utility adjusted its rates in the last five years?10.Does your utility have reserve funds equal to at least 90 days of operating expenses?
- 11.Does your utility track how many customers are paying on time and in full throughout the year?
- 12.Does your utility enforce written shut-off policies if customers do not pay on time and in full?
- 13.Does your utility have a program to help less fortunate customers pay their bills?

Benefits of Meters





Benefits of Meters

• Installing and reading water meters provides benefits to utilities and to customers even if you decide not to charge your customers based on their consumption



Benefits of Meters

- Identify potential leaks in homes and businesses and notify customers
- Measure how much water you are treating vs. metering
- Promote conservation

Utility Financial Sustainability Assessment

14.Does your utility meter water use for all of your customers?

- 15.Does your utility use meter data to identify potential leaks and notify customers?
- 16.Does your utility offer programs to promote water conservation?

17.Does your utility compare the amount of water you treat to the amount of water your customers receive each year?

Infrastructure Funding

First Step: Asset Management

- Recognize the highest priority assets to replace
- Determine when to replace the assets
- Identify the appropriate funding sources



Ways to Pay for Infrastructure

- Use revenue generated from customers and/or from the Tribal Government
- Borrow money from lenders
- Federal loan and grant programs



Existing Major Funding Programs



Sanitation Facilities Construction Program



Water and Waste Disposal Grants to Alleviate Health Risks on Tribal Lands and *Colonias*



Drinking Water Infrastructure Grants - Tribal Set-Aside Program



Indian Community Development Block Grant (ICDBG)

Two New Opportunities

- American Rescue Plan Act (ARPA)
- Low Income Household Water Assistance Program (LIHWAP)



Keeping an Eye on the Future

- Bipartisan Infrastructure Bill
- Reconciliation



https://efcnetwork.org/funding-sources-by-state/

Tribal Water and Wastewater Funding Sources

Compiled by the Environmental Finance Center Network, February 2019

Organization	Program (key words)	Fed. Tribe	State Tribe	Tribal Orgs.	Purpose or Use of Funds	How to Apply	Website	Contact
	Drinking Water State Revolving Fund Program (DWSRF) (water)	~			The DWSRF program is available to drinking water systems to finance infrastructure improvements. The program also emphasizes providing funds to small and disadvantaged communities and to programs that encourage pollution prevention as a tool for ensuring safe drinking water. Projects that have received assistance from the national set-aside for Indian Tribes and Alaska Native Villages under the SDWA §1452(i) are ineligible to receive funding.	Contact the DWSRF program in your state for information on how to apply.	<u>https://www.epa.gov/drinkingwa</u> <u>tersrf</u>	U.S. Environmental Protection Agency Office of Ground Water and Drinking Water 202-564-4700 For regional specific contact see this map: https://www.epa.gov/drinkingwatersrf
	Drinking Water Infrastructure Grants Tribal Set-Aside Program (water)	√			EPA's Drinking Water Infrastructure Grant – Tribal Set Aside (DWIG TSA) Program provides resources to assists tribes in improving water system infrastructure. Community water systems and non-profit non-community water systems serving tribal populations are eligible for project funding. Under the Water Infrastructure Improvements for the Nation Act, projects for technical training and operator certification are now eligible to receive funding through DWIG TSA.	Contact the Regional DWIG TSA coordinator in your area for information on how to apply.	https://www.epa.gov/tribaldrinki ngwater/tribal-set-aside-program- drinking-water-infrastructure- grant	Samuel Russell russell.sam@epa.gov 202-564-4012 For regional specific contact see this map: https://www.epa.gov/tribaldrinkingwater/re gional-tribal-drinking-water-coordinators
U.S. Environmental Protection Agency	Clean Water State Revolving Fund Program (CWSRF) <i>(wastewater, sewer)</i>	~			The Clean Water State Revolving Fund program funds water quality protection projects for wastewater treatment, nonpoint source pollution control, and watershed and estuary management.	Contact the CWSRF program in your state for information on how to apply.	<u>http://water.epa.gov/grants_fun</u> ding/cwsrf/cwsrf_index.cfm	U.S. Environmental Protection Agency Clean Water State Revolving Fund 202-564-4700 For regional specific contact: https://www.epa.gov/cwsrf/forms/contact- us-about-clean-water-state-revolving-fund- cwsrf#state
	Clean Water Indian Set- Aside Program	√			The Clean Water Indian Set-Aside Grant Program (CWISA) provides funding to Indian tribes and Alaska Native Villages for wastewater infrastructure. The CWISA program is administered in cooperation with the Indian Health Service (HIS). EPA uses	To be considered for CWISA program funding, tribes must identify their wastewater needs to	https://www.epa.gov/small-and- rural-wastewater-systems/clean-	Matthew Richardson richardson.matthew@epa.gov 202-564-2947 1200 Pennsylvania Avenue. Northwest

Utility Financial Sustainability Assessment

1. Does your utility have a list of assets and a map showing their location?

2. Does your utility have a plan to replace assets?

3. Has your utility had contact with your local infrastructure funding program representatives from Indian Health Service, USDA, and the State Revolving Fund?

Utility Financial Sustainability Assessment

Thank You!



Glenn Barnes

Director

Water Finance Assistance

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