

# *Optimizing Municipal Water Utility Governance: The Seattle Case*



Margaret Pageler  
Senior Council Member  
City of Seattle, Washington USA

- Municipal water utility governance, which is the standard model in the United States, has some easily identified strengths and weaknesses.
- We like to think that Seattle is one of the best because we have optimized those strengths and because we recognize and try to counter those weaknesses.



## Outline

- Overview - water governance models
- What is good utility function?
- Seattle water governance
  - preconditions for good utility function
  - expectations of the utility
    - #1 Deliver customer service
    - #2 Reflect community values and decision-making
    - #3 Achieve environmental values and outcomes
- What works and what needs work

I will start with a reference to the conceptual framework we're using to analyze public and private utility governance.

Then I'll explain Seattle's city government set-up and the preconditions in the American system that provide essential context.

For each of the three components of the utility function:

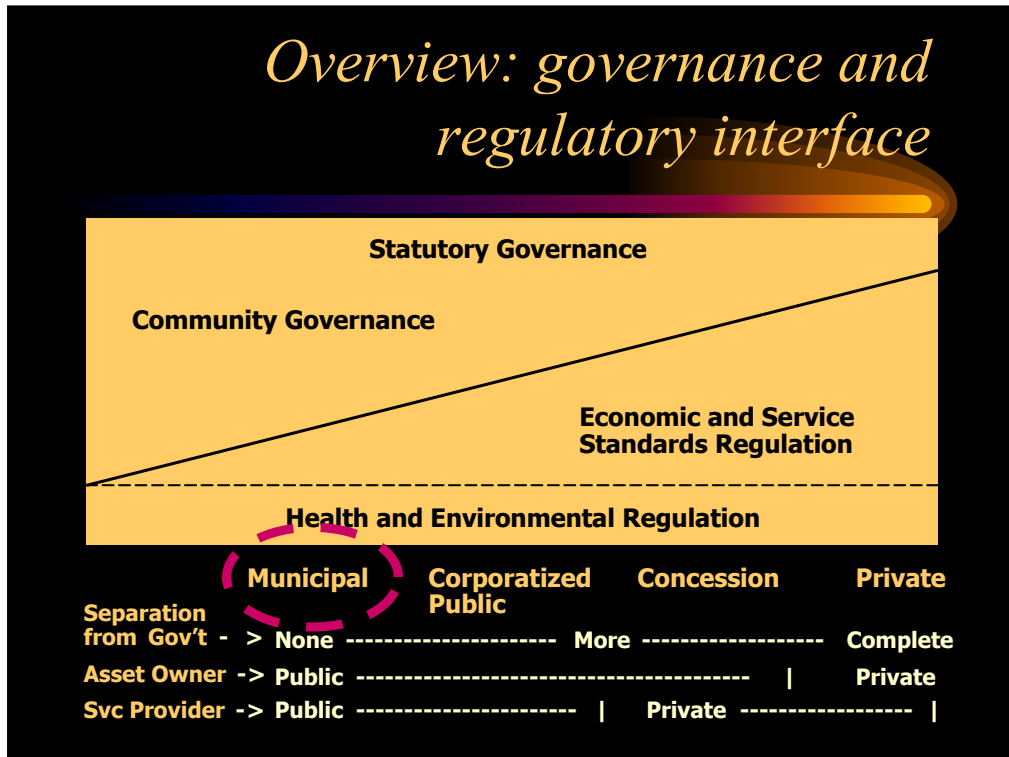
Customer service

Community values

Environmental outcomes

I'll give examples of what Seattle has done to make these work well or, in some cases, what problems we've faced and how we are working to address them.

# Overview: governance and regulatory interface



In a traditional municipal water department, the city owns the assets and provides the services.

There is a statutory background of rules about how cities should operate, but very little regulation for how the city should run its water department.

There is some national or state regulation that sets rules for drinking water quality and for some environmental parameters, but it's up to the local elected officials with the community to provide most of the economic and service standards.

This contrasts sharply with the privately operated water systems in the UK that are highly regulated.

# *Overview: Good utility function*

## *The concept*

- Operating contract as organizing concept
  - with customers
  - with community
  - with the environment
- Implementation in practice
  - US municipal - operating contracts are implicit and political

If we use the operating contract as an organizing idea, the terms of the contract, in a US municipal utility, are largely implicit and politically determined.

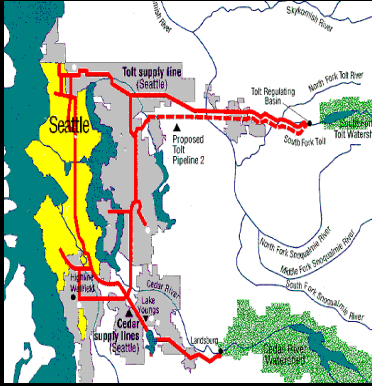
Local elected officials establish financial policies, set rates, determine reliability standards, decide on maintenance investments, plan and develop water supply, and adopt environmental policies.

In the best case these decisions are openly debated and the policies reflect community values.

In the worst case, local politics can produce policies that are short-sighted and self serving.

How does this work in Seattle?

## Seattle and water governance



- Central city in metropolitan region of 3 million
- Water utility serves 1.3 million
- Half is direct sales; half wholesale sales

Seattle is the central city in a metropolitan region of 3 million people.

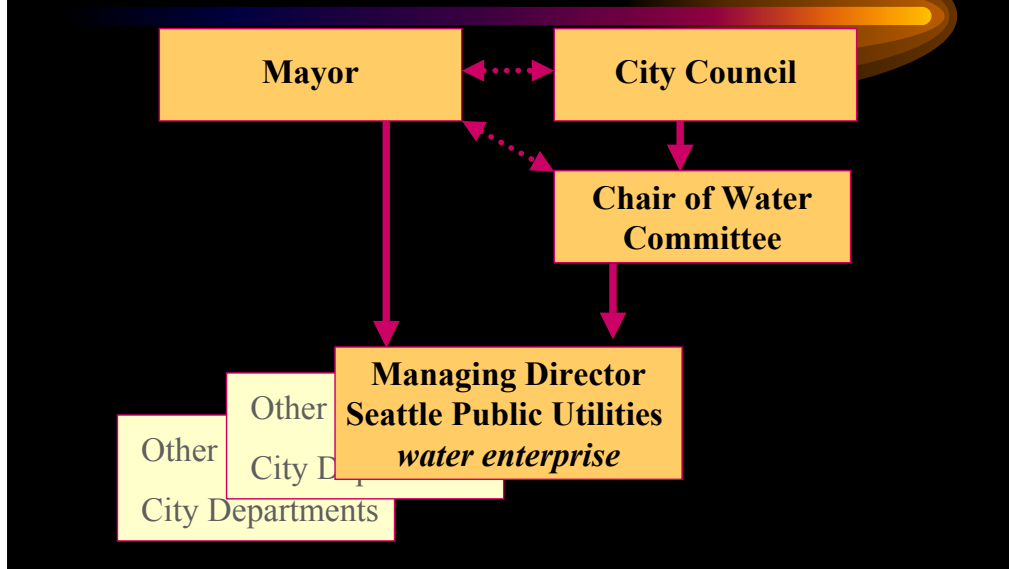
The water utility serves 1.3 million people, 600,000 in the city itself – the yellow area on the map – and the rest through wholesale sales to surrounding suburbs – the light gray area on the map.

We draw our water from two mountain reservoirs situated in fully protected watersheds. The green areas show the protected areas around the reservoirs which the city of Seattle owns.

Note that Seattle's elected government is making decisions about a water service that supplies other cities and towns.

Note, too, that the river basins are not within Seattle's city jurisdiction.

## *Water service in the Seattle municipal context*



Seattle's water service is provided by a department of City government.

The City Mayor is the CEO, managing all the departments.

The City Council serves as the board of directors and the regulator.

We have nine city councilmembers, all elected at large, non partisan and full-time paid officials.

The Councilmembers chair functional committees, which rotate from time to time. I chair the committee that's responsible for policy and budget for the water service. The department is called Seattle Public Utilities and it includes: wastewater, stormwater management, garbage and recycling, along with the water enterprise.

My Council committee is also responsible for public health.

## *What is good municipal utility function? Preconditions*

- Mature capital markets
- Stable political institutions
- Reliable cost-recovery mechanisms
- Protections against corruption
  - “Sunshine” laws
  - Accountancy Act
- Managerial competence; technical expertise

It's a big set of responsibilities for an elected official. We rely on certain external conditions which really are prerequisites for effective municipal water governance.

First, mature capital markets, including tax incentives that favor municipal bonds.

Then, stable political institutions. Elected officials come and go, but the governmental agencies are well-established.

The community accepts the fact that they must pay for infrastructure and service through rates. We have effective metering, billing and collection mechanisms that provide for FULL COST RECOVERY.

“Sunshine laws” – public disclosure and open meetings – ensure public decisions are taken openly.

Accountancy Acts establish utility service as an enterprise fund and require that water rates can only be spent on the water system, not on other government missions.

And finally, there is excellent management competence and technical expertise available in the public sector.

# *Expectations of the water utility #1*

## *Deliver customer service*

- Clean water reliably delivered at an affordable price
- Health regulations for drinking water
- Local, implicit economic and service standards



With that as a background, how well does the Seattle water utility perform?

Start with our contract with our customers, which is to deliver clean water reliably at an affordable price.

The state and federal government set the baseline health regulations for drinking water.

The other economic and service standards are local and mostly implicit.

## *Deliver customer service: What works?*

- Direct relationship between customers and elected officials
- Cost-based rates
- Responsive to changing needs, expectations
- The Seattle Story - Organize system around customers & leverage “City family” relationships



What works well in this model?

First, our customers are citizens. There's a direct relationship between customers and elected officials.

Second, rates are based on costs, without a profit margin added in.

Third, because it's a political system, it responds readily to changing citizen needs.

In Seattle, we've taken advantage of an additional key opportunity that recognizes the overlap among city departments and services.

In 1997 we reorganized all our utility services in a strategic consolidation that is built around the customer, not the separate lines of business. Water, wastewater, drainage and garbage-recycling merged to become Seattle Public Utilities. Seattle Public Utilities and Seattle City Light then developed a shared customer call center and billing systems.

The result is improved customer service with reduced overhead costs.

The merger also allows us to integrate our environmental services.

## *Deliver customer service: What can go wrong?*



- Implicit and locally-controlled economic and service standards can slip
- Avoidance of prudent rate increases can impact system maintenance
- Special political constituencies can drive additional costs

So what can go wrong?

Well, where financial policies and rates are set by local elected officials, there's a counter-incentive to let the standards slip in order to avoid rate increases.

Councilmembers are reluctant to set rates appropriately because our customers are voters and they may not be willing to pay the full cost of service.

I'll say more about special constituencies later, but first, some Seattle statistics.

Part of the story here is what happens when elected officials defer investment.

## *Deliver customer service: Seattle statistics*

- 100 year old system
- \$100 million/year capital program
- \$ 21.86 average monthly bill
- 70 % debt/asset ratio
- 102 gallons (386 liters) per day per capita water use
- 10 % average annual rate increase/year over 6 years
- 4 percent system loss to leaks and evaporation



Seattle's system was born 100 years ago. There was a large infrastructure investment in the early 1900's and then again in the 50's and 60's. But during the 70's and 80's, the Water Committee was in the hands of a politician who would not raise rates. After 20 years of disinvestment, Seattle was way behind in water treatment and system repair.

Beginning in the mid-90's, I committed to an aggressive capital program, at about \$100 million a year. It requires annual rate increases of about 10%. We've been on that ramp up for about 6 years and probably have another four years to go to get on track with prudent system investment.

Because rates for other services, notably wastewater treatment and electricity, are also climbing, customers are feeling the pinch.

And I'm standing for election this year! It would be all too easy to defer investment in system maintenance and rehabilitation; politics favors procrastination.

## *Expectations of the water utility #2 Reflect community values*

- Community decision-making
- Educational programs
- Stewardship and volunteerism



*Water is a Public Good in Public Hands*

Let's move to the contract with our community –

The essence of the municipally governed utility is that our customers are not merely purchasers of water. Our customers are citizens. They provide the civic values that shape the water service.

The utility reflects community values.

The community participates in decision making.

The city provides education and outreach.

The citizens participate in stewardship programs and resource volunteerism.

“Water is a Public Good in Public Hands.”

## *Reflect community values: What works?*

- Transparency of decision-making - citizen involvement
- Education and outreach investments reinforce resource-saving behaviors
- The Seattle Story: flexible response to evolving issues
  - low income subsidies
  - water conservation
  - forest preservation
  - salmon recovery



We're proud of Seattle's record here.

Decision-making is transparent with lots of grass roots involvement. I hold public meetings, roundtables with special interest groups, community workshops, business forums. The utility has a citizen advisory committee on rates.

We invest in citizen education in order to shape behaviors that protect water quality and increase conservation. For example, I launched a "salmon-friendly gardening" campaign to help citizens appreciate how home gardening practices could be improved to protect fish in the streams.

Seattle is a progressive city. Our people are proud of our humanitarian and our environmental commitment.

We subsidize utility rates for low-income residents at 50%. Last year, as a result of a citizen initiative we began retrofitting low income housing projects with water-efficient toilets and washing machines.

The community believes in conservation. Our goal is to reduce water consumption 1%/year for 10 years. Brown lawns have become a status symbol!

The catchments areas around our mountain reservoirs are 100% protected from logging. Again, the policy to prohibit logging was a result of community concern that put protecting forest habitat above the revenue that could be generated from timber sales.

Our stream flow commitments to protect salmon go way beyond what is required by law or by science, for that matter, but they reflect community priorities.

I could add others community values that have been incorporated in our water utility operations:

Percent for Art

Diversity in employment and contracts

Sustainable building standards for projects like the treatment plants

Community values are at the core of what it means to be a municipal water utility.

## *Reflect community values: What can go wrong?*



- Utility service can become politically unglamorous
- Vulnerable to mission-creep and cross-subsidization
- Intelligence and tenure of elected officials
- “Sunshine” laws create business challenges

So what can go wrong?

Precisely because water service intersects with so many other values, the community and politicians can lose sight of the core responsibility.

We take the water system for granted and can begin to bleed off utility revenues to support other city services or public benefits.

The costs of water projects are driven up by demands of neighbors or environmentalists or other city departments or other groups that catch the ear of elected officials. For example, there was an effort a few years ago to double the percent for art charged to utility capital projects.

Note that in the municipal model there are NO REGULATIONS governing the contract with the community.

Balanced governance depends then on the intelligence, focus and tenure of elected officials. There are good politicians and bad politicians. But make no mistake – the municipal model puts water, this core public good, squarely in politician's hands.

## *Expectations of the water utility #3*

### *Achieve environmental outcomes*

- State and national regulations provide performance standard
- Local communities can exceed the regulatory goals based on local values



What about the contract with the environment?

In the American model, state and national regulations such as the Clean Water Act and Endangered Species Act provide some of the relevant standards.

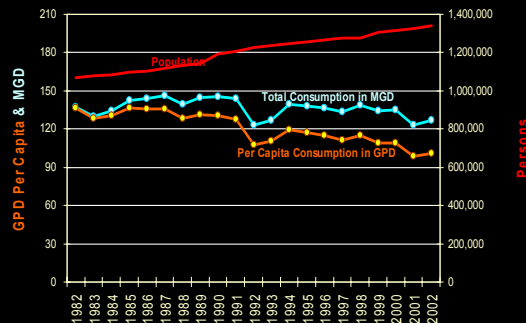
These regulations can be viewed as a constraint or an opportunity, a floor or a ceiling.

I would argue that one advantage of the municipal model is our freedom to exceed regulatory goals based on local values.

The picture of the forest is from our Cedar River Watershed where we have preserved 90,000 acres of forestland as a catchment area for our primary reservoir. This was an expensive decision, which exceeded environmental regulations, but our citizens demanded it.

# *Achieve environmental outcomes: What works - the Seattle story*

- Catchment protected 100 %
- All 158 local water supply utilities voluntarily coordinate water supply plans
- Total voluntary buy-in to programs for salmon protection by local authorities
- Water conservation program adds years to existing supplies



Again going beyond any state requirement, in the Seattle metropolitan area all the local water suppliers are voluntarily coordinating water supply plans. The water suppliers meet monthly in a forum that tries to balance the water needs of people and fish.

When chinook salmon were listed as an endangered species a few years ago, the cities and towns up and down the three river basins in the Seattle area got together to figure out what we could do collectively to restore salmon habitat. This was a voluntary response that went beyond any legal requirements.

In fact, none of the state schemes for watershed management worked in our region, so we invented our own system of shared costs and agreed programs and strategies.

We're working together to conserve water. Americans are notoriously wasteful of water, especially for our lawns. In Seattle's service area, our conservation programs have reduced water use to levels of the early 1970's even though we've had a 20% population growth.

The top line on the conservation chart shows population growth in Seattle's water service area from 1982-2002. The middle line shows total water consumption in mgd, and the lower line shows per capita consumption in gallons per day. Seattle's per capita residential water use, at 386 liters per day compares favorably to European averages and is well below the 600 liters that is the average for North America and Japan.

In short, because the municipal utility reflects community values and because political leadership can shape and support those values, we have exceeded federal and state mandate in protecting the environment.

## *Achieve environmental outcomes: What can go wrong?*

- Regulations don't cover all the municipal/environmental conflicts
- Municipal service boundaries don't coincide with natural resources
- Legal framework is not congruent with science-based strategies
- Special constituencies can drive additional costs

But there are obstacles.

The path to compliance often is not clear even when there are environmental regulations.

Municipal service boundaries don't coincide with river basin geography. In Seattle's case, long ago systems were set up in the metropolitan area that transfer water from one basin to another.

The framework of laws doesn't keep up with changes in scientific understanding. We see this all the time in water quality regulations.

And because we are community-based, we are vulnerable to the demands of special constituencies which may conflict with science-based ecological priorities. For example, right now we are dealing with a citizen initiative to save salmon by restoring all the creeks in the Central City. In fact, our fish biologists tell us that chinook salmon don't live in these creeks and never will. We should be using our dollars to improve habitat along the lakeshores and major rivers if salmon protection is our goal.

## *Summary: Sources of municipal utility “sag”*

- Self-regulation of customer service and economic objectives; typically, no standards
- Deferral of investments endemic; political considerations favour procrastination
- Counter-incentives limit efficiency of operations
- Labor and contracting rules limit capacity for innovation and change
- Worst case – patronage, corruption and political influence on top of other factors above

In summary,

There are significant risks and downsides in a municipal water utility model.

We need to acknowledge these and develop robust strategies to offset them.

Typically there are no clear economic and service standards.

Investments in maintenance and rehabilitation are too easily deferred by politicians who don't want the political risk of raising rates.

There's always a tendency toward mission-creep and cross-subsidization that reduces efficiency.

Labor and contracting rules that don't apply to the private sector may also limit efficiency.

In the worst cases, patronage, corruption and political influence make municipal water governance as bad as anything on the corporate side.

## *Summary: Seattle strategies to combat “sag”*

- Create a term of service for Managing Director
- Strategically use private capabilities through partnering arrangements
- Codify standards – create internal discipline - develop trends and outcomes reporting
- Create governance mechanisms – for example, an operational board

In Seattle, we’ve adopted several strategies to offset these risks.

I established a 4-year tenure for the Managing Director to make her somewhat independent of changing elected officials.

We’ve used private sector partnerships strategically, to bring in outside expertise and productivity. The Design Build-Operate contract for our Tolt Treatment Plant is the best known of our ventures.

This year my goal is to complete a set of codified economic and service standards for City Council to adopt. This will provide internal discipline for the utility and a reporting framework to keep Councilmembers focused on the core water service mission.

And I created an operational board of utility professionals from our wholesale customers, to bring additional expertise and suburban voices into the governance of the water service.

## *Summary: Strengths of publicly-owned utilities*

- Water is a public good in public hands
- Officials keep in touch with their customer/owners
- Rates based on costs
- System has the flexibility to rapidly change
- Retain local control of local resources



With these safeguards, Seattle is optimizing municipal governance of our water utility and achieving our strategic advantage.

Water is a public good in public hands.

The system is run by elected officials who have a direct relationship with our customers who are our owners.

Rates are based on costs – and full costs are recovered through rates.

The system is responsive to evolving community needs and values.

And we've retained local control of local resources in the hands of locally-elected political leaders.



*For more information contact*

*Margaret Pageler*

*<http://www.cityofseattle.net/council/Pageler>*

*[margaret.pageler@seattle.gov](mailto:margaret.pageler@seattle.gov)*