Water Resources Advisory Board Agenda

July 22, 2025, at 6:00 PM
Pacific Street Operations & Zoom

Participation Options: Water Resources Advisory Board meetings have returned to in-person but can also be attended virtually online or by phone by using the meeting information below.

Virtual Meeting Link: https://cob.org/watershedadvisory

By Phone: • (253) 215-8782 • (669) 900-6833 • (301) 715-8592 • (929) 205-6099
ID/ Password: Meeting ID: **829 1629 0864**/ Password: **8**

Water Resources Advisory Board Members

Bret Beaupain, Carl Benson, Rick Eggerth, Martin Kjelstad, Fiona McNair, Kirsten McDade, John Peppel, Alicia Toney, Francesca White

Call To Order

Approval of Minutes

Public Comment

2 minutes per person / Max. 15 minutes

Agenda Items

1. **Utility Customer Survey Results** p. 2
2. **AIS Rapid Response Presentation** p. 58
3. **Resolution** p. 78

Old and New Business

Adjournment

Next Scheduled Water Resources Advisory Board Meeting
Tuesday, September 23, 2025

Accessibility: The City of Bellingham complies with the Americans with Disabilities Act. Hearing assistance is available, and a receiver may be checked out from Pacific Street Operations prior to the meeting. For additional accommodations, contact Jennifer Hamilton, 360-778-7776(voice), 711 (WA State Relay), or jbhamilton@cob.org at least 3 business days prior to the meeting.

Water Resources Advisory Board

Agenda Item

7/22/2025 6:00 PM
Meeting

Subject:
Utility Customer Survey Results

Summary:
Riley Grant, Public Works Communications and Outreach Manager, will provide an update on the results from a survey of utility customers.

Previous Action:

Recommendation:
Information/Discussion

Attachments:
1. MEMO_UTILITY CUSTOMER SURVEY_WRAB
2. PRESENTATION_UTILITY SERVICES RESEARCH_WRAB
3. REPORT_UTILITY SERVICES RESEARCH_WRAB

Activity:
Public Meeting

Clearances | Date

Category:
NA

Presenter:
Riley Grant

Time Estimate:
20

Staff Contact:
Mike Olinger

City of Bellingham
210 Lottie Street
Bellingham, WA 98225

MEMORANDUM

TO: WATER RESOURCES ADVISORY BOARD

FROM: MIKE OLINGER, PUBLIC WORKS DEPUTY DIRECTOR

SUBJECT: UTILITY CUSTOMER SURVEY RESULTS

DATE: JULY 22, 2025

Background:

The City recently contracted with DHM Research to conduct a statistically valid survey of residential utility customers to gauge customer satisfaction levels, values, priorities, and preferences regarding their utility services. Utility services provided by the City of Bellingham include drinking water, wastewater, stormwater, and Lake Whatcom watershed protections.

The survey was done in anticipation of increased utility rates to support much needed upgrades of the City's utility infrastructure, including replacement of the decades-old water distribution system, upgrades to our wastewater solids handing processes, and expansion of our water storage capacity.

From April 29 – May 9, 2025, DHM Research conducted a mixed mode survey of 400 residential utility customers in the City of Bellingham. This is a sufficient sample size to assess customer opinions generally and to review findings by multiple subgroups including age, gender, race/ethnicity, income, housing status, and area.

The survey was translated into the top 5 languages spoken in Bellingham other than English and offered in all languages across all survey modes.

Key Findings

Community Mood

- **84%** of residents rate quality of life in Bellingham as "good" or "excellent."
- The City is seen as doing well in parks, public safety, and environmental protection.
- **64%** say the City is doing a good or excellent job in water and sewer utility services.

Utility Service Awareness & Satisfaction

- **73%** of residents are aware their service includes drinking water; fewer are aware of wastewater (57%), stormwater (48%), and Lake Whatcom protection (42%).
- **81%** are satisfied with overall utility service, citing reliability and water quality.
- Dissatisfaction (16%) is primarily due to rising costs and affordability concerns.

Top Service Priorities

Residents rate the following as most important:

- Providing safe drinking water (98% important)
- Ensuring a reliable supply (96%)
- Keeping bills affordable (96%)

However, affordability and infrastructure upgrades are seen as areas needing improvement.

Future Priorities

Residents want the City to:

- Stay ahead of regulations (55%)
- Plan for climate resilience (51%)
- Offer more bill assistance programs (47%)

Results from the survey reiterate our own beliefs and assumptions about our utility services: residents value safe, reliable utilities and believe the City is doing well in this area. We must also continue to address affordability concerns, as well as prioritize infrastructure upgrades. We are in the process of expanding our existing customer assistance program for community members who need help paying their utility bill.

City of Bellingham Utility Services Research

Mixed Mode Survey

May 2025

Methodology

- Mixed mode (phone and text-to-online) survey of N=400 Bellingham residential utility customers
  - The survey was translated into the top 5 languages spoken in Bellingham other than English (Spanish, Chinese, Vietnamese, Russian, Punjabi) and offered in all languages across all survey modes

- Conducted April 29 – May 9, 2025; 15 minutes to complete

- A variety of quality control measures were employed, including questionnaire pre-testing and validation. Quotas were set by gender, age, language, housing status, income, race/ethnicity, and education level to ensure a representative sample

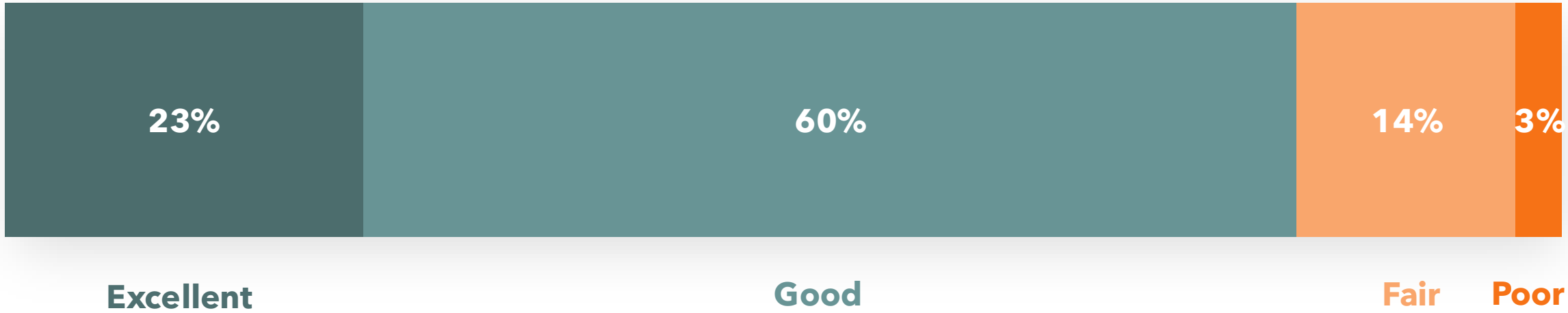
- Margin of error ±4.9%

- Due to rounding, some totals may differ by ±1 from the sum of separate responses

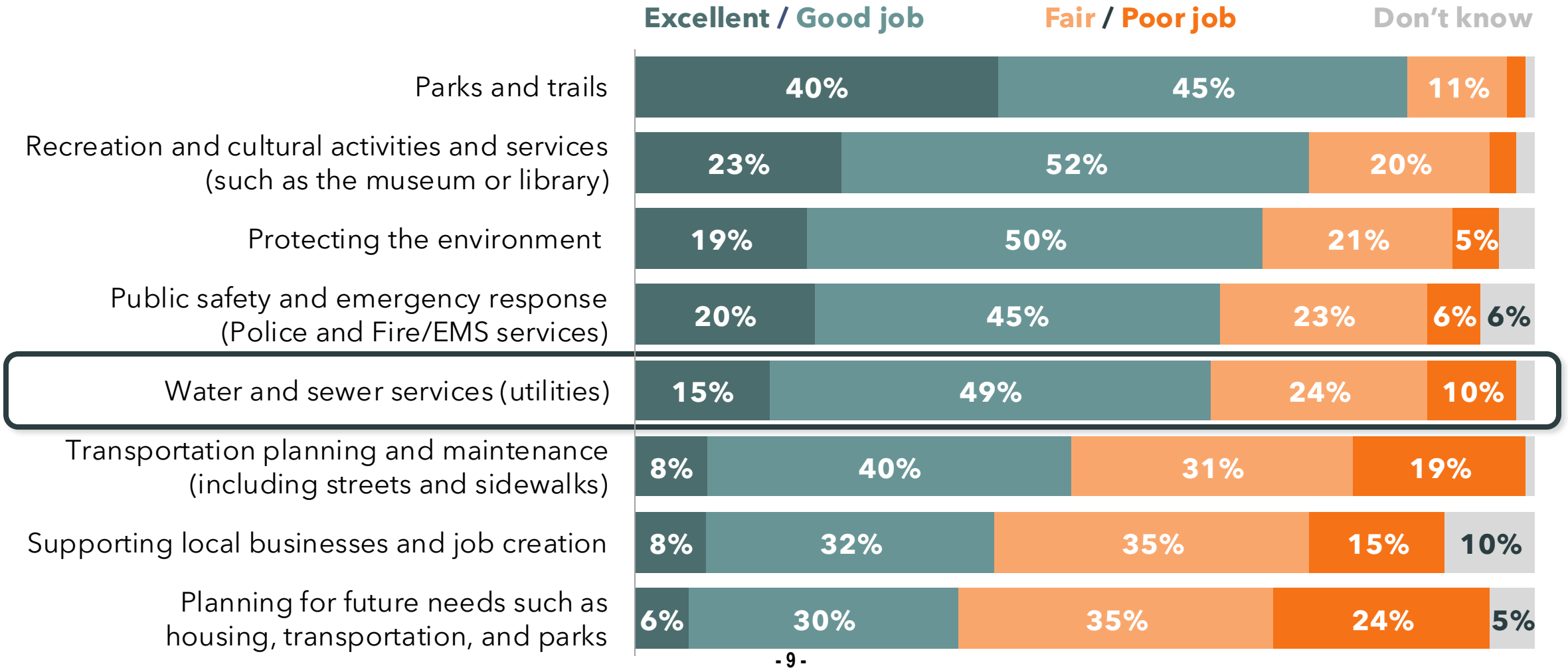
Community Mood

Quality of Life in Bellingham

83% Would rate their quality of life in Bellingham as **excellent**/**good**

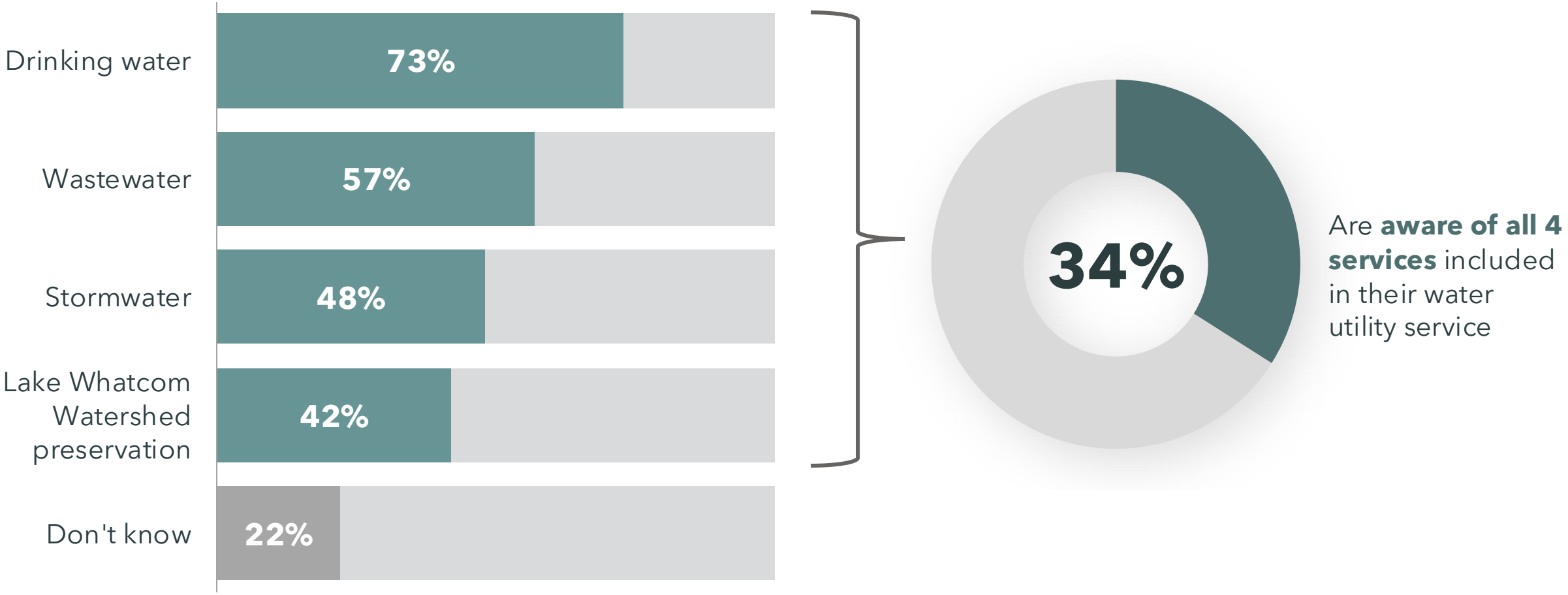


Job Rating for Services Provided by City of Bellingham

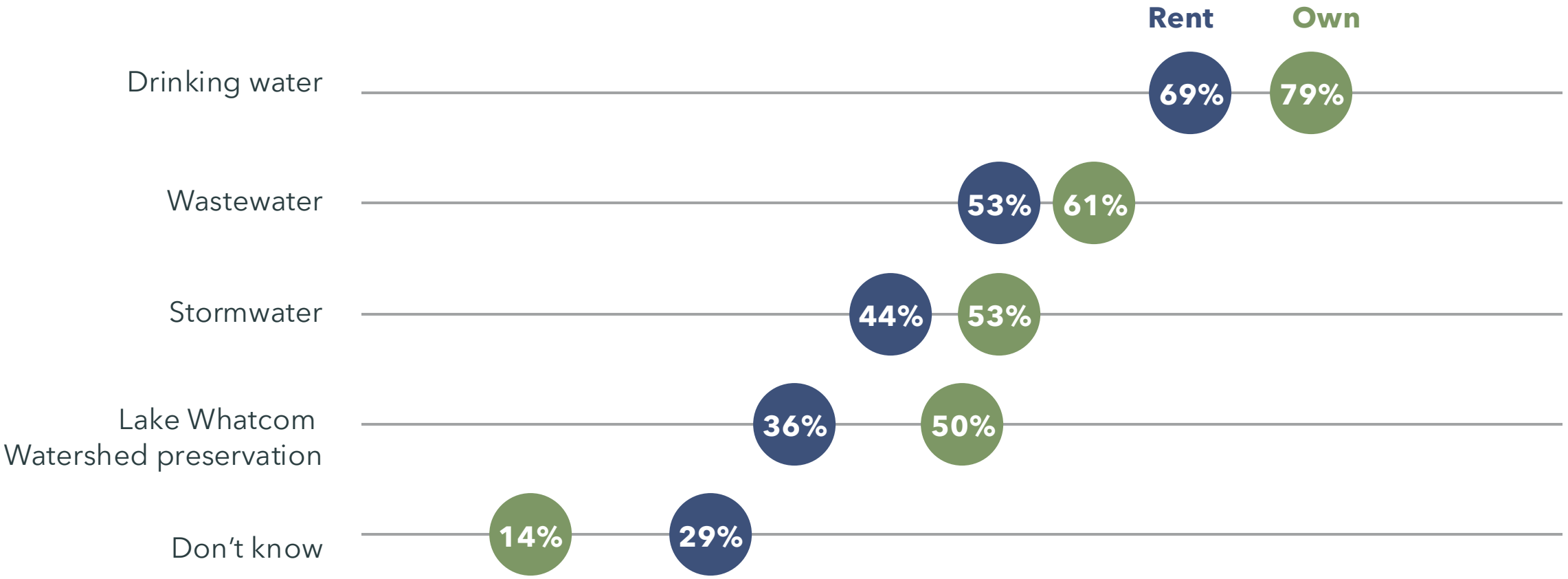


Utility Service: Awareness of Services

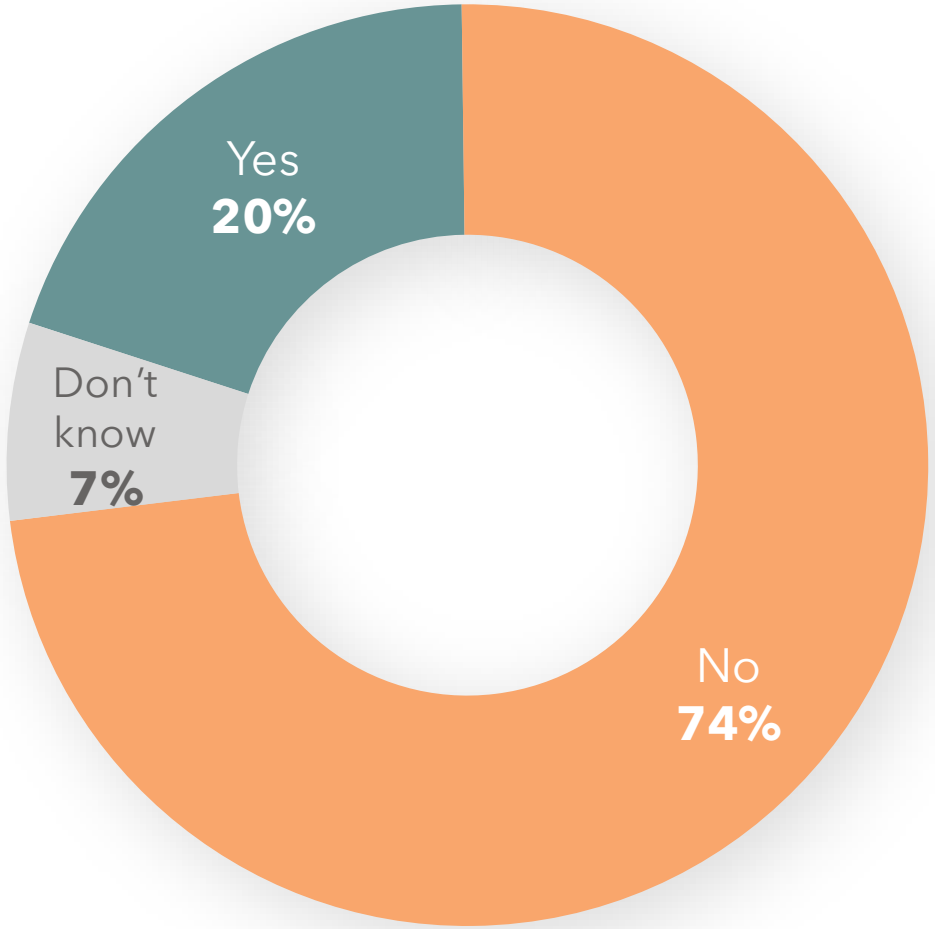
Perception of Services Included in Water Utility Service



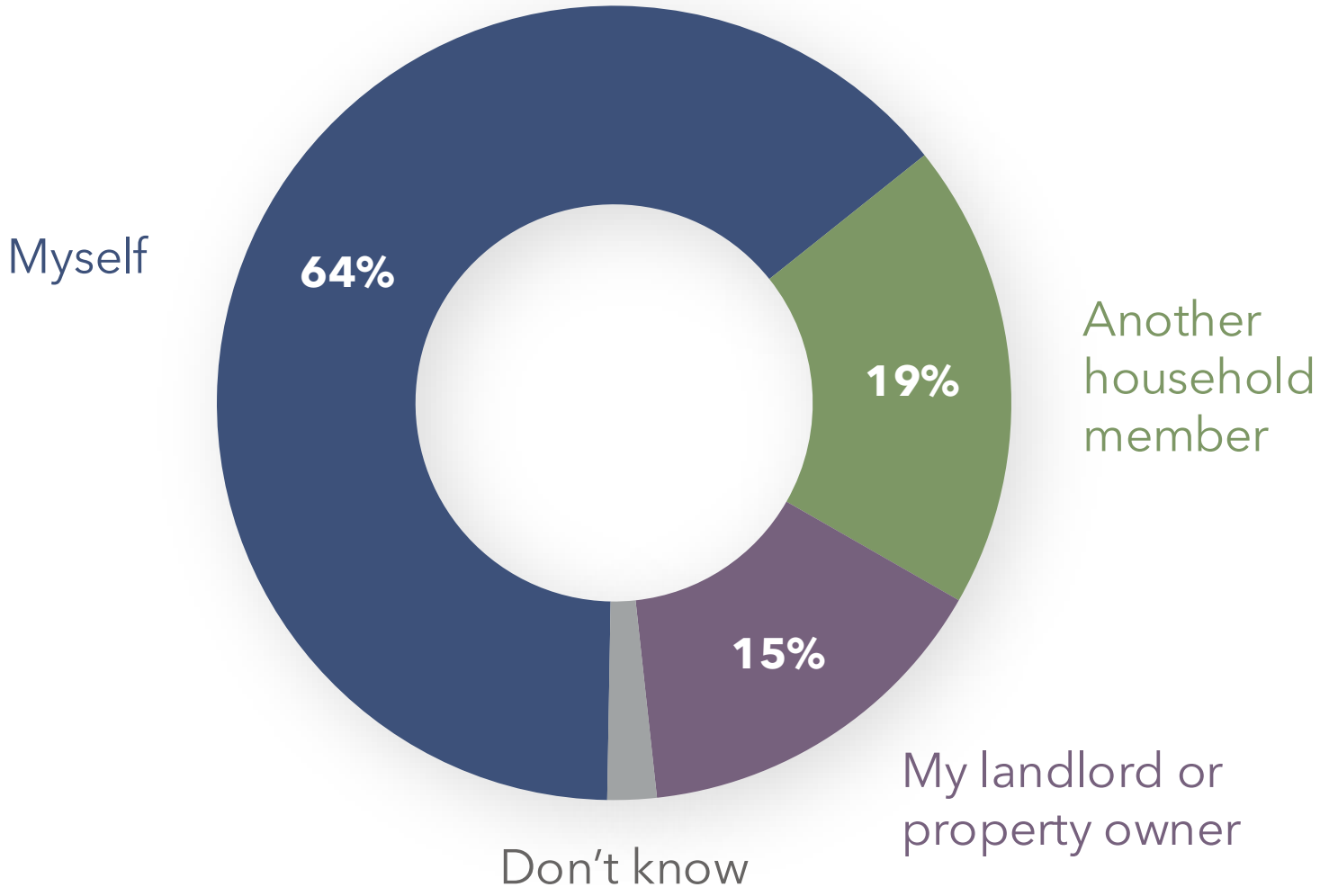
Perception of Services Included in Water Utility Service by Housing Status



Contacted City of Bellingham for Water Utility Service/Information in Past Few Years



Household Bill Payment Responsibility



DHM Research | City of Bellingham Utility Customer Research | Q36

Utility Service: Satisfaction

Satisfaction with Overall Water Utility Service

81% Are **very**/**somewhat satisfied** with their overall water utility service from the City of Bellingham

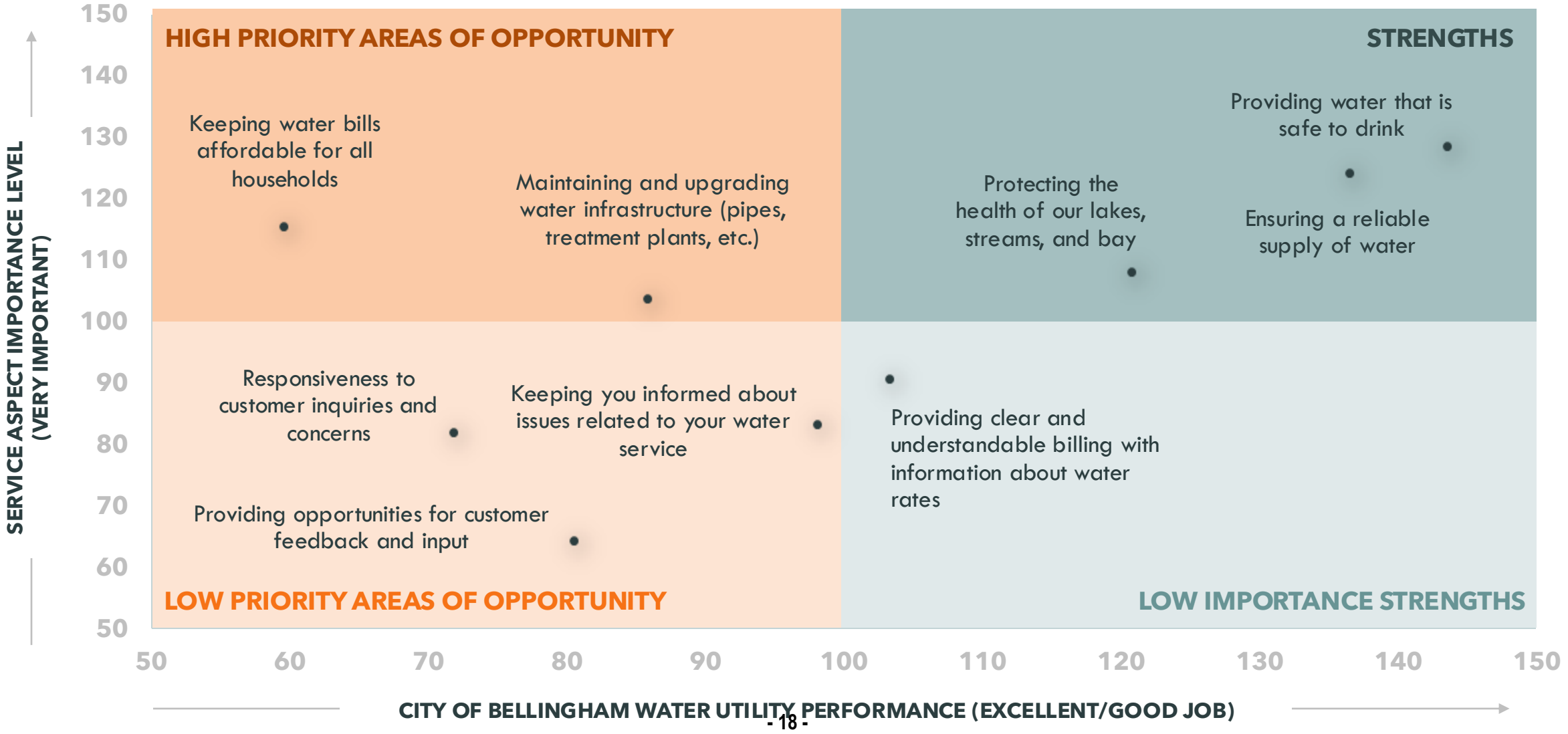
Very satisfied → **Very dissatisfied** **Don't know**

Satisfied because…
- *Works well, reliable, no outages*
- *Water is clean, safe to drink, high quality, tastes good*
- *Protection of Lake Whatcom, focus on sustainability*

Dissatisfied because…
- *Cost of billing*
  - *Feel high despite low use*
  - *Feel costs are rising*

Utility Service:
Aspects of Service: Importance and Performance

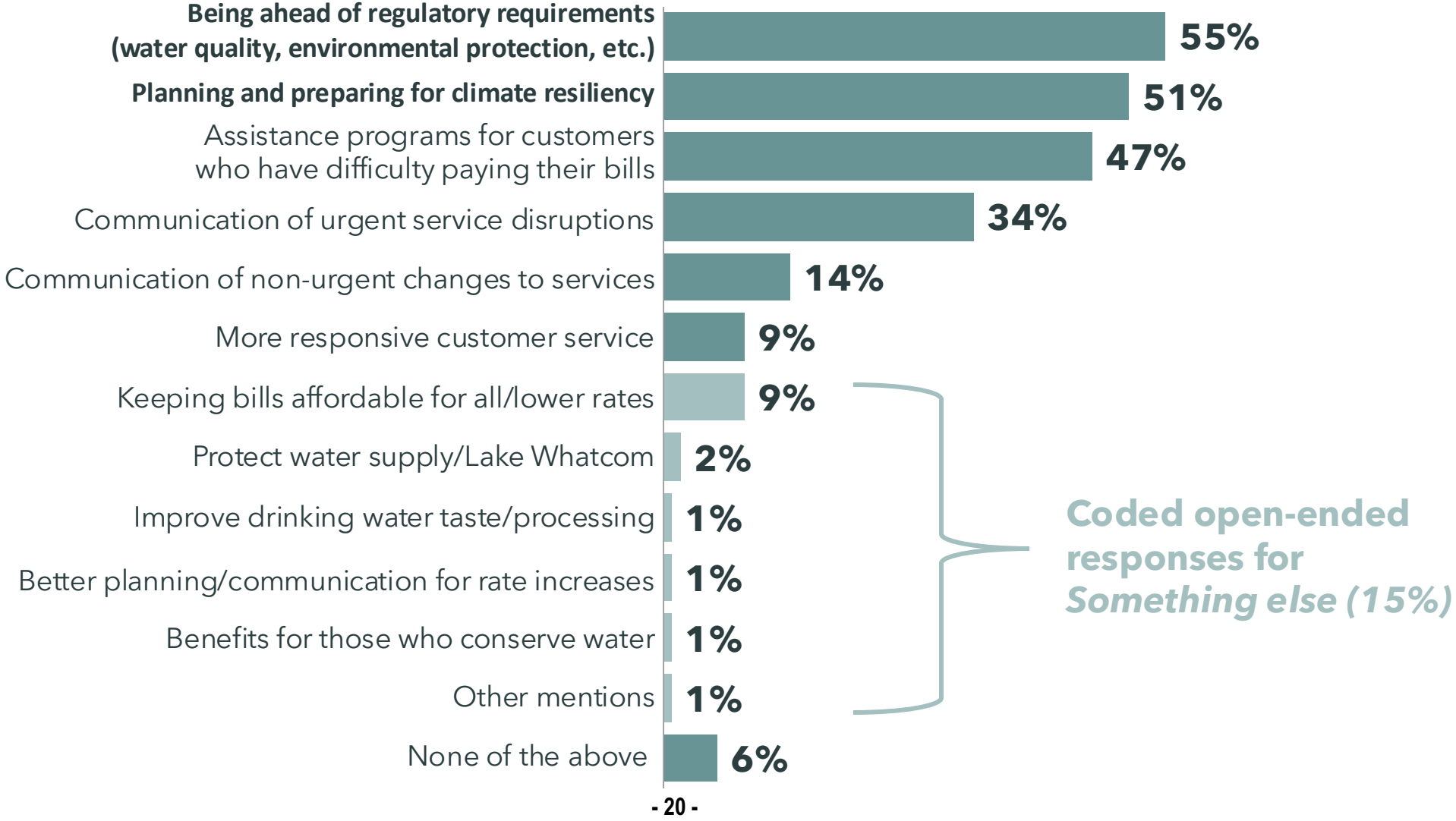
Bellingham Water Utility Aspects: Importance vs. Performance



DHM Research | City of Bellingham Utility Customer Research | Q17-Q36

Utility Service:
Future Service Priorities

Future Prioritization Preferences for City Water Utility



DHM Research | City of Bellingham Utility Customer Research | Q35

dhmresearch.com

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City of Bellingham Utility Services Research

Mixed Mode Survey

May 2025

Know More. Do Better.

Prepared by DHM Research
503.220.0575

555 SE MLK Jr Blvd, Suite 105
Portland, OR 97214
www.dhmresearch.com

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Introduction & Methodology 1

From April 29 – May 9, 2025, DHM Research conducted a mixed mode survey of residential utility customers in the City of Bellingham. The purpose of the survey was to gauge Bellingham customers' satisfaction, values, priorities, and preferences regarding their water utility service and create a benchmark to track these opinions over time. With the findings from this survey, we aim to inform the City's budget priorities, maintenance efforts, and communications strategies while helping it deliver reliable and high-quality drinking and wastewater services to its diverse customer base.

Research Methodology

The mixed mode survey included of N=400 Bellingham residential utility customers and took approximately 15 minutes to complete. This is a sufficient sample size to assess customer opinions generally and to review findings by multiple subgroups including age, gender, race/ethnicity, income, housing status, and area.

Respondents were contacted from landline, cellular, and email lists compiled from public records, consumer lists, and cell and cable consumer information matched to publicly available address information. Telephone (landline and cell) respondents were contacted by a live interviewer. Text-to-online and email respondents received a text or email invitation directing them to an online survey. The survey was translated into the top 5 languages spoken in Bellingham other than English and offered in all languages across all survey modes. In gathering responses, a variety of quality control measures were employed, including questionnaire pre-testing and validation. Quotas were set by gender, age, language, housing status, income, race/ethnicity, and education level to ensure a representative sample.

Statement of Limitations

Any sampling of opinions or attitudes is subject to a margin of error. The margin of error is a standard statistical calculation that represents differences between the sample and total population at a confidence interval, or probability, calculated to be 95%. This means that there is a 95% probability that the sample taken for the study would fall within the stated margin of error if compared with the results achieved from surveying the entire population. The margin of error for this survey is: ± 4.9%

DHM Research Background

DHM Research has been providing opinion research and consultation throughout the Pacific Northwest and other regions of the United States for over 40 years. The firm is nonpartisan and independent and specializes in research projects to support public policy making.

Summary & Observations 2

Community Mood:

- Most Bellingham residential utility customers are satisfied with the quality of life in Bellingham (84%). Nearly 1 in 4 rate their quality of life as excellent.
- Bellingham residential customers feel the City is doing a good job at providing water and sewer utility services (64% excellent/good job). Compared to other City services, water and sewer utility service performs in the middle of the pack, with performance ratings higher than transportation planning and maintenance, supporting local businesses and jobs and planning for future needs, but lower than parks and trails, recreation and cultural activities and services, protecting the environment, and public safety and emergency response.

Overall Utility Service:

- Most residential customers are aware that drinking water and wastewater are included in their water utility service (73% and 57%, respectively). They are slightly less aware of stormwater and Lake Whatcom Watershed preservation services in their water utility service (48% and 42%, respectively). About 1 in 3 residential customers are aware of all four services currently included in their water utility service and detailed on their utility bill (34%).
    - Homeowners and residential customers who have lived in Bellingham for more than 10 years are more aware of the services included on their water utility bill.
- Most residential customers are satisfied with their overall utility service (81%).
    - There are no major differences in satisfaction with water utility service by demographic groups, and satisfaction rates are similar to those of other public utilities across Washington and Oregon.
    - Residential customers are satisfied with their utility service because it works well and is reliable. Some mention that the water is clean, safe to drink, high quality, or tastes good, and a few mention protection of the Lake Whatcom Watershed and feeling the City focuses on sustainability. The 16% who are dissatisfied mostly have issues with cost of rates, though this in the context of current issues across the state regarding cost of living.

Aspects of Utility Service:

- Residential utility customers find all aspects of service asked about in this survey important overall for the rate they pay (88% - 98% important), though providing water that is safe to drink, ensuring a reliable supply of water, and keeping water bills affordable are the most important.
    - Importance ratings differ most by age, with those ages 30+ significantly more likely than those ages 18-29 to feel the top 5 most important aspects are *very important*.
- Comparing importance and performance, clear strengths include providing water that is safe to drink, ensuring a reliable supply of water, and protecting the health of lakes, streams, and the bay. Providing clear and understandable billing with information about water rates is also an area of high performance, though it is less important to residential customers.
- Key areas residential customers want to see improved are keeping water bills affordable for all households and maintaining and upgrading water infrastructure (pipes, treatment plants, etc.). Less important areas that customers feel could use improvement include responsiveness to

customer inquiries and concerns, keeping customers informed about issues related to their water service, and providing opportunities for customer feedback and input.

Preferences for Future Utility Priorities:

- Over half of residential customers want to see the City prioritize being ahead of regulatory requirements (including water quality, environmental protection, etc.) or planning and preparing for climate resiliency. This further reinforces the value Bellingham residential customers place on protecting the environment.
    - These priorities are even higher among women, residential customers ages 30-44 and 65+, and those in West Bellingham neighborhoods.
- Just under half want to see the City prioritize assistance programs for customers who have difficulty paying their bills. However, almost 1 in 10 residential customers expressed wanting to see bills kept affordable or lowered for *all* households, with some specifically calling out fairness for single-person households. This reinforces the feelings of financial pressure many currently face that may cause some residential customers who do not qualify for traditional financial assistance to feel left behind.
    - Those in West Bellingham are more likely than those in other neighborhoods, especially South Bellingham, to want to see assistance programs for those in need, as are renters compared to homeowners.
    - Men, residential customers ages 30-64, and those not in South Bellingham neighborhoods are more likely to want to see bills kept affordable for all households.

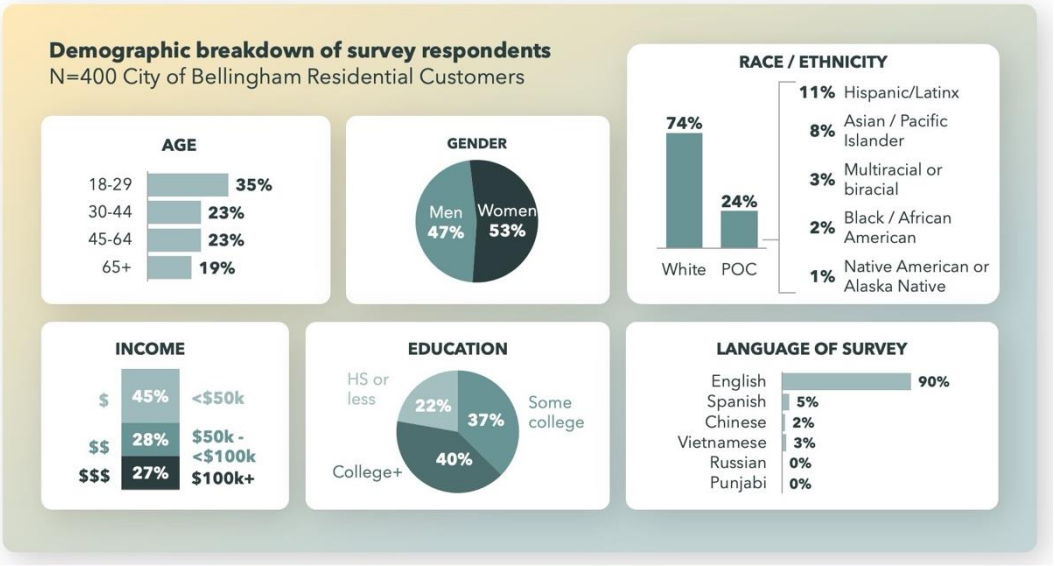
Communication Preferences:

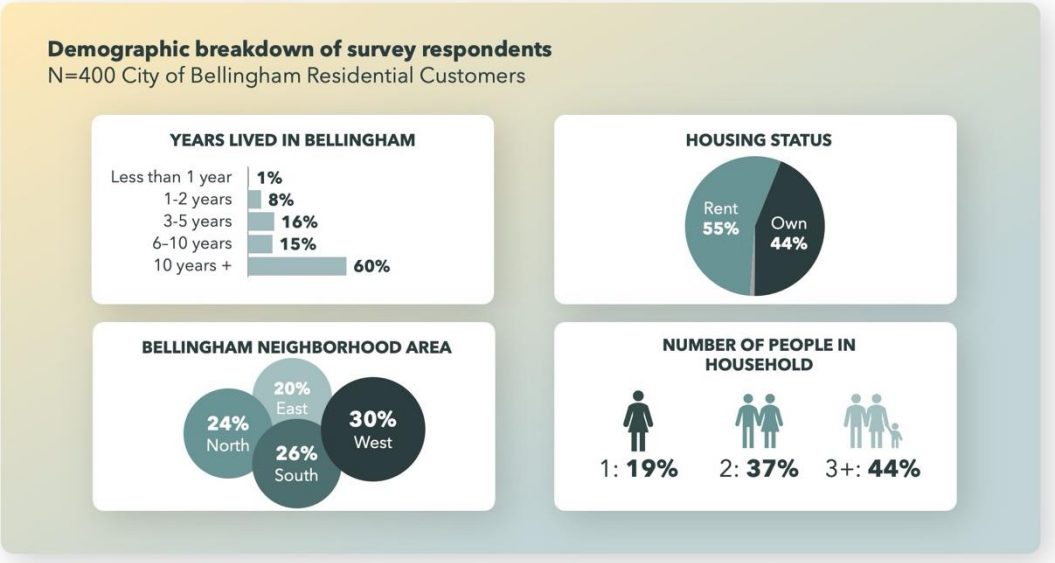
- Residential customers prefer email over all other communication methods for non-emergency updates (54%). Letters or bill inserts by mail or text messages are the next most frequently chosen communication preference (40% and 38%, respectively). Just over 1 in 5 prefer social media or the City website (23% and 22%, respectively), with the fewest residential customers choosing phone calls as their preferred method of communication (5%).
    - Just over 50% of those with a high school education or less, as well as those ages 65+, prefer letters or bill inserts.
    - Just over 50% of those ages 30-44 prefer text message
    - Residential customers ages 18-29 are more likely to prefer social media than any other age group, though they still prefer email most.

Survey Results 3

Summary of Demographics

The demographics below reflect respondents in this survey, who are representative of census demographics among residential utility customers in the City of Bellingham. Quotas and weighting were used to ensure age, gender, race/ethnicity, income, education level, language spoken, and housing status matched census. Years lived in Bellingham, neighborhood area, and number of people in the household reflect natural fallout among this group of representative residential customers.





Community Mood

Bellingham residential utility customers are satisfied with the quality of life in Bellingham, with most considering it excellent or good. Nearly 1 in 4 rate their quality of life as excellent.

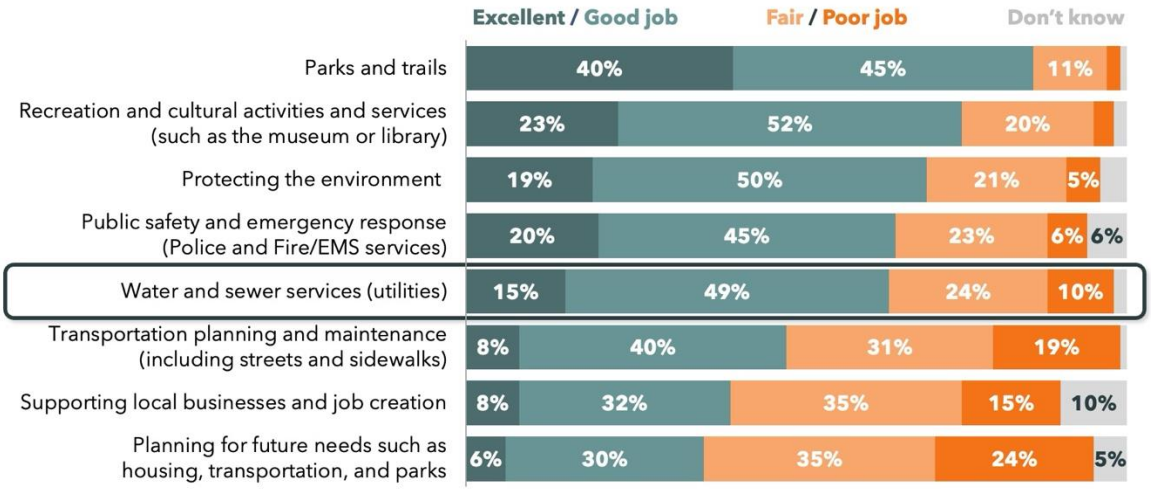
DHM Research | City of Bellingham Utility Customer Research | Q4

Customers in the following demographic groups are significantly more likely to rate their quality of life in Bellingham as excellent or good compared to their subgroup counterparts:

- Residential customers ages 18-29 *(91%)* and 65+ *(87%)* vs. ages 30-44 *(79%)* and 45-64 *(71%)*.
- Residential customers who are white alone *(87%)* vs. People of Color *(73%)*.
- Residential customers who have lived in Bellingham for 5 years or less *(90%)* vs. residential customers who have lived in Bellingham for more than 10 years *(79%)*. Residential customers who have lived in Bellingham for 6-10 years are not significantly different from the other groups *(86%)*.

Bellingham residential customers feel the City is doing the best job at providing parks and trails, recreation and cultural activities and services, protecting the environment, public safety and emergency response, and water and sewer services. Residential customers are split on how well they feel the City is doing when it comes to transportation planning and maintenance. They feel the City is doing a fair or poor job than a good job when it comes to supporting local businesses and jobs and planning for future needs. However, they are also the most unsure about the City's support for businesses and job creation.

Job Rating for Services Provided by City of Bellingham



DHM Research | City of Bellingham Utility Customer Research | Q5–Q12

The only significant demographic differences among residential customers who are more likely to rate the City as doing an excellent or good job at providing water and sewer services in Bellingham compared to their subgroup counterparts are those with a college degree or higher *(73%)* vs. those with some college education *(59%)* or a high school education or less* *(59%)*.

Directionally, but not significant, residential customers ages 65+* are more likely to rate the City as doing an excellent or good job at providing water and sewer services in Bellingham compared to all younger age groups *(70% vs. 57% - 67%)* as are those in South Bellingham compared to all other neighborhoods (*72% vs. 58% - 66%).*

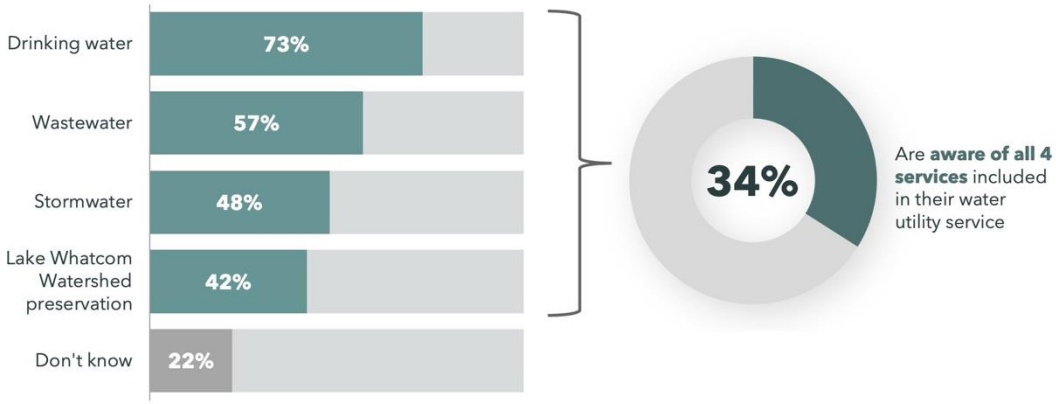
* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

Utility Service

Awareness of Services

Most residential customers are aware that drinking water is included in their water utility service. Over half are aware that wastewater services are included. Just under half are aware of the inclusion of stormwater services. Residential customers are least aware of the inclusion of Lake Whatcom Watershed preservation services in their water utility service, but overall, awareness of this service is not low. About 1 in 3 residential customers are aware of all four services currently included in their water utility service and detailed on their utility bill.

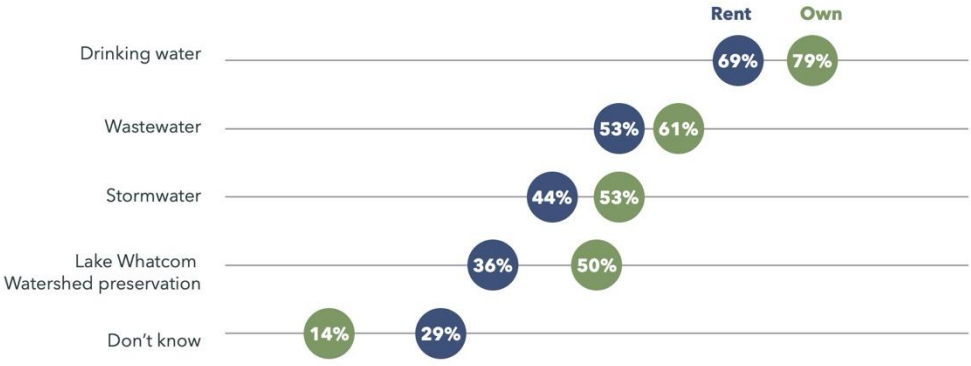
Perception of Services Included in Water Utility Service



DHM Research | City of Bellingham Utility Customer Research | Q13

Homeowners are more aware of all services than renters, especially of drinking water and Lake Whatcom Watershed preservation services.

Perception of Services Included in Water Utility Service by Housing Status



DHM Research | City of Bellingham Utility Customer Research | Q13

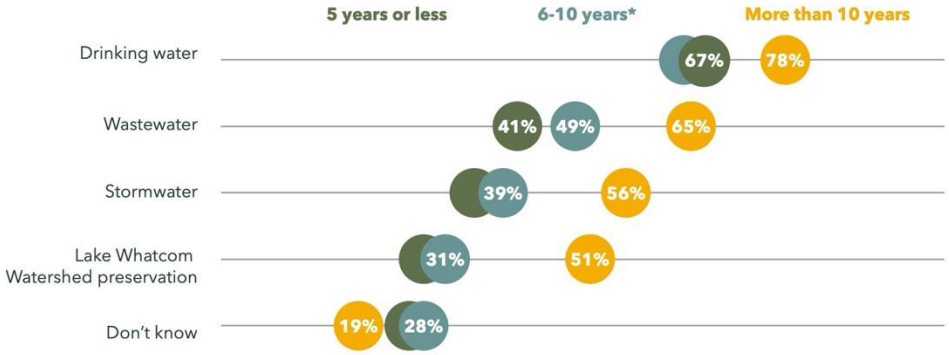
Customers in West and East* Bellingham are more likely to be aware of stormwater and wastewater services compared to those in North* and South Bellingham.

Perception of Services Included in Water Utility Service by Neighborhood

DHM Research | City of Bellingham Utility Customer Research | Q13

Residential customers who have lived in Bellingham for more than 10 years are significantly more likely to be aware of all services compared to those who have lived in Bellingham 6-10 years* or less.

Perception of Services Included in Water Utility Service by Years of Bellingham Residency



DHM Research | City of Bellingham Utility Customer Research | Q13

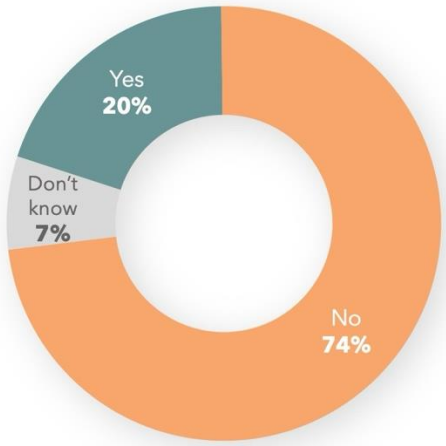
* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

Customers in the following demographic groups are also significantly more likely to be aware of the components of their water utility service compared to their subgroup counterparts:

- *Drinking water services:*
  - Residential customers ages 65+* vs. ages 18-29 and 45-64* *(86% vs. 65% and 71%, respectively)*. Those ages 30-44 are in the middle and do not reach statistical significance *(76%)*.
  - Residential customers with income levels of $100K+ vs. $50K-$100K *(81% vs. 66%)*.
  - Customers who are responsible for paying their utility bill themselves vs. those who are not responsible for paying *(79% vs. 62%)*.
- *Wastewater services:*
  - Residential customers ages 30+ vs. ages 18-29 *(63% - 72% vs. 39%)*.
  - Residential customers with income levels of $100K+ vs. $50K-$100K *(66% vs. 50%)*.
  - Customers who are responsible for paying their utility bill themselves vs. those who are not responsible for paying *(63% vs. 46%)*.
- *Stormwater services:*
  - Residential customers ages 30-44* and 65+* vs. ages 18-29 and 45-64* *(58% and 65% vs. 36% and 41%, respectively)*.
  - Residential customers with income levels of $100K+ and less than $50K vs. $50K-$100K *(57% and 50% vs. 35%, respectively)*.
  - Customers who are responsible for paying their utility bill themselves vs. those who are not responsible for paying *(55% vs. 35%)*.
- *Lake Whatcom Watershed preservation services:*
  - Residential customers ages 65+* vs. ages 18-64 *(63% vs. 32% - 41%)*.

Only 1 in 5 residential customers have contacted the City for service or information regarding their water utility service in the past few years.

Contacted City of Bellingham for Water Utility Service/Information in Past Few Years



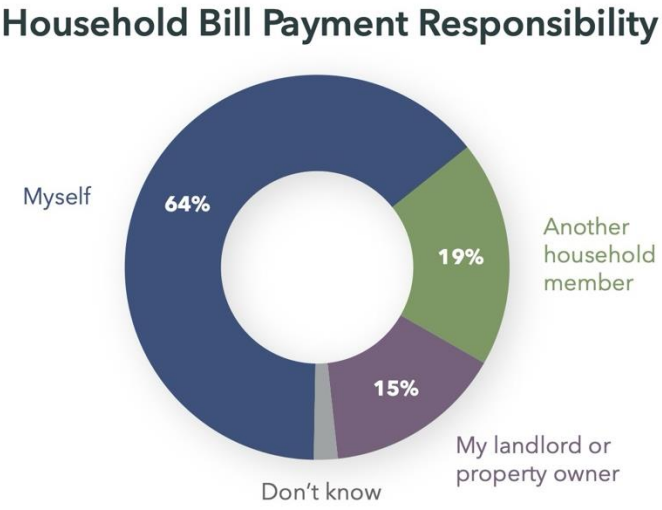
DHM Research | City of Bellingham Utility Customer Research | Q16

* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

Customers in the following demographic groups are significantly more likely to have contacted the City for information or service regarding their water utility service in the past few years compared to their subgroup counterparts:

- Residential customers ages 30+ vs. ages 18-29 *(21% - 31% vs. 10%)*.
- Homeowners vs. renters *(27% vs. 14%)*.
- Those who are dissatisfied with their overall water utility service* vs. those who are satisfied *(36% vs. 17%)*.
- Those who are personally responsible for paying their water utility bill vs. those who are not responsible for paying *(24% vs. 13%)*.

Nearly 2 in 3 residential customers are responsible for paying their water utility bill in their household, while the other 1 in 3 are split between another household member or their landlord or property owner having responsibility for paying the bill.



DHM Research | City of Bellingham Utility Customer Research | Q36

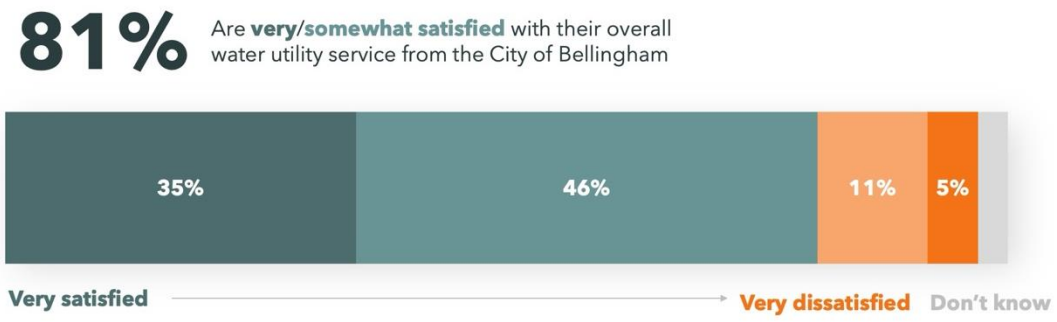
- Residential customers ages 45+ are significantly more likely to pay the bill themselves than those ages 18-29 *(69% - 73% vs. 54%, respectively)*. Residential customers ages 30-44 are in the middle, not reaching statistical significance *(66%)*.
- Homeowners are significantly more likely to pay the bill themselves than renters *(75% vs. 56%)*.
- Those with higher income levels of $100K+ are significantly more likely to pay the bill themselves than residential customers with middle income levels of $50K-$100K *(74% vs. 57%)*, with lower income residential customers of less than $50K in the middle and not reaching significance *(63%)*.
- Residential customers of North* and West Bellingham are significantly more likely to pay the bill themselves than residential customers of South Bellingham (69% - 71% vs. 52%). Residential customers of East Bellingham* are in the middle, not reaching statistical significance *(64%)*.
- Those who have lived in Bellingham for 6 years or longer are significantly more likely to pay the bill themselves than those who have lived in Bellingham for 5 years or less *(66% - 71% vs. 47%)*.

* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

Satisfaction

When thinking about their experience over the last year, most residential customers in Bellingham are satisfied with their overall water utility service, with just over 1 in 3 *very satisfied*.

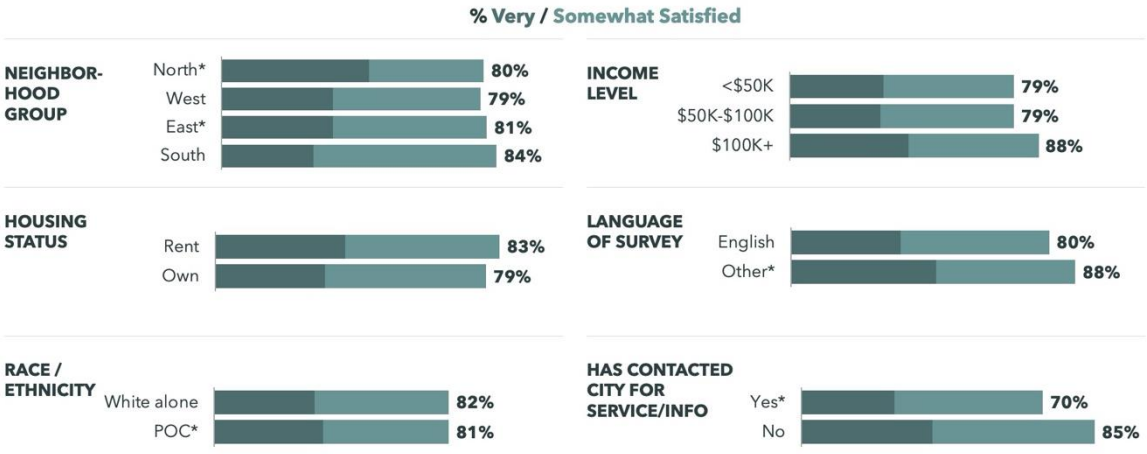
Satisfaction with Overall Water Utility Service



DHM Research | City of Bellingham Utility Customer Research | Q14

There are no significant differences in satisfaction with utility service in Bellingham among key demographic groups, meaning satisfaction is equally high across groups. Unsurprisingly, only those who have contacted the City for service or information in the past few years are significantly less likely to be satisfied than those who have not contacted the City.

Satisfaction with Overall Water Utility Service by Demographic Group



DHM Research | City of Bellingham Utility Customer Research | Q14

Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.

Satisfaction with water utility service from the City of Bellingham is on par with satisfaction rates received by other public utilities in Washington and Oregon in recent years, which average to 84% in Washinton *(though this includes electricity and water utility services from 2013 to 2023)* and 80% in Oregon (*only including water utility services from 2022 to 2023)*.

When asked about reasons for satisfaction, residential customers are most likely to mention that their service works well and is reliable. Some also mention that the water is clean, safe to drink, high quality, or tastes good. There are also a few mentions of the protection of the Lake Whatcom Watershed, and the feeling that the City focuses on sustainability. Those who are somewhat satisfied are more likely to also bring up issues or desires for improvement alongside reasons for satisfaction, especially regarding the cost of utility bills, as many people are dissatisfied with the cost of living across the state at this moment in time.

Among those who are satisfied (very/somewhat satisfied: *81% of total*)

Response category	n=324
Theme: More Satisfied	**62%**
Works well/Reliable/No issues or outages	**33%**
Clean water/Safe to drink	12%
High water quality	10%
Water tastes good/normal	8%
General positive	6%
Good customer service (responsive/helpful/courteous/etc.)	3%
Superior water/Better than elsewhere	2%
Affordable/Price is low/reasonable	2%
Protection of watershed/Lake Whatcom	2%
Eco-friendly/Focus on sustainability	2%
Theme: Less Satisfied	**39%**
Sub-theme: Billing issues	**25%**
Expensive/overpriced (general)	**16%**
Increasing cost/Bills keep going up	4%
High bills despite low usage	3%
Other billing issues	1% or less (each)
Water safety concerns/Poor protection of watershed/Lake Whatcom	7%
Issues with flooding/drainage/stormwater flows	2%
Taste issues	2%
Adequate but room for improvement	3%
Unfamiliar/I don't deal with water service/pay bill	2%
All other responses	1% or less (each)
Don't know/Not sure	2%
Nothing/N/A	1%

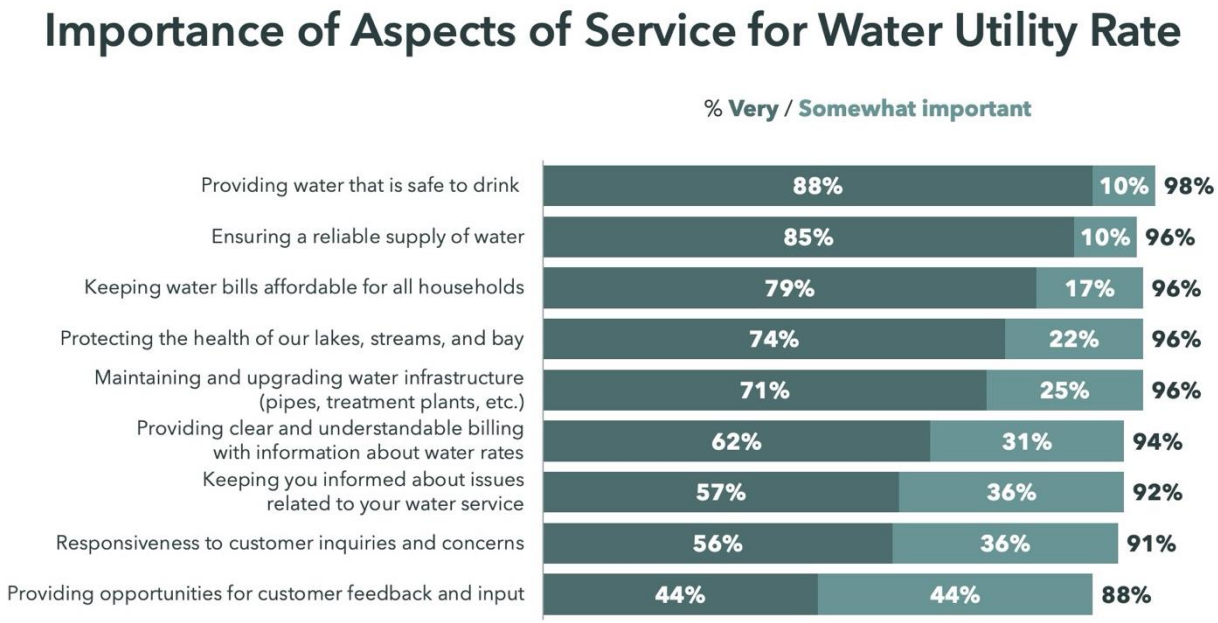
When asked about reasons for dissatisfaction, the top mentions are related to billing rates due to the current cost of living strains. Some mention water safety, quality, or taste issues, but this is only among a small portion of an already small group of customers who report dissatisfaction.

Among who are dissatisfied (very/somewhat dissatisfied: *16% of total)*

Response category	n=63
Theme: Less Satisfied	**84%**
Sub-theme: Billing issues	**61%**
Expensive/overpriced (general)	**27%**
High bills despite low usage	**15%**
Increasing cost/Bills keep going up	**13%**
High stormwater fees even if not using service	8%
Unwarranted price increases/Bills go up without improved service	3%
Issues with billing system/website	2%
Too aggressive with billing/water shut-off/Won't work with you	2%
Water safety concerns/Poor protection of watershed/Lake Whatcom	10%
Taste issues	7%
Poor customer service (unfriendly/unresponsive/etc.)	6%
Issues with flooding/drainage/stormwater flows	5%
Too much chlorine/added chemicals	5%
Water taste	4%
Issues with wastewater/sewage management	3%
Watershed protection is too stringent / infringes on development rights	2%
Other water quality issues	1% or less (each)
Adequate but room for improvement	4%
Theme: More Satisfied	**3%**
Affordable/Price is low/reasonable	2%
High water quality	2%
Other mentions	7%
Nothing/N/A	4%

Aspects of Service: Importance and Performance

Bellingham residential utility customers find all aspects of service asked about in this survey important overall for the rate they pay, though providing water that is safe to drink, ensuring a reliable supply of water, and keeping water bills affordable are the most important.



DHM Research | City of Bellingham Utility Customer Research | Q17-Q25

Residential customers' opinions on the importance of aspects of service differ by some key groups:

- Those ages 30+ are significantly more likely than those ages 18-29 to feel the top 5 most important aspects are *very important*.
- Residential customers with the lowest and highest income levels are also significantly more likely to find providing water that is safe to drink *very important* compared to those with middle-income levels.
- West and East* Bellingham residential customers are significantly more likely to find providing water that is safe to drink and ensuring a reliable supply of water *very important* compared to North* and South Bellingham residential customers.
- There are no significant differences in *very important* aspects of service by race/ethnicity, language of survey, or housing status.

Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.

Importance of Aspects of Water Utility Service by Demographic Groups *(% Very important)*

Response category	AGE				INCOME			NEIGHBORHOOD			
	18-29	30-44*	45-64*	65+*	<$50K	$50K-$100K	$100K+	North*	West	East*	South
Providing water that is safe to drink	69%	99%	97%	99%	92%	80%	90%	82%	96%	96%	79%
Ensuring a reliable supply of water	68%	94%	95%	95%	87%	79%	88%	81%	93%	91%	76%
Keeping water bills affordable for all households	67%	85%	86%	87%	82%	72%	80%	75%	85%	86%	71%
Protecting the health of our lakes, streams, and bay	60%	79%	83%	82%	78%	73%	69%	70%	79%	78%	68%
Maintaining and upgrading water infrastructure (pipes, treatment plants, etc.)	57%	80%	79%	78%	75%	63%	72%	67%	75%	75%	68%
Providing clear and understandable billing with information about water rates	53%	71%	66%	64%	64%	57%	64%	57%	70%	63%	58%
Keeping you informed about issues related to your water service	46%	63%	60%	65%	56%	55%	57%	60%	56%	62%	50%
Responsiveness to customer inquiries and concerns	47%	54%	60%	69%	60%	46%	57%	57%	54%	59%	54%
Providing opportunities for customer feedback and input	41%	41%	45%	52%	49%	35%	44%	51%	43%	38%	43%

Note: The darkest highlighted boxes represent statistical significance between all groups, while boxes with a dark outline and slightly darker colored highlighting represent statistical significance only between the groups highlighted.

Residential customers who have contacted the City for service or information regarding their water utility service in the past few years* are significantly more likely to rate the following aspects of service as *very important* compared to those who have not contacted the City recently:

- Keeping water bills affordable for all households *(87% vs. 76%)*. This is also true among those who are personally responsible for paying their bill vs. those who are not responsible *(82% vs 73%)*.
- Maintaining and upgrading water infrastructure (pipes, treatment plants, etc.) *(82% vs. 67%)*.
- Responsiveness to customer inquiries and concerns *(73% vs. 49%)*.
- Keeping you informed about issues related to your water service *(69% vs. 53%)*.
- Providing opportunities for customer feedback and input *(54% vs. 41%)*.

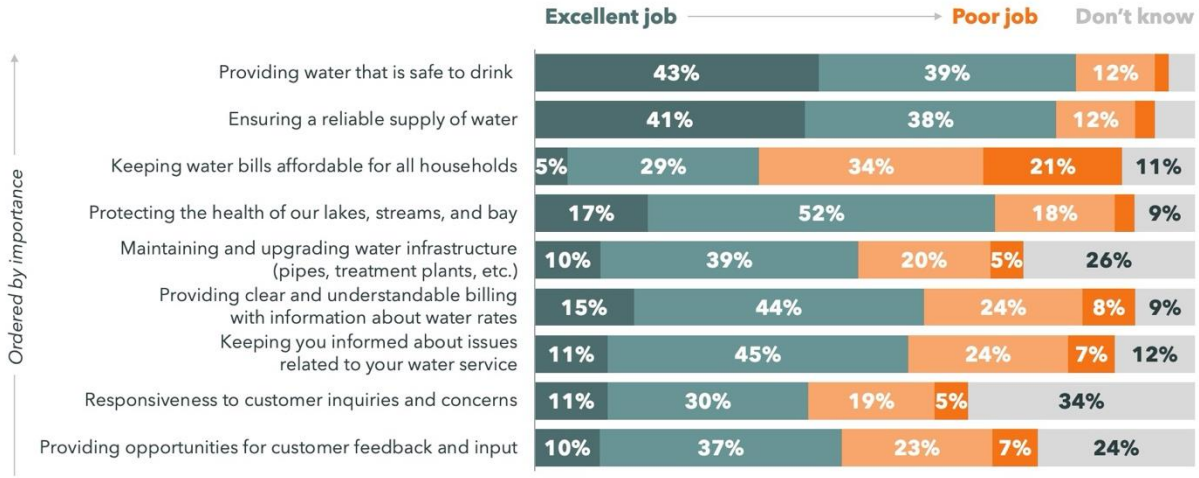
Residential customers who are satisfied with their overall water utility service are significantly more likely to rate protecting the health of our lakes, streams, and bay *very important* compared to those who are dissatisfied* *(77% vs. 59%)*. Meanwhile, those who are dissatisfied* are significantly more likely

Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.

to rate providing opportunities for customer feedback and input as *very important (56% vs. 42% among those satisfied).*

When asked how well residential customers feel Bellingham is performing at providing the same aspects of their water utility service, they rate providing water that is safe to drink, ensuring a reliable supply of water, and protecting the health of our lakes, streams, and bay as the City's top performing items. Though ranked as one of the most important aspects of service, residential customers consider keeping water bills affordable for all households as the lowest performing aspect of service, which is consistent with responses when asked about satisfaction, open-ended, earlier in the survey. Maintaining and upgrading water infrastructure (pipes, treatment plants, etc.) is another aspect of service where performance does not match up with the level of importance, which is more so due to a higher rate of uncertainty than a poor job rating.

City's Job Rating for Aspects Water Utility Service



DHM Research | City of Bellingham Utility Customer Research | Q26-Q34

The most significant demographic differences in perceptions of City performance across aspects of service are higher performance ratings across a variety of metrics by ages 18-29 and ages 65+, to a lesser degree, especially for maintaining and upgrading water infrastructure (pipes, treatment plants, etc.). Those ages 44 and under are significantly more satisfied with the job the City does at providing opportunities for customer feedback and input. Additionally, residential customers in South Bellingham are significantly more satisfied with the job the City does at maintaining and upgrading water infrastructure (pipes, treatment plants, etc.) compared to all other neighborhoods. Differences in performance ratings are not as strong or clear between income levels as they are for importance ratings for aspects of service.

Performance of Aspects of Water Utility Service by Demographic Groups *(Excellent/Good)*

Response category	AGE				INCOME			NEIGHBORHOOD			
	18-29	30-44*	45-64*	65+*	<$50K	$50K-$100K	$100K+	North*	West	East*	South
Providing water that is safe to drink	81%	86%	78%	83%	83%	82%	82%	84%	86%	77%	80%
Ensuring a reliable supply of water	72%	86%	77%	83%	75%	76%	87%	78%	80%	82%	74%
Keeping water bills affordable for all households	42%	28%	29%	35%	29%	41%	36%	34%	28%	30%	46%
Protecting the health of our lakes, streams, and bay	69%	73%	61%	75%	66%	68%	76%	69%	69%	70%	69%
Maintaining and upgrading water infrastructure (pipes, treatment plants, etc.)	59%	43%	35%	54%	46%	55%	50%	42%	46%	43%	65%
Providing clear and understandable billing with information about water rates	61%	59%	54%	58%	52%	60%	68%	61%	56%	58%	60%
Keeping you informed about issues related to your water service	63%	54%	46%	59%	51%	58%	64%	56%	54%	51%	64%
Responsiveness to customer inquiries and concerns	51%	39%	34%	37%	35%	49%	45%	44%	33%	40%	51%
Providing opportunities for customer feedback and input	55%	49%	33%	41%	45%	48%	47%	47%	39%	43%	56%

Note: The darkest highlighted boxes represent statistical significance between all groups, while boxes with a dark outline and slightly darker colored highlighting represent statistical significance only between the groups highlighted.

Other important differences not included in this table:

- Residential customers of Color* in Bellingham are significantly more likely to rate providing opportunities for customer feedback and input as fair or poor compared to those who are white alone *(38% vs. 26%)*.
- Residential customers who took the survey in a language other than English* are significantly more likely to rate protecting the health of our lakes, streams, and bay as excellent or good compared to those who took the survey in English *(87% vs. 67%)*.
- Those satisfied with their utility service are significantly more likely to rate performance across all aspects of service as excellent or good, while those dissatisfied are significantly more likely to rate performance on all aspects as fair or poor.

* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

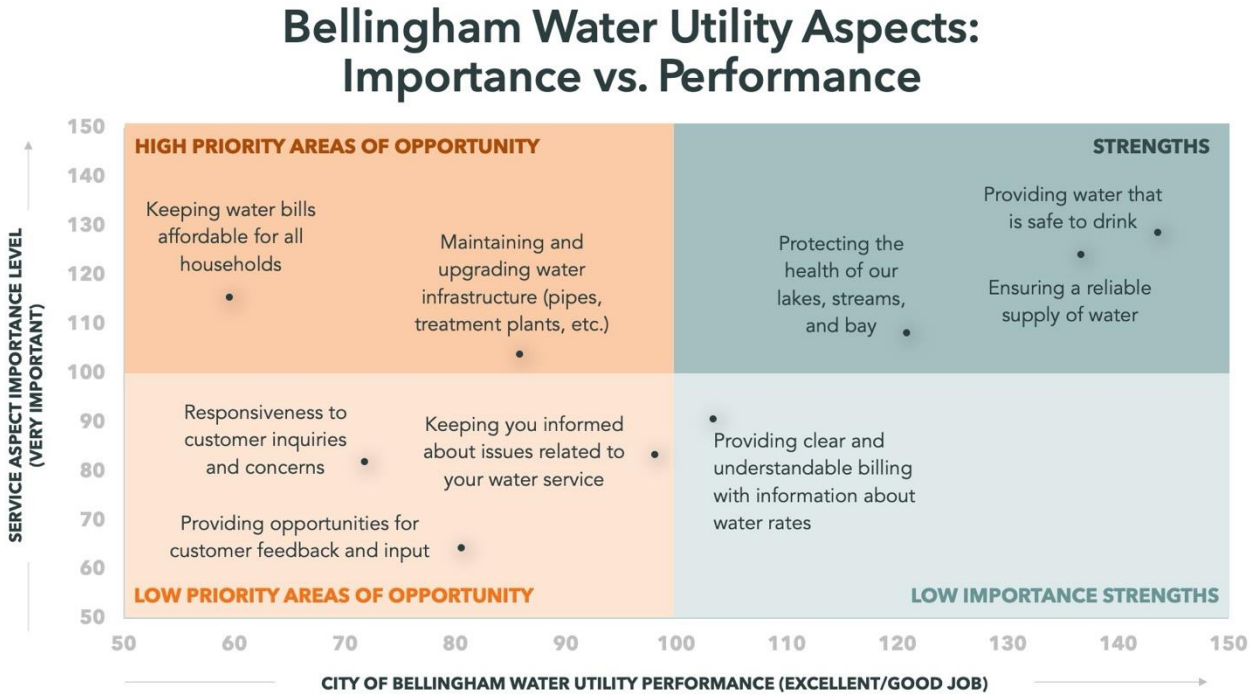
By asking residential customers to rate importance and performance across the same list of attributes, we can create an importance vs. performance chart using index scores. This analysis allows us to uncover areas of strength that the City can emphasize to maintain satisfaction, and areas to improve.

Score calculation comes from % Very important and % Excellent/Good job indexed against average priority and performance for each aspect of service. A score of 100 represents the average. Items with a score higher than 100 are considered above average, with items under 100 are considered below average.

Example of how to read importance vs. performance chart below:
Keeping water bills affordable for all households has a performance score of 60, meaning performance is below average, and an importance score of 115, meaning importance is above average. Plotting these together places it in the quadrant for areas of improvement.

The chart below shows that the City of Bellingham excels at providing water that is safe to drink, ensuring a reliable supply of water, and protecting the health of lakes, streams, and the bay, matching residential customers' level of importance placed on these aspects of service with high performance. Providing clear and understandable billing with information about water rates is also an area of high performance, though it is less important to residential customers.

Key areas residential customers want to see improved are keeping water bills affordable for all households and maintaining and upgrading water infrastructure (pipes, treatment plants, etc.). Less important areas that customers feel could use improvement include responsiveness to customer inquiries and concerns, keeping them informed about issues related to their water service, and providing opportunities for customer feedback and input.

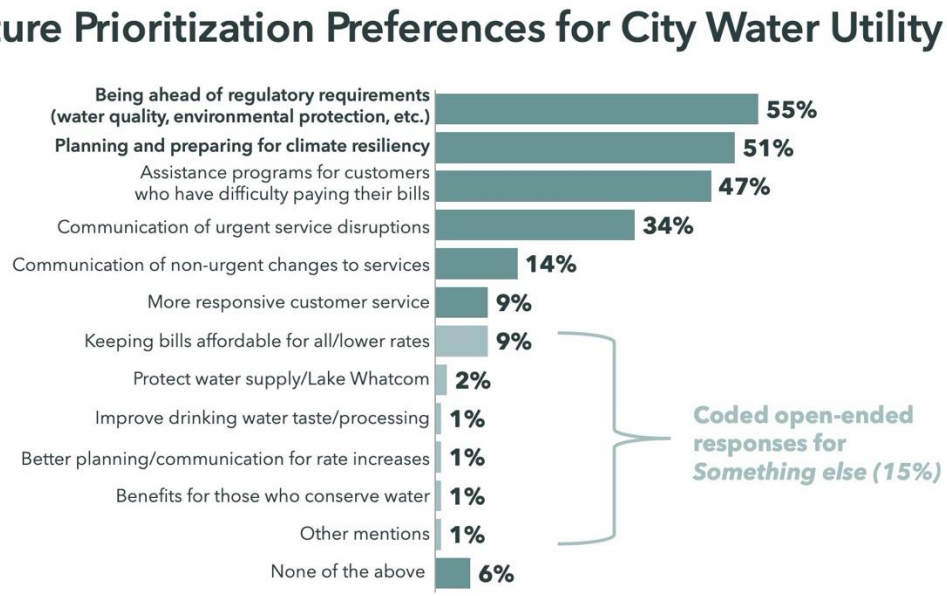


DHM Research | City of Bellingham Utility Customer Research | Q17-Q36

There is a clear tension between residential customers' desire for improvements in keeping water bills affordable for all households, but a lack of importance placed on providing clear and understandable billing with information about water rates. This tension may be due to customers wanting to feel the impact of lower rates due to many people's felt experience of current financial struggles, but not feeling the need to see the details of how it happens.

Future Service Priorities

Residential customers were asked to select up to three options that the City should prioritize in the future regarding water utilities. Over half chose being ahead of regulatory requirements (including water quality, environmental protection, etc.) or planning and preparing for climate resiliency, emphasizing the value of protecting the environment among Bellingham residential customers. These priorities are particularly strong among women, residential customers ages 30-44 and 65+, and those in West Bellingham (*data in the table on the following page*).



DHM Research | City of Bellingham Utility Customer Research | Q35

Just under half chose assistance programs for customers who have difficulty paying their bills. Among those who opted to specify their preference with an option that was not listed, almost 1 in 10 residential customers expressed wanting to see bills kept affordable or lowered for *all* households, with some specifically calling out fairness for single-person households (especially men, ages 30-64, and those not in South Bellingham). So, while nearly half of residential customers want to see assistance programs for those who need them, there continues to be feelings of financial pressure that may cause some residential customers who do not qualify for traditional financial assistance to feel left behind. Those in West Bellingham are more likely than those in other neighborhoods, especially South Bellingham, to want to see assistance programs for those in need. Men and younger residential customers ages 18-29 are also significantly more likely to express a desire for communication of non-urgent changes to services.

Top Future Prioritization Preferences by Demographic Groups *(Select up to 3 options)*

Response category	GENDER		AGE				NEIGHBORHOOD			
	Men	Women	18-29	30-44*	45-64*	65+*	North*	West	East*	South
Being ahead of regulatory requirements (water quality, environmental protection, etc.)	52%	58%	47%	67%	52%	61%	52%	64%	56%	48%
Planning and preparing for climate resiliency	40%	60%	48%	51%	47%	60%	43%	61%	47%	49%
Assistance programs for customers who have difficulty paying their bills	43%	51%	42%	43%	54%	52%	47%	56%	43%	40%
Communication of urgent service disruptions	36%	33%	34%	35%	37%	30%	31%	30%	34%	42%
Communication of non-urgent changes to services	19%	9%	23%	9%	7%	11%	13%	11%	19%	14%
More responsive customer service	12%	7%	4%	7%	10%	19%	5%	10%	13%	9%
Keeping bills affordable for all/lower rates	13%	6%	4%	16%	14%	6%	13%	12%	12%	1%

Note: The darkest highlighted boxes represent statistical significance between all groups, while boxes with a dark outline and slightly darker colored highlighting represent statistical significance only between the groups highlighted.

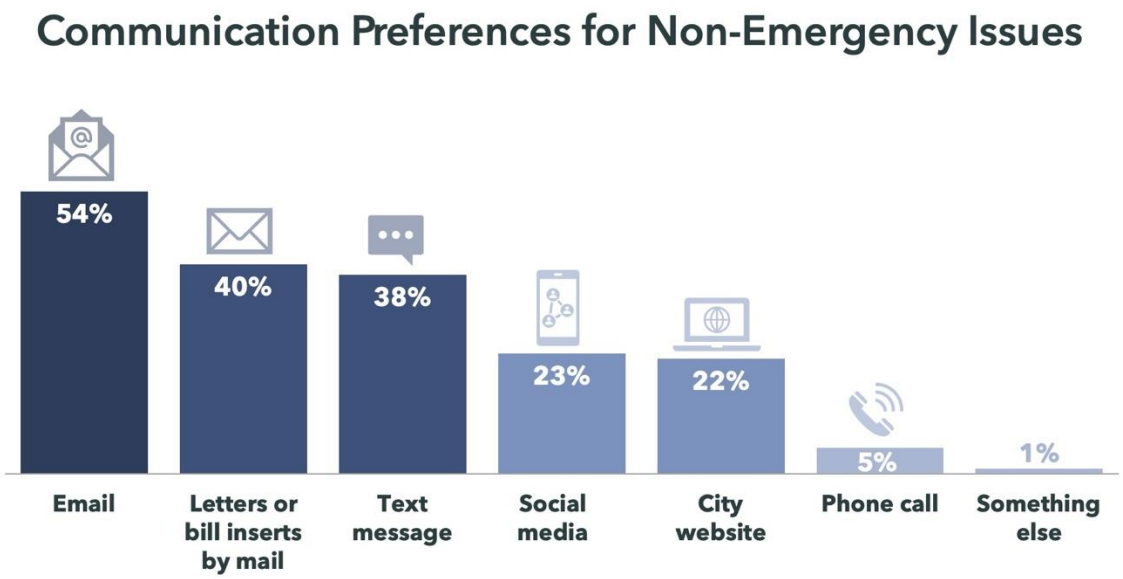
Other important differences not included in this table:

- Renters are significantly more likely to want to see assistance programs for customers who have difficulty paying their bills prioritized than homeowners *(53% vs. 39%)*.
- Residential customers with middle income levels of $50K-$100K are significantly more likely to want to see communication of non-urgent changes to services prioritized than other income levels *(20% vs. 10% - 13%)*.
- Residential customers who have contacted the City for service or information in the past few years* are significantly more likely to want to see more responsive customer service prioritized than those who have not contacted the City recently *(23% vs. 6%)*.
- Residential customers who are satisfied with their utility service are significantly more likely than those who are dissatisfied to want to see the top 3 items prioritized *(58%, 54%, 49% vs. 43%, 30%, 35% respectively)*, while those who are dissatisfied* are significantly more likely to prefer to see more responsive customer service *(20% vs. 7%)* and mention keeping bills affordable for all households or lowering rates in the open-end response *(28% vs. 6%)*.
- Residential customers who are personally responsible for paying their utility bill are significantly more likely to mention keeping bills affordable for all households or lowering rates in the open-end response than those who do not pay their utility bill themselves *(14% vs. 2%)*.

* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

Communication Preferences

When asked how residential customers prefer the City to communicate with them about non-emergency, yet important issues, such as payment options or water conservation tips, most prefer email, followed by letters or bill inserts, and text messages. Just over 1 in 5 prefer social media or the City website, with the fewest residential customers choosing phone calls as their preferred method of communication.



DHM Research | City of Bellingham Utility Customer Research | Q37

Customers in the following demographic groups are significantly more likely to prefer the following communication methods compared to their subgroup counterparts:

- *Email:*
  - Homeowners vs. renters *(60% vs. 48%)*.
  - Residential customers in West, East*, and South vs. North* Bellingham *(57% - 60% vs. 40%)*.
- *Letters or bill inserts by mail:*
  - Men vs. women *(46% vs. 34%)*.
  - Ages 30+ vs. ages 18-29 *(44% - 51% vs. 25%)*.
  - Residential customers with income levels of <$50K vs. $50K - $100K *(47% vs. 34%)*. Those with income levels of $100K+ are directionally less likely to choose this option, but do not reach statistical significance *(35%)*.
  - Residential customers in West and East* Bellingham vs. North* (46% - 48% vs. 31%). Those in South Bellingham are directionally less likely to choose this option, but do not reach statistical significance *(34%)*.

* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

- Residential customers with a high school education or less vs. those with some college education or higher *(55% vs. 31% - 40%)*.
- Residential customers who have lived in Bellingham for more than 10 years vs. 5 years or less (49% vs. 21%). Those who have lived in Bellingham for 6-10 years* are directionally less likely to choose this option, but do not reach statistical significance *(35%)*.

- *Text message:*
  - Residential customers ages 30-44 vs. all other ages *(53% vs. 29% - 36%)*.
- *Social media:*
  - Residential customers ages 18-29 vs. all other ages *(39% vs. 10% - 20%)*.
  - Residential customers with income levels of $100K+ vs. <$50K (29% vs. 17%). Those with income levels of $50K-$100K are directionally more likely to choose this option, but do not reach statistical significance *(27%)*.
  - North and South Bellingham residential customers vs. West and East Bellingham *(34% and 27% vs. 19% and 11%, respectively)*.
- *City website:*
  - Women vs. men *(26% vs. 17%)*.
  - Ages 18-44 vs. 45+ *(25% - 33% vs. 13%)*.
  - Residential customers with a high school education or less vs. those with some college *(31% vs. 16%)*. Those with a college degree or higher are directionally less likely to choose this option, but do not reach statistical significance *(22%)*.
  - Residential customers who have lived in Bellingham for 5 years or less vs. 6 years or more *(34% vs. 17% - 19%)*.
  - Residential customers who are not personally responsible for paying their water utility bill vs. those who are personally responsible for paying their bill *(28% vs. 18%)*.
- *Phone call:*
  - Those who are dissatisfied* with their water utility service vs. those who are satisfied *(12% vs. 4%)*.

Considering that men and younger residential customers age 18-29 are more likely to express a desire for communication of non-urgent changes to services as a future prioritization for the City, communicating future changes via these residential customers' more preferred communication methods of letter or bill inserts and social media in addition to email could create higher satisfaction and positive associations.

* *Note: Demographics marked with an asterisk mean base size is <100. Use caution when interpreting results.*

Appendix (Toplines) 4

INTRODUCTION

The City of Bellingham is committed to meeting the needs of its community members and wants to learn more about what you think about the water utility services you are receiving. Please take a few moments to share your opinions.

The City of Bellingham has hired DHM Research to conduct this survey to ensure complete confidentiality. The survey should take about 10 to 15 minutes. We thank you in advance for your participation.

SCREENER QUESTIONS

1. First, in what language would you prefer to take the survey?
   En primer lugar, ¿en qué idioma preferiría responder la encuesta?
   首先，您喜歡以哪種語言進行本次意見調查？
   Trước tiên, quý vị muốn thực hiện khảo sát bằng ngôn ngữ nào hơn?
   Во-первых, на каком языке вы хотели бы отвечать на вопросы анкеты?
   ਸਭ ਤੋਂ ਪਹਿਲਾਂ ਦੱਸੋ ਕਿ ਤੁਸੀਂ ਇਸ ਸਰਵੇਖਣ ਨੂੰ ਕਿਸ ਭਾਸ਼ਾ ਵਿੱਚ ਪੂਰਾ ਕਰਨਾ ਚਾਹੁੰਦੇ ਹੋ?

Response category	n=400
English	90%
Spanish / Español	5%
Traditional Chinese [**PHONE**: specify Mandarin or Cantonese] /中文 [**PHONE**: 請說明是普通話或是廣東話]	2%
Vietnamese / Tiếng Việt	3%
Russian / Русский	n=0
Punjabi / ਪੰਜਾਬੀ	n=2

2. In what month and year were you born?

Response category	n=400
18–29	35%
30–44	23%
45–64	23%
65+	19%
I prefer not to say	--

3. What is the 5-digit zip code of the area where you reside? **[Open numeric; Only 98225, 98226, and 98229 were accepted, with all other zip codes resulting in respondent termination]**

COMMUNITY MOOD

Now we have some questions about the City of Bellingham.

4. How would you rate the quality of life in Bellingham?

Response category	n=400
Total Excellent/Good	**83%**
Excellent	23%
Good	60%
Total Fair/Poor	**17%**
Fair	14%
Poor	3%
Don't know	0% (n=1)

Here is a list of some of the services provided by the City of Bellingham. For each one, please tell me how you feel the City is doing in providing that service.

Response category n=400	Total Excellent/ Good job	Excellent job	Good job	Total Fair/ Poor job	Fair job	Poor job	Don't know
5. Public safety and emergency response (Police and Fire/EMS services)	**64%**	20%	45%	**29%**	23%	6%	6%
6. Supporting local businesses and job creation	**40%**	8%	32%	**50%**	35%	15%	10%
7. Parks and trails	**85%**	40%	45%	**14%**	11%	2%	1%
8. Water and sewer services (utilities)	**65%**	15%	49%	**34%**	24%	10%	2%
9. Transportation planning and maintenance (including streets and sidewalks)	**48%**	8%	40%	**50%**	31%	19%	1%
10. Protecting the environment	**70%**	19%	50%	**27%**	21%	5%	4%
11. Planning for future needs such as housing, transportation, and parks	**36%**	6%	30%	**59%**	35%	24%	5%
12. Recreation and cultural activities and services (such as the museum or library)	**75%**	23%	52%	**23%**	20%	3%	2%

UTILITY SERVICE

Now we have some questions about your water utility service in the City of Bellingham.

13. Which of the following services are included in your water utility service? Please select all that apply. **[Multi-select]**

Response category	n=400
Drinking water	73%
Wastewater	57%
Stormwater	48%
Lake Whatcom Watershed preservation	42%
Don't know	22%
Aware of all 4 services	**34%**
Aware of some (3 or less) services	**44%**

SATISFACTION

14. The City of Bellingham provides you with your water utility service, including drinking water, stormwater, wastewater, and preservation of the Lake Whatcom Watershed. Please [read / listen to] the following explanations of what is included in your service:

    - **Drinking water service** includes treating and delivering drinking water, maintaining the system, and following regulations.
    - **Stormwater service** includes managing rainwater to prevent pollution (like fertilizer and oil) from reaching our lakes, streams, and Bellingham Bay. It also helps control flooding, improve water quality, and enhance fish habitats.
    - **Wastewater/sewer service** includes collection and treatment of sewage and maintaining the sewer system.
    - **Lake Whatcom Watershed service** protects Lake Whatcom's water quality by preserving land and building pollution control systems.

    Thinking about your experience over the last year, would you say you are satisfied or dissatisfied with your overall water utility service?

Response category	n=400
Total Satisfied	**81%**
Very satisfied	35%
Somewhat satisfied	46%
Total Dissatisfied	**16%**
Somewhat dissatisfied	11%
Very dissatisfied	5%
Don't know	3%

15. **[If satisfied or dissatisfied]** Why are you **[insert Q14 response]** with your water utility service from the City of Bellingham? **[Open; Displaying coded open-ended responses below. Full list of responses in crosstabs and verbatim responses delivered separately.]**

Among total satisfied (those very/somewhat satisfied)

Response category	n=324
NET - More Satisfied	**62%**
Works well/Reliable/No issues or outages	33%
Clean water/Safe to drink	12%
High water quality	10%
Water tastes good/normal	8%
General positive	6%
Good customer service (responsive/helpful/courteous/etc.)	3%
Superior water/Better than elsewhere	2%
Affordable/Price is low/reasonable	2%
Protection of watershed/Lake Whatcom	2%
Eco-friendly/Focus on sustainability	2%
NET - Less Satisfied	**39%**
SUBNET - Billing issues	**25%**
Expensive/overpriced (general)	16%
Increasing cost/Bills keep going up	4%
High bills despite low usage	3%
All other billing issues	1% or less (each)
Water safety concerns/Poor protection of watershed/Lake Whatcom	7%
Issues with flooding/drainage/stormwater flows	2%
Taste issues	2%
Adequate but room for improvement	3%
Unfamiliar/I don't deal with water service/pay bill	2%
All other responses	1% or less (each)
Don't know/Not sure	2%
Nothing/N/A	1%

Among total dissatisfied (those very/somewhat dissatisfied)

Response category	n=63
NET - Less Satisfied	**84%**
SUBNET - Billing issues	**61%**
Expensive/overpriced (general)	27%
High bills despite low usage	15%
Increasing cost/Bills keep going up	13%
High stormwater fees even if not using service	8%
Unwarranted price increases/Bills go up without improved service	3%
Issues with billing system/website	2%
Too aggressive with billing/water shut-off/Won't work with you	2%
Water safety concerns/Poor protection of watershed/Lake Whatcom	10%
Taste issues	7%
Poor customer service (unfriendly/unresponsive/etc.)	6%
Issues with flooding/drainage/stormwater flows	5%
Too much chlorine/added chemicals	5%
Water taste	4%
Issues with wastewater/sewage management	3%
Watershed protection is too stringent / infringes on development rights	2%
Other water quality issues	1% or less (each)
Adequate but room for improvement	4%
NET - More Satisfied	**3%**
Affordable/Price is low/reasonable	2%
High water quality	2%
Other mentions	7%
Nothing/N/A	4%

15B. **[If don't know]:** Why are you unsure about your satisfaction with your water utility service from the City of Bellingham? **[Open; Displaying coded open-ended responses below. Full list of responses in crosstabs and verbatim responses delivered separately.]**

Response category	n=13
Unfamiliar/I don't deal with water service/pay bill	51%
General positive	8%
Don't know/Not sure	15%
Nothing/N/A	26%

16. Have you or anyone else in your household contacted the City of Bellingham regarding your water utility for service or information of any kind in the past few years?

Response category	n=400
Yes	20%
No	74%
Don't know	7%

The following are specific aspects of your water utility service that the City of Bellingham provides to you. How important are each of the following aspects of service to you and your household for the rate you pay?

Response category n=400	Total Important	Very important	Somewhat important	Total Not Important	Not that important	Not important at all	Don't know
17. Responsiveness to customer inquiries and concerns	**91%**	56%	36%	**7%**	7%	<1%	2%
18. Keeping water bills affordable for all households	**96%**	79%	17%	**4%**	3%	1%	<1%
19. Providing clear and understandable billing with information about water rates	**94%**	62%	31%	**5%**	5%	0%	1%
20. Keeping you informed about issues related to your water service	**92%**	57%	36%	**7%**	6%	1%	1%
21. Maintaining and upgrading water infrastructure (pipes, treatment plants, etc.)	**96%**	71%	25%	**3%**	3%	1%	1%
22. Protecting the health of our lakes, streams, and bay	**96%**	74%	22%	**4%**	2%	1%	1%
23. Providing opportunities for customer feedback and input	**88%**	44%	44%	**11%**	9%	2%	1%
24. Ensuring a reliable supply of water	**96%**	85%	10%	**4%**	3%	1%	<1%
25. Providing water that is safe to drink	**98%**	88%	10%	**2%**	1%	1%	<1%

Now, please **[**tell me **/** indicate**]** if you think the City is doing an excellent, good, fair, or poor job at each of the following aspects of your water utility service.

Response category n=400	Total Excellent/ Good job	Excellent job	Good job	Total Fair/ Poor job	Fair job	Poor job	Don't know
26. Responsiveness to customer inquiries and concerns	**41%**	11%	30%	**24%**	19%	5%	34%
27. Keeping water bills affordable for all households	**34%**	5%	29%	**54%**	34%	21%	11%
28. Providing clear and understandable billing with information about water rates	**59%**	15%	44%	**32%**	24%	8%	9%
29. Keeping you informed about issues related to your water service	**56%**	11%	45%	**32%**	24%	7%	12%
30. Maintaining and upgrading water infrastructure (pipes, treatment plants, etc.)	**49%**	10%	39%	**25%**	20%	5%	26%
31. Protecting the health of our lakes, streams, and bay	**69%**	17%	52%	**22%**	18%	3%	9%
32. Providing opportunities for customer feedback and input	**46%**	10%	37%	**30%**	23%	7%	24%
33. Ensuring a reliable supply of water	**78%**	41%	38%	**15%**	12%	3%	6%
34. Providing water that is safe to drink	**82%**	43%	39%	**14%**	12%	2%	4%

35. Which of the following should the city prioritize in the future when it comes to water utilities? Please select up to three. **[Multi-select] [Select 3 max]**

Response category	n=400
Being ahead of regulatory requirements (water quality, environmental protection, etc.)	55%
Planning and preparing for climate resiliency	51%
Assistance programs for customers who have difficulty paying their bills	47%
Communication of urgent service disruptions	34%
Communication of non-urgent changes to services	14%
More responsive customer service	9%
Something else **[Open; displaying coded open-ended responses below]**	15%
Keeping bill prices affordable/Price concerns	9%
Protect water supply/Lake Whatcom (limit nearby construction/keep lake clean)	2%
Other mentions	1% or less (each)
None of the above	6%

36. In your household, who is responsible for paying for your water utility bill to the City of Bellingham?

Response category	n=400
Myself	64%
Someone in my household	19%
My landlord or property owner	15%
Don't know	2%

COMMUNICATION

37. How would you prefer the City of Bellingham to communicate with you about non-emergency, yet important issues, such as payment options or water conservation tips? Please select all that apply. **[Multi-select]**

Response category	n=400
Email	54%
Letters or bill inserts by mail	40%
Text message	38%
Social media (such as Facebook, Instagram, NextDoor)	23%
City website	22%
Phone call	5%
Something else: **[Open]**	1%

38. Is there anything else you'd like the City of Bellingham to know regarding your water utility service? **[Open; Full verbatim responses delivered separately.]**

DEMOGRAPHICS

The following questions are only to make sure we are collecting responses that represent the community. It's important to collect answers to all the following questions, and please keep in mind that your responses are confidential.

39. How many years have you lived in the City of Bellingham?

Response category	n=400
Less than 1 year	1%
1-2 years	8%
3-5 years	16%
6–10 years	15%
More than 10 years	60%

40. How do you describe your gender?

Response category	n=400
Man	47%
Woman	53%
Non-binary or gender non-conforming	n=0
Transgender	n=0
Prefer to self-describe **[Open]**	n=0
I prefer not to say	n=0

41. Which of the following best describes your race or ethnicity? Please select all that apply. **[Allow for multiple responses]**

Response category	n=400
Asian or Asian American	7%
Black or African American	2%
Hispanic or Latino	11%
Middle Eastern or North African	n=2
Native American or Alaska Native	1%
Native Hawaiian or Pacific Islander	1%
White or European American	76%
Multiracial or biracial	3%
Prefer to self-describe **[Open]**	1%
Don't know	2%
I prefer not to say	n=0
White alone	**74%**
POC	**24%**

42. Do you rent or own your home?

Response category	n=400
Rent	55%
Own	44%
I have a different arrangement	1%
I prefer not to say	n=0

43. What neighborhood do you reside in? **[PHONE: Ask open and select a response from the drop-down menu; Read responses if necessary. ONLINE: Show drop-down menu]**

Response category	n=400
Alabama Hill	4%
Barkley	9%
Birchwood	7%
City Center/ Downtown	2%
Columbia	5%
Cordata	5%
Cornwall Park	4%
Edgemoor	3%
Fairhaven	7%
Happy Valley	5%
Irongate	1%
King Mountain	4%
Lettered Streets	4%
Meridian	n=1
Puget	4%
Roosevelt	4%
Samish	3%
Sehome	4%
Silver Beach	5%
South	2%
South Hill	3%
Sunnyland	5%
Western Washington University	2%
Whatcom Falls	5%
York	2%

NEIGHBORHOOD CATEGORIES:

Response category	n=400
Group A (North): Cordata, Meridian, King Mtn, Irongate, Barkley, Silver Beach	24%
Group B (West): Birchwood, Cornwall Park, Columbia, Letter Streets, Sunnyland, City Center, York	30%
Group C (East): Alabama Hill, Roosevelt, Whatcom Falls, Puget, Samish	20%
Group D (South): Sehome, WWU, Happy Valley, South Hill, Fairhaven, Edgemoor, South	26%

44. How many people reside in your household? **[Open]**

Response category	n=400
1	19%
2	37%
3	21%
4	16%
5 or more	7%
I prefer not to say	n=0

45. What is the highest level of education that you have completed?

Response category	n=400
Less than high school	1%
High school diploma / GED	21%
Some college / 2-year degree	37%
College degree / 4-year degree	28%
Graduate / professional school	13%
I prefer not to say	n=0

46. Which category best describes your gross household income, before taxes? Remember to include everyone living in your household. Your best estimate will do.

Response category	n=400
Less than $25,000	23%
$25,000 to less than $50,000	22%
$50,000 to less than $75,000	20%
$75,000 to less than $100,000	8%
$100,000 to less than $150,000	14%
$150,000 to less than $200,000	6%
$200,000 or more	7%
I prefer not to say	1%

Subject:
AIS Rapid Response Presentation

Summary:
Four Peaks Environmental Consultants will provide an update on the Aquatic Invasive Species Rapid Response Plan.

Previous Action:

Recommendation:
Information/Discussion

Attachments: 1. LW INVASIVE MUSSEL PLAN PRESENTATION

Activity:
Public Meeting

Clearances Date

Category:
NA

Presenter:
Dr. Erika Rubenson

Time Estimate:
25

Staff Contact:
Mike Olinger

FOUR PEAKS ENVIRONMENTAL
Science & Data Solutions®

LAKE WHATCOM INVASIVE FRESHWATER MUSSEL RAPID AND EXTENDED RESPONSE PLAN

July 2025

MEETING GOALS

- Provide an overview of why there is a need for a response plan to address invasive freshwater mussels in Lake Whatcom
- Provide an overview and status of the draft response plan
- Request feedback
  - Are the purpose and goals missing anything?
  - What will be the most difficult for the public to understand?
  - What do you believe the public will view as the largest benefit of and largest problem with the plan?
- Request your support to Council to adopt the response plan

RAPID AND EXTENDED RESPONSE PLAN DEVELOPMENT

- Led by City of Bellingham Public Works
- Partnership with Washington Department of Fish and Wildlife (WDFW), Whatcom County Natural Resources, and Lake Whatcom Water and Sewer District
- Interviews with partner entities plus City of Bellingham Parks and Recreation, Institute for Watershed Studies at Western Washington University
- Structured decision-making workshop included partner and interviewed entities plus Whatcom County Health and Community Services Department and Sudden Valley Property Management
- Multiple internal and external reviews
- Tribal outreach via City of Bellingham staff

INVASIVE FRESHWATER MUSSEL IMPACTS

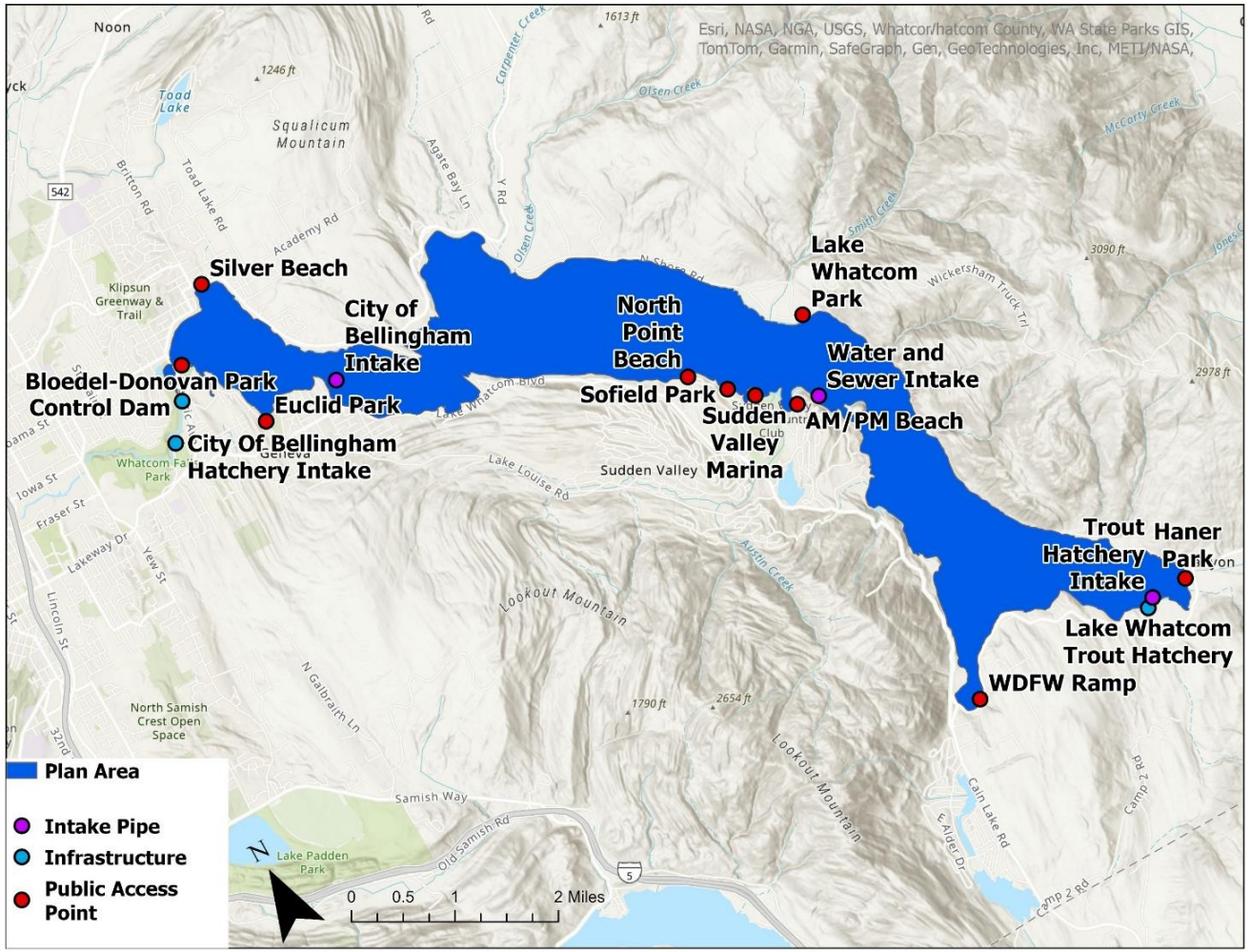
Photo credit: Washington Department of Ecology

- Mussel species of concern
  - Quagga, zebra, and golden
- Impacts
  - Contaminate drinking water supplies
  - Outcompete native species
  - Alter habitats
  - Change food web dynamics
  - Clog water intakes, fish screens, and boat engines
  - Overtake docks, buoys, boat hulls, anchors, and beaches affecting recreation and public access
  - Contribute to avian disease outbreaks when eaten by birds

LAKE WHATCOM RESPONSE PLAN DRAFT PURPOSE AND GOALS

- Draft Plan Purpose
  - In Lake Whatcom, enhance the efficiency and effectiveness of
    - Rapid response (delimitation, minimizing additional spread, and data collection)
    - Extended response (decision-making, treatment, and/or management)
- Draft Plan Goals
  - Minimize the probability of quagga, zebra, or golden mussel establishment
  - Minimize the impact of quagga, zebra, or golden mussels on aquatic resources, outdoor recreational resources, critical infrastructure, and cultural resources after the initial detection

PLAN AREA

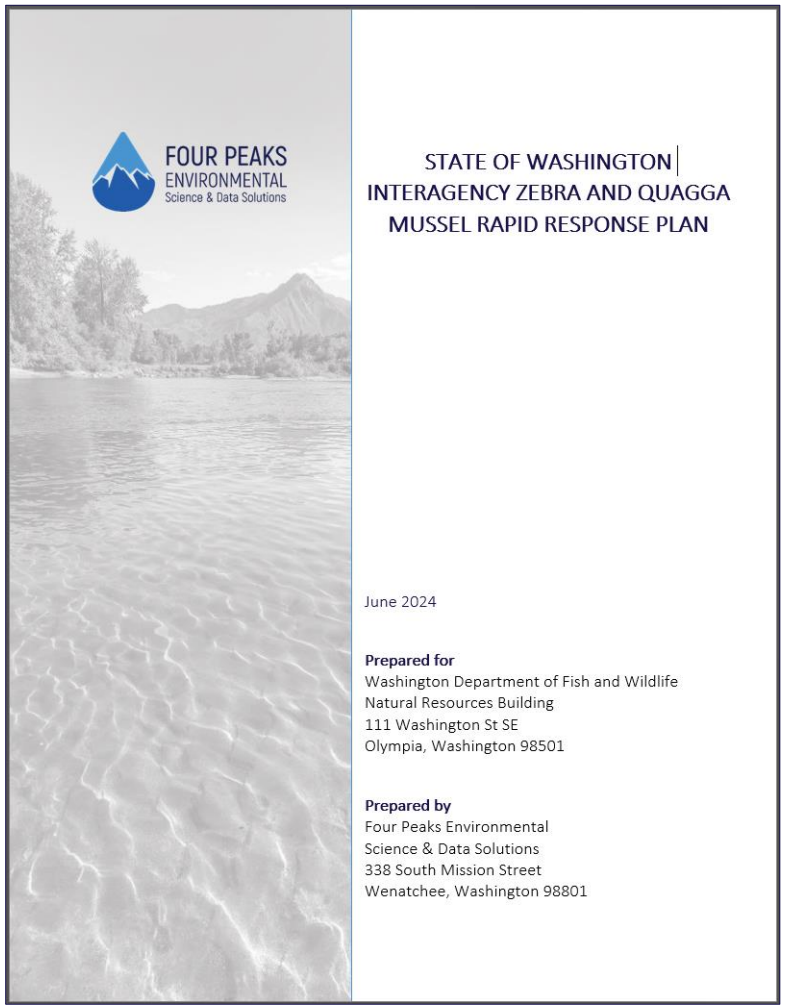


- Risks of Invasion
  - Extent and types of public usage including total day use, presence of boat ramps and marinas, motorized boating, sea plane access, and fishing
  - Number of private residences with boat docks
  - Proximity to waterbody with recent quagga mussel introduction (Snake River in Idaho)
  - Proximity to Port of Bellingham, which receives shipping vessels from Sacramento San-Joaquin Delta

LAKE WHATCOM CONSIDERATIONS

- Infrastructure
  - City of Bellingham Control Dam
  - City of Bellingham drinking water intake
  - Lake Whatcom Water and Sewer District drinking water intake
  - Private drinking water intakes
  - City of Bellingham Hatchery and intake system
  - Lake Whatcom Trout Hatchery and intake system
  - Boat ramps and docks
- Water Quality
  - Lake Whatcom on Washington's 303(d) list for polluted water bodies
  - Washington Department of Ecology approved a Total Maximum Daily Load (TMDL) for Lake Whatcom
    - Dissolved oxygen
    - Fecal coliform bacteria
    - Phosphorus
- Ecology
  - Variety fish species including Kokanee and Coastal Cutthroat Trout
  - Over 10 amphibian, 2 reptile, 125 bird, and 49 mammal species

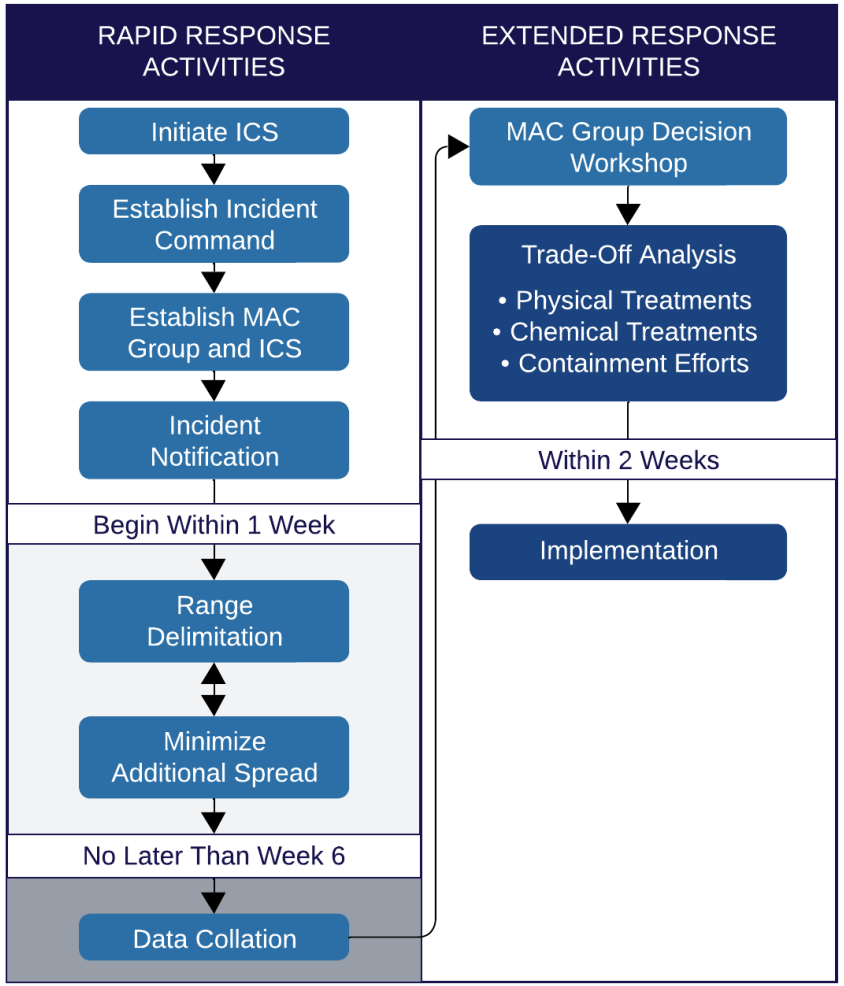
STATE PLAN CONTEXT



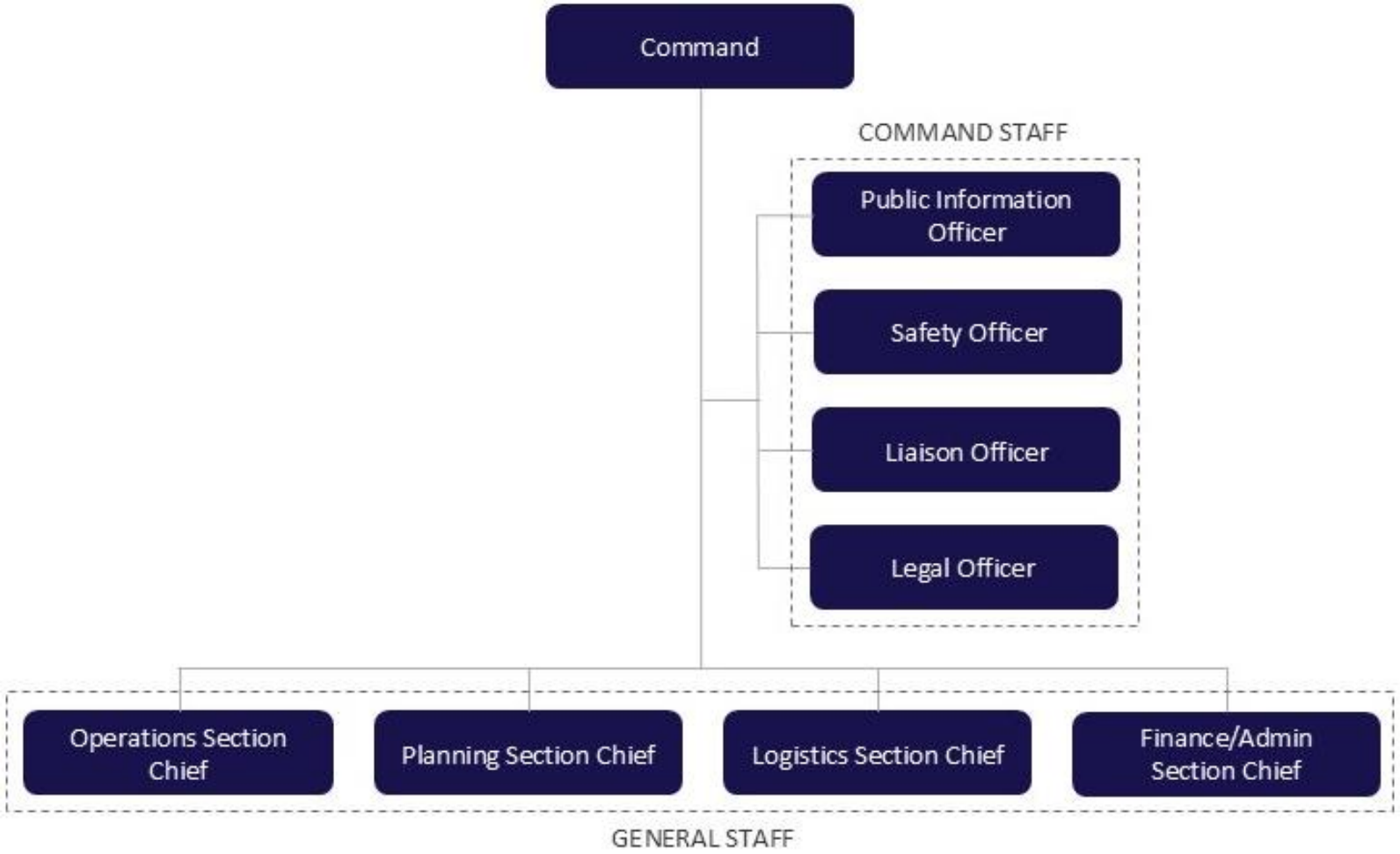
- Lake Whatcom plan initiated after implementation of statewide plan
- Statewide plan provides details on
  - Statewide prevention efforts
  - Statewide monitoring
  - Detection definition
  - Detection verification process
  - Waterbody classification schema
  - Incident Command System (ICS) overview
- If there are two verified detections of an invasive freshwater mussel, Lake Whatcom will be classified as "positive," and the site-specific plan will be implemented

PLAN OVERVIEW

- Rapid Response Activities
  - ICS initiated by WDFW
  - ICS staff and multi-agency coordination (MAC) group established
  - Notification to state, tribal, and local media
  - Range delimitation
  - Minimize additional spread
  - Data collation
- Extended Response Activities
  - Decision-making workshop
  - Treatment options
  - Decision-making considerations
  - Implementation



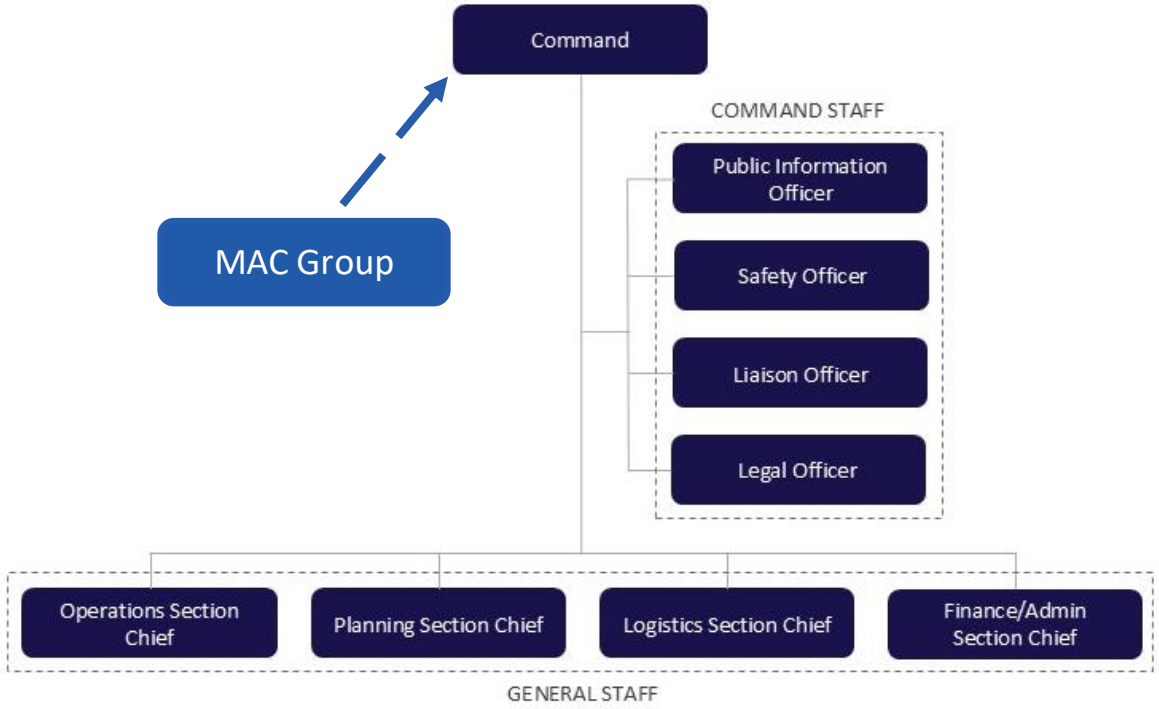
INCIDENT COMMAND SYSTEM



- Unified Command
  - WDFW
  - City of Bellingham
  - Whatcom County
  - Lake Whatcom Water and Sewer District
- WDFW filling chief and deputy chief roles
- Local Unified Command entities have a designated representative to support each role

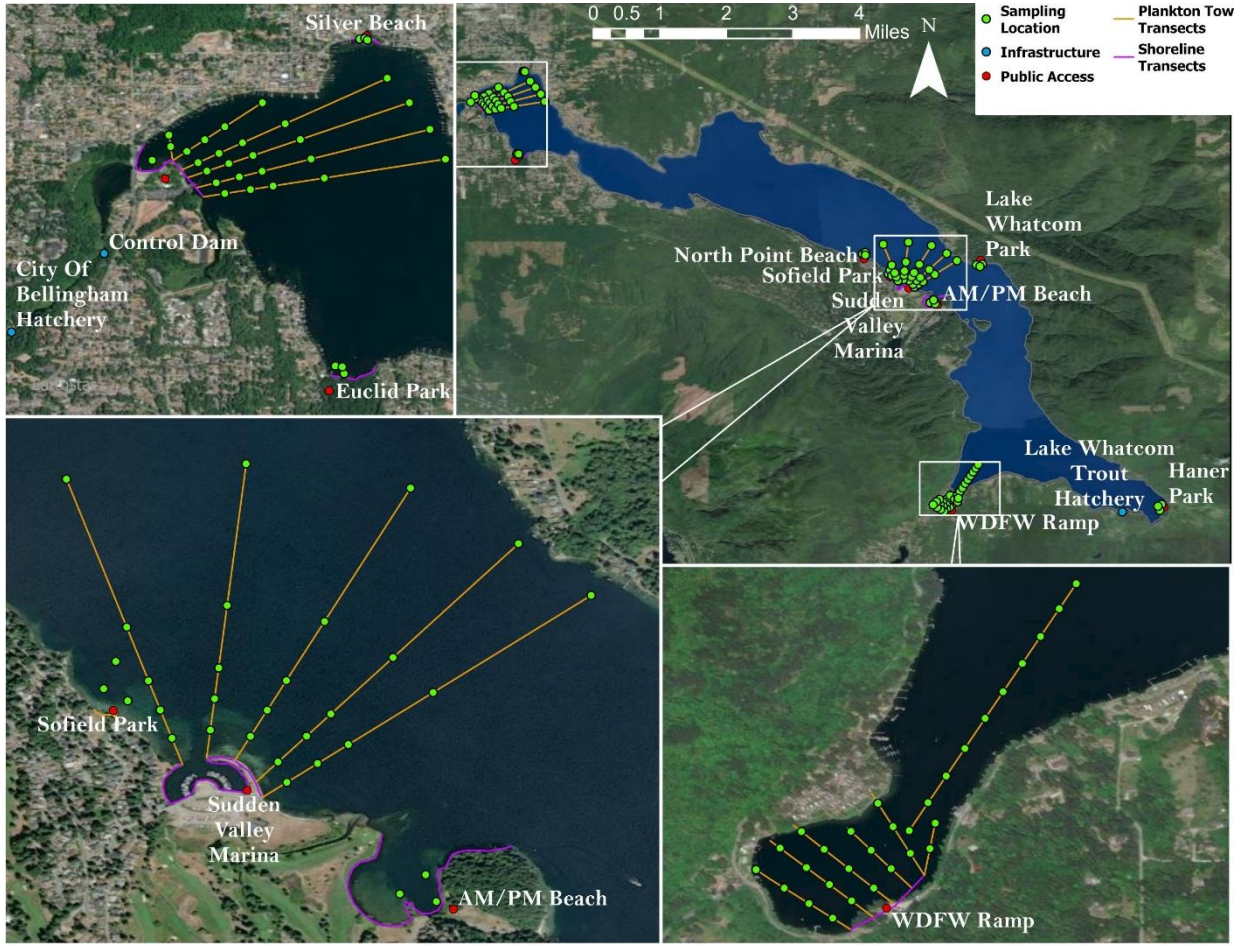
MULTI-AGENCY COORDINATION GROUP

- Mechanism for elected and appointed officials, tribal entities, and other groups to provide input to the Unified Command
- Provides coordinated decision-making for resource allocation, harmonizes agency policies, and offers strategic guidance and direction to support rapid and extended response activities
- Membership in the MAC group can and does evolve as the invasion scenario changes



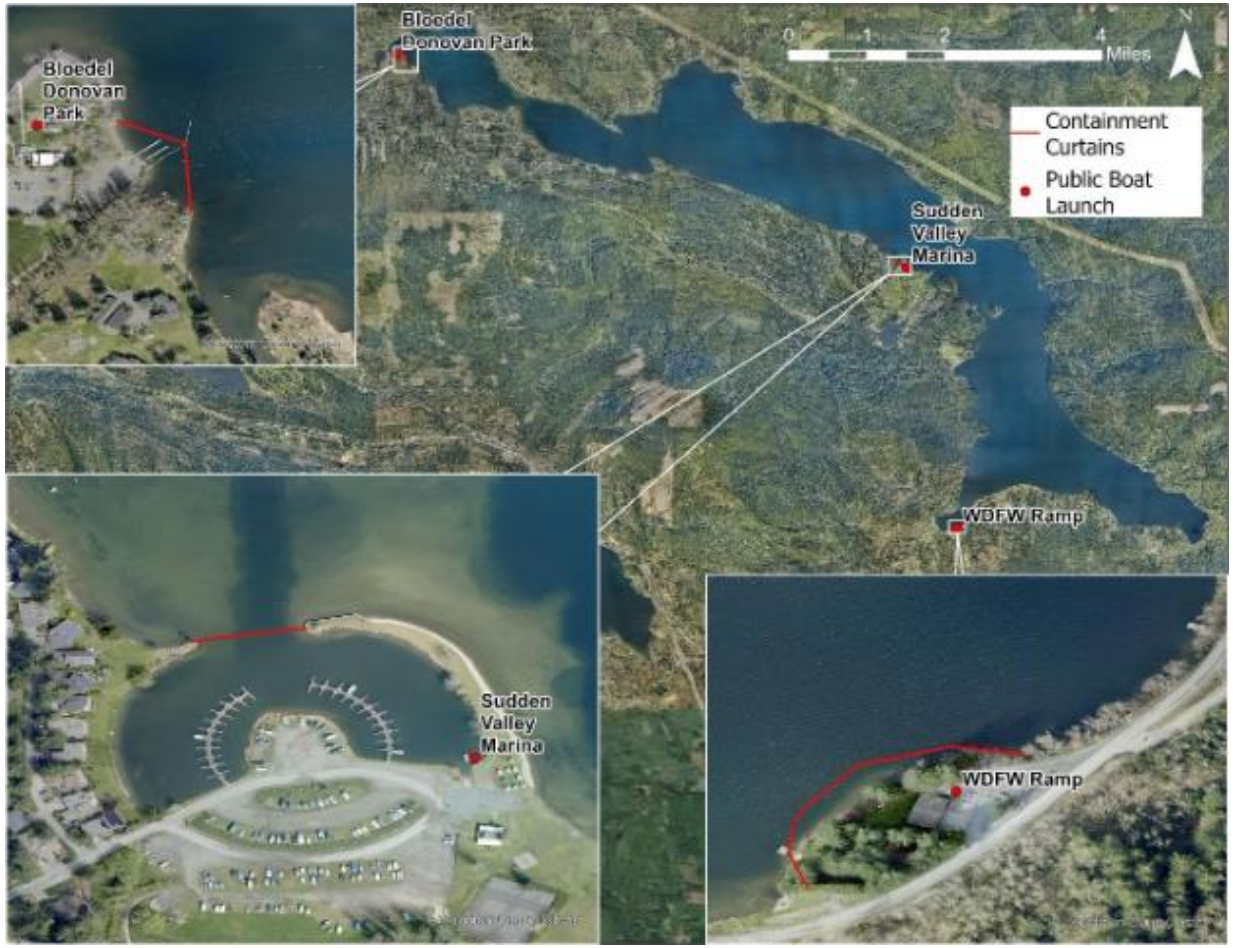
RAPID RESPONSE

- Notification
  - Statewide media release (WDFW)
  - Tribal notification
  - Local media releases
- Range delimitation (initiated within 1 week)
  - All public access points
  - Additional sampling around public motorized boat launches
  - Shoreline surveys, plankton tows, benthic sampling, eDNA sampling, water chemistry
- Data collation



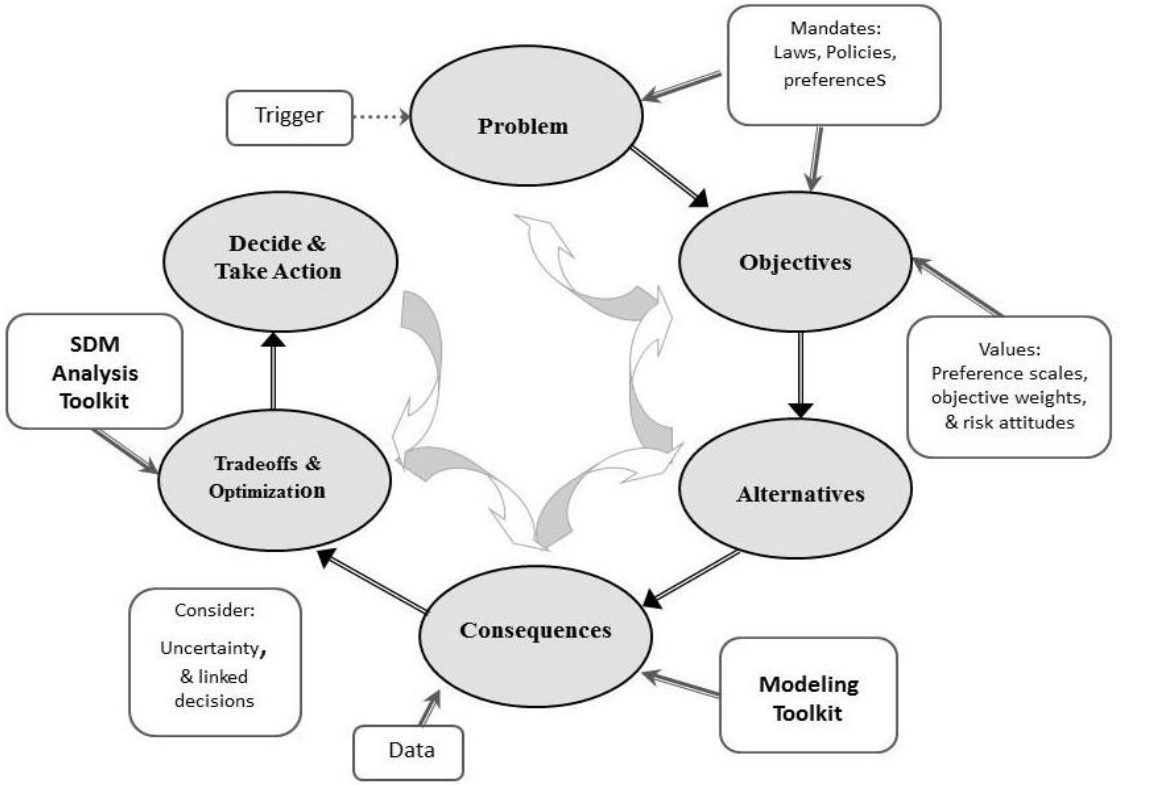
MINIMIZE ADDITIONAL SPREAD

- Alert users of invasive freshwater mussel presence
- Close the detection location access point
- Consider removing and decontaminating watercraft and infrastructure
- Deploy a containment curtain (permits required)
- Establish additional mandatory check stations
- Deploy mobile decontamination units to the public boat ramps not closed
- Consider alternative containment strategies at control dam and intake structures
- Consider quarantine on nearby hatcheries
- Collect data on Lake Whatcom boater origin and destination



DECISION-MAKING WORKSHOP

- No later than 6 weeks after initial detection
- ICS staff and MAC Group
- Agenda
  - Problem overview
  - Desired outcomes of a treatment ("Objectives")
  - Treatment options available ("Alternatives")
  - Consequences of treatment options
  - Trade-off analysis
  - Decide and implement
- Initial workshop held June 2, 2025



Source: Jean Fitts Cochrane

Hemming et al. (2021): An Introduction to Decision Science for Conservation, *Conservation Biology*

CURRENT KNOWN TREATMENT OPTIONS

Photo credit: Steve Wells (Aquaticus LLC)

- Do nothing
- Treat with product (behind containment barrier)
  - Bacterial (Zequanox)
  - Chemical (Potash, EarthTec QZ)
- Physical treatment
  - Manual removal
- Containment treatment
  - Benthic mat
- Combinations of treatments (e.g., benthic mat + product)

CONSEQUENCES AND TRADEOFFS

Consequences

Treatment Options	Total Treatment Cost	Capital Investment Cost	Ecological Impacts	Short-Term Impacts to Drinking Water	Long-Term Impacts to Drinking Water	Total Treatment Time
	Weights					
Do Nothing	Numerical Values					
Zequanox						
Potash						
EarthTec QZ						
Mechanical Removal						
Benthic Mat						
Combination Treatments						

PREVAILING OPINIONS

Treatment decisions will be made during the MAC Group Workshop at the time of detection

- All invasive freshwater mussels should be treated the same despite there being a lower risk of establishment of quagga and zebra mussels compared to golden mussels
  - Establishment risk of quagga and zebra mussels not zero
  - Veligers may survive for long periods thus present a high risk of spread if left untreated
- Relying solely on physical removal was assessed as too risky because it requires successfully finding and removing all adults prior to any reproduction
  - Divers should be used to support treatments
- Boat launch nearest the detection should be closed
- Containment curtain should be deployed as soon as possible after a detection
- Chemical or bacterial treatments behind containment curtains were desired
  - Zequanox preferred, Potash secondary
  - Copper ions not wanted
- If not containable, would still treat what was feasible to minimize impact

NEXT STEPS

- Finalize the response plan
- Consult with entities to understand applicable laws and permitting requirements for planned responses
- Engage in scenario-based exercises to identify knowledge or data gaps and solidify roles
- Engage the public
  - Web content
  - Informational flyer
  - Frequently asked questions

Photo credit: Aleksandre Gogaladze, CC Attribution 4.0, no changes made

Photo credit: Sam Stukel (USFWS)

Photo credit: Boltovskoy, CC Attribution 4.0, no changes made

QUESTIONS

- What is missing from the purpose and goals of the plan?
- What do you believe will be the most difficult for the public to understand?
- What do you believe the public will view as the largest benefit or largest problem of the plan?

Subject:
Resolution

Summary:
Aquatic Invasive Species Rapid Response Plan Resolution.

Previous Action:

Recommendation:
Vote to Approve

Attachments:

Activity:
Public Meeting

Clearances

Date

Category:
NA

Presenter:
Bret Beaupain

Time Estimate:
10

Staff Contact:
Mike Olinger