



**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS
WATER QUALITY AND WATER SERVICES
COMMITTEE MEETING AGENDA**

**Thursday, July 21, 2016
11:00 a.m.**

**5000 Overlook Avenue, SW
Washington, DC 20032**

11:00 a.m. I. Call to Order

Rachna Butani
Chairperson

11:05 a.m. II. Water Quality Monitoring

Charles Kiely

**Coliform Testing
LCR Compliance Testing**

11:15 a.m. III. Fire Hydrant Upgrade Program

David Wall

**Status Report of Public Fire Hydrants
Out of Service Fire Hydrant Map**

11:25 a.m. IV. DC Water Customer Satisfaction Survey (Key Findings by Ward) Lauren Preston

11:45 a.m. V. Emerging Issue Lead in Schools

Maureen Schmelling

12:00 p.m. VI. Executive Session*

Adjournment

*The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); proprietary matters under D.C. Official Code § 2-575(b)(11); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.

Status Report of Public Fire Hydrants for DC Water Services Committee - July 8, 2016

	April Cmte. Report (Apr 04, 2016)	May Cmte. Report (May 04, 2016)	June Cmte. Report (Jun 06, 2016)	July Cmte. Report (Jul 08, 2016)
Public Fire Hydrants:	9,488	9,483	9,484	9,517
In Service:	9,420	9,418	9,425	9,437
Marked Out-of-Service (OOS)	68	65	59	80
OOS - defective requiring repair/replacement	36	45	29	34
% OOS requiring repair or replacement (DC Water goal is 1% or less OOS)	0.38%	0.47%	0.31%	0.36%
OOS - due to inaccessibility or temp construction work	23	20	30	46

Note: The number of public hydrants in the DC Water system fluctuates; this number fluctuates as hydrants are added and removed during development or construction activities as well as at the request of the Fire Dept.

Breakdown of Public Fire Hydrants Out-of-Service (OOS) as of July 8, 2016 80

Breakdown of Defective

	0-7 Days	8-14 Days	15-30 Days	31-60 Days	61-90 Days	91-120 Days	> 120 Days	Total
Hydrant Needs Repair/Investigation	5	1	4	1	0	0	3	14
Needs Valve Investigation for Low Flow/Pressure or Shut Test for Replacement	0	0	0	0	0	0	3	3
Needs Replacement	0	0	0	2	2	0	13	17

Defective 34

Breakdown of Others

	0-7 Days	8-14 Days	15-30 Days	31-60 Days	61-90 Days	91-120 Days	> 120 Days	Total
Temporarily OOS as part of operations such as a main repair	3	1	6	4	2	0	3	19
Construction* - OOS	11	0	0	1	1	1	7	21
Obstructed Hydrant – OOS hydrant due to operation impeded by an obstruction.	0	0	1	0	0	0	5	6

Others 46

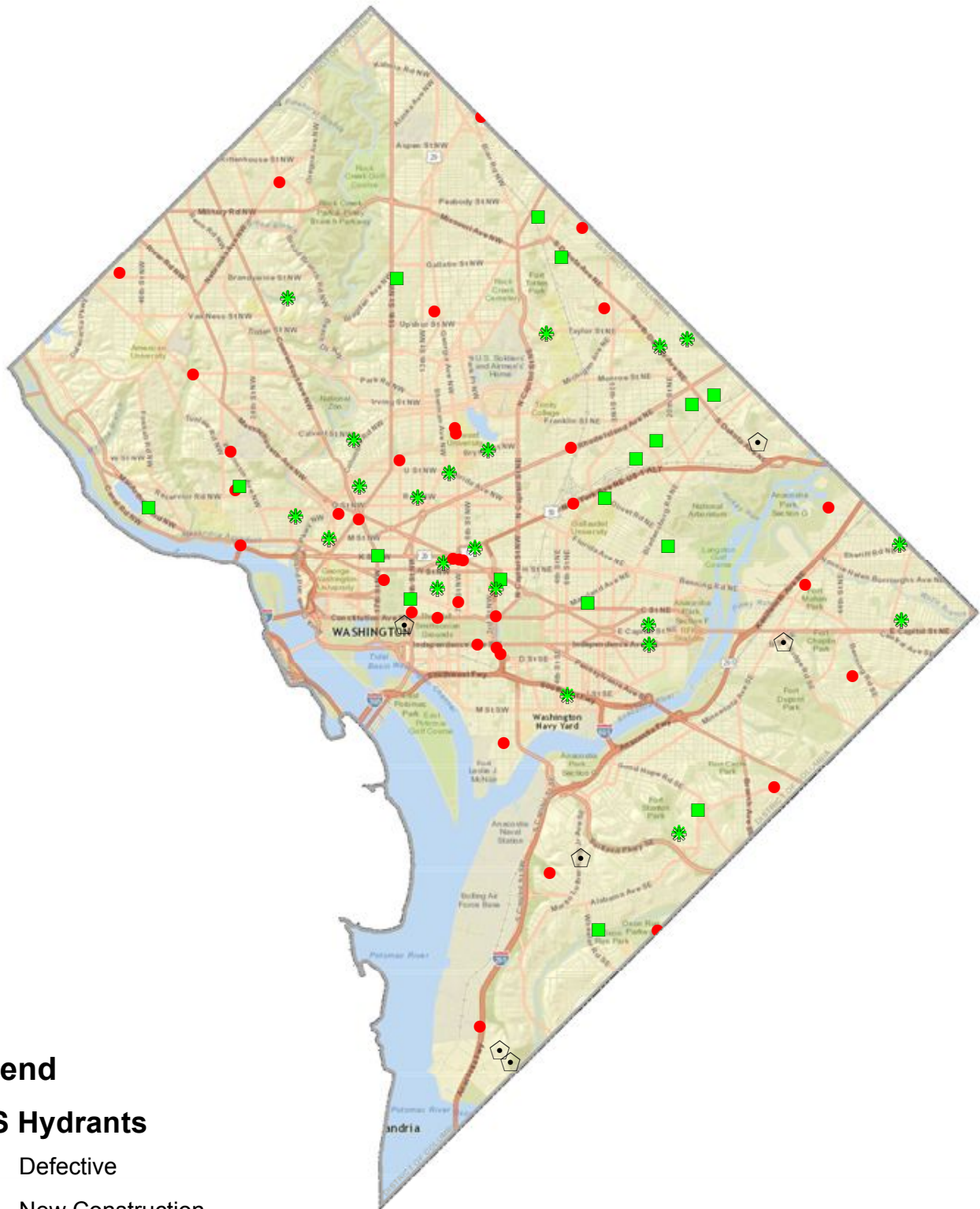
*Fire hydrants not accessible due to construction activities. Also includes new hydrants which have not yet been commissioned or old hydrants which will be abandoned as part of ongoing construction projects.

Status of Private Fire Hydrants-Based on FEMS Inspection Reporting

Private Hydrants:	1,318
• In Service:	1,188
• Out-of-Service (OOS):	130

Map of Public Out-of-Service Hydrants

July 11, 2016



Legend

OOS Hydrants

- Defective
- ✱ New Construction
- ⬠ Obstructed
- Temporary



INNOVATIVE THINKING
RIGOROUS APPROACHES
REAL WORLD IMPACT



Key Findings by Ward from the DC Water Customer Satisfaction Survey

IMPAQ International
June 29, 2016

www.impaqint.com

Purpose of Survey

- Assess residential and commercial customers' satisfaction with, attitudes toward, and perceptions of DC Water's services
- Previous customer satisfaction survey conducted in 2004
- Carried out April-July, 2015

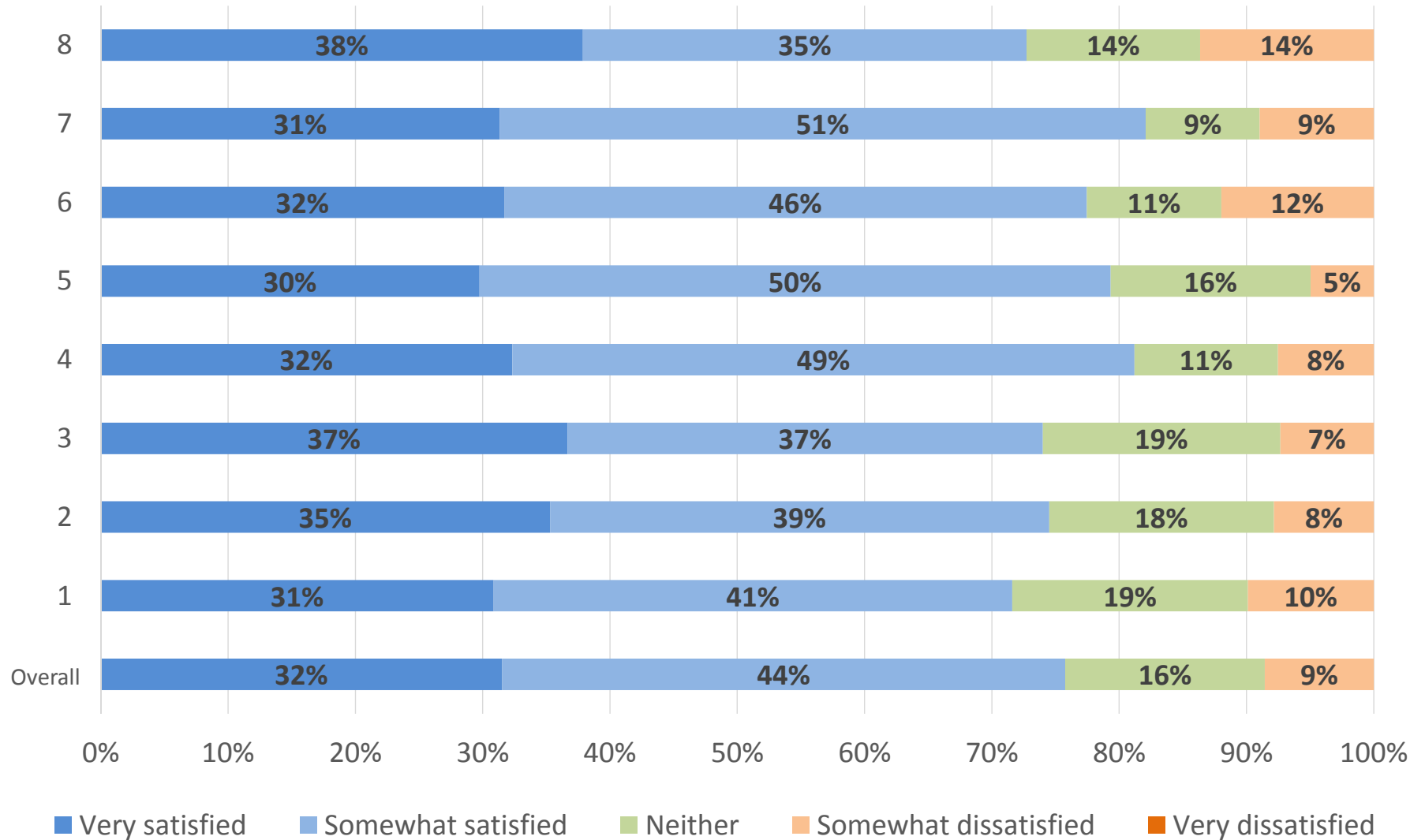
Methods

- Random, stratified sample of residential (single and multi-family) and commercial customers
- Different questionnaire versions for residential and commercial; extra module for those with recent direct contact with DC Water
- Multi-mode survey process: online, mail and phone
- 1,214 completed surveys (approximately 400 per group: single family residential, multi-family residential and commercial)

Findings

- Overall satisfaction with DC Water was quite high across all wards (76%)
- Overall satisfaction ranged from 72% (Ward 1) to 82% (Ward 7)

Overall Satisfaction with DC Water



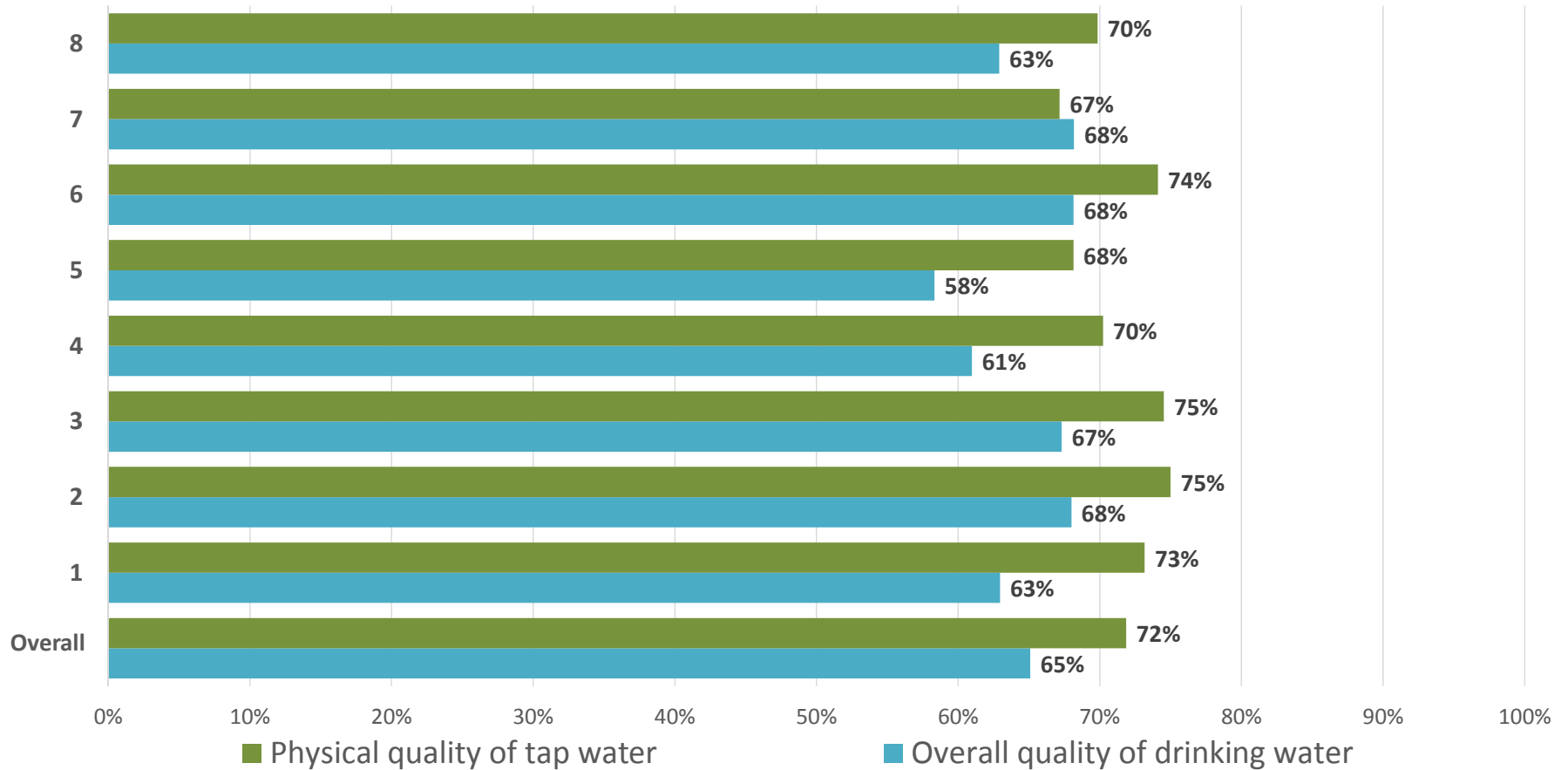
Areas of Satisfaction-Water Quality

- Physical quality of tap water
- Overall quality of drinking water
- Safety of drinking water
- Taste of drinking water

Areas of Satisfaction

Water quality— Across all wards, satisfaction was highest with the physical quality of the tap water (72%), ranging from 67% in Ward 7 to 75% in Wards 2 and 3.

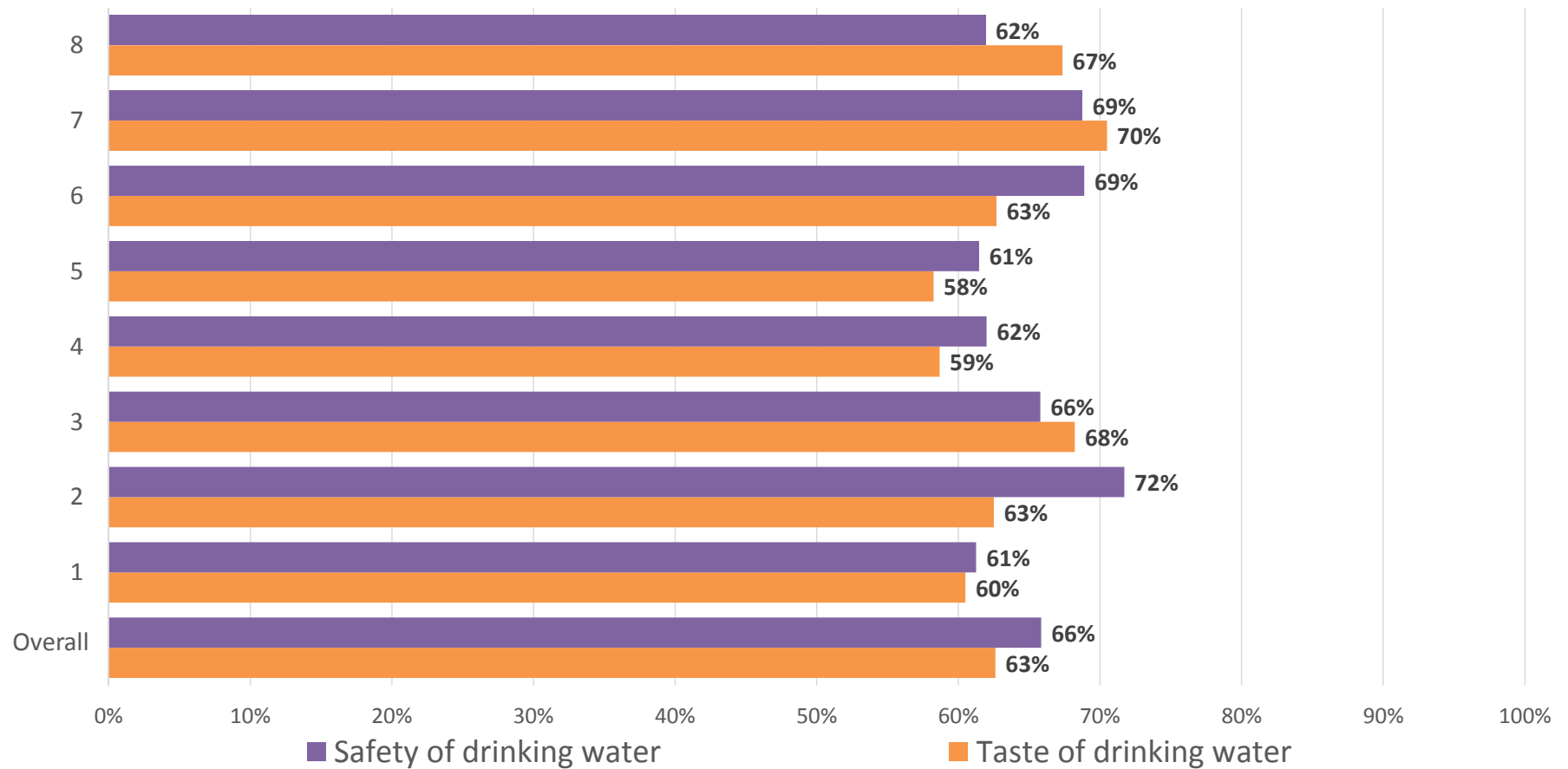
% Very or Somewhat Satisfied



Areas of Satisfaction

Water quality— Overall, satisfaction was slightly higher for safety of drinking water (66%) as compared to taste of drinking water (63%), though this varied from ward to ward

% Very or Somewhat Satisfied

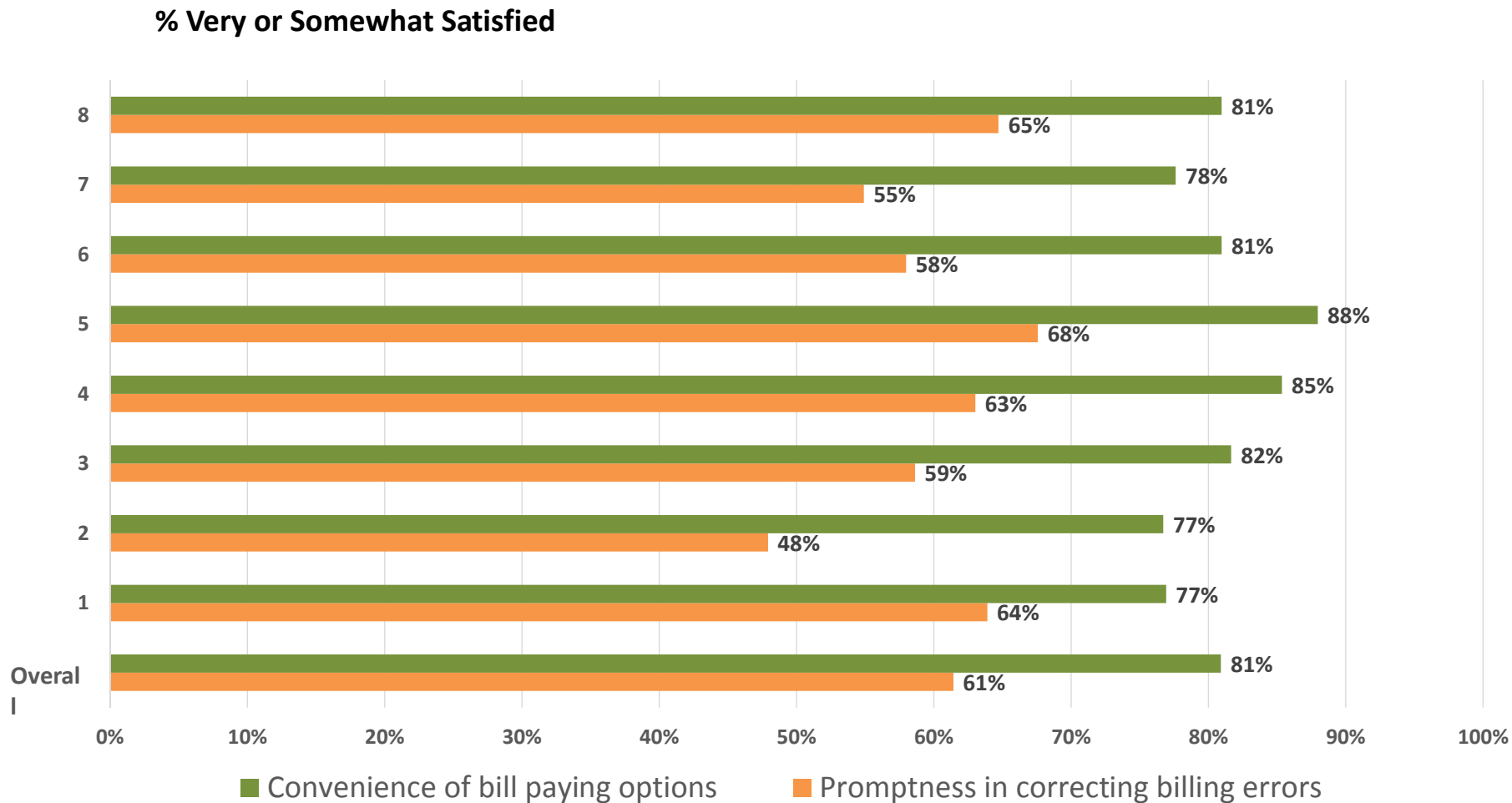


Areas of Satisfaction-Billing

- Convenience of bill paying options
- Promptness in correcting billing errors
- Billing and timeliness of bill
- Understandability and accuracy of bill

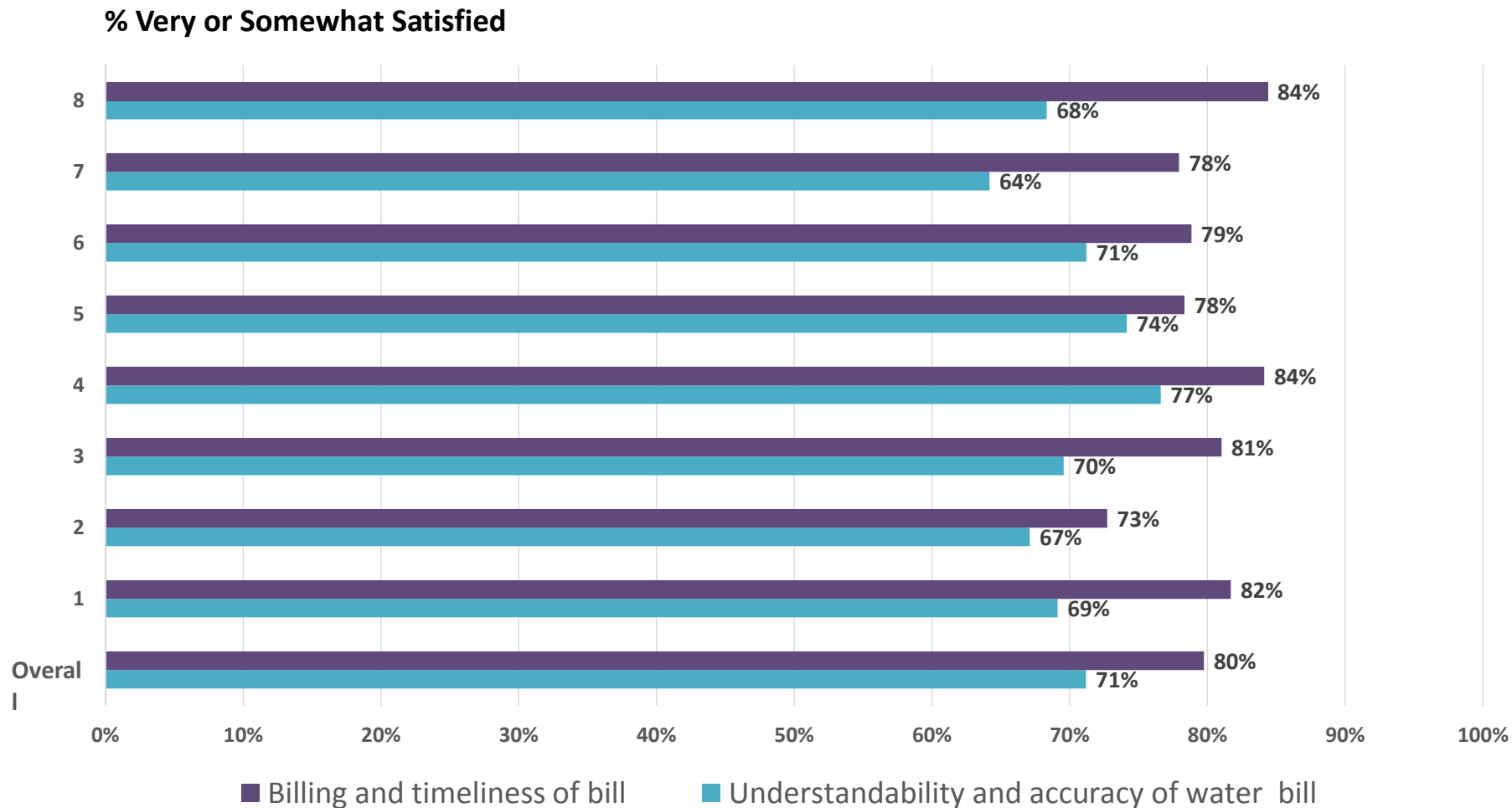
Areas of Satisfaction

Billing—Across all wards, satisfaction was highest for convenience of bill paying options (81%), with a range of 77% in Wards 1 & 2 to 88% in Ward 5.



Areas of Satisfaction

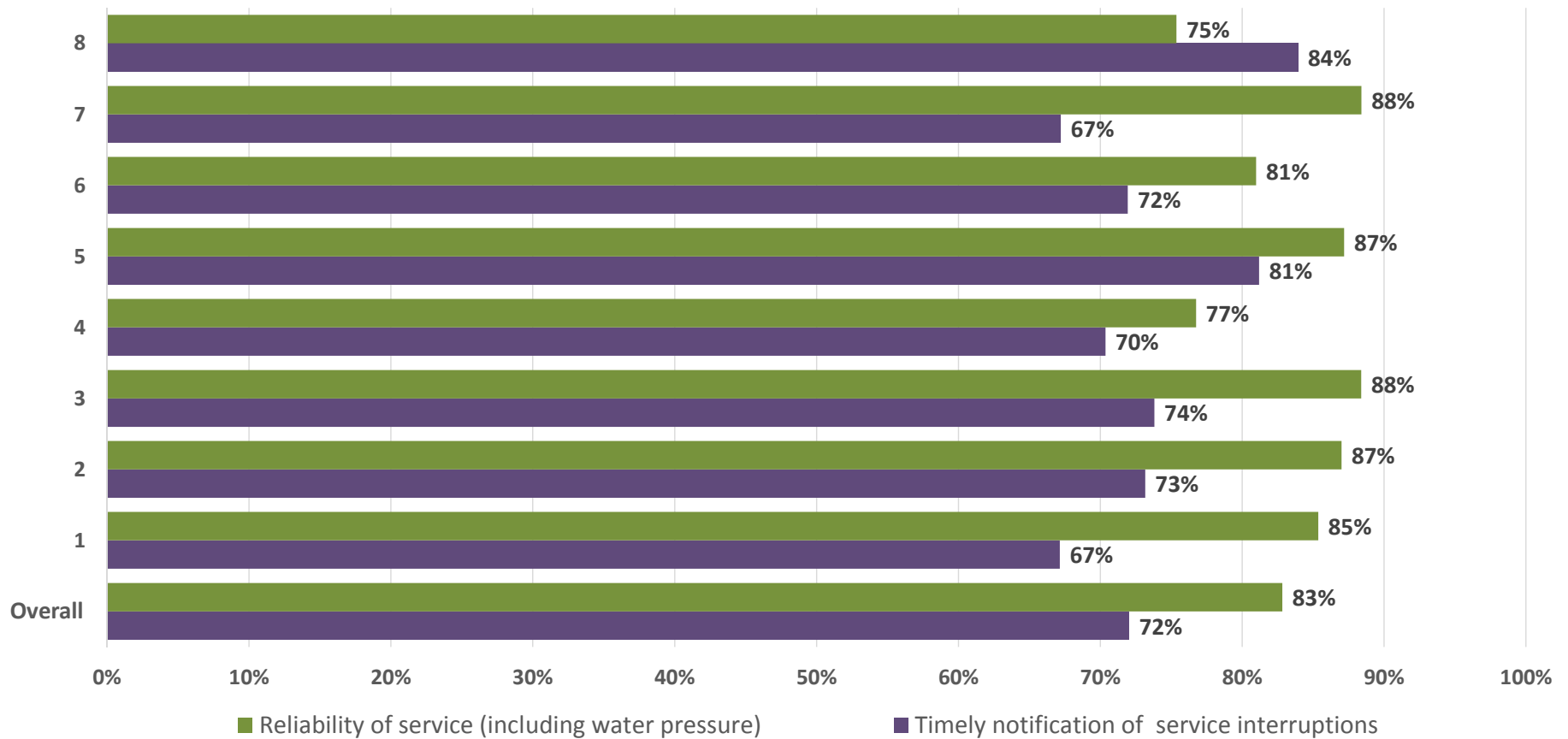
Billing—Across all wards, satisfaction was higher for billing and timeliness of bill (80%), with a range of 73% in Ward 2 to 84% in Wards 4 & 8.



Areas of Satisfaction

Reliability — Across all wards except Ward 8, customers were more satisfied with reliability of service (83%)

% Very or Somewhat Satisfied

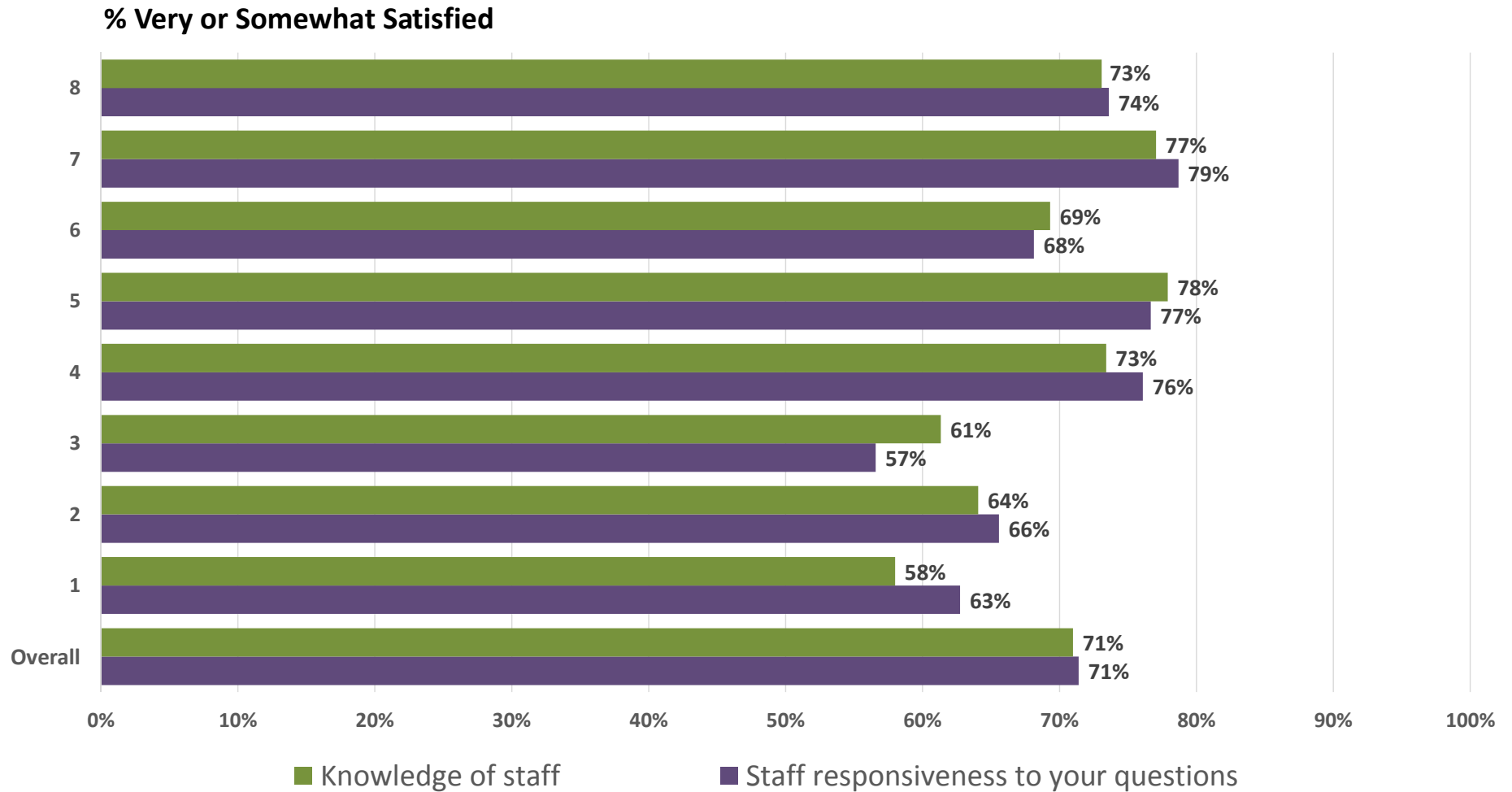


Areas of Satisfaction-DC Water Staff

- Knowledge
- Responsiveness to questions
- Courtesy

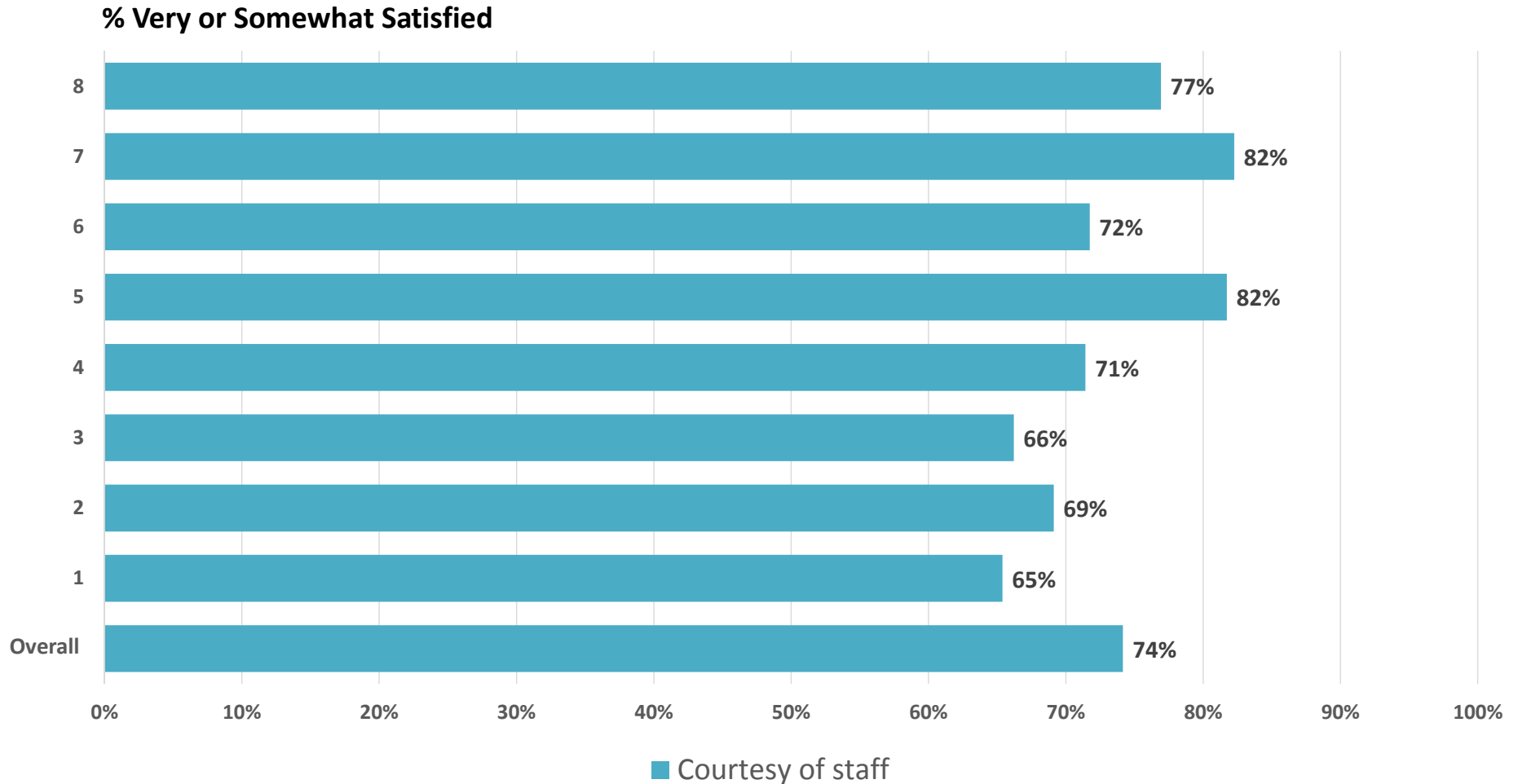
Areas of Satisfaction

DC Water Staff — Overall, satisfaction with staff knowledge and staff responsiveness to questions was the same (71%), with Wards 1, 2 and 3 somewhat lower on both



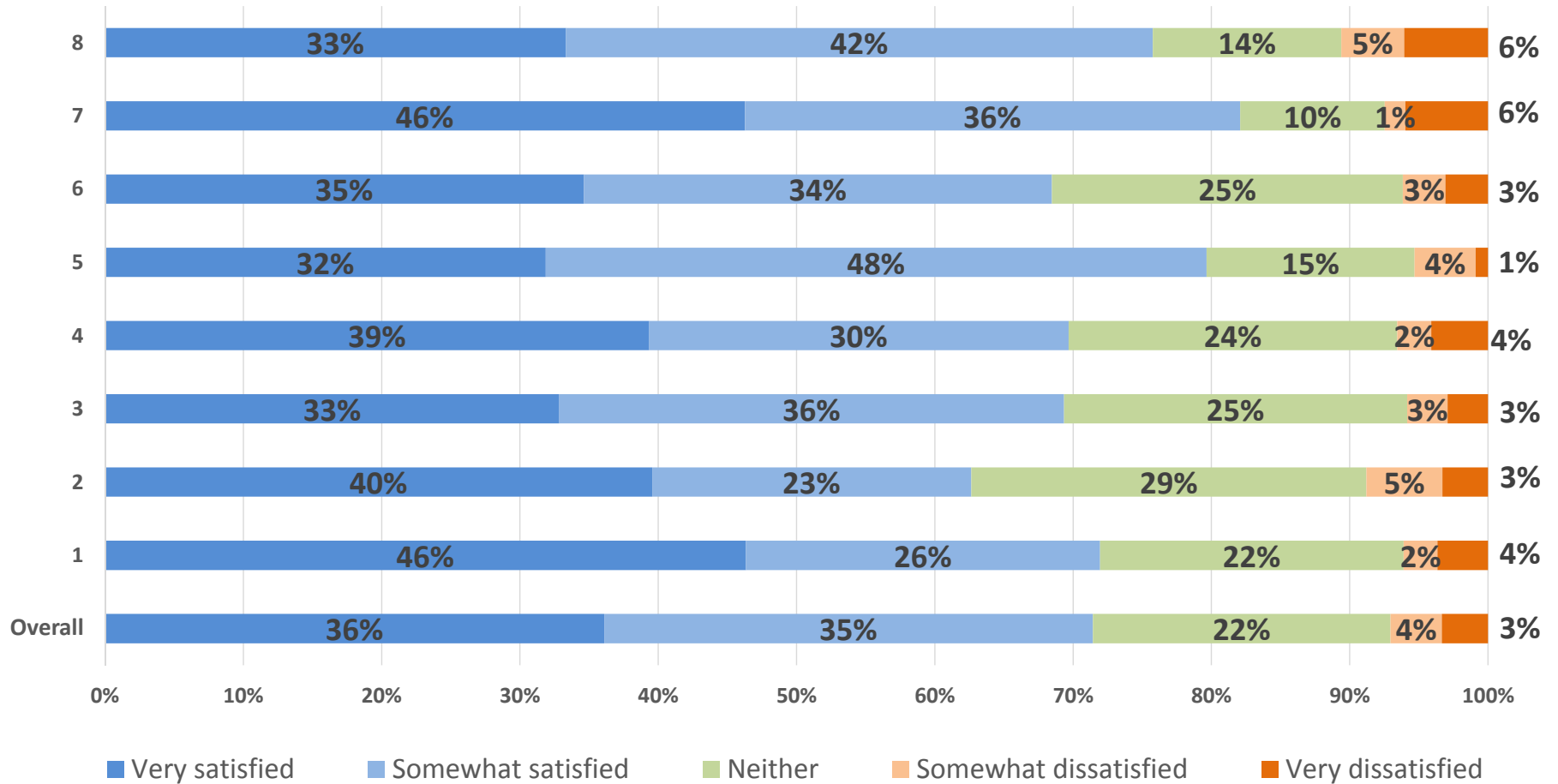
Areas of Satisfaction

DC Water Staff — Overall, 74% were satisfied with staff courtesy, with a range of 65% (Ward 1) to 82 % (Wards 5 & 7)



Satisfaction with DC Water Compared to Other Services

71% overall were satisfied with DC Water compared to other similar services, ranging from 63% (Ward 2) to 82% (Ward 7)



Value of DC Water

Across wards, customers agreed most with the statement “I receive excellent value for the for the money I pay for DC Water”



Perceptions of DC Water

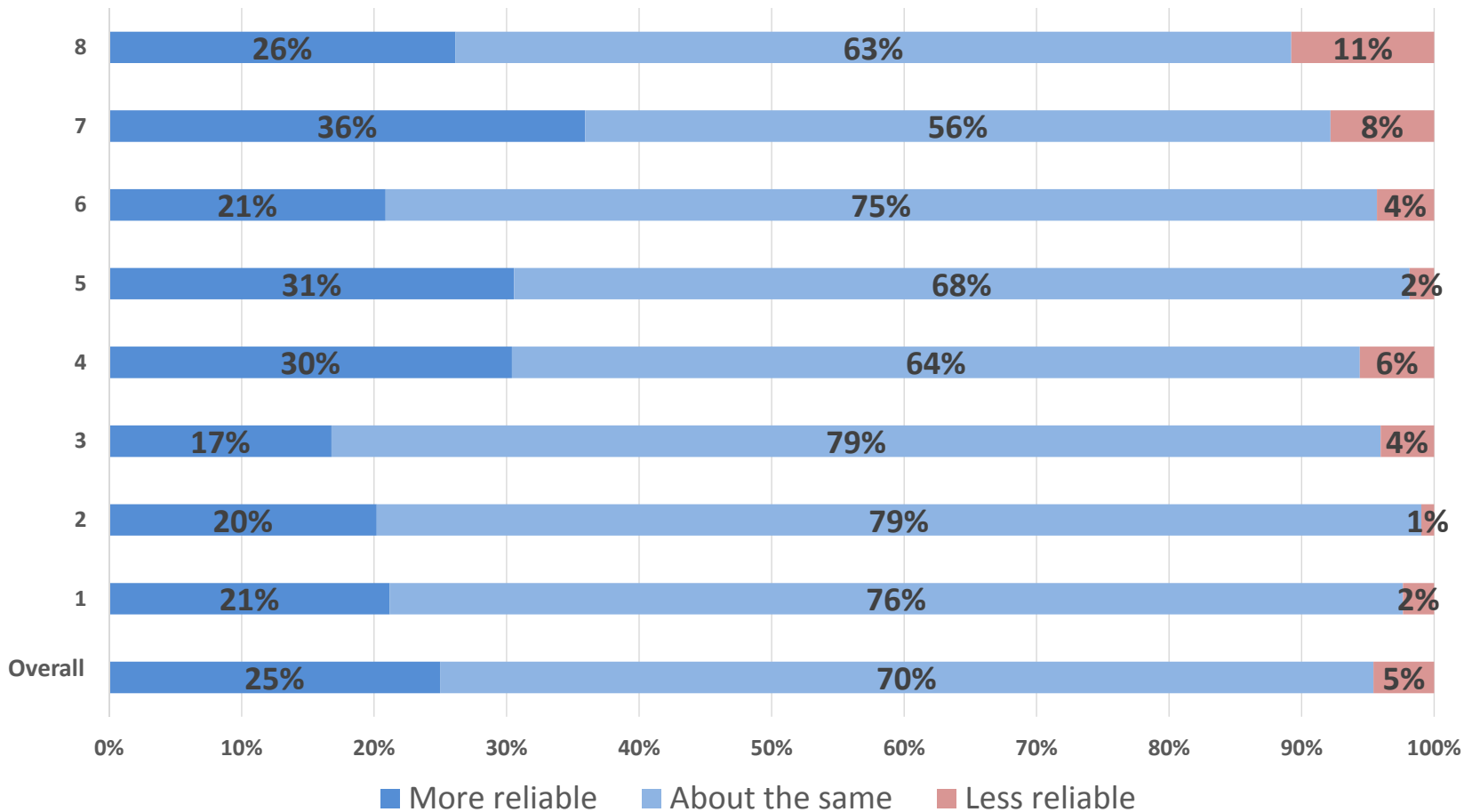
“Efficiently delivers services” and “Cares about the environment” topped the list across wards.

% Strongly and Somewhat Agreeing

Perceptions: DC Water.....	Total	1	2	3	4	5	6	7	8
Adequately publicizes itself to the wider community	67%	70%	57%	59%	58%	63%	71%	73%	77%
Is actively involved in DC neighborhood and community activities	70%	71%	75%	65%	60%	71%	75%	67%	69%
Provides effective ways for DC residents to express their views and concerns	71%	72%	75%	63%	65%	68%	74%	76%	74%
Manages construction projects in your neighborhood with minimal disruption (such as road closures due to pipe repair or pipe maintenance)	74%	67%	68%	71%	78%	69%	74%	76%	67%
Really cares about their customers	78%	77%	77%	77%	75%	81%	76%	81%	77%
Responds to water or sewer emergencies quickly	85%	83%	85%	83%	89%	87%	89%	84%	68%
Takes water quality seriously	85%	82%	83%	86%	84%	83%	86%	88%	83%
Cares about the environment	88%	80%	87%	87%	89%	90%	90%	83%	85%
Efficiently delivers services	88%	88%	91%	93%	88%	90%	86%	82%	77%

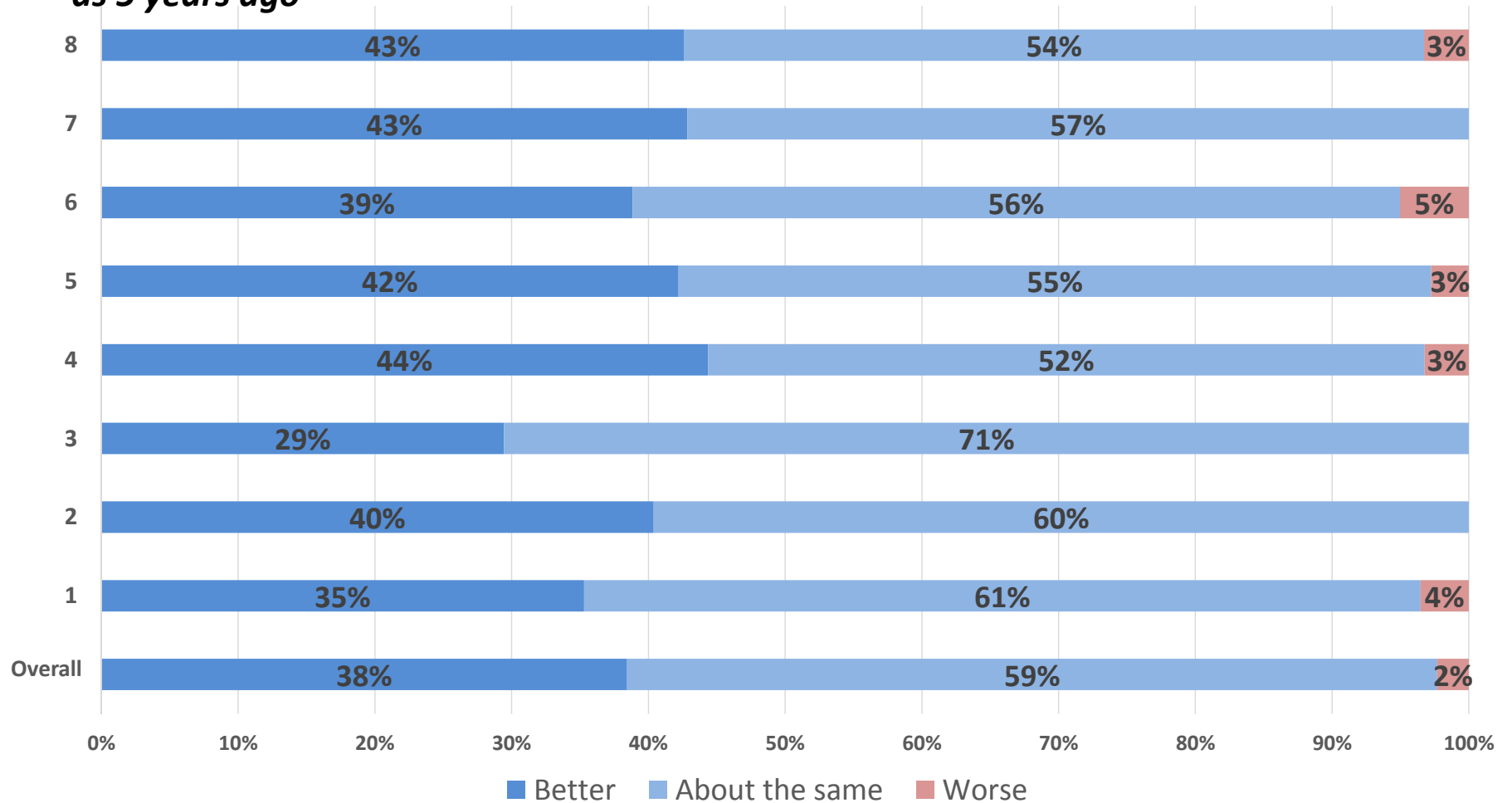
Reliability of DC Water in Last 5 Years

Across all wards, most customers reported that DC Water services were about as reliable as 5 years ago



Quality of DC Water in Last 5 Years

Across all wards, most customers reported that the quality of water was about the same as 5 years ago





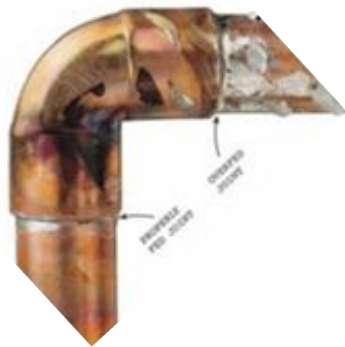
Lead Monitoring and Minimization in Schools, Daycares, and Apartment Buildings

Water Quality and Water Services Committee, July 21, 2016

Sources of Lead

Service lines less than 2-inch

- Large buildings require larger water flow
- Lead pipe too heavy and bendable to be used for 2-inch or larger



Lead solder

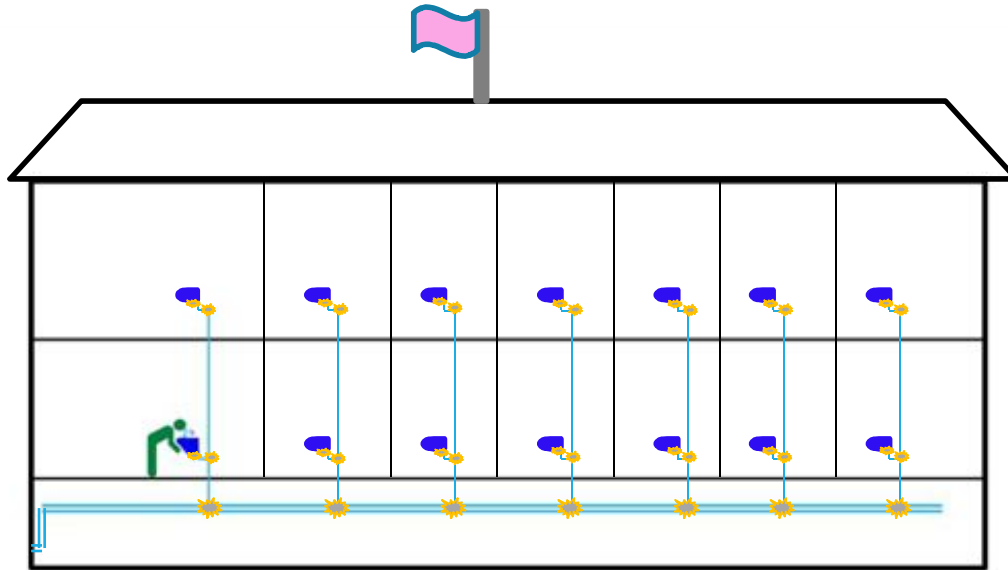
- 1986 law reduced from 50% lead to less than 0.2%

Brass fittings and fixtures

- 1996 reduced lead content to less 8%
- 2014 reduced lead 0.25%



Monitoring Challenges



☀ Lead solder at joints and bends can release particles, especially during construction work



Lead particles can get caught in fountain tubing

Random "hits"

Daycare Facility Challenges

- Single family home with lead service lines
- Churches with lead service lines
- Galvanized iron pipe following the lead service line

Proposed District Law

Law: Filtering and testing all designated drinking water sources for schools and daycares

DC Water Assistance:

- Communication to daycare facilities that might have lead service lines
- Education on minimizing exposure
 - Cleaning aerators
 - Flush pipes after construction or plumbing work
 - Replacing filters by estimated volume

Apartment Buildings

Increased lead tests this year

- Small percent will have elevated levels
- Smaller sample bottle to capture water in the individual unit's plumbing



Communication

- Routinely clean aerator
- Potential lead solder release during construction / plumbing work
- Run water for one minute before using for drinking or cooking



Summary of Actions

- Working with DGS to assist implementation of Schools' lead monitoring program
- Talked to OSSEE about regulating daycares for lead in drinking water; offered assistance
- Providing lead test kits to tenants of apartment buildings and discussing elevated levels with owners
- Research on best flushing methods following construction (Water Research Foundation)
- Outreach to apartment building management for lead exposure minimization