



Bellevue | Bothell | Duvall | Kenmore | Newcastle | Woodinville

**Stormwater Runoff  
Awareness, Attitudes & Behavior  
Survey of Residents**

November 2019



Bellevue Bothell Duvall Kenmore Newcastle Woodinville

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# Stormwater Runoff: Awareness, Attitudes and Behavior

November 2019

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# INTRODUCTION

This report summarizes the results of a telephone survey, conducted on behalf of the cities of Bellevue, Bothell, Duvall, Kenmore, Newcastle and Woodinville to assess resident awareness, attitudes and behavior relative to stormwater runoff. The survey was designed to allow the cities to compare current thinking and behavior to those measured in a survey conducted in Bellevue, Redmond and Shoreline in 2005 and repeated in Bellevue, Bothell, Kenmore, Kirkland, Redmond and Shoreline in 2012.

A total of 2527 randomly selected adult heads of household completed this survey between October 16 and November 3, 2019. A systematic sample was drawn for each of the six cities, making this project six surveys utilizing the same questionnaire. Interviews were conducted by a mix of live telephone interviews and online questionnaire. Households selected for the online portion of the survey were sent a letter from a city official, on city letterhead, inviting them to log on to the survey website and complete the questionnaire,

The survey was administered by Elway Research, Inc. The questionnaire was designed in collaboration with representatives of each of the participating cities to replicate the 2012 questionnaire, with modifications. Survey respondents were asked about:

- Awareness and concern about water pollution and awareness of contributors to local water pollution – particularly stormwater runoff;
- Yard care practices;
- Vehicle maintenance;
- Pet waste;
- The perceived efficacy of various mitigation strategies.

Demographic information was also collected so as to compare and contrast answers. The demographic analysis, presented here in bullet points on the graphs, applies to the combined, six-city data. Each city has also been presented a set of demographic crosstabs unique to its sample.

# METHODS

- SAMPLE:** 2527 Heads of household in 6 King County cities
- SAMPLE FRAME:** Registered voter household list + commercial list  
Respondent did not have to be a registered voter.
- FIELD DATES:** October 16 – November 3, 2019
- DATA COLLECTION:** Multi-mode:  
252 telephone interviews with live interviewers;  
558 text to cellphones; online questionnaire;  
1717 online questionnaire from mailed invitations.
- TELEPHONE: Calls were made during weekday evenings and weekend days by trained, professional interviewers under supervision. Up to four attempts were made to contact each number in the sample. Questionnaires were edited for completeness and 10% of each interviewer's calls were re-called for verification.
- TEXT: Text invitations were sent to cellphone numbers with a hot link to the online questionnaire.
- ONLINE: Invitation letters were mailed to households asking residents to log on to the survey website and complete the questionnaire.
- WEIGHTING:** The data for each city were statistically weighted to more closely match the demographic profile of the city. The weighted variables were age, education and home ownership.
- For the combined analysis, the data were further weighted to reflect each city's proportion of the combined population of the six cities.

**METHODS****Mixed-Mode Data Collection**

This survey was conducted using a mixed-mode sample design that combined land-line telephone and cell phone with online data collection. Previous surveys (2005 and 2012) were conducted entirely via telephone, and primarily on land lines.

We drew a systematic sample of households in each of the six cities. For the three smaller cities (Duvall, Newcastle and Woodinville) the “sample” consisted of every available household in the city. The total sample consisted of 12,663 landline telephone numbers, 11,296 cellphone numbers, plus 20,291 households with mailing addresses but no telephone numbers.

The telephone numbers were called up to 4 times each or until someone answered and either agreed or refused to be interviewed. A total of 39,439 calls were placed. The telephone survey resulted in 252 interviews, for a *completion rate*<sup>1</sup> of 2%, and a *cooperation rate*<sup>2</sup> of 22.5%.

Cell phone numbers were sent a text invitation with a hot link to take the survey online. A total 558 people completed questionnaires for a completion rate of 4.9% and a cooperation rate of 26.4%.

The households for which we had no telephone number were mailed a letter from the city asking a designated adult<sup>3</sup> in the household to log on to our survey website and complete the questionnaire online. The online survey resulted in 1717 completed questionnaires for a completion rate of 14%.

Sample sizes and response rates are presented in the table below. Demographic profiles of each city sample are presented in the following section.

The data from all modes were combined into a single data set. The combined data were statistically weighted by age, home ownership and education to align with known population distributions in each city.

In addition to improving the representativeness of the sample, it is argued that mixed-mode data collection improves the quality of the data by combining telephone and online answers. This is due to differences in the response patterns to oral vs. displayed questions. By combining the responses, mixed-mode data collection is thought to mitigate any inherent bias in response patterns.

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<sup>1</sup> The *completion rate* is the percentage of completed interviews by the total number of telephone numbers dialed. It includes numbers where no one answered the call.

<sup>2</sup> The *cooperation rate* is the percentage of completed interviews by the number of qualified respondents contacted.

<sup>3</sup> Instructions were that the survey be completed by the adult (18+) in the household with the most recent birthday. This is a common practice to randomize respondents.

**Margin of Error**

The margin of sampling error (MOSE) is a statistic that provides an estimate of the precision of a survey response. It expresses a range within which a given answer would be expected to fall if the entire population had been interviewed.

The MOSE is commonly referred to as simply “the margin of error,” and is expressed as ±X percentage points, as in “this survey has a margin of sampling error of ±3.2%.” By convention, the MOSE is typically calculated using a 95% confidence interval. This means that there is a 95% probability that the true response is within the margin of error.

The MOSE is primarily function of sample size. Generally speaking, the smaller the sample size, the larger the margin of error. Thus, Results for sub-groups within the sample (e.g., homeowners, people over age 65) will have a larger margin of error than the sample as a whole. On the other hand, the closer the response is to unanimity, the smaller the MOSE. That is, an 80% response has a smaller margin of error than a 51% response in the same sample.

Because this survey consisted of six independent samples, each city’s sample has its own margin of error. The sample size and overall margin of sampling error for the participating cities is displayed in the table below.

**Sample Size and Margin of Sampling Error by City**

The primary sample was drawn from the list of registered voter households in each city (that is, at least one person in the household is registered to vote) and supplemented by a commercial list that aggregates lists from numerous sources.

Attempts were made to contact 44,250 households in this sample, including 12,633 by telephone, 11,296 by text and 20,291 by mail. The completion rates for each mode are included in the table below.

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	WOODINVILLE
<b>Interviews</b>	<b>435</b>	<b>475</b>	<b>344</b>	<b>654</b>	<b>349</b>	<b>270</b>
Margin of Error	±4.7	±4.5	±5.1	±3.8	±5.2	±5.9
<b>Completes by Mode</b>						
Phone/Text	106	44	10	54	19	19
Text	129	118	57	147	56	51
Mail/Online	200	313	277	453	274	200
<b>Completion Rate</b>						
Phone %	1.9%	2.1%	2.0%	2.3%	2.0%	1.7%
Text %	3.7%	5.5%	6.4%	6.4%	4.2%	4.2%
Online %	7.4%	7.7%	14.8%	10.1%	8.2%	5.2%

# RESPONDENT PROFILE

In interpreting survey findings, it is important to keep in mind the characteristics of the people actually interviewed. This table presents a demographic profile of the respondents in the survey and the profile of the sample in each of the participating cities. The data have been statistically adjusted to match demographic characteristics of each city’s adult population.

**Note:** Cell entries are percentages. Throughout this report, percentages may not add to 100%, due to rounding.

BELLEVUE BOTHELL DUVALL KENMORE NEWCASTLE W'VILLE

<b>GENDER:</b>		BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Male		51	50	49	49	50	49
Female		49	50	51	51	50	51
<b>AGE:</b>		BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
18-35		30	30	24	24	24	29
36-50		27	29	45	30	36	31
51-64		23	22	23	27	25	25
65+		17	17	8	19	15	15
<b>YEARS IN CITY</b>		BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
3 Years Or Less		26	30	27	32	32	23
4-9 Years		20	26	29	28	24	32
10 To 20 Years		23	19	28	17	24	23
More Than 20 Years		29	26	16	22	19	22
No Answer		3	*	*	1	1	*
<b>TYPE OF HOME</b>		BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Single-Family House		63	65	94	73	69	60
Condominium		9	7	4	7	14	9
Townhouse		6	4	1	6	5	5
Apartment		22	23	1	14	12	27
Other / No answer		1	1	*	*	*	*

Cont. ►

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>OWN/ RENT</b>						
Own	57	66	89	72	77	59
Rent	43	33	10	28	23	41
No Answer	1	2	1	1	1	0
<b>PRIMARY LANGUAGE</b>						
English	89	94	96	94	89	92
Chinese	4	1	0	2	5	1
Spanish	0	*	2	1	1	*
Korean	2	*	0	*	1	0
Russian	1	1	1	*	*	1
Vietnamese	0	*	0	1	*	0
Tagalog	0	0	0	0	0	1
Persian (Farsi)	0	0	0	*	0	*
Other	4	2	1	1	4	5
No Answer	1	1	*	1	1	1
<b>EDUCATION LEVEL</b>						
High School Or Less	15	22	14	17	12	15
Some College /Tech. School	19	27	34	29	19	28
4-Year College Degree	37	33	35	33	39	37
Post Graduate School	29	17	17	22	30	19
No Answer	1	*	1	1	1	1
<b>HOUSEHOLD INCOME</b>						
\$50,000 or Less	13	17	13	16	9	10
\$50 To 75,000	12	12	7	16	12	11
\$75 To \$100,000	13	17	10	15	11	14
\$100-125,000	14	12	13	13	16	18
Over \$125,000	39	32	51	32	44	36
No Answer	9	10	6	8	8	12

# OVERVIEW

## AWARENESS

- ◆ Water quality issues were cited second or third behind growth issues and sometimes traffic as the top local environmental concern in each city.
- ◆ 3 in 10 were aware of water pollution problems in local waterways.
- ◆ 3 in 10 thought that actions they take affect the health of local waterways.
- ◆ 8 in 10 thought that stormwater runoff ends up in local waterways or Puget Sound.
  - 3 in 4 thought that runoff caused “significant harm” to local water quality.
- ◆ 4 in 10 did not know whether or not stormwater is treated.

## SOURCES OF WATER POLLUTION

- ◆ Chemicals, such as pesticides, motor oil, and household chemicals were twice as likely to be seen as significant sources of water pollution than obvious runoff, such as car wash water, soil erosion and pet waste.
- ◆ For most household tasks (e.g., painting, pressure washing, window washing) most respondents said the wastewater goes into their yard.

## LAWN & GARDEN

- ◆ 8 in 10 households in this survey have a yard or garden.
- ◆ Most respondents clean their hardscapes by sweeping (5 in 10) or using a blower (4 in 10).
- ◆ Many use chemicals at least occasionally, including
  - Weed killers (nearly half);
  - Slow release fertilizers (just over than half);
  - Pesticides (about 1 in 3).

## HOUSEHOLD HAZARDOUS WASTE

- ◆ Large majorities take their HHW to a collection site or the Wastemobile.

## PET WASTE

- ◆ 8 in 10 dog owners pick up their dog's waste on every walk;
  - 7 in 10 put it in the trash.
- ◆ 4 in 10 pick up their yard daily.

## VEHICLE MAINTENANCE

- ◆ Half take their vehicle to a car wash at least “every couple of months.”
  - 1 in 5 wash their vehicles at home at least occasionally.
- ◆ Fewer than 1 in 5 change their own oil.
- ◆ About half check regularly for vehicle oil leaks:
  - Most (6 in 10) said they would put absorbent pads or material under their vehicle if they found a leak;
  - 9 in 10 said that if they found a leak they would get it checked immediately;
  - Potential expense was the largest barrier to getting a leak checked out.

## EFFECTIVENESS OF MEASURES TO PROTECT WATER QUALITY

- ◆ 4 measures were each rated by more than 7 in 10 respondents as potentially “very effective at protecting water quality”:
  - Proper disposal of household hazardous waste;
  - Repairing vehicle oil leaks;
  - Reducing the use of garden chemicals;
  - Planting and protecting trees.

# FINDINGS

**The findings are presented in graphs comparing the results from each of the six cities.**

- Not all the questions were asked in all of the cities. In those cases, the bars in the graph are left blank.

**The small graph in the upper left of each page compares the overall, combined findings from this year's survey to those from the 2012 survey (where available and comparable).**

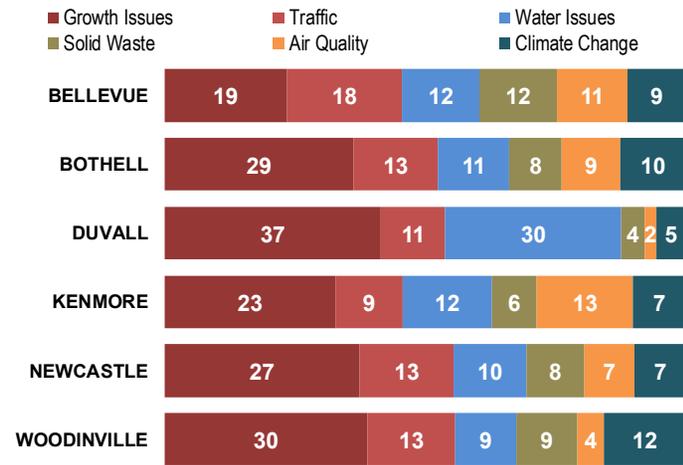
- These comparisons should be regarded as suggestive, rather than indicative of changes. This is for two reasons:
  - First, and most obviously, the cities are not the same in the two surveys, Three cities are the same and three are different.
  - Second, for purposes of the aggregated data the six cities are treated as a single population, which they technically are not. The combined results are weighted to reflect each city's proportion of the combined population of the six cities.
- The year-to-year comparison graphs should therefore be read to suggest broad indicators in the region at large.

**The bullet points describe demographic and other notable differences based on the regional sample at large.**

- This analysis assumes that respondents with similar demographic characteristics would answer similarly regardless of which city they reside in.
- For the large majority of questions, results do not differ significantly from city to city, which lends credence to this combined demographic analysis.

*Environmental Issues*

**1: Growth Issues Cited as Top Environmental Issues in Every City**



**Traffic or Water Quality issues #2 or #3 in each city**

- Homeowners were more likely than renters to name Growth (29% v. 22%) and Traffic (14% v. 10%) issues.
- Most likely to name Growth issues were those age 36-50 (31%).
- Most likely to name Water related issues were Respondents age 50-64 (16%).

**27 GROWTH**

- 13 Growth Mgt / Overdevelopment / Overcrowding / Density
- 5 Land Use / Open Space
- 4 Deforestation / Loss Of Trees
- 3 Loss Of Habitat / Wildlife
- 1 Construction
- \* Waterfront Development / Access to Water

**14 WATER**

- 3 Water Quality / Clean Water
- 3 Runoff: Water / Stormwater
- 3 Flooding / Drainage
- 2 Polluted Waterways
- 1 Water
- 1 Water Pollution
- \* Water Supply / Management
- \* Wastewater / Sewage
- \* Groundwater Contamination
- \* Pesticides

**13 TRAFFIC**

- 11 Traffic / Congestion
- 1 Transportation Alternatives
- \* Better Roads

**8 AIR**

- 6 Emissions / Vehicle Emissions
- 3 Air / Air Pollution / Air Quality

**8 CLIMATE CHANGE**

- 8 Climate Change / Global Warming
- \* Weather

**7 SOLID WASTE**

- 4 Solid Waste / Trash/ Litter
- 3 Recycling
- 1 Plastics
- \* Pet Waste

**1 POLITICAL**

- \* Regulations
- \* Politicians
- \* Environmentalist

**13 OTHER**

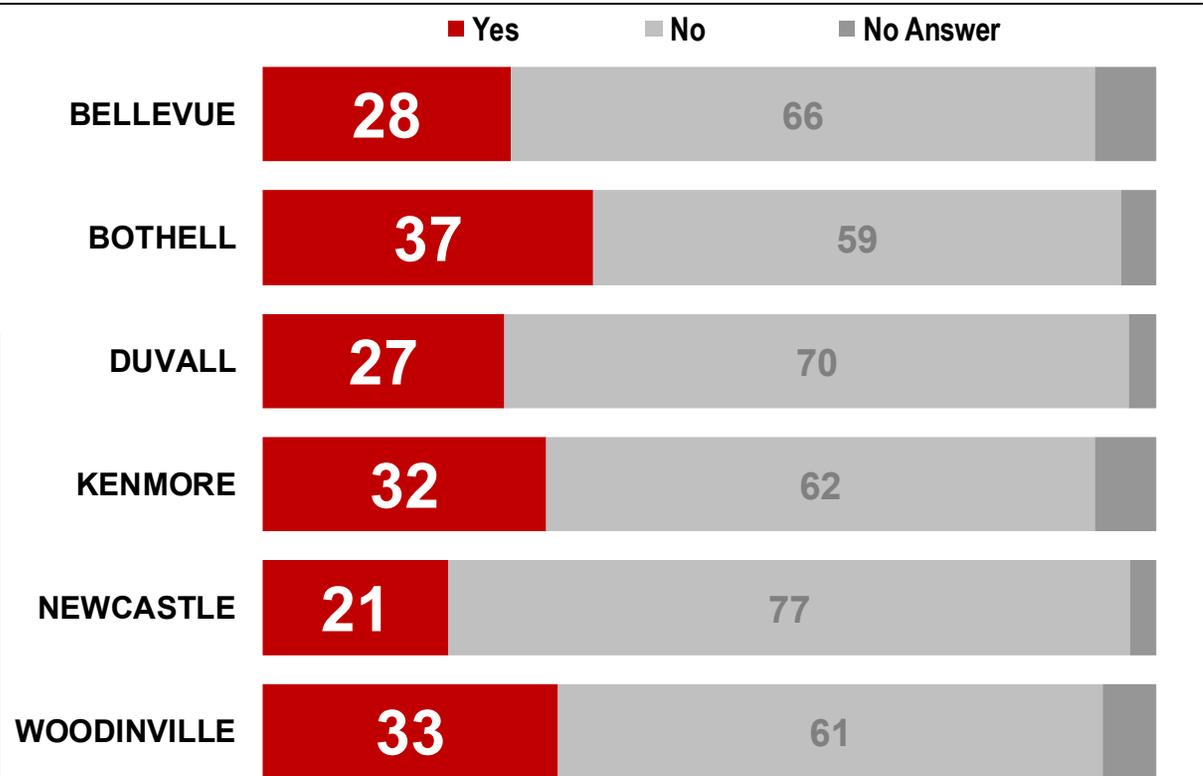
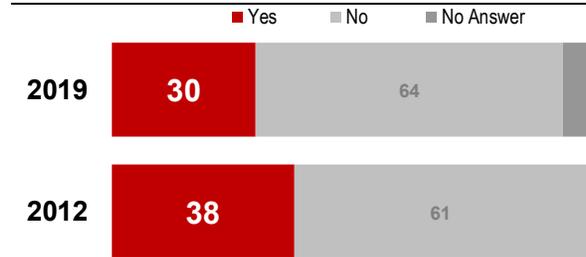
- 3 "Pollution"
- 2 Fossil Fuel / Lack Of Alt. Energy
- 1 Noise Pollution
- 1 Industrial Pollution / Cement Plant
- 1 Parks
- 7 Misc.

**3 NOTHING**

**7 NO ANSWER**

*Stormwater Awareness*

## 2: Awareness of Local Water Pollution



Awareness of water pollution somewhat lower compared to 6 years ago.

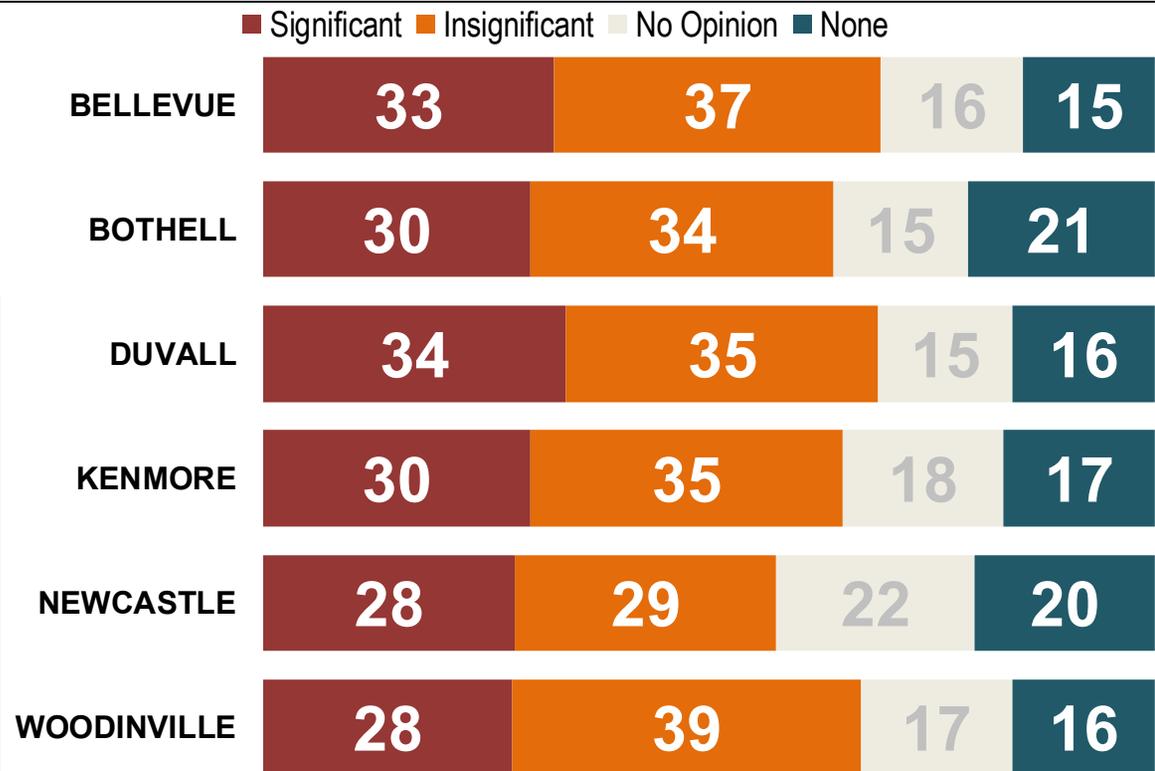
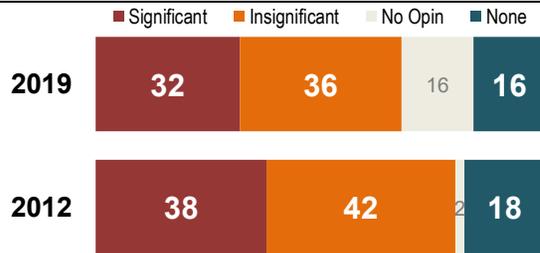
Most likely to say they were aware of water pollution were:

- Residents of Bothell (37%), Woodinville (33%) and Kenmore (32%);
- Residents of more than 20 years (38%);
- Age 65+ (37%);
- Those with incomes of \$50,000 or less (40%).

Q4 Are you aware of any water pollution problems in local waterways – like streams, rivers or lakes?

*Stormwater Awareness*

### 3: Can Personal Actions Affect Health of Local Waterways?



**Somewhat fewer believe their actions can affect health of local waters, compared to 6 years ago.**

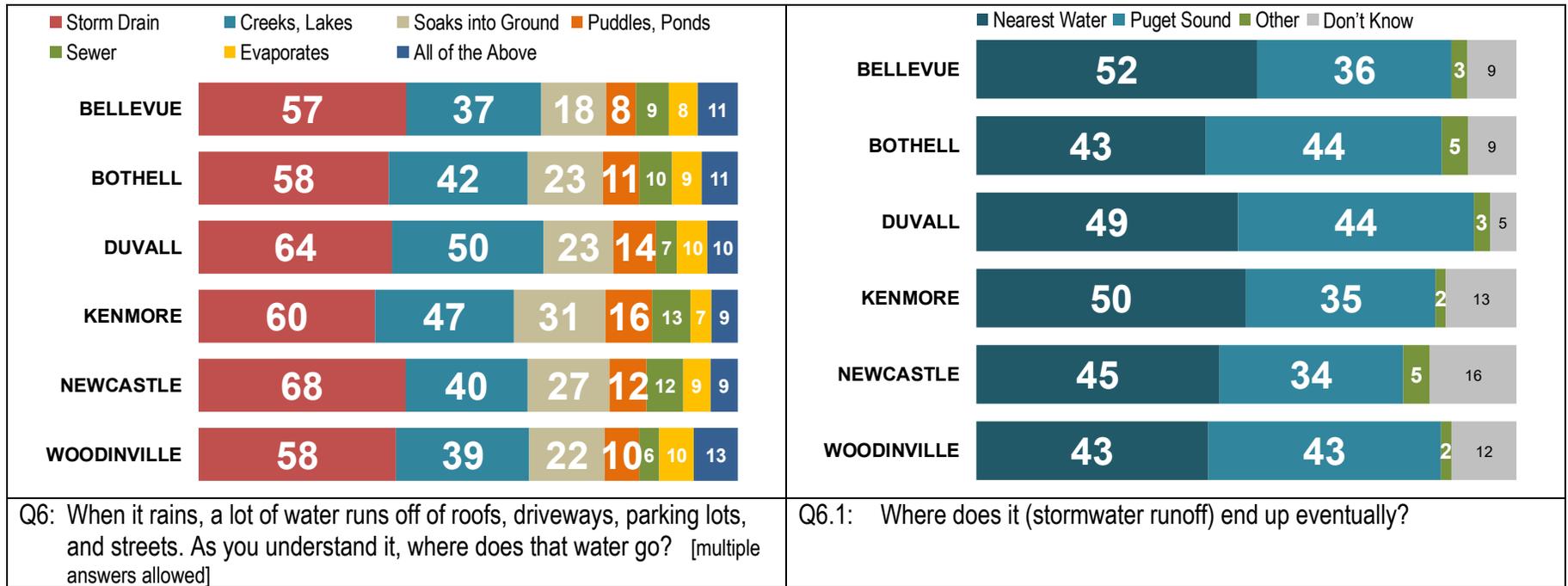
**Most likely to say they had a significant impact were:**

- Residents in single family homes (32%) and condos (33%) compared to townhouse (23%) or apartment dwellers (25%);
- Those age 36-50 (33%) and 51-64 (39%) compared to those under 35 (25%) and over 65 (20%);
- Women (34%) v. men (28%);
- Those with incomes over \$100,000 (33%).

Q5: To what degree do you believe that actions you and your family take affect the health of local streams, lakes, and rivers? Would you say your household has...

*Stormwater Awareness*

### 4: Where Does Runoff Water Go?

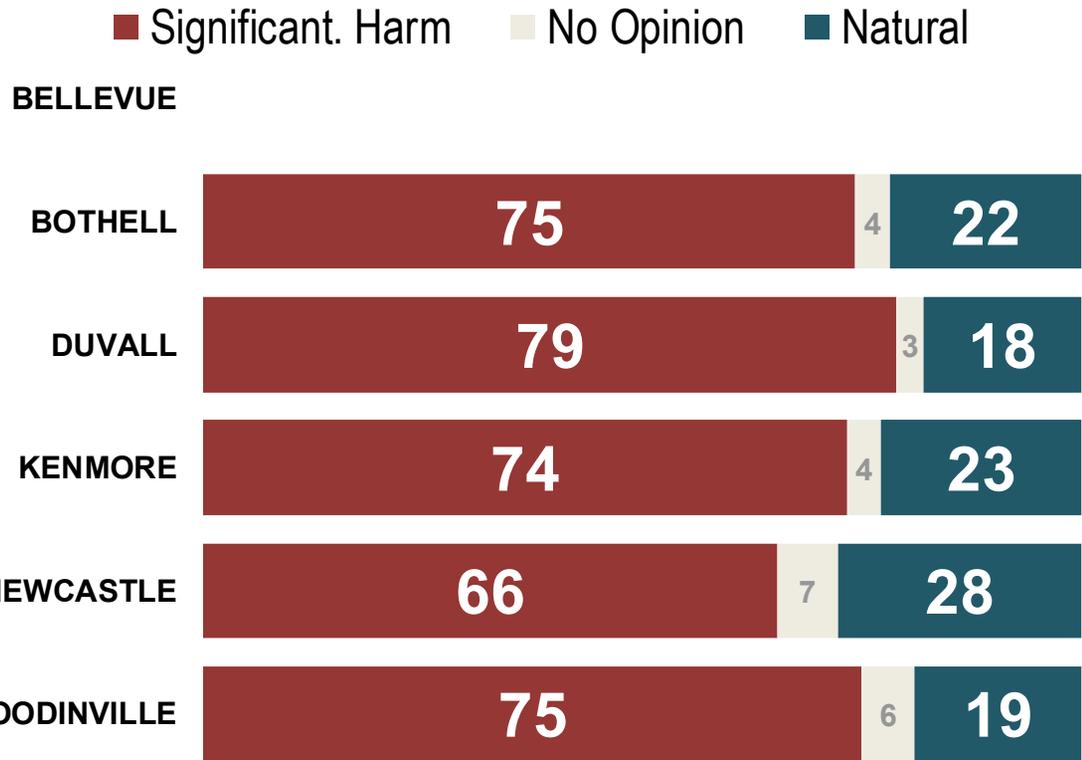
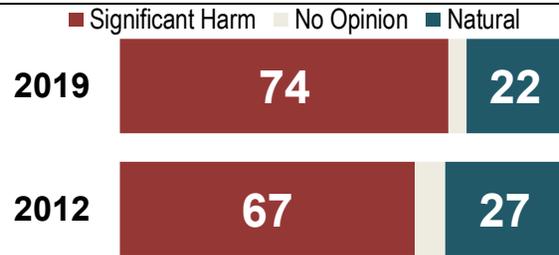


**Overall, more respondents said the runoff ended up in the nearest water than in Puget Sound.**

- There is some ambiguity in the wording (“eventually”) and structure of this question, so these results should not be taken as definitive.

*Stormwater Awareness*

### 5: Level of Harm Caused by Runoff



**3 in 4** believed that runoff has “significant harmful effect” on local waters.

- The likelihood of saying “significant harm” went up with education, from 63% of those with no college, to 72% of those with some college and 78% of those with a college degree.
- Most likely to say “significant harm” were those with incomes of \$100-125,000 (79%).

Q7: Which of the following views is closest to your own opinion about the impact of stormwater.

1. Stormwater runoff has a significant harmful effect on water quality in local streams, lakes and rivers.
2. Stormwater runoff is part of the natural way of things. Any harm to water quality from stormwater is not enough to worry about.

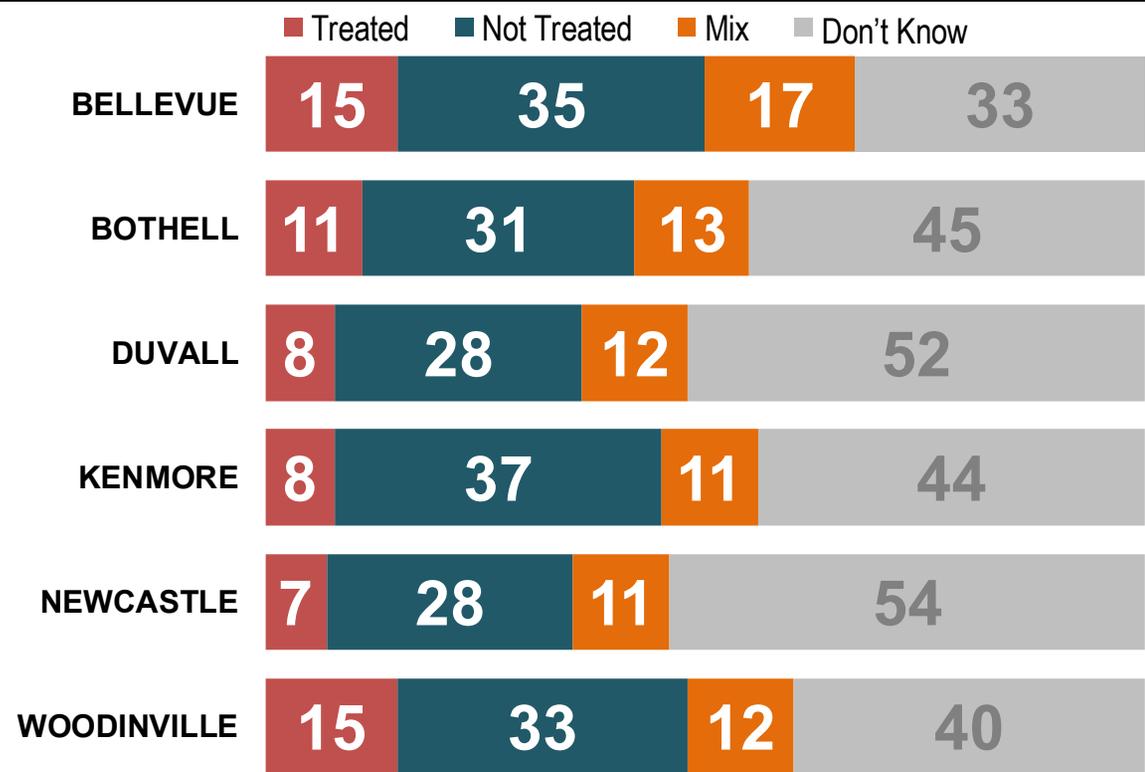
*Stormwater Awareness*

**6: Is Stormwater Treated?**



**More uncertainly about whether or not stormwater is treated compared to 6 years ago.**

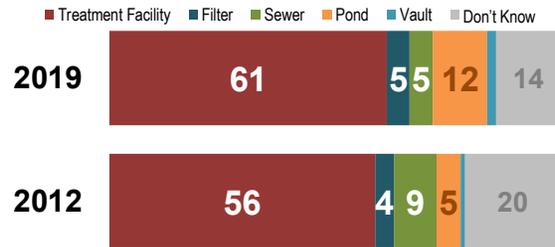
- Beyond the differences by city, the other significant difference was that those with a high school education were more likely than those who had gone to college to say that stormwater was treated (22% v. 8%).



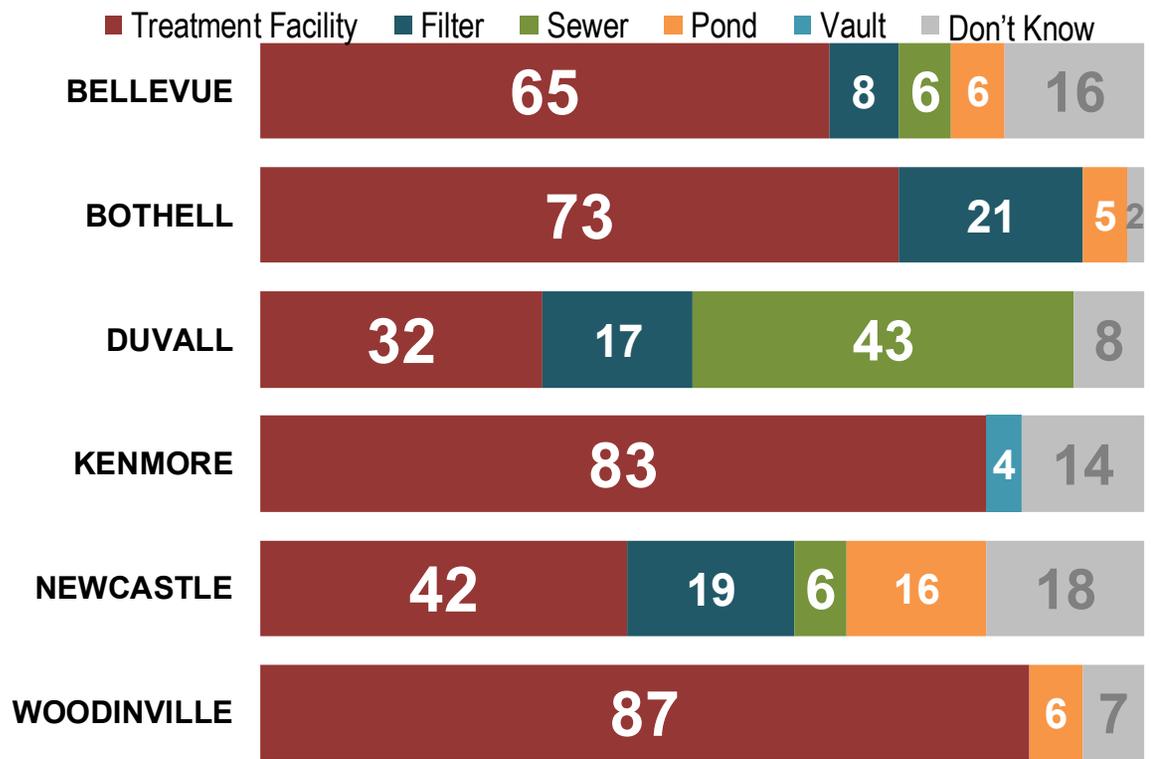
Q8: To the best of your knowledge, is runoff water in <CITY> treated before it goes back into local waters? Or is runoff water not treated?

*Stormwater Awareness*

**7: If Treated, Where is it Treated?**



There was a wide variance in answers by city, but since only 138 respondents were asked this question, the differences are not statistically significant.



Q8.1: **IF TREATED:** Where does it go for treatment? [% based on respondents who said "treated"]

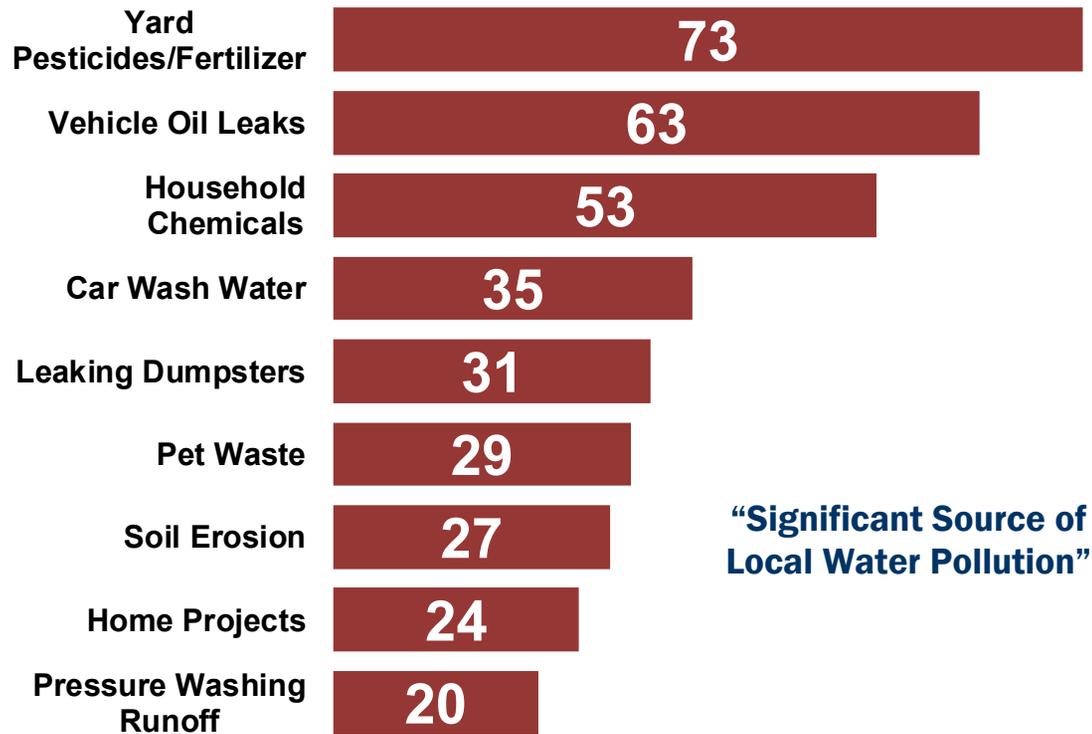
*Sources of Water Pollution*

## 8: Significant Contributors to Water Pollution

Respondents were asked to rate 9 potential contributors to local water pollution. This graph ranks them in order of the percentage of respondents who said that was a “significant source of local water pollution.”

Each source is considered separately in the following pages.

- In general, chemical sources (including oil) were rated at least twice as significant as obvious runoff sources.
- Each of the 9 sources was rated as contributing at least “some small amount” by at least 75% of respondents.

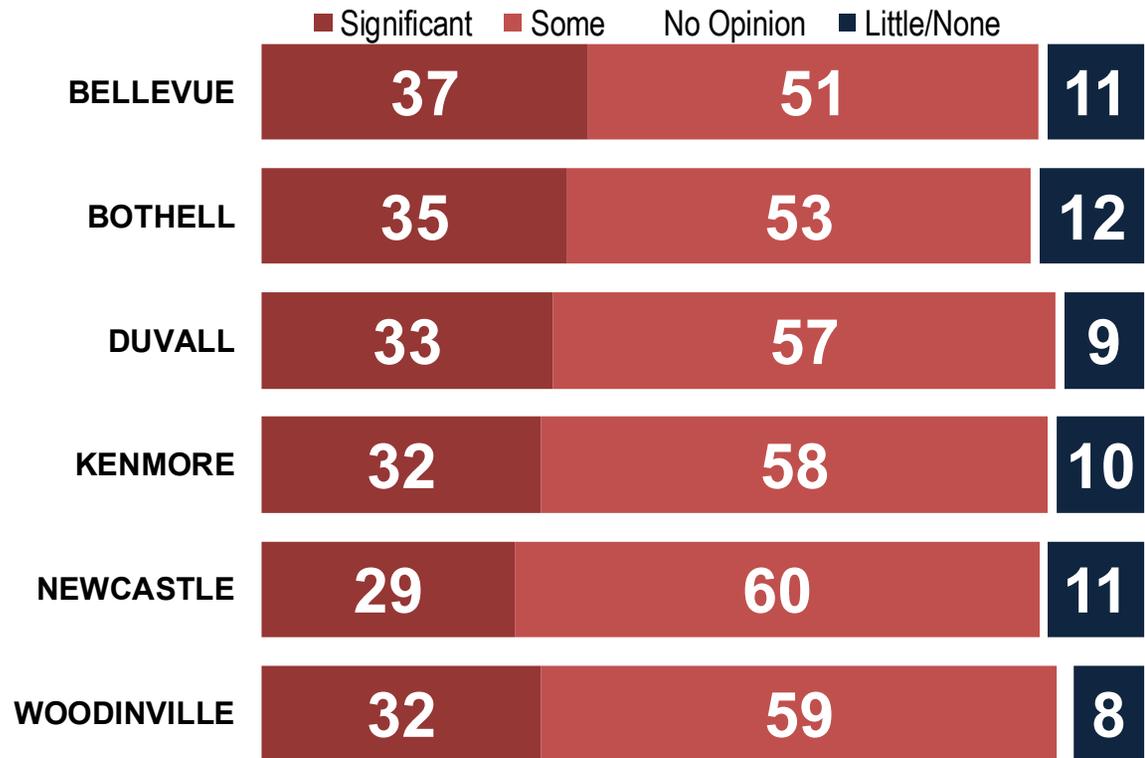
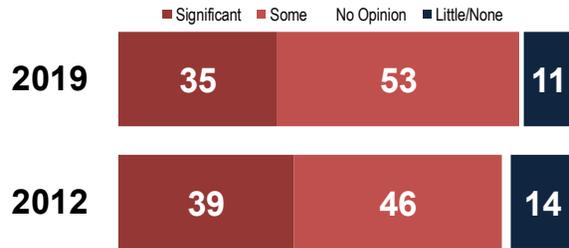


**“Significant Source of Local Water Pollution”**

Q9a Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

Sources of Water Pollution

9: Does Car Washing Contribute to Local Water Pollution?



Nearly universal agreement that car washing contributes to water pollution, but only about 1/3 believed it is significant.

Most likely to say it is a significant contributor were:

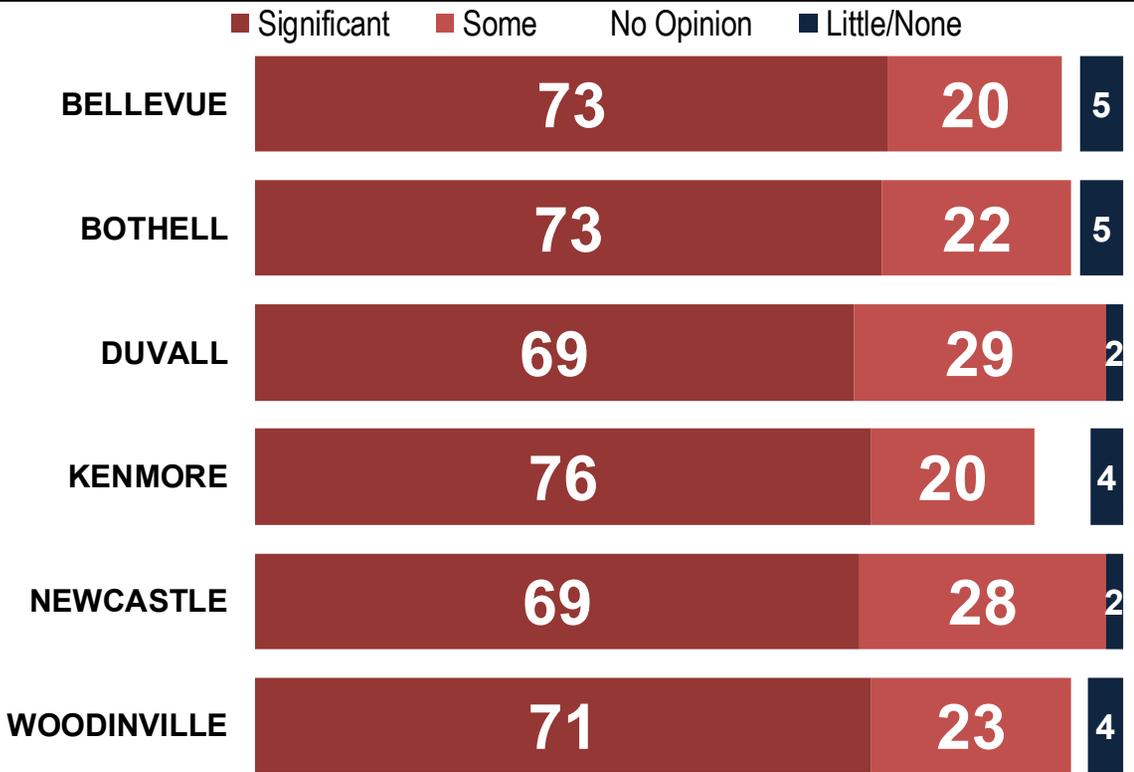
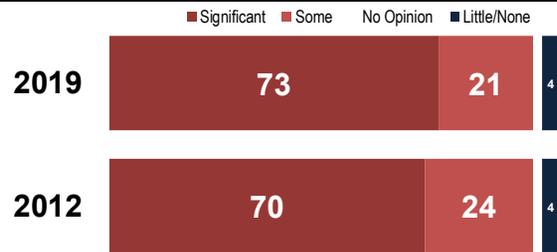
- Women (41% v. 25% of men);
- Those who spoke a language other than English at home (42% v. 32% of English speakers);
- Those with incomes of \$75,000 - \$100,000 (40% v. 31% of those with lower incomes and 30% of those with higher incomes).

Q9a Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

**Soapy water from washing cars on pavement**

Sources of Water Pollution

10: Does Pesticide Use Contribute to Local Water Pollution?



**7 in 10 believed pesticides contribute significantly to water pollution.**

**Most likely to say “significant” were:**

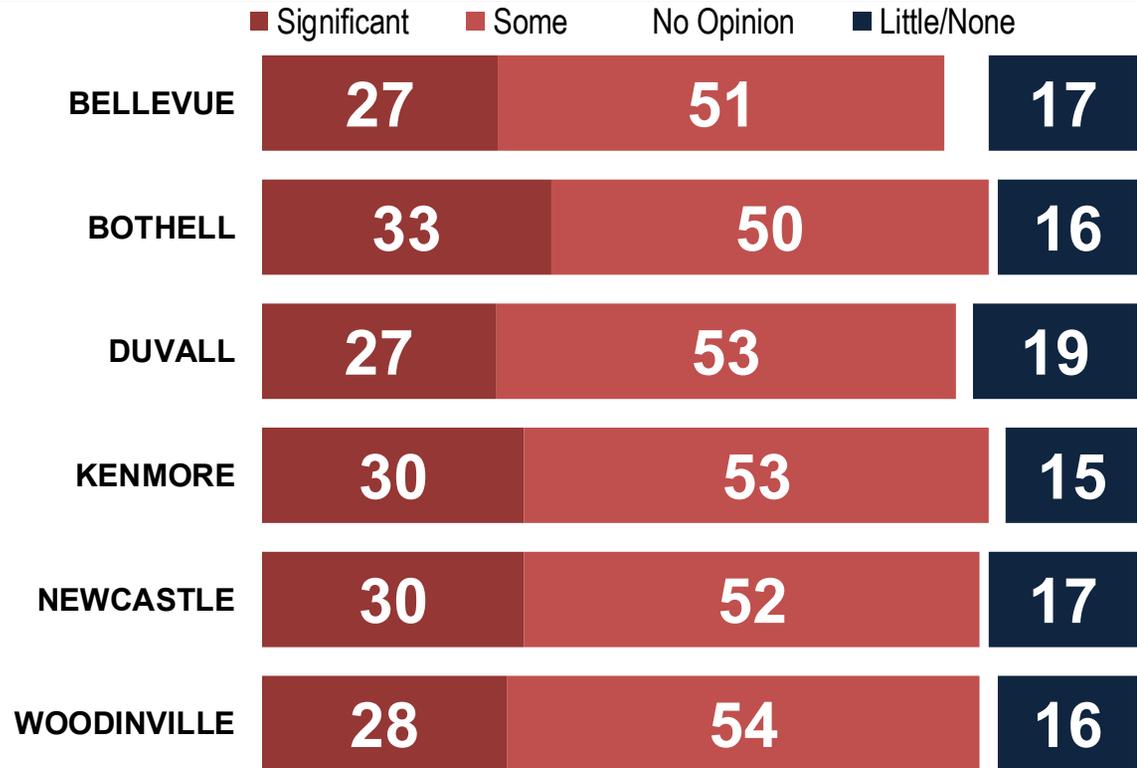
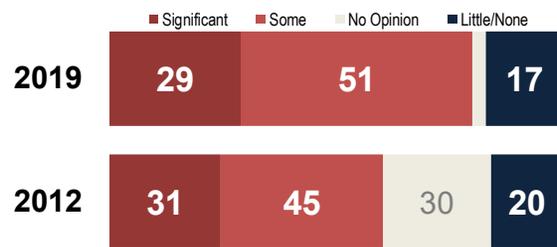
- Those under age 65 (75% v. 57% of those 65+);
- Likelihood of saying “significant” went up with education, from 68% of those with high school to 77% of those with a graduate degree.

Q9b Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

**Pesticides and fertilizers from yards**

Sources of Water Pollution

11: Does Pet Waste Contribute to Local Water Pollution?



**8 in 10** agreed that pet waste contributes to water pollution, but only **3 in 10** believe it is significant.

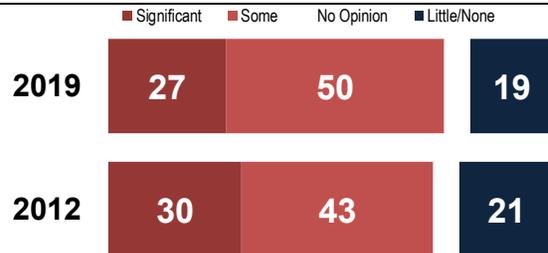
- Women were more likely than men to say "significant" (35% v. 24%);
- Apartment residents were more likely than those in single-family houses (34% v. 28%).

Q9c Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

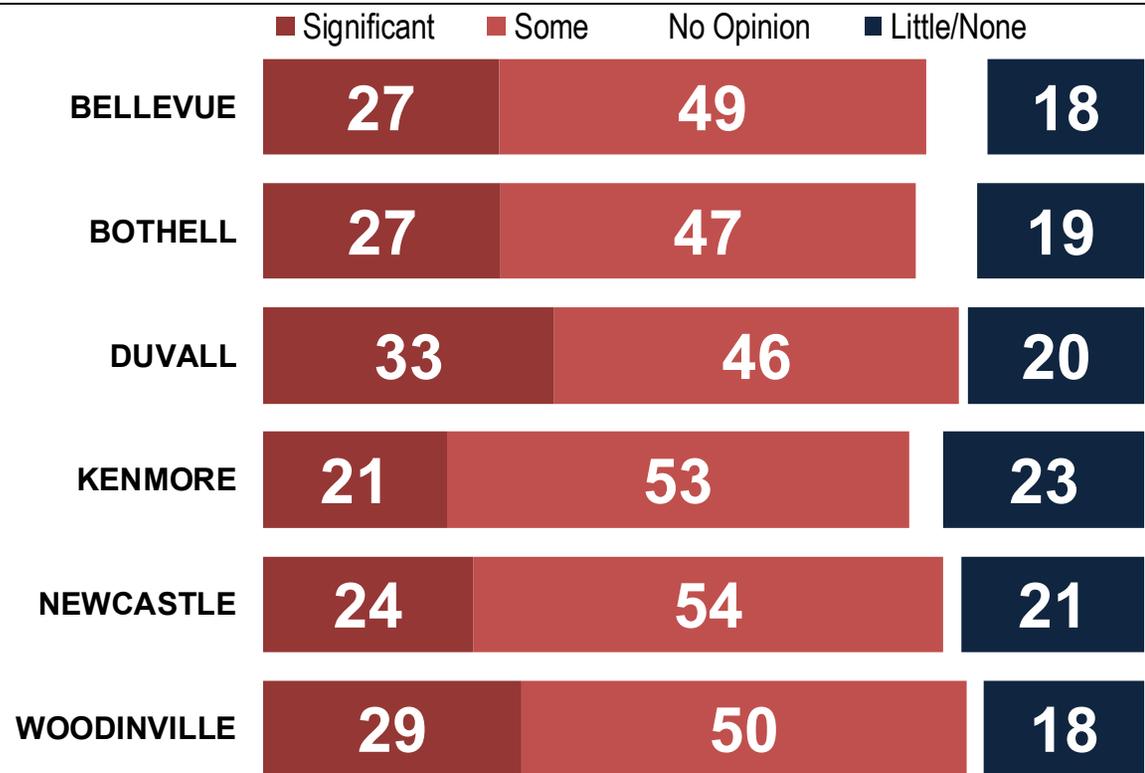
**Dog poop left on the ground**

Sources of Water Pollution

12: Does Soil Erosion Contribute to Local Water Pollution?



3 in 4 agreed that soil erosion contributes to water pollution, but only about 1 in 4 believed it is significant.

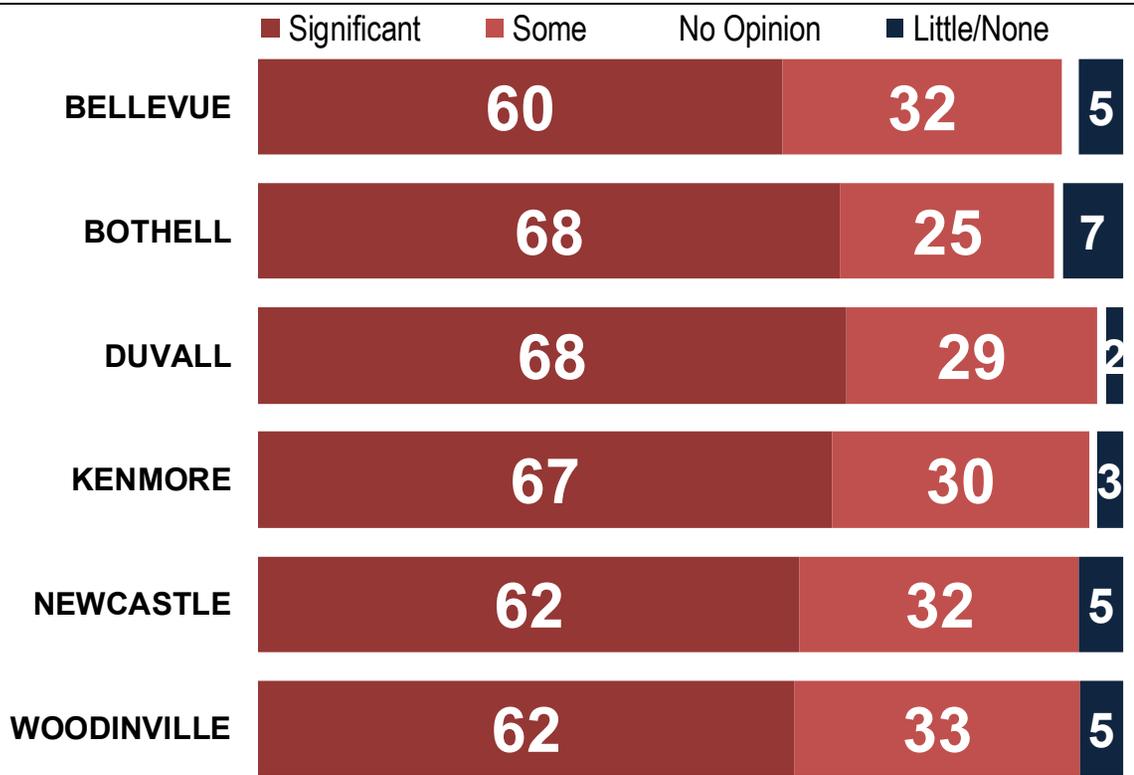
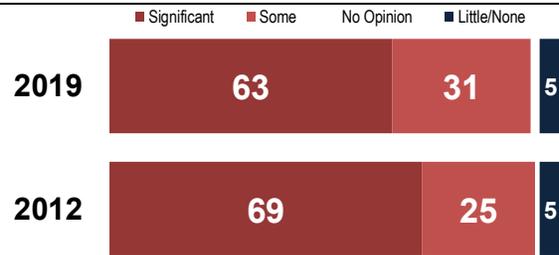


Q9d Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

Soil erosion from exposed soil

Sources of Water Pollution

13: Do Vehicle Oil Leaks Contribute to Local Water Pollution?



Nearly 2/3 agreed that vehicle oil leaks contributes significantly to water pollution.

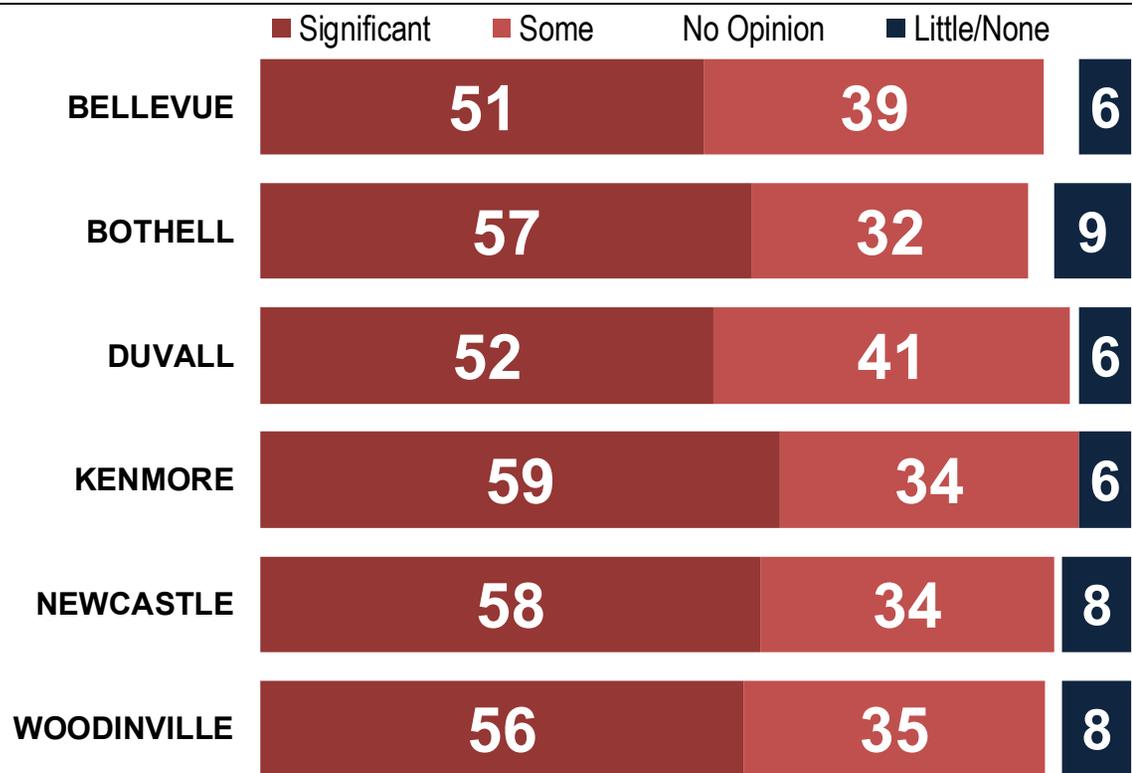
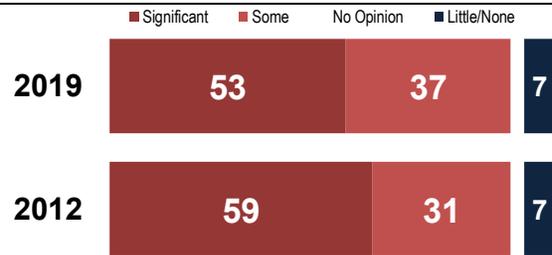
- Those under 65 were more likely to say "significant" (66%) than those 65+ (54%).

Q9e Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

Oil leaks from cars and trucks

Sources of Water Pollution

14: Do Household Chemicals Contribute to Local Water Pollution?



Slight majority believed that household chemicals contribute significantly to water pollution.

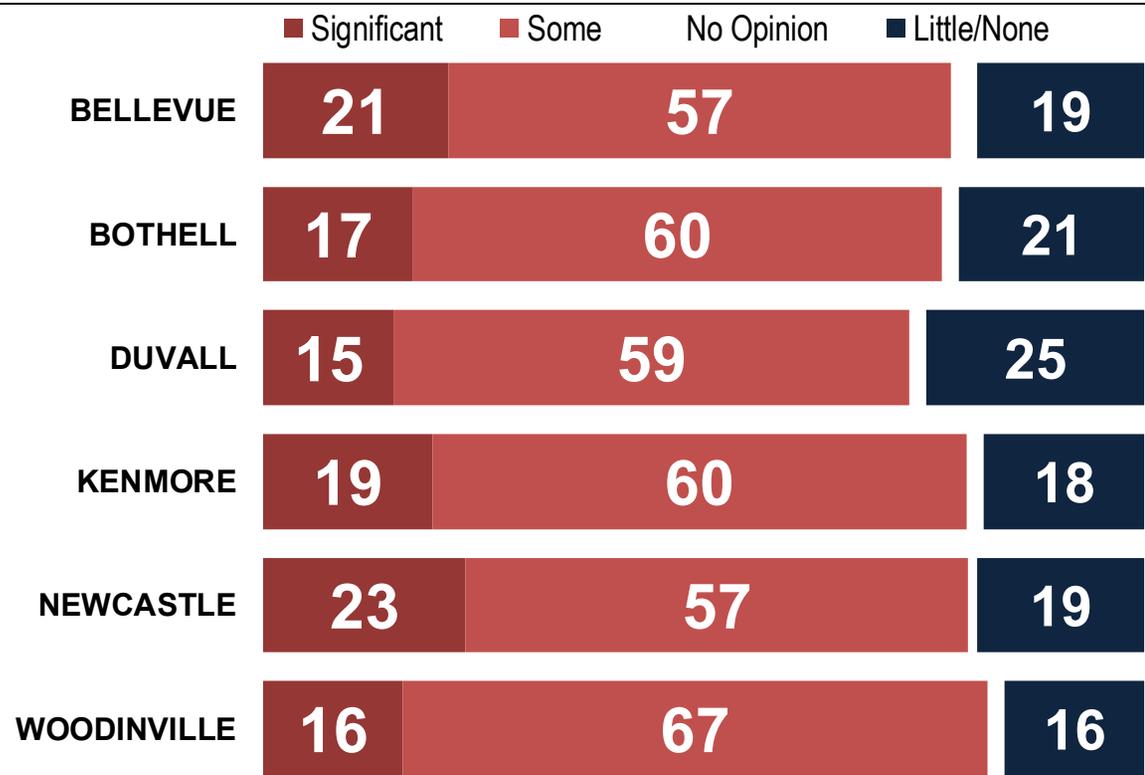
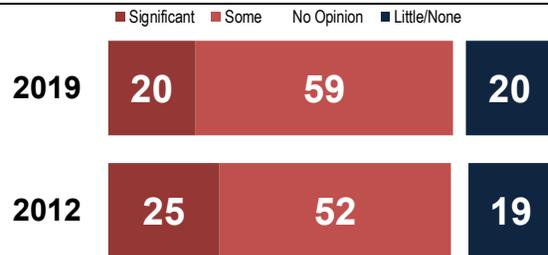
- Women were more likely than men to say it is “significant” (61% v. 51%).

Q9f Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

**Cleaning fluids, other household chemicals improperly stored or disposed of**

Sources of Water Pollution

15: Does Pressure Washing Contribute to Local Water Pollution?



**1 in 5 believed that pressure washing contributes significantly to water pollution.**

- Residents of single-family houses were least likely to say “significant” (16% v. 23% of those in multi-family buildings).

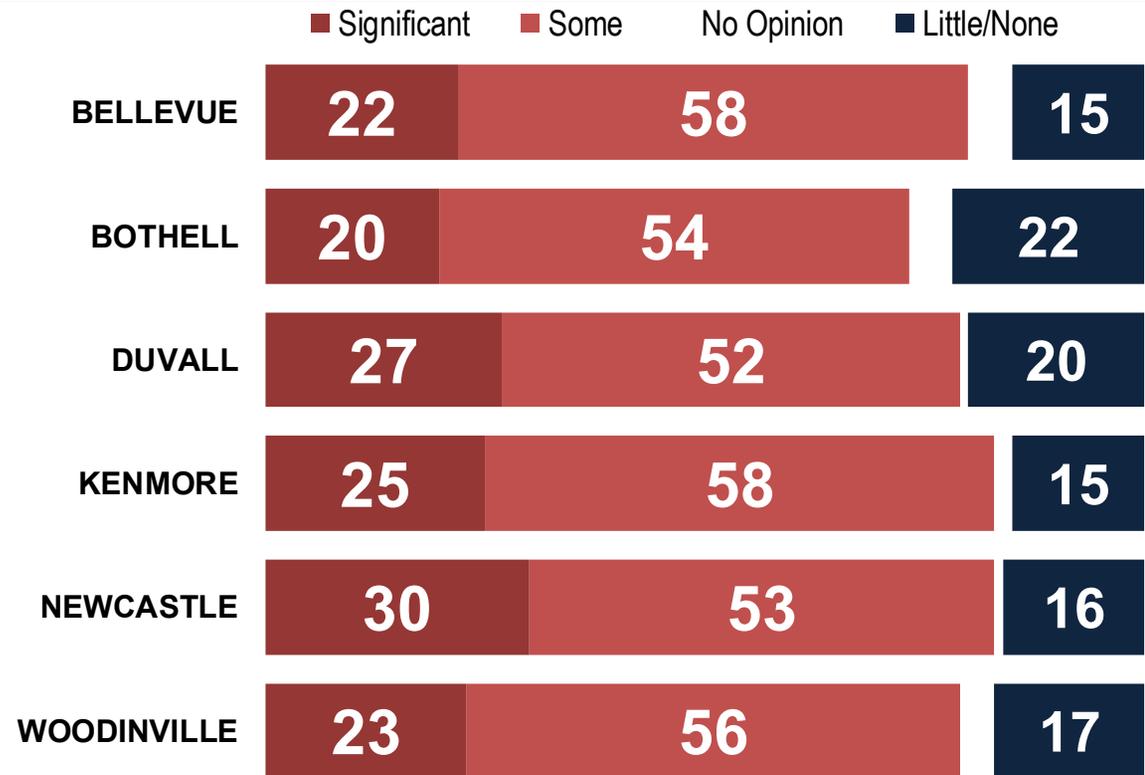
Q9g Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

**Runoff water from pressure washing**

Sources of Water Pollution

16: Do Home Improvement Projects Contribute to Local Water Pollution?

No comparative data



Only 1 in 4 believed that home improvement projects contribute significantly to water pollution.

- Residents of single-family houses were least likely to say “significant” (22% v. 29% of those in multi-family buildings).

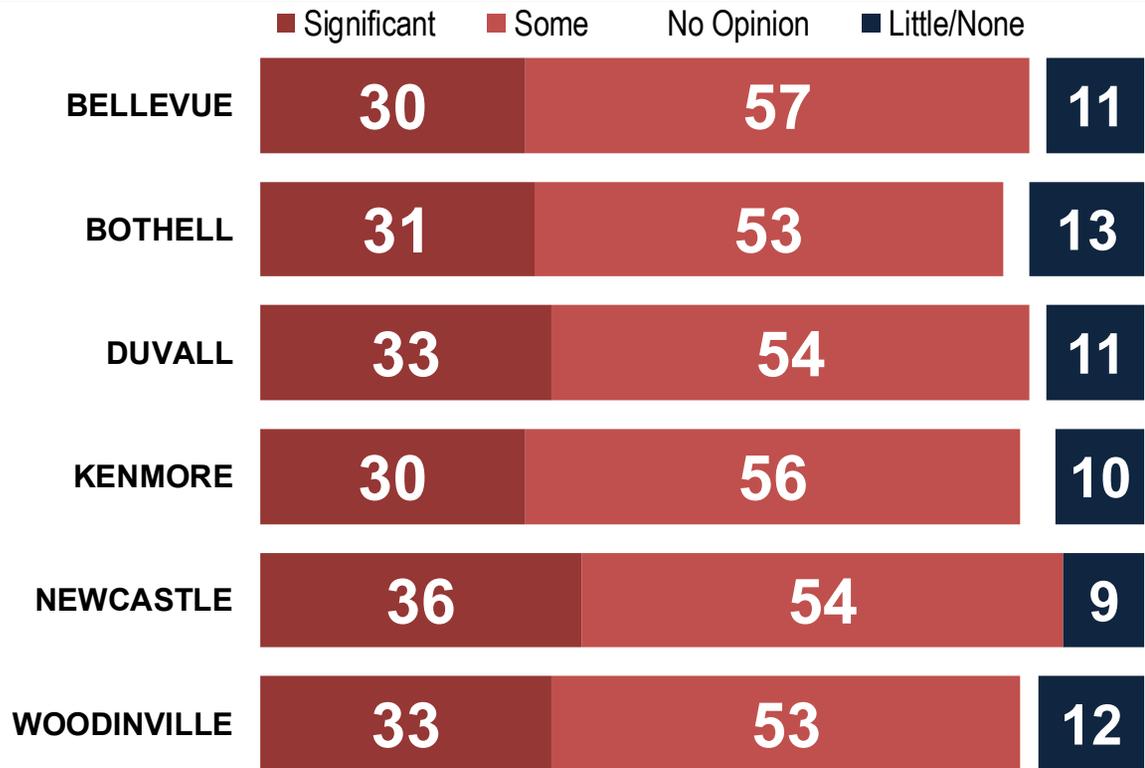
Q9h Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

**Runoff from home improvement projects like tile cutting**

Sources of Water Pollution

17: Do Leaking Dumpsters Contribute to Local Water Pollution?

No comparative data



**1 in 3 believed that leaking dumpsters contribute significantly to water pollution.**

- Residents in townhouses (44%) and apartments (37%) were more likely to say “significant” than those in single-family houses (29%).

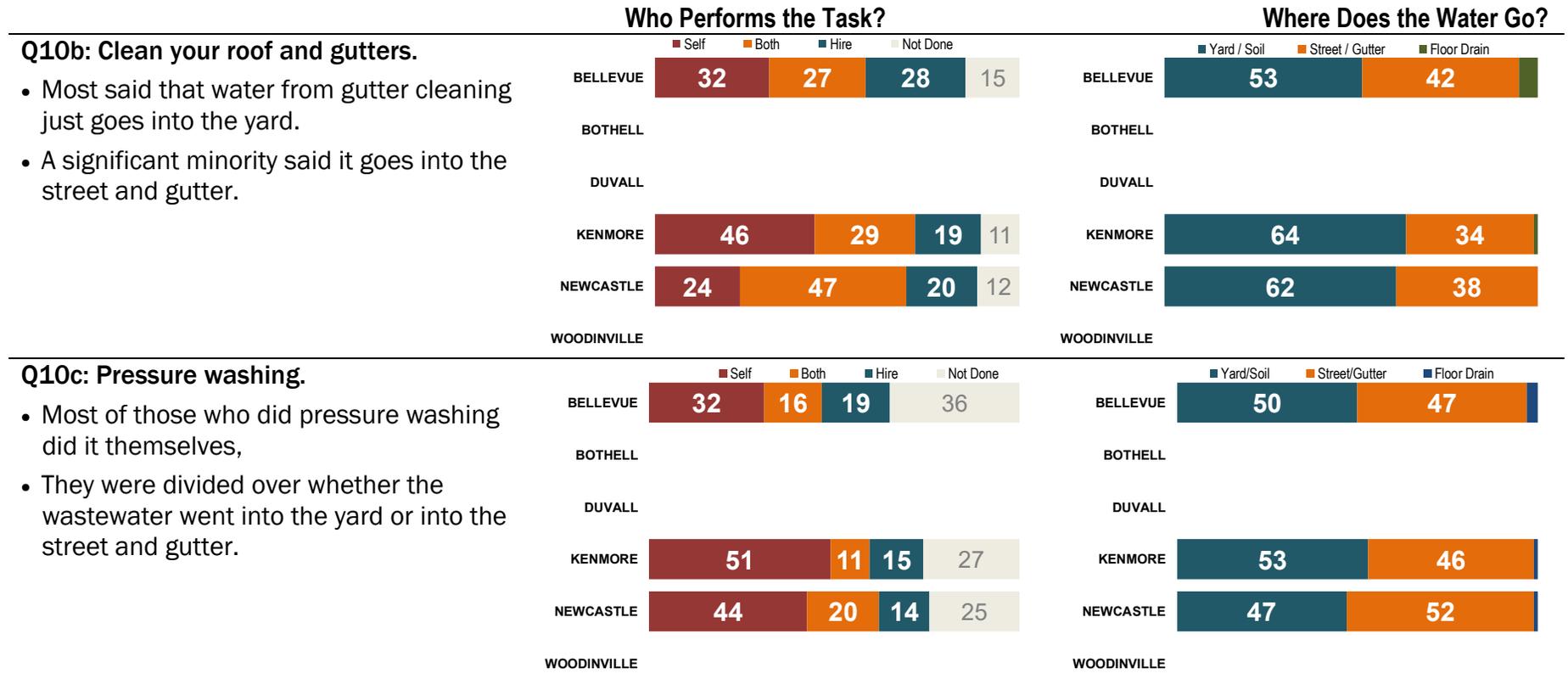
Q9i Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

**Leaking liquid from dumpsters**

*Household Tasks*

### 18: Household Tasks at Your Home: Who Does Them? Where Does the Water Go?

The following are some common household tasks. As I read each one, tell me who does that at your home: Yourself, a friend or relative? A hired company or professional? A property manager?



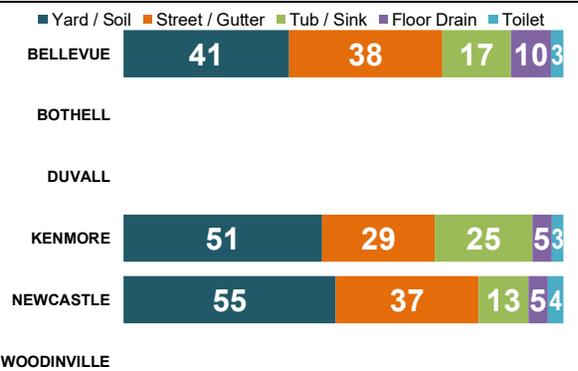
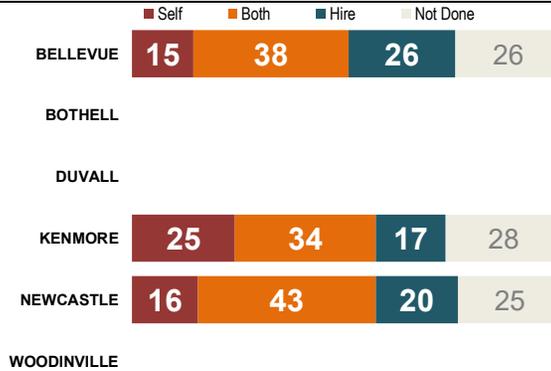
*Household Tasks*

**Who Performs the Task?**

**Where Does the Water Go?**

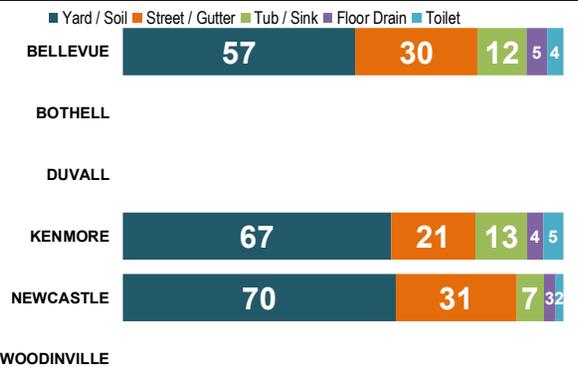
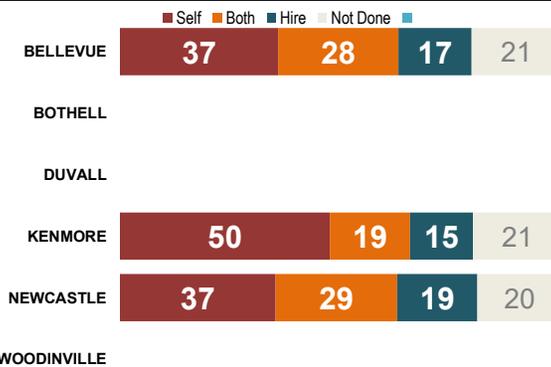
**Q10e: Exterior painting.**

- Most of those who did exterior painting did at least some of it themselves.
- They were equally divided over whether the wastewater went into the yard or into the street and gutter.



**Q10h: Exterior window washing.**

- Most of those who did exterior window washing did at least some of it themselves.
- Most said the water went into their yard.



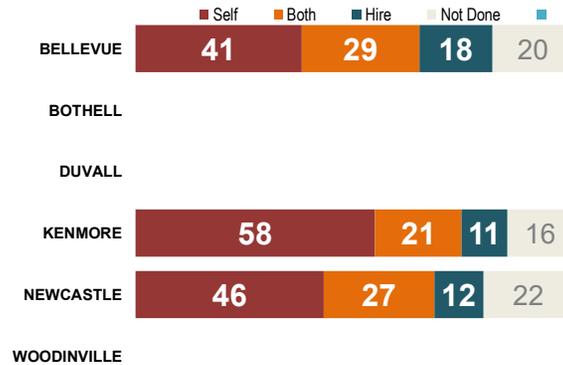
*Household Tasks*

### 19: Who Does Household Tasks at Your Home

Not Asked Where Water Goes

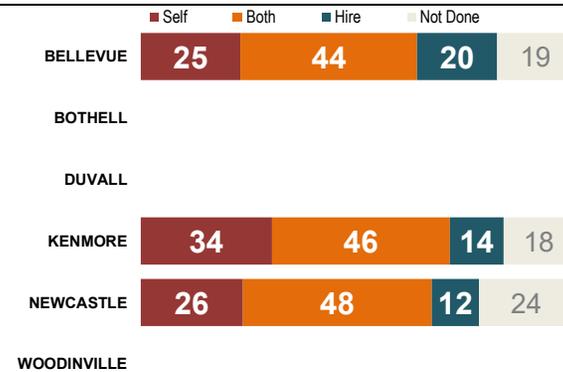
**Q10d: Interior painting.**

- Most of those who did interior painting did it themselves.



**Q10f: Home improvement or construction projects.**

- Most home improvement projects were hired out.



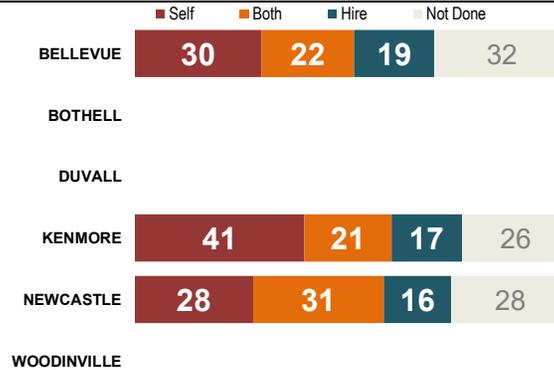
Household Tasks

20: Who Does Household Tasks at Your Home

Not Asked Where Water Goes

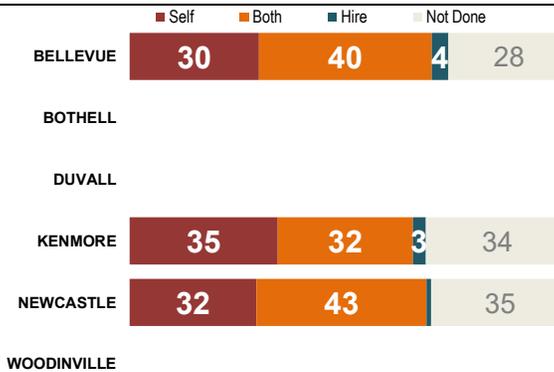
Q10g: Moss removal.

- Most of those who did moss removal did at least some of it themselves.



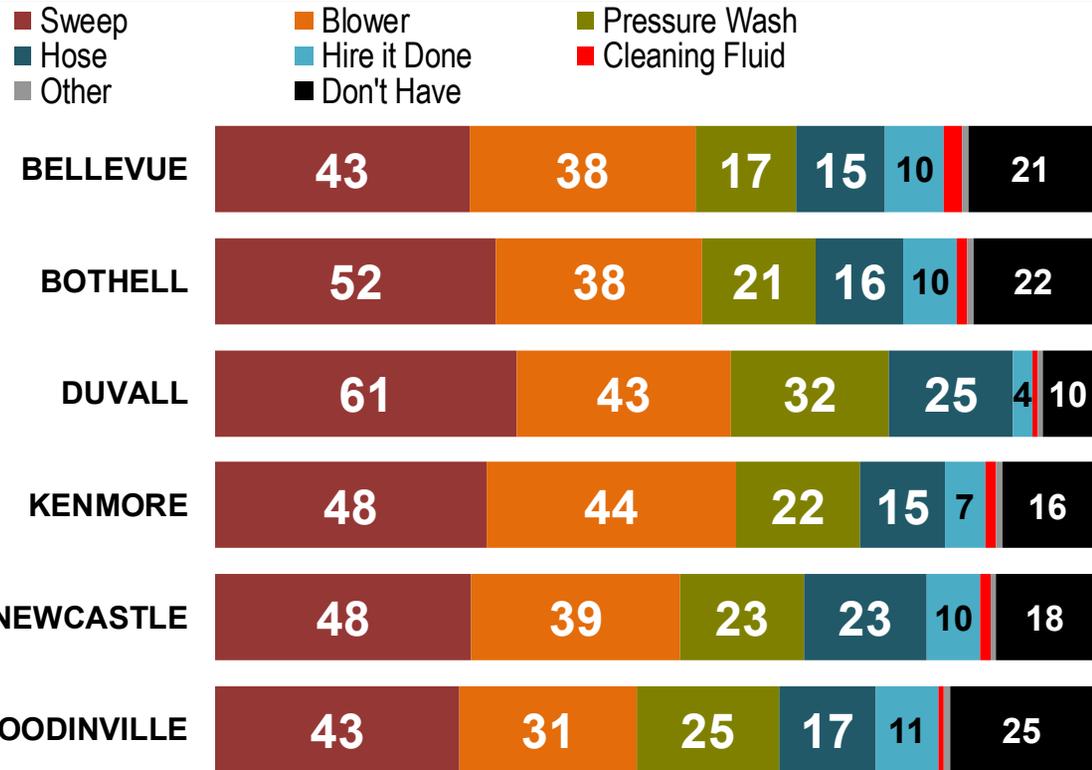
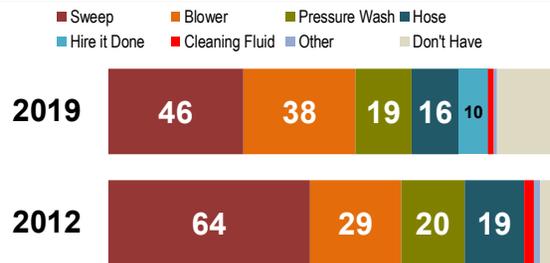
Q10a: Shampoo your carpets.

- Respondents were slightly more likely to shampoo their own carpets at least some of the time, although a significant proportion hired that done.



Lawn & Garden

## 21: Use to Clean Hardscapes Around Home



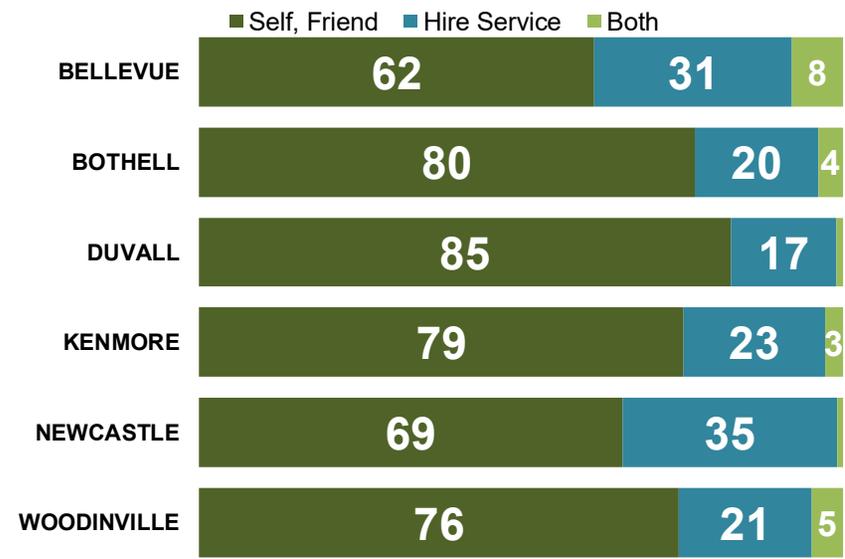
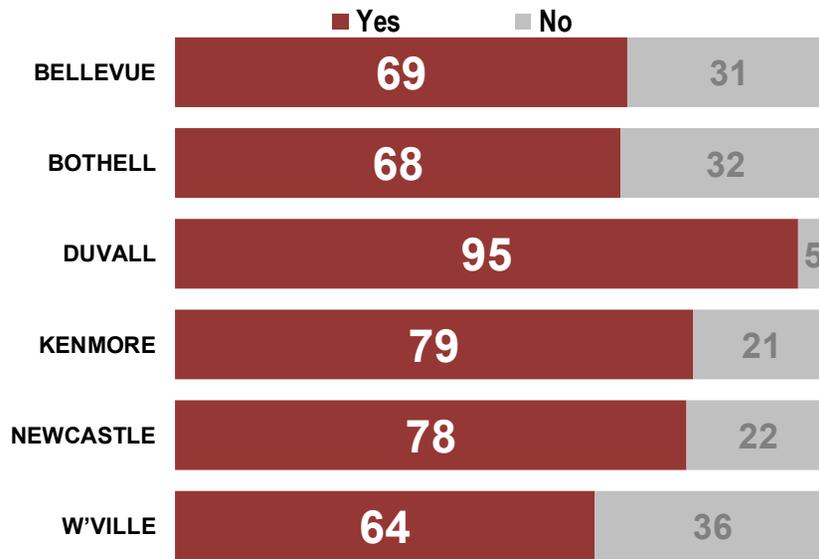
Less sweeping, more blowing compared to 6 years ago.

- About 1 in 5 who have hardscapes pressure wash at least occasionally.
- Among single-family house residents 54% sweep; 51% use a blower; 29% pressure wash; 21% hose those areas down.
- 62% of apartment residents don't have these types of areas.
- 40% of condo residents sweep; 31% don't have these types of areas.

Q11: The next questions are about your home. When you clean places like your driveway, walkways, patio or deck, do you typically:  
Sweep those areas...Use a blower...Hose them down...Pressure wash them...  
Use a cleaning fluid...Hire someone to do it

*Lawn & Garden*

## 22: Eight in 10 Households Have A Yard Or Garden. Most Take Care of It Themselves



Q12: Does your home have a yard or garden?

Q13: Do you or someone in your household maintain the yard yourself? Or do you hire someone to take care of it?

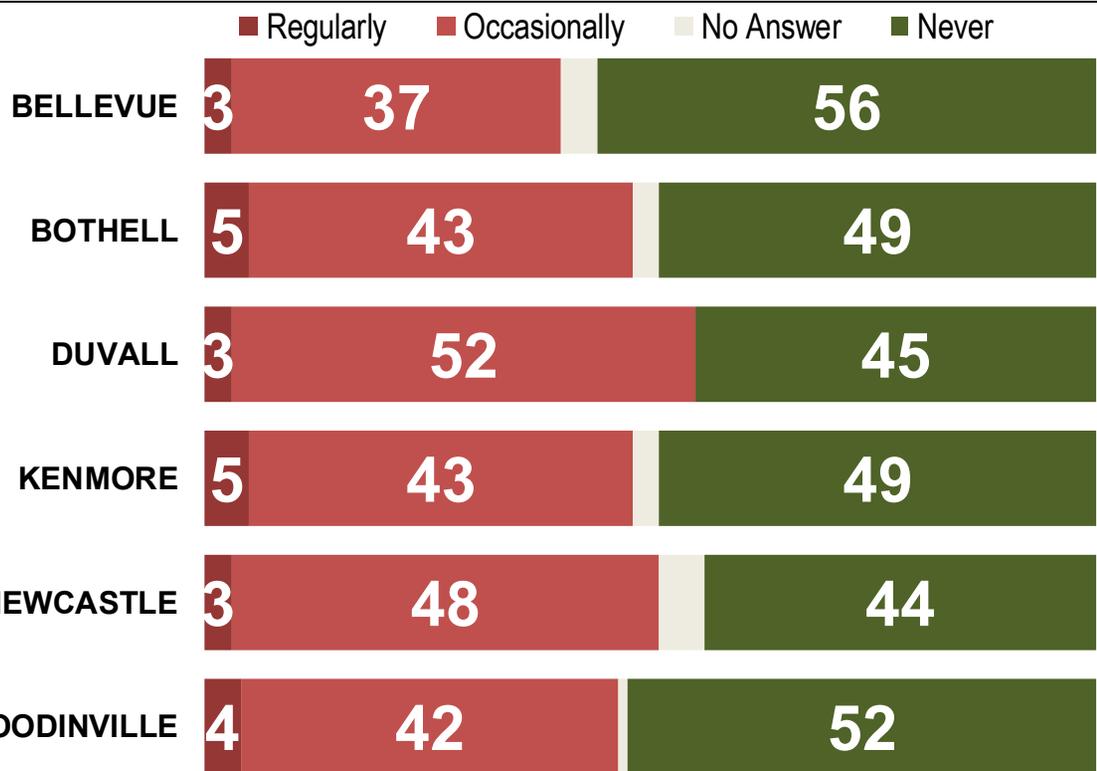
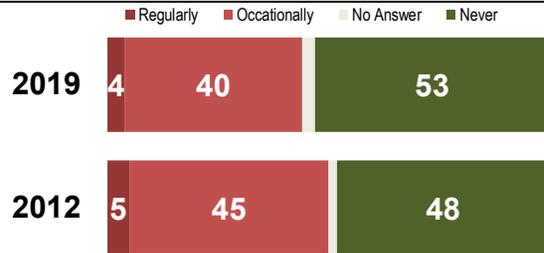
Although most respondents had a yard or garden, there was considerable variation between cities.

Also, not surprisingly, between housing types. A yard or garden was found in

- 96% of single-family houses;
- 50% of townhouses;
- 35% of condos;
- 16% of apartments.

Lawn & Garden

### 23: Use of Weed Killers



**More than 4 in 10 used lawn chemicals at least occasionally.**

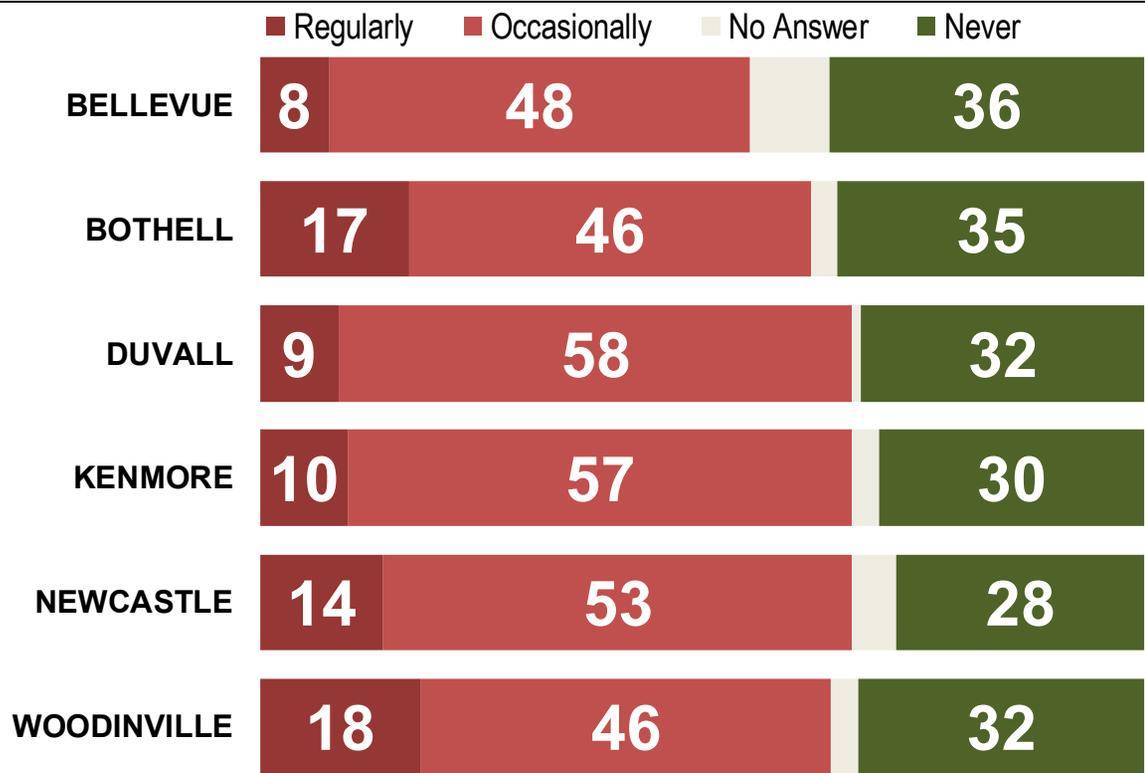
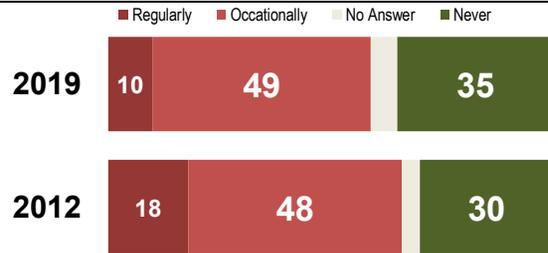
- Use of chemicals was higher in communities where more households have yards. (Although the question was asked only of those who had a yard.).
- Regular use of weed killers was highest among those over age 65 (10% v. 3% of those younger).
- It was also highest among those with middle incomes (11% of those with incomes of \$75,000-\$100,000 v. 3% among those with higher incomes and >1% among those lower).

Q14A: I am going to read a list of products that people sometimes use on their yards and gardens. During a typical growing season would you say you used <INSERT> regularly, once in a while, or never?

**Weed killers, like weed-and-feed type products**

Lawn & Garden

### 24: Use of Organic or Slow-release Fertilizer



**6 in 10 used organic fertilizer at least occasionally. Overall use appears to be down slightly compared to 6 years ago.**

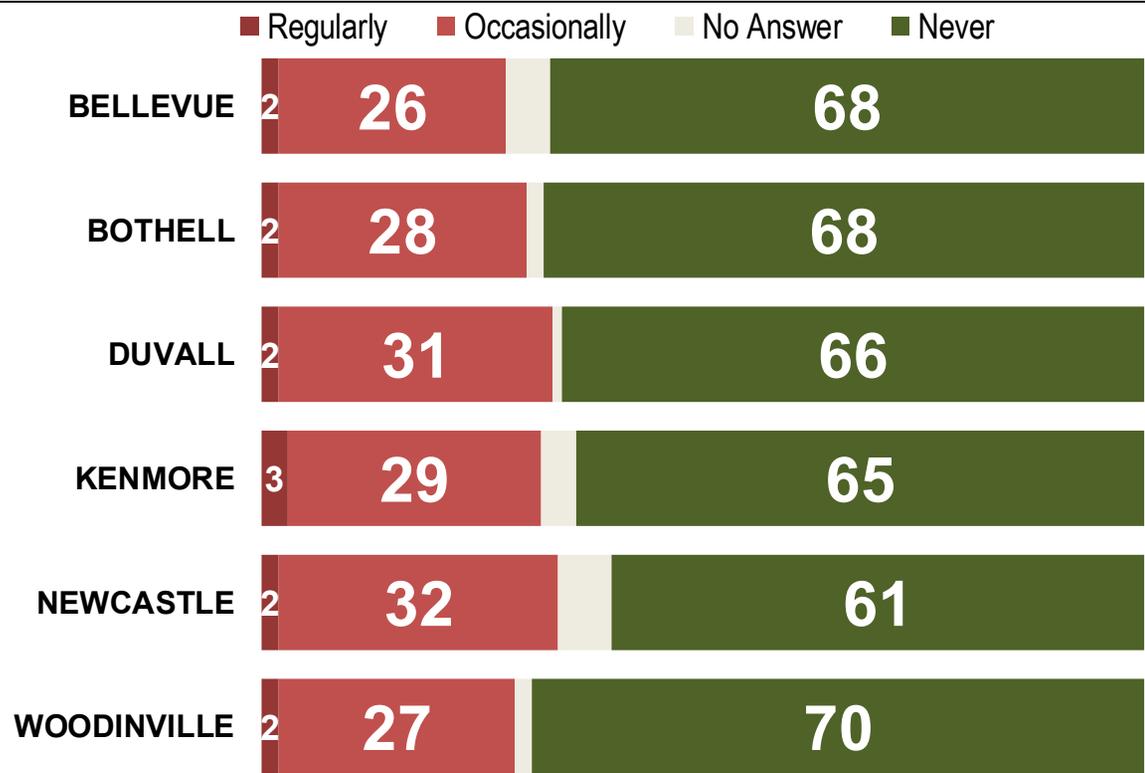
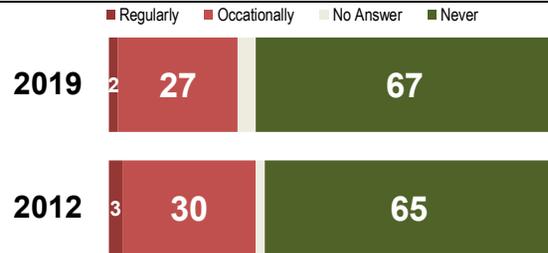
- Single-family home (76%) and condo residents (66%) were most likely to use it at least once in a while.

Q14b: I am going to read a list of products that people sometimes use on their yards and gardens. During a typical growing season would you say you used <INSERT> regularly, once in a while, or never?

**Organic or slow release fertilizer**

Lawn & Garden

## 25: Use of Pesticides, Insecticides or Fungicides



**3 in 10 used pesticides at least occasionally.**

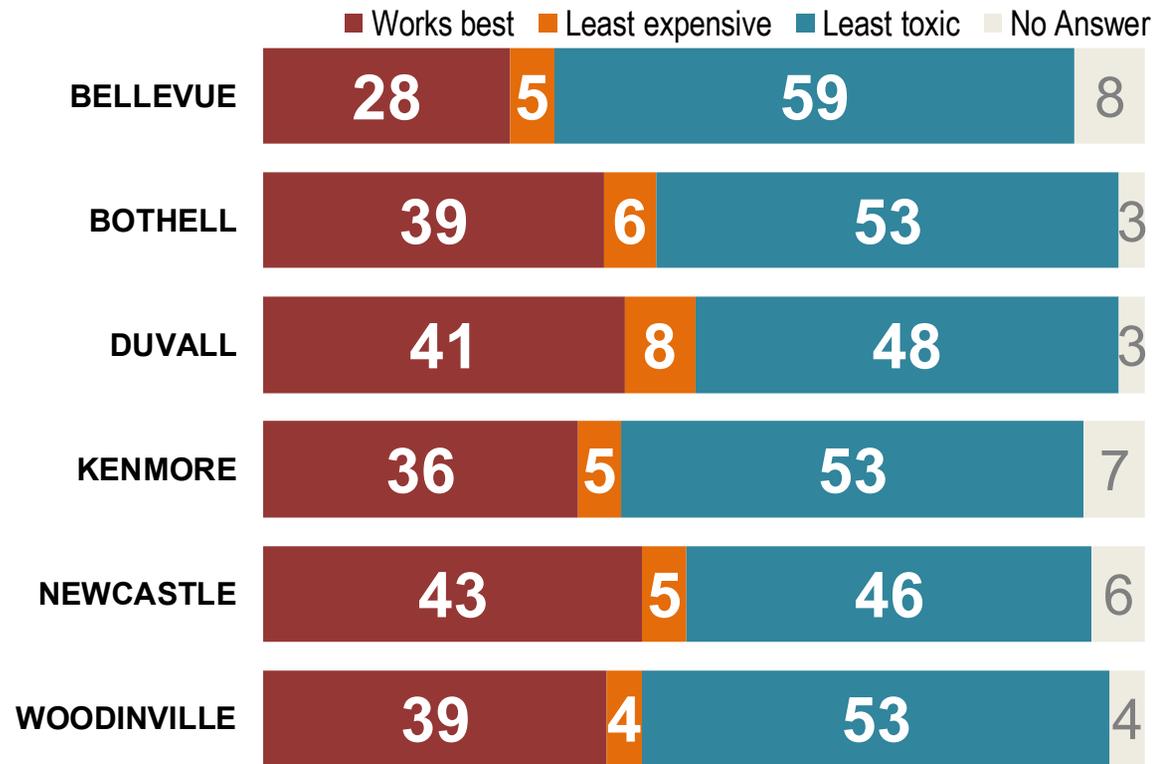
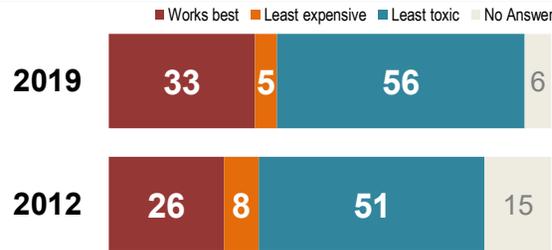
- Homeowners were more likely than renters to use them at least once in a while (33% v. 21%)
- Men reported using them more than women (34% v. 28%).

Q14c: I am going to read a list of products that people sometimes use on their yards and gardens. During a typical growing season would you say you used <INSERT> regularly, once in a while, or never?

**Pesticides, insecticides or fungicides**

Lawn & Garden

## 26: Lawn & Garden Chemicals Purchase Criteria



Most said they shop for least toxic garden products.

Most likely to shop for “what works best” were:

- Men (44% v. 31% of women);
- Age 35 and under (43% v. 36% of older respondents);
- Those in the highest income bracket (42% of those over \$125,000 v. 33% with lower incomes).

Q15: When you shop for yard and garden care products do you most often buy products that:  
1) Works Best; 2) Least Expensive; 3) Least Toxic?

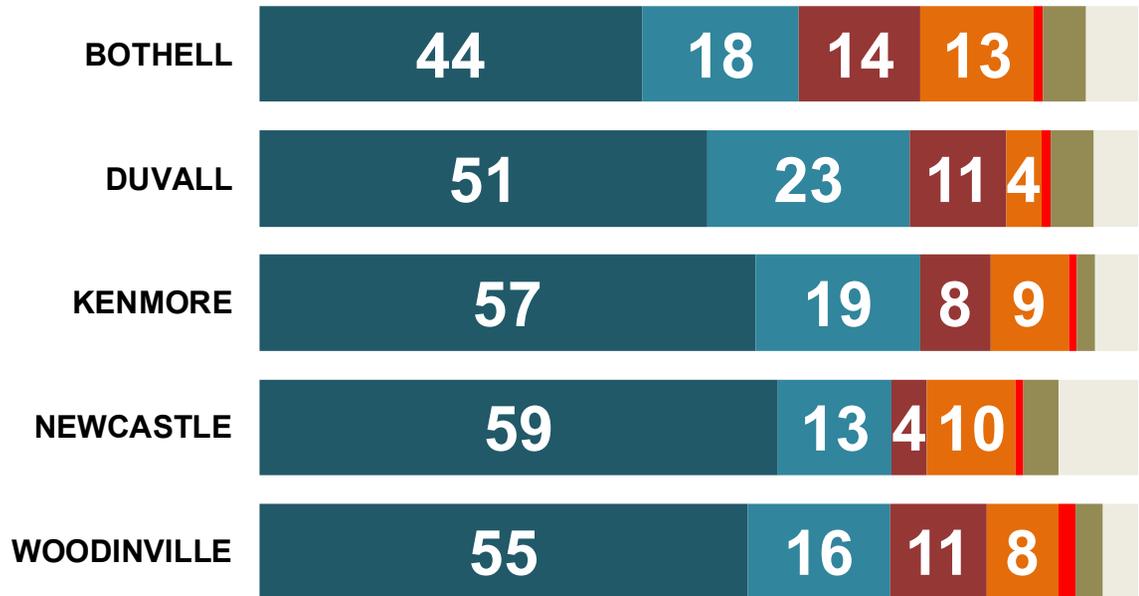
Household Hazardous Waste

27: Household Hazardous Waste Disposal

No comparative data



BELLEVUE



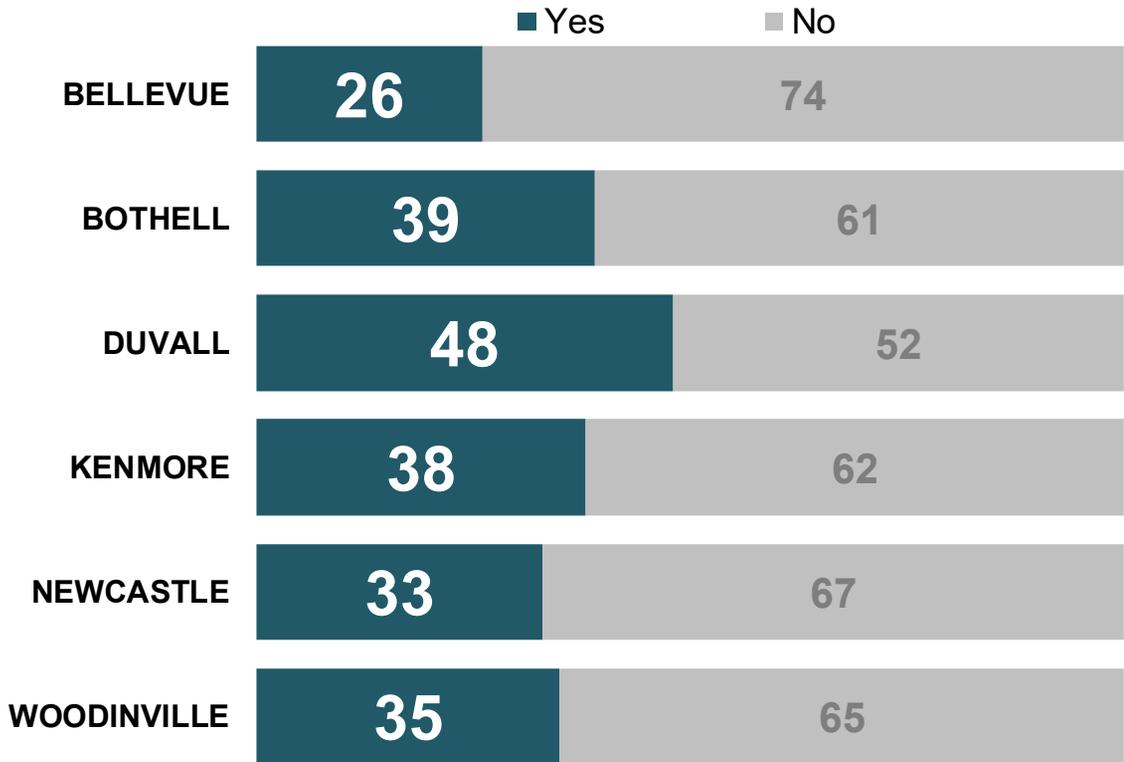
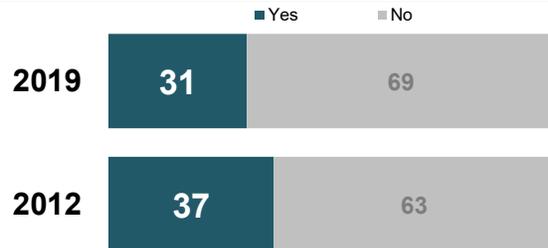
**Most disposed of HHW at collection facility or Wastemobile.**

- Taking HHW to a collection site was the most cite option across demographic categories.
- Renters were 3 times more likely to put HHW in the trash than were homeowners (18% v. 6%).
- Similarly, residents 35 and under were 3 times more likely than older respondents to put it in the trash (19% v. 6%).

- Q16 What does your household typically do with products that may contain hazardous materials, such as cleaning fluids, paint and other household hazardous waste?
1. Take them to a hazardous waste collection site/facility
  2. Take them to the Wastemobile
  3. Put them in the trash
  4. Store them in a garage, shed or basement at home
  5. Put them in curbside recycling

Pet Waste

### 28: Households with Dogs



The proportion of households with dogs varied from 1/2 to 1/4 across the region.

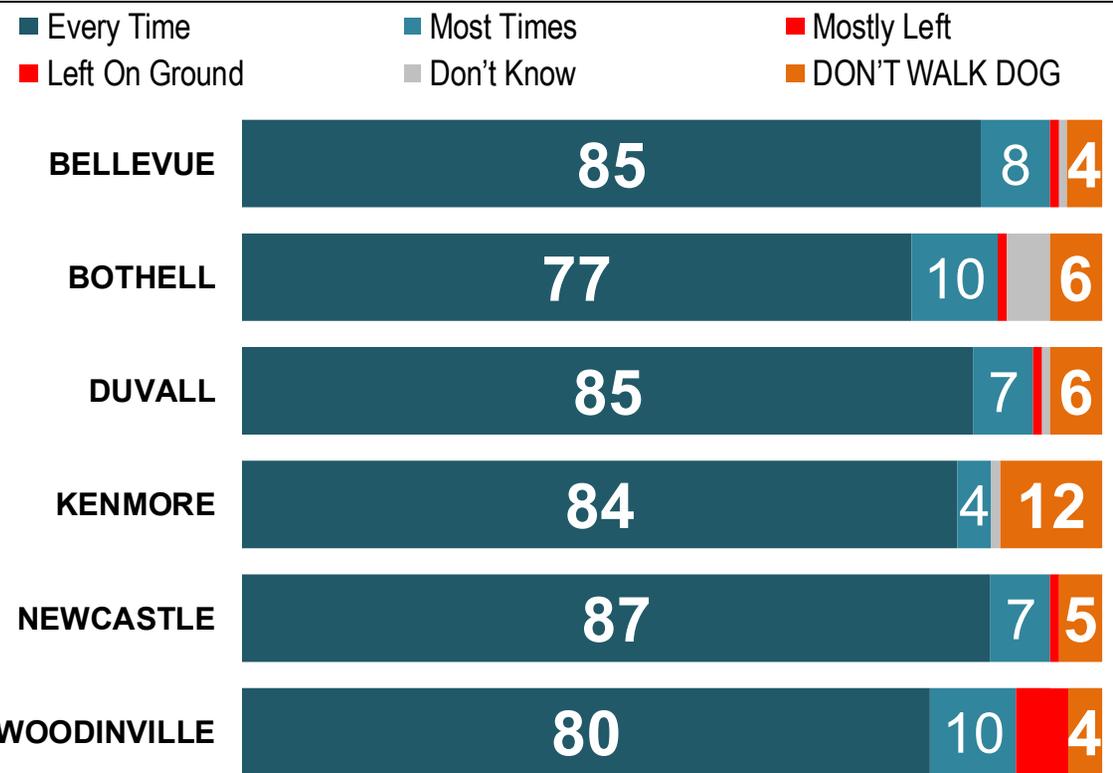
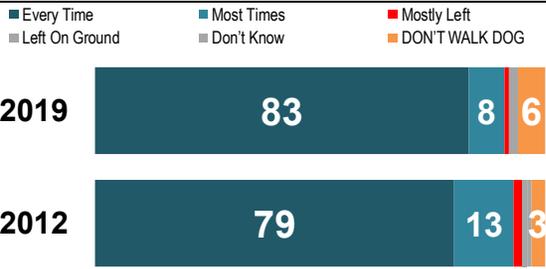
Dogs were most likely to be found

- In single-family houses (41% v. 26% in multi-family buildings); and
- In households with the highest incomes (42% of those over \$125,000 v. 30% of those under \$75,000).

Q17: My next question is about pets. Do you have a pet dog or dogs?

Pet Waste

### 29: Dog Poop Picked Up on Walks



**More than 8 in 10 dog owners reported picking up after dog on every walk.**

- Picking up on every walk was universally high across all demographic categories

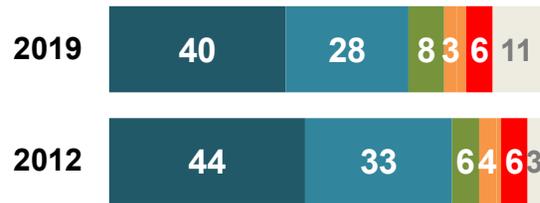
Q18: When the dog is out for a walk, how is the dog poop dealt with? Would you say the waste is:

- Picked up every time
- Picked up most of the time
- Left on the ground most of the time
- Always left on the ground

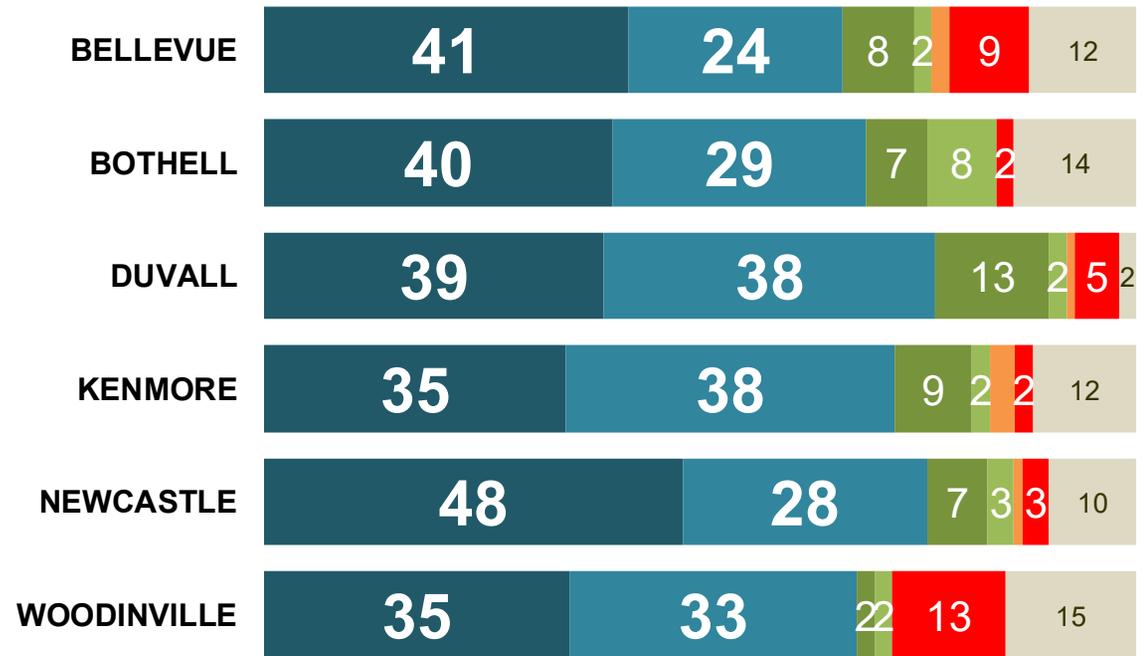
Pet Waste

### 30: Dog Poop Picked Up in Yard

■ Daily ■ Weekly ■ 2x Per Month ■ Monthly ■ Left On Ground ■ NO YARD



■ Daily ■ Weekly ■ 2x Per Month ■ Monthly  
 ■ < Monthly ■ Left On Ground ■ NO YARD



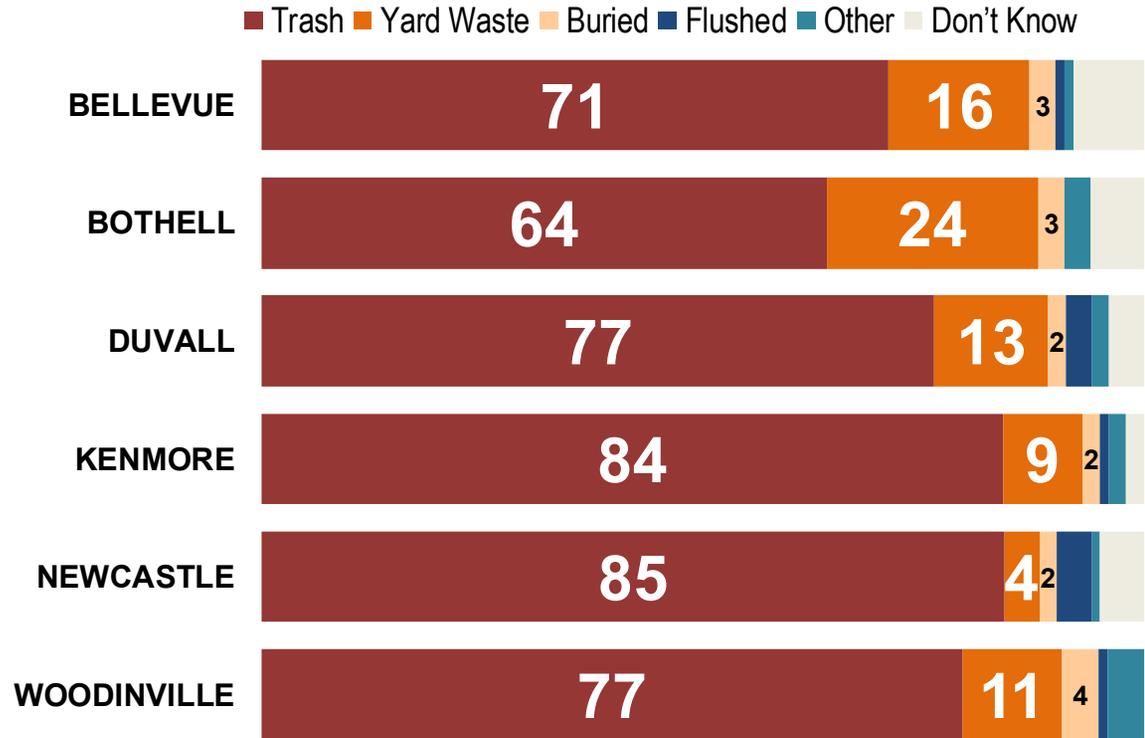
**4 in 10 dog owners picked up poop in yard daily.**

- Townhouse (60%), condo (44%) and apartment residents (45%) were somewhat more likely than single-family home residents (37%) to pick up daily.
- 100% of apartment residents with access to a yard said they picked up daily.
- 100% of condo and townhouse residents with a yard said they picked up at least weekly.

Q19: How about dog poop in the yard at home? Is that:  
 Cleaned up daily  
 Cleaned up weekly  
 Every couple of weeks  
 Once a month or so  
 Less than once a month  
 Left on the ground

Pet Waste

### 31: Disposal of Dog Poop



**7 in 10 put dog poop in trash.**

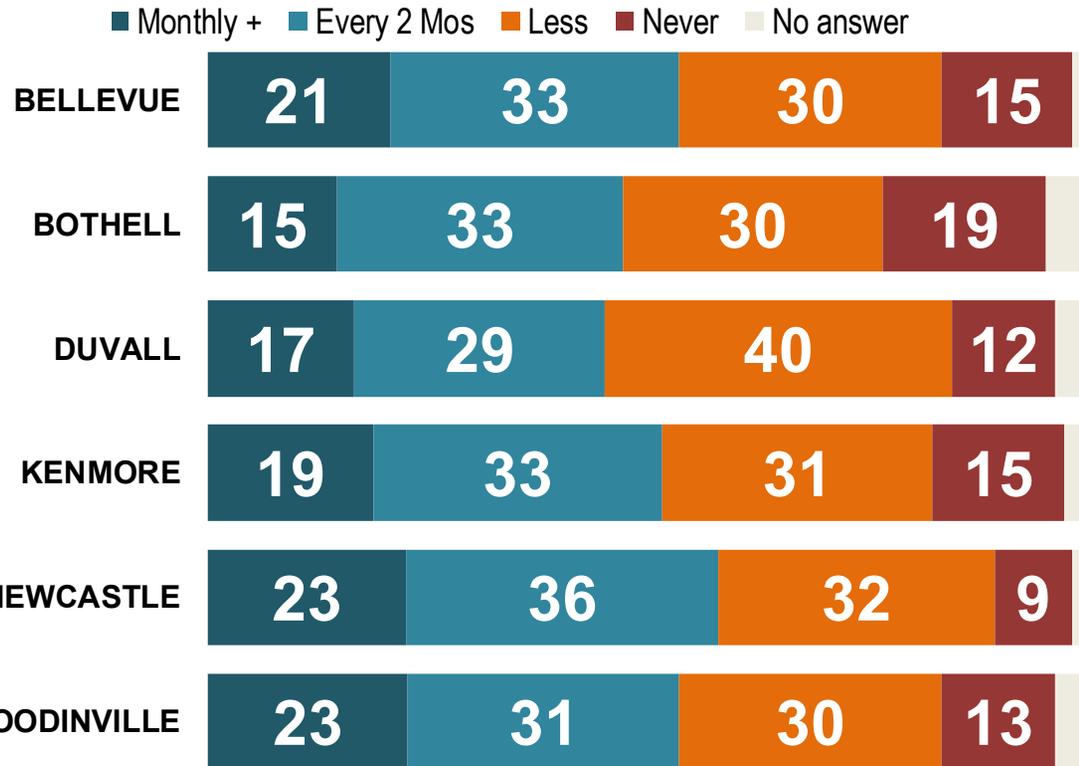
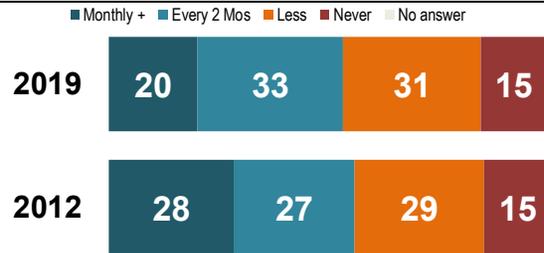
- At least 70% of dog owners in every demographic category put the poop in the trash, except
- Those with a high school education (62% put it in the trash; 30% put in in the yard waste);
- Those age 65+ (61% put it in the trash; 19% in the yard waste and 14% gave no answer).

Q20 If the dog poop is picked up, how is it typically disposed of? Is it...

- Put in Trash
- Put in compost or yard waste
- Buried
- Flushed down toilet
- [OTHER]

Vehicle Maintenance

### 32: How Often Are Vehicles Taken to Car Wash



Only about 1 in 7 owners never took their vehicles to a car wash.

Least likely to use a commercial car wash:

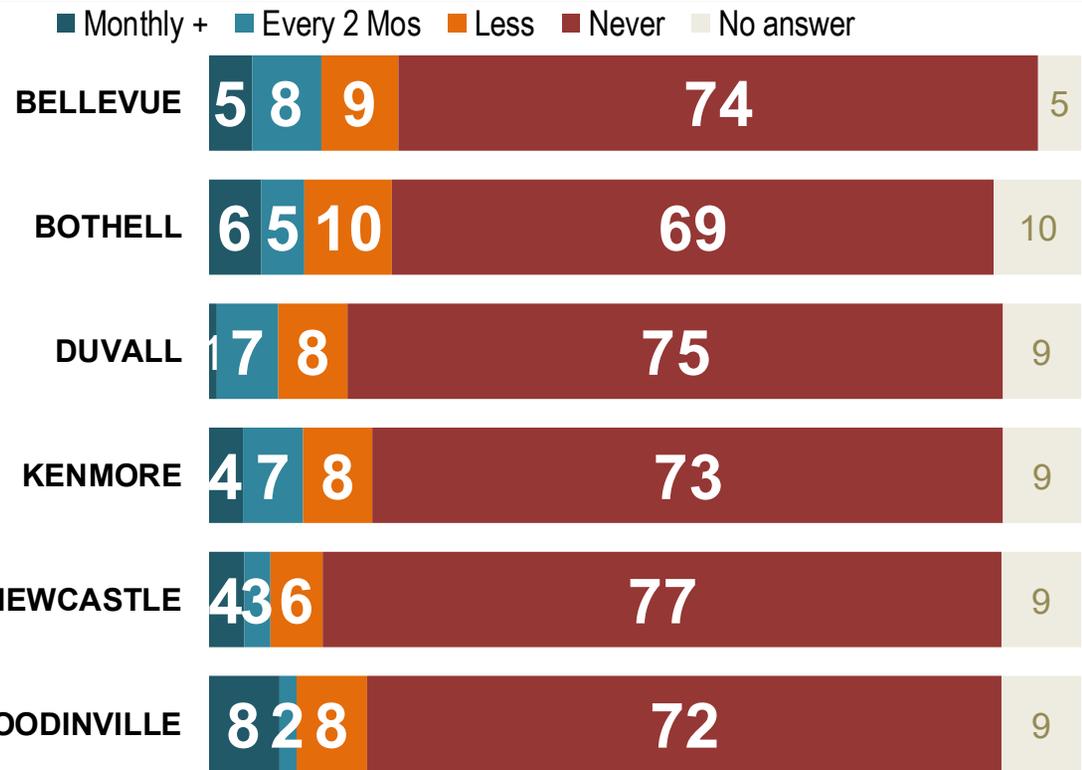
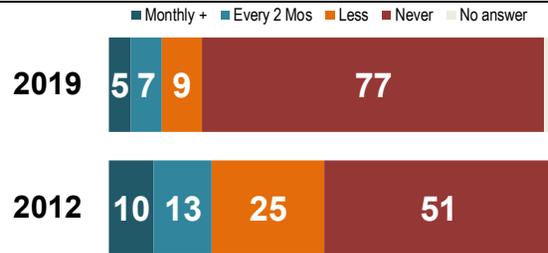
- Apartment residents (21% Never);
- People over 65 (22%);
- Those with incomes under \$50,000 (27%).

Q21: When it comes to washing vehicles, how often do you [INSERT LIST]? Would you say once a month or more often? Every couple of months? Less often? Or never.

Take them to a car wash

Vehicle Maintenance

### 33: How Often are Vehicles Washed at Home?



**1 in 5 washed their vehicles at home at least occasionally.**

**Most likely to wash their vehicles at home at least every couple of months:**

- Over age 65 (16%);
- Single-family house residents (14%);
- Middle income (14% of those between \$75-125,000);
- Homeowners (13%);
- Men (12%).

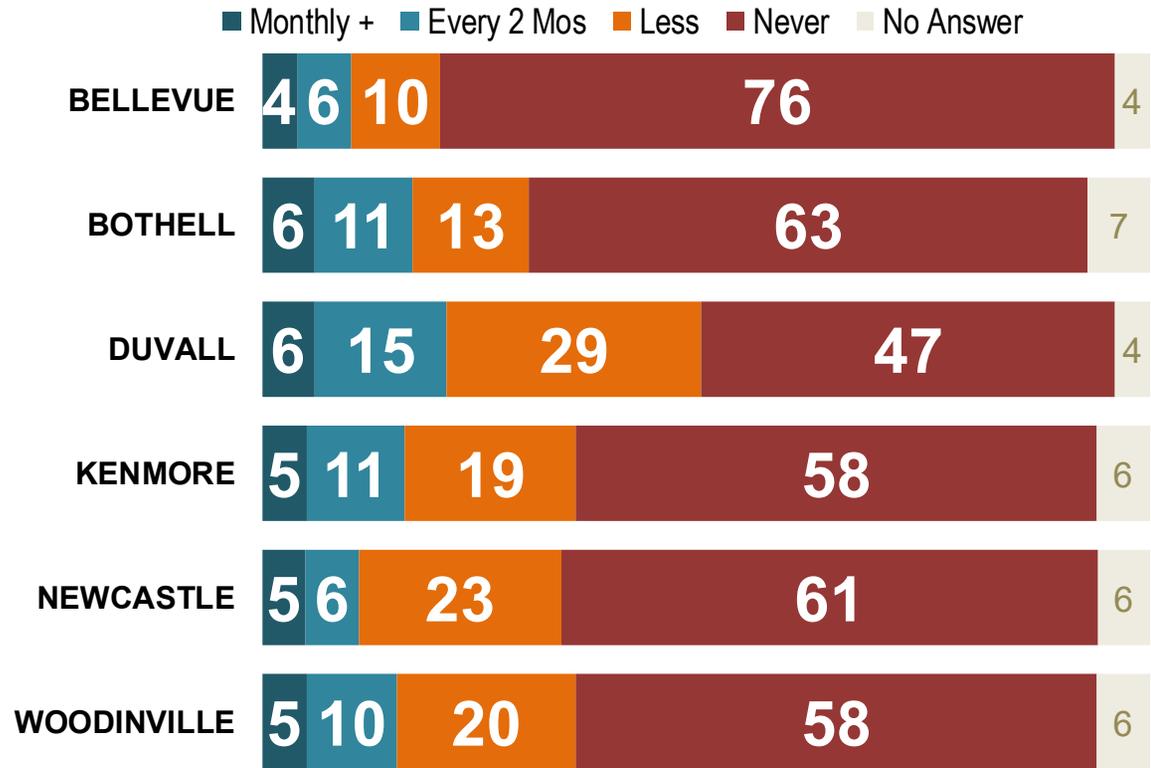
Q21: When it comes to washing vehicles, how often do you [INSERT LIST]? Would you say once a month or more often? Every couple of months? Less often? Or never.

**Wash them at home**

Vehicle Maintenance

34: How Often are Vehicles Washed at Home by a Service?

No comparable data.



**1 in 3** hired a service to clean their vehicle at home at least occasionally.

Most likely to hire a home cleaning service at least every couple of months:

- Lower middle income (23% of those with incomes of \$50-75,000)
- Over age 65 (19%)
- Single-family house residents (18%)
- Homeowners (17%)
- Men (17%)

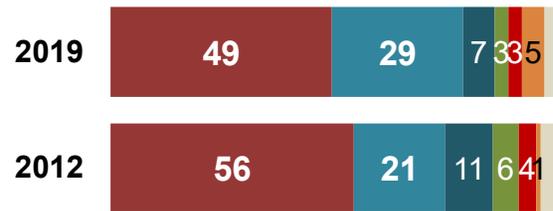
Q21: When it comes to washing vehicles, how often do you [INSERT LIST]? Would you say once a month or more often? Every couple of months? Less often? Or never.

Hire a business to clean my car at home

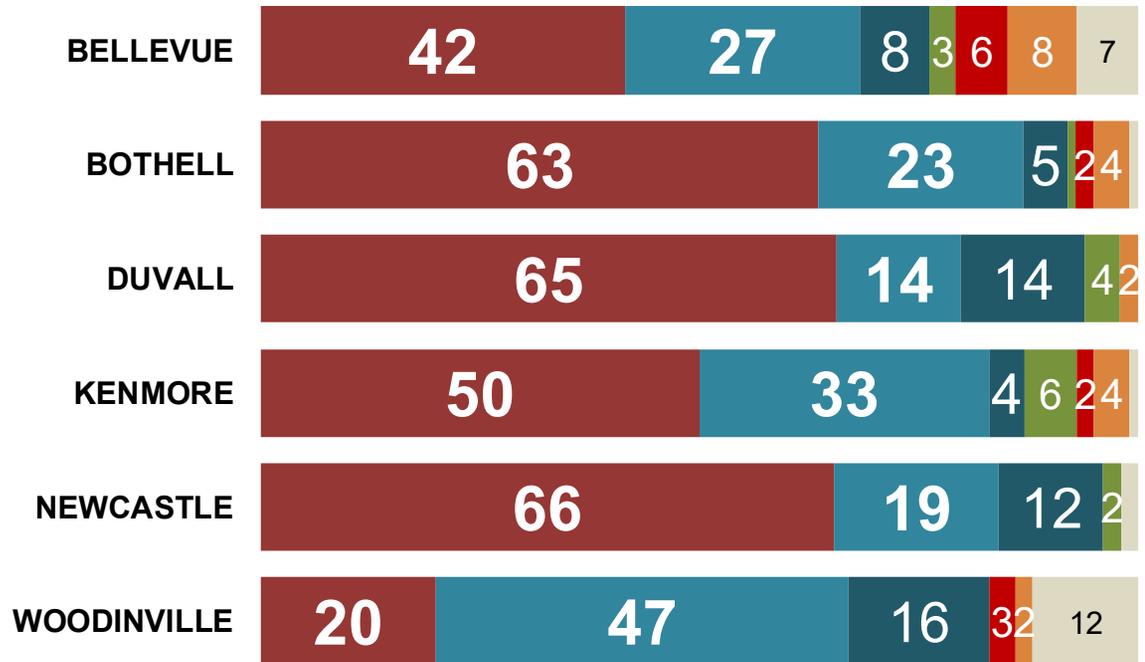
Vehicle Maintenance

### 35: Where does Car Wash Water Go?

■ Paved Surface ■ Drains To Soil ■ Lawn / Soil ■ Gravel ■ Street ■ Other ■ No Answer



■ Paved Surface ■ Drains To Soil ■ Lawn / Soil ■ Gravel  
 ■ Street ■ Other ■ No Answer



Half of home car washers washed their vehicles on a paved surface than drains to street.

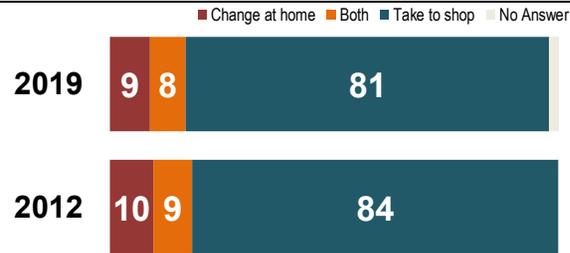
Most likely to wash on a paved surface:

- Condo residents (64%);
- Homeowners (54%).

Q21.1 When you wash your vehicle at home, do you wash it...?  
 On a paved driveway or parking spot that runs to the street or a drain  
 On a driveway or parking spot that drains to soil, grass or gravel  
 In the street  
 On gravel  
 On the lawn or dirt or sandy ground

Vehicle Maintenance

### 36: Vehicle Oil Changes



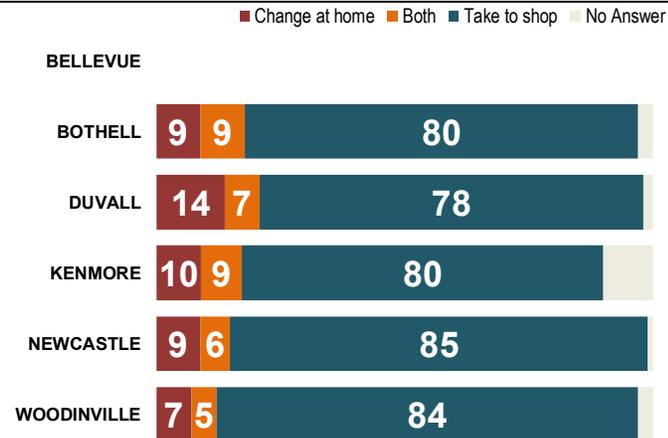
Fewer than 1 in 5 changed their own oil.

Most likely to do so at least sometimes:

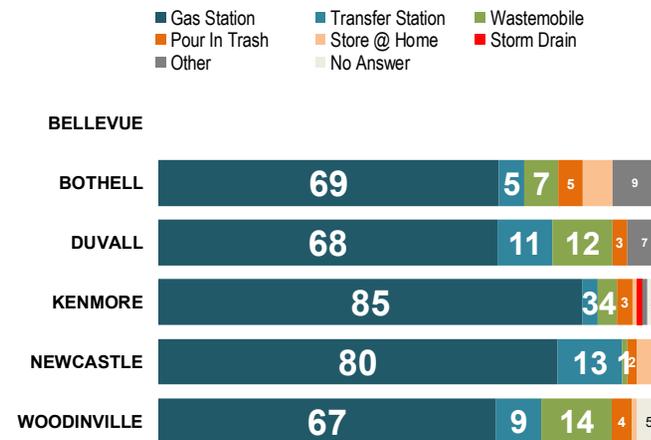
- Single-family house residents (21%);
- Homeowners (20%);
- Men (22%);
- Those with less than a college degree (22%);
- Middle income (24% of those between \$75-100,000).

About 3 in 4 home oil-changers took the used oil to a gas station for recycling.

- Only 3% put it in the trash. Most likely to do so were
  - ~Those who spoke a language other than English at home (18%);
  - ~Those with incomes under \$50,000 (16%);
  - ~Those age 35 and under (11%);
  - ~Apartment residents (8%).
- Only 1 respondent poured in down the storm drain.



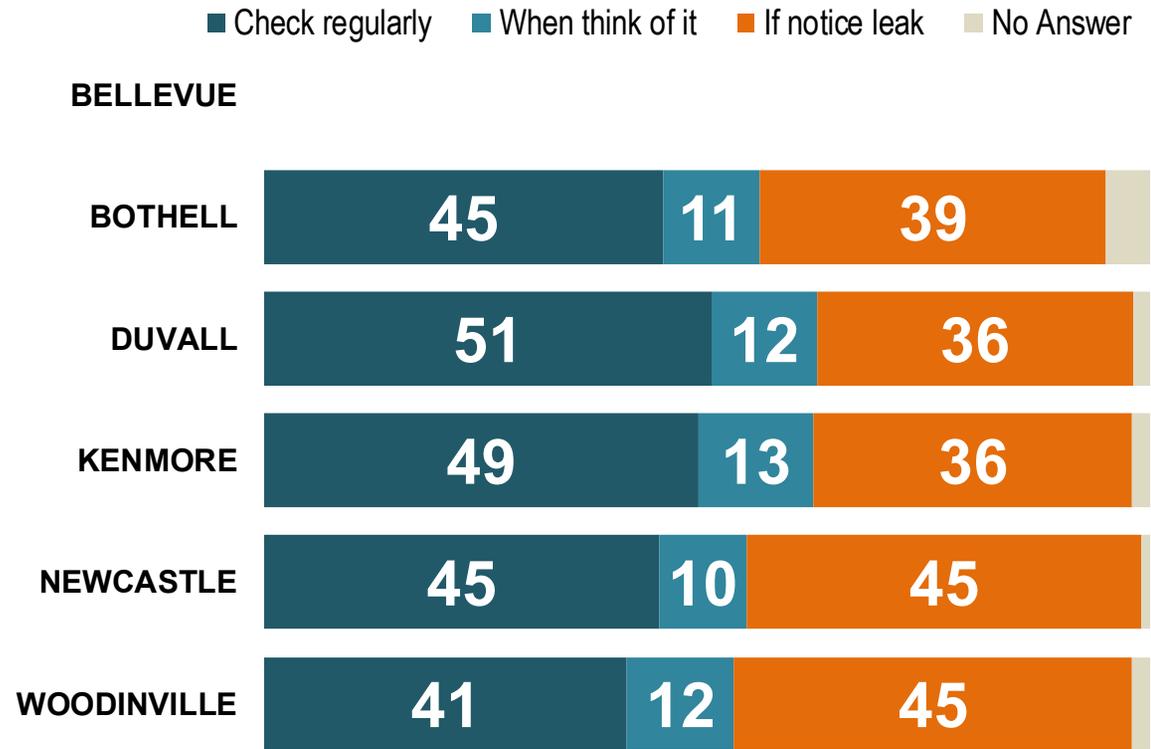
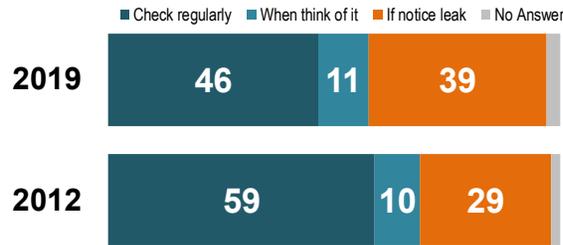
Q22: When it comes to changing the motor oil, anti-freeze or other fluids, do you or someone else in your household typically do it at home, or are the vehicles taken to a service shop for that?



Q22.1: When the motor oil or other fluid is changed at home, what is typically done with the used fluids?

Vehicle Maintenance

### 37: Checking for Oil Leaks



Fewer than half regularly checked under their vehicles for fluid leaks.

Least likely to check regularly were

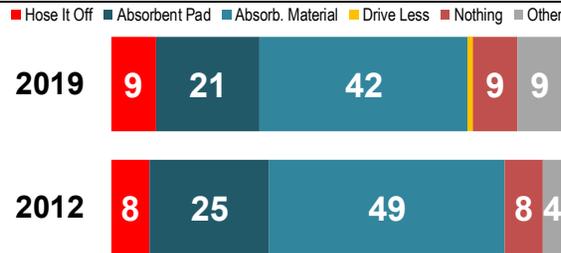
- Condo residents (35% checked regularly);
- Age 35 and under (34%).

Q23 What about oil or fluid leaks? Which of the following best describes you?

- I make it a point to check for leaks under my vehicles regularly
- I look under the vehicle for leaks when I think of it
- I'll notice a leak if there is one, but I don't make a point of checking

Vehicle Maintenance

### 38: Dealing with Vehicle Oil Leaks at Home



■ Hose It Off ■ Absorbent Pad ■ Absorb. Material ■ Drive Less ■ Nothing ■ Other

#### BELLEVUE

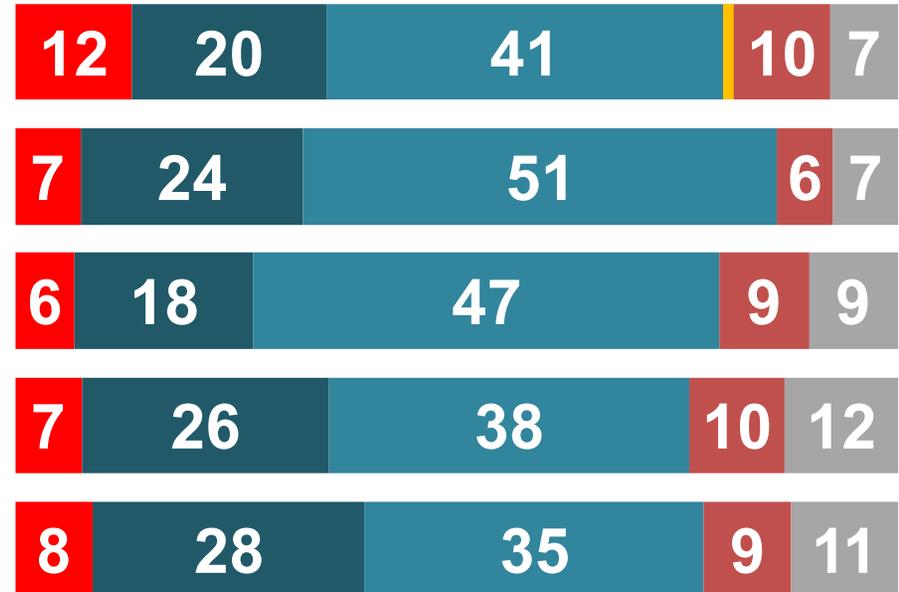
#### BOTHELL

#### DUVALL

#### KENMORE

#### NEWCASTLE

#### WOODINVILLE



Most (6 in 10) said they would put absorbent material or a pad under their vehicle if they found a leak.

Least likely to do so were

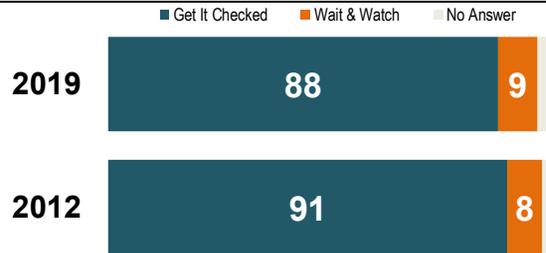
- Those who speak a language other than English at home (44%);
- Lowest income (43% of those with incomes under \$50,000);
- Over age 65 (35%);
- Homeowners (32%);
- Single-family house residents (31%).

Q24 If your vehicle leaked or spilled oil or antifreeze onto your driveway, which of the following would you most likely do:

- Hose it off
- Put an absorbent pad under the leak to soak it up
- Put some absorbent material on the puddle
- Drive it less
- Probably not do anything

Vehicle Maintenance

39: Response to Vehicle Oil Leak



BELLEVUE

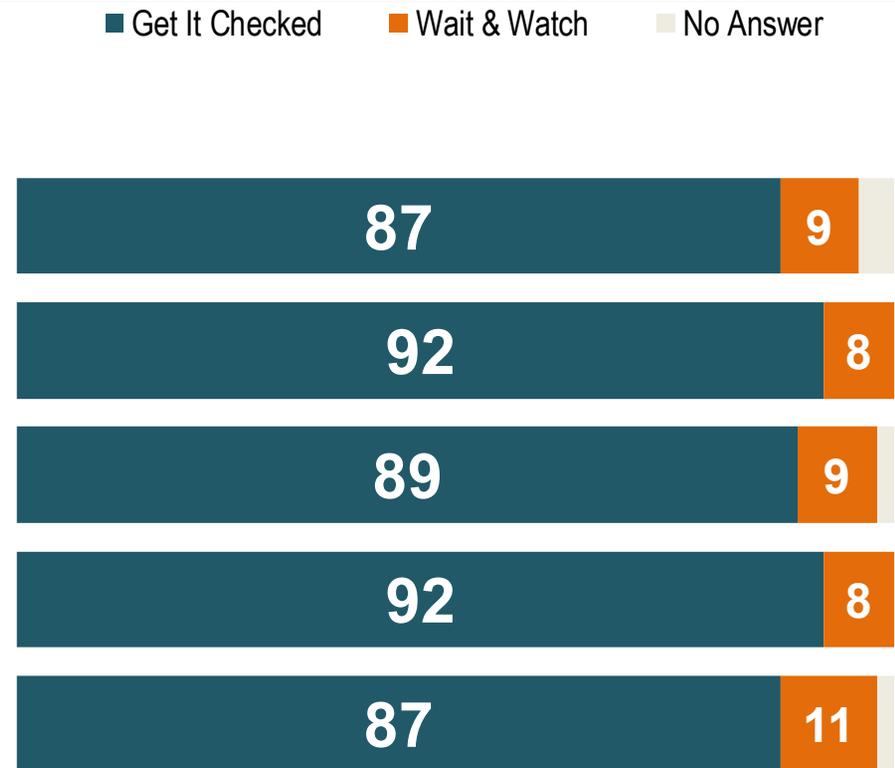
BOTHELL

DUVALL

KENMORE

NEWCASTLE

WOODINVILLE



Nearly all would get a leak checked right away once they noticed it.

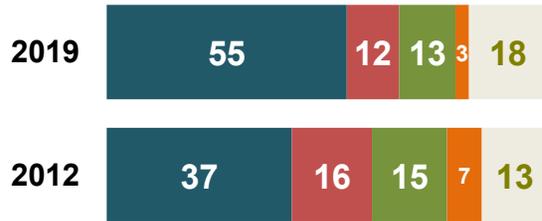
- At least 86% in every demographic category said they would get it checked right away (except those with incomes under \$50,000, where it was 81%)

Q25 If you noticed a leak, would you:  
Get it checked right away or  
Watch to see if it got worse

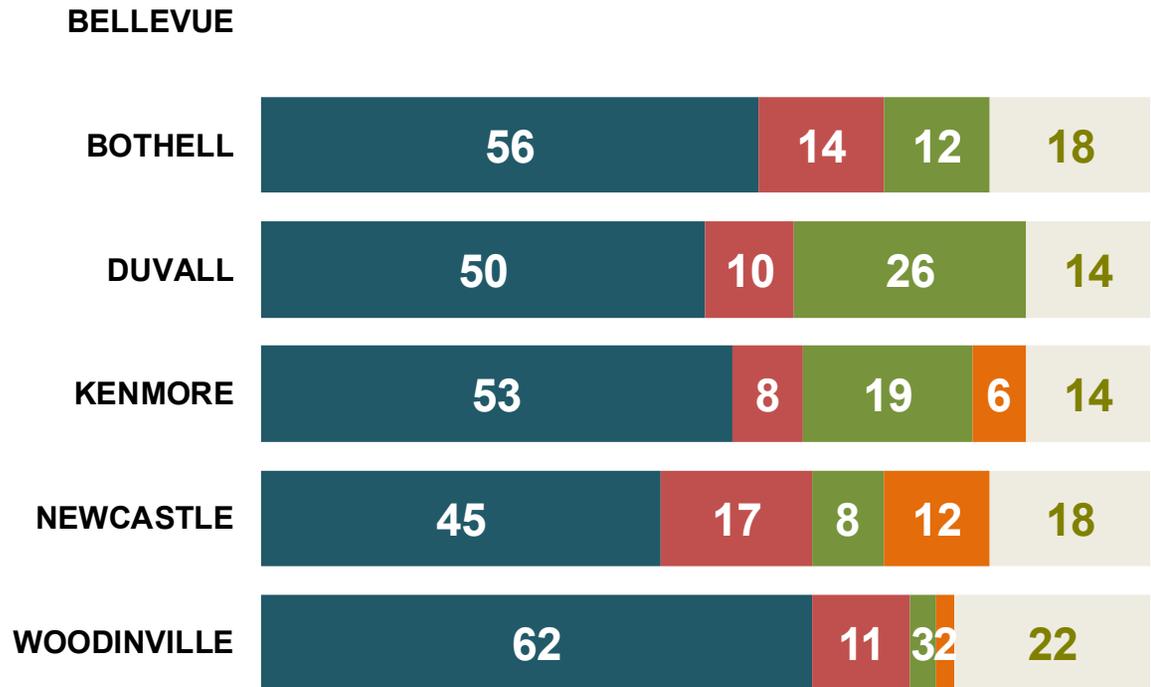
Vehicle Maintenance

### 40: Reasons for Not Dealing with Oil Leak Immediately

■ Expensive ■ Doesn't Hurt ■ Too Much Trouble ■ DK What To Do ■ No Answer



■ Expensive ■ Doesn't Hurt ■ Too Much Trouble ■ DK What To Do ■ No Answer



Potential expense was the most significant barrier to acting immediately to fix a leak.

- Potential expense was the most-cited reason in every demographic category.

Q25 Here are some reasons we have heard about why people do not always fix an oil leak right away. Which comes closest to your thinking?  
 It could be expensive  
 A small leak doesn't really hurt anything  
 It would be more trouble than it is worth  
 I am not sure where I could take it to be fixed

*Vehicle Maintenance*

### 41: Incentives to Deal With Oil Leak

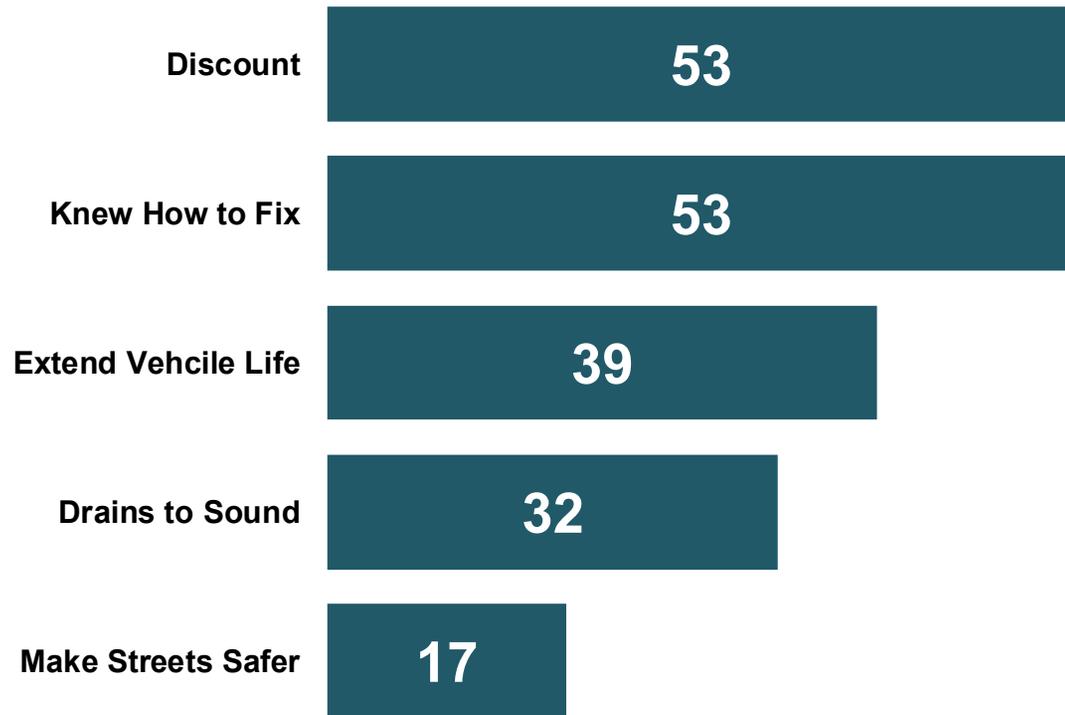
Respondents who said they would wait to deal with an oil leak rather than getting it checked right away (n=187) were asked about a number of potential incentives for acting more quickly.

This graph displays the overall percentages who said each would be “very effective” motivation for them.

The individual motivations are presented in the following pages.

The two most effective incentives had to do with money, which aligns with the reasons respondents gave for delaying action – the potential expense.

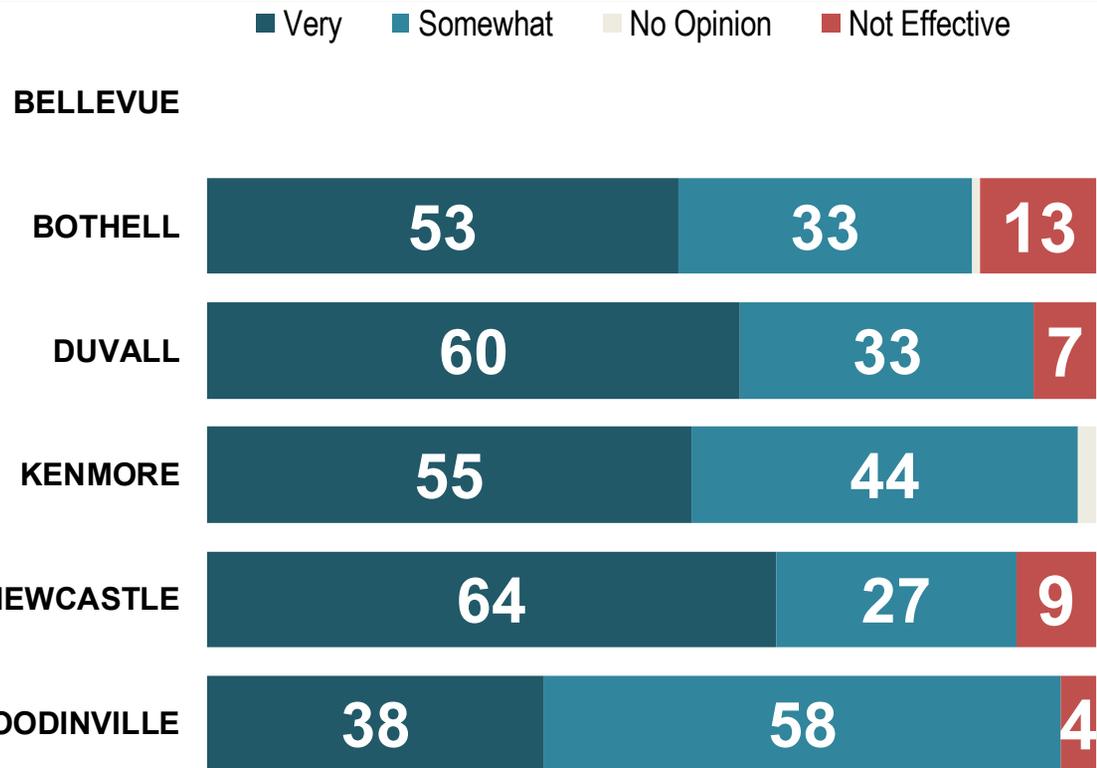
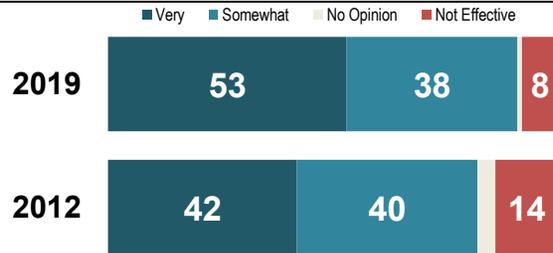
- 53% said a discount would be very effective at motivating them to fix a leak.
- 53% said knowing how to fix the leak themselves would be “very effective”.



Q25.2 **IF WAIT:** I am going to list some things that may or may not motivate you to fix a fluid leak on your vehicle right away. As I read each one, tell me whether that would be Very Effective, Somewhat Effective or Probably Not Effective in motivating you to fix a fluid leak on your vehicle right away.

Vehicle Maintenance

42: Incentive to Deal With Oil Leak: Discount



Of those who said they would not act immediately, most said a discount would be very effective at motivating them to fix a leak.

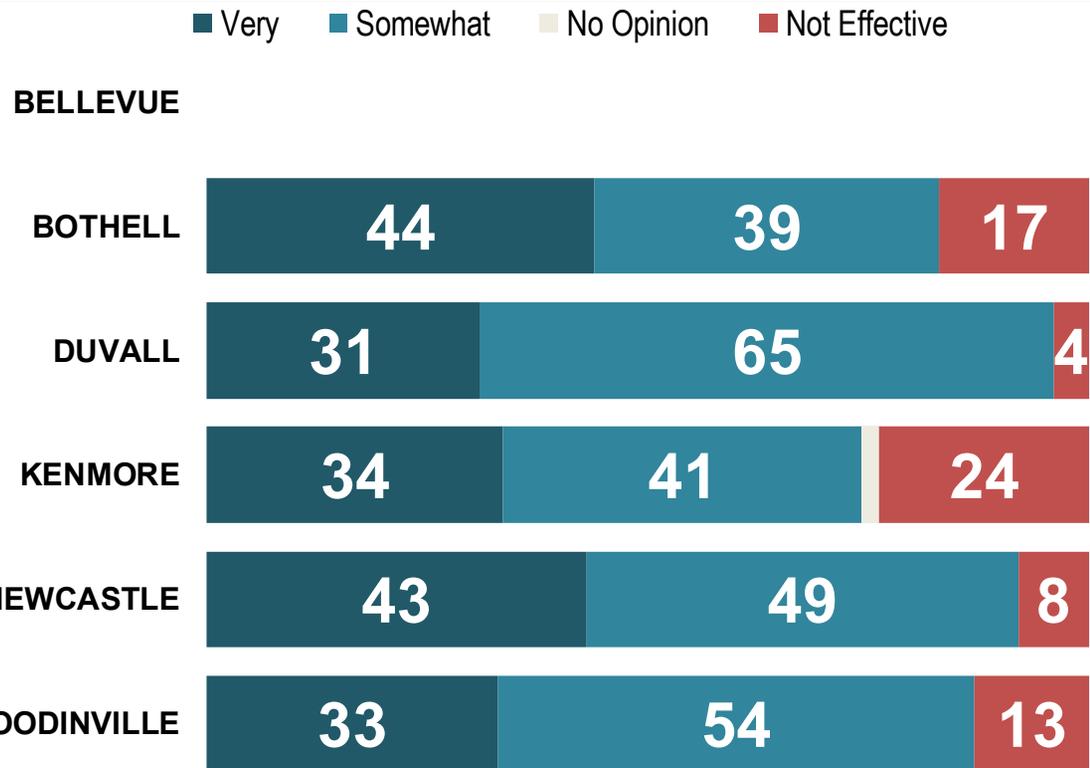
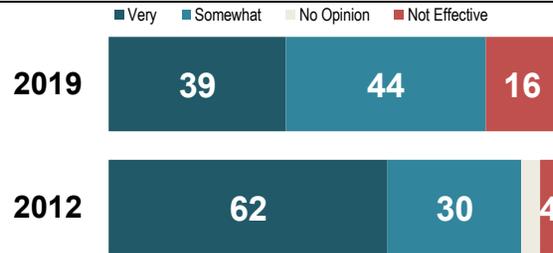
- This would be expected, given that most named the expense as the main barrier to getting a leak fixed.
- Because of the small number (187) of respondents who said they would wait and watch, comparisons between demographic categories are statistically unreliable.

Q25.2 IF WAIT: I am going to list some things that may or may not motivate you to fix a fluid leak on your vehicle right away. As I read each one, tell me whether that would be Very Effective, Somewhat Effective or Probably Not Effective in motivating you to fix a fluid leak on your vehicle right away.

If you were offered a discount at a shop to have a leak fixed

Vehicle Maintenance

43: Incentive to Deal With Oil Leak: Extend Vehicle Life



Of those who said they would not act immediately, 4 in 10 said would be very motivated to act if they knew that fixing the leak would extend the life of their vehicle.

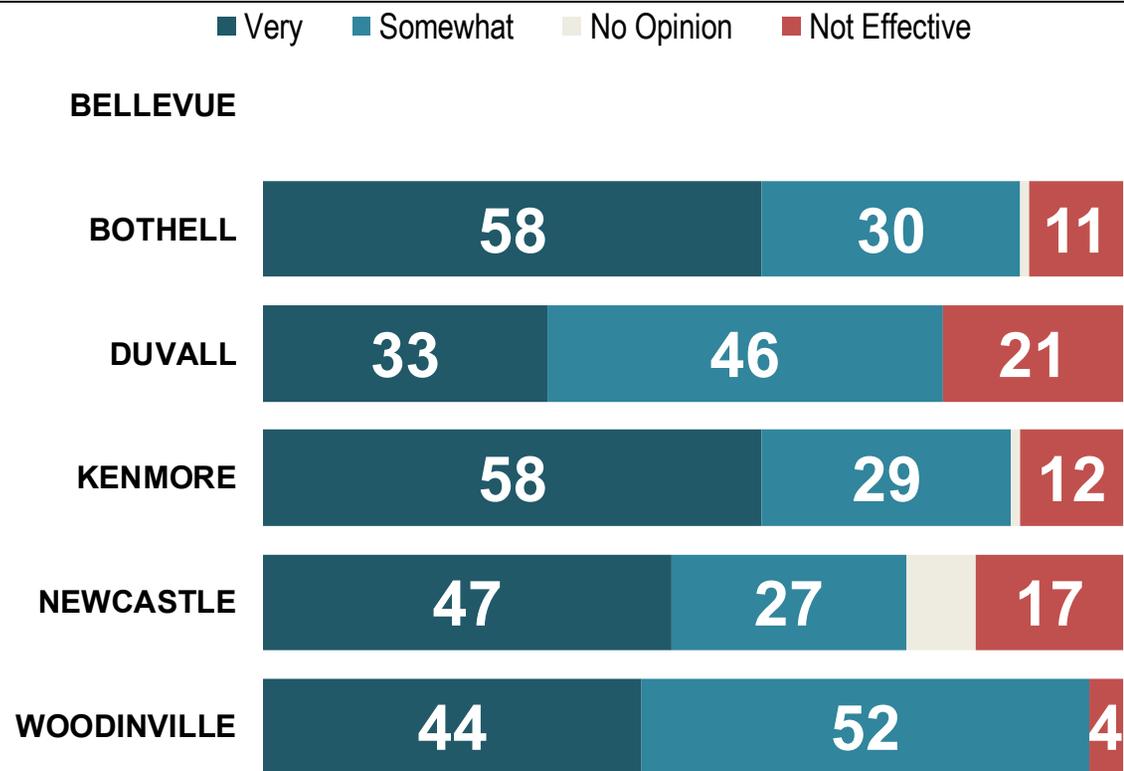
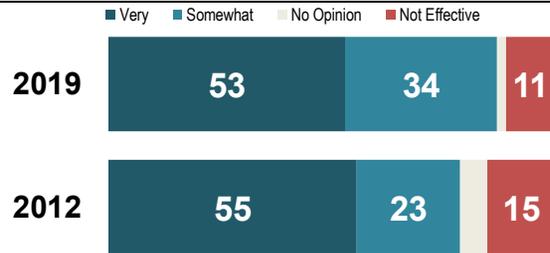
- Because of the small number (187) of respondents who said they would wait and watch, comparisons between demographic categories are statistically unreliable.

Q25.2 **IF WAIT:** I am going to list some things that may or may not motivate you to fix a fluid leak on your vehicle right away. As I read each one, tell me whether that would be Very Effective, Somewhat Effective or Probably Not Effective in motivating you to fix a fluid leak on your vehicle right away.

If you knew that it will extend the life of your vehicle

Vehicle Maintenance

44: Incentive to Deal With Oil Leak: Know How to Fix Leak



Of those who said they would not act immediately, just over half said would be very motivated to act if they knew how to fix the leak themselves.

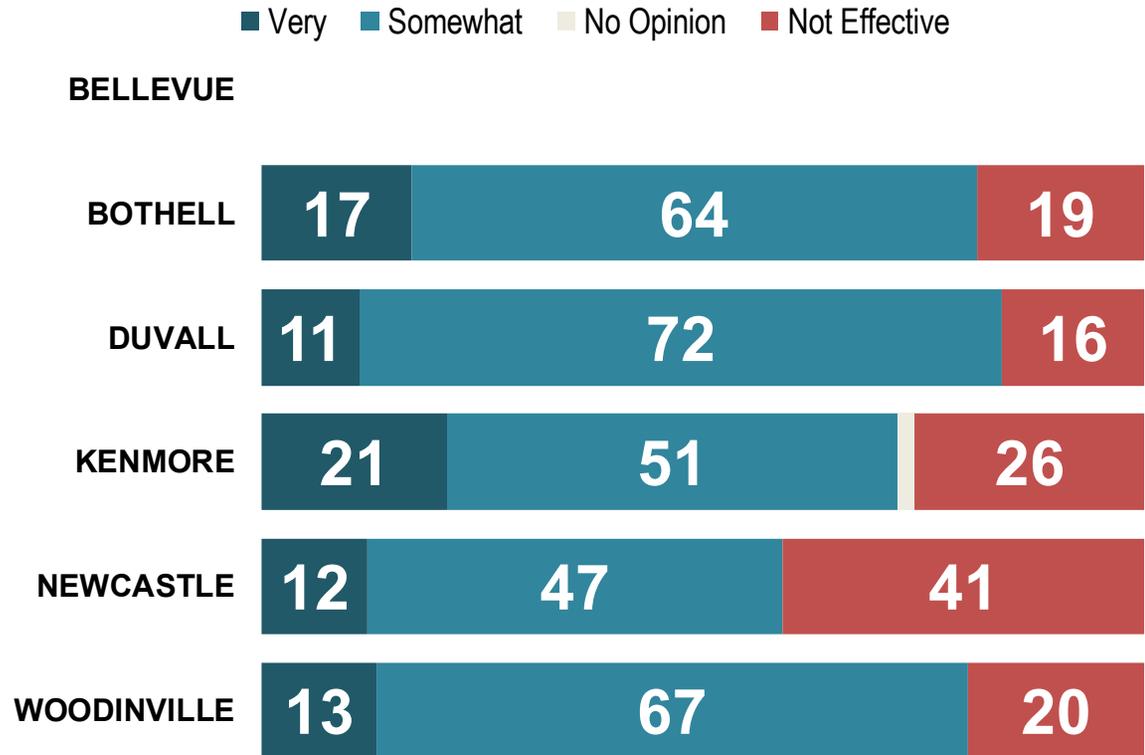
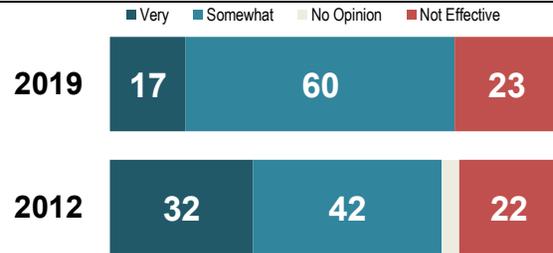
- Because of the small number (187) of respondents who said they would wait and watch, comparisons between demographic categories are statistically unreliable.

Q25.2 **IF WAIT:** I am going to list some things that may or may not motivate you to fix a fluid leak on your vehicle right away. As I read each one, tell me whether that would be Very Effective, Somewhat Effective or Probably Not Effective in motivating you to fix a fluid leak on your vehicle right away.

**If you knew how to fix the leak yourself**

Vehicle Maintenance

45: Incentive to Deal With Oil Leak: Make Roadways Safer



Of those who said they would not act immediately, 1 in 6 said would be very motivated to act if they were told that keeping fluid leaks off the streets would make them safer.

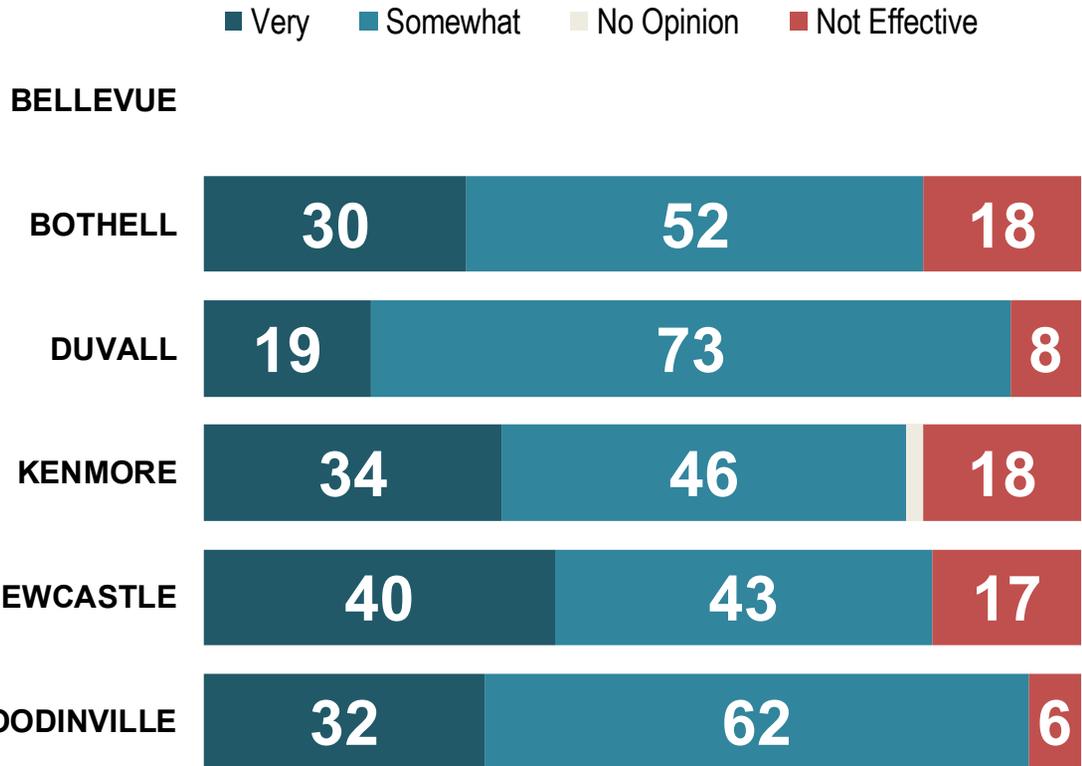
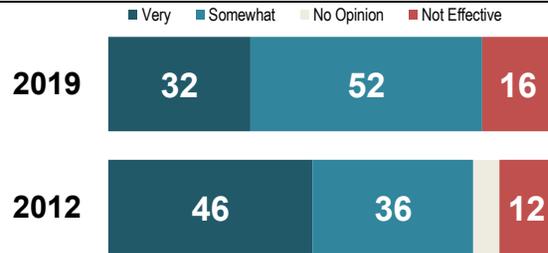
- Because of the small number (187) of respondents who said they would wait and watch, comparisons between demographic categories are statistically unreliable.

Q25.2 IF WAIT: I am going to list some things that may or may not motivate you to fix a fluid leak on your vehicle right away. As I read each one, tell me whether that would be Very Effective, Somewhat Effective or Probably Not Effective in motivating you to fix a fluid leak on your vehicle right away.

If you were told that keeping fluid leaks off the streets will make them safer to drive on

Vehicle Maintenance

46: Incentive to Deal With Oil Leak: Oil Leaks End Up in Puget Sound



Of those who said they would not act immediately, about 1 in 3 said would be very motivated to act if they were told that oil leaks eventually drain into local waters and Puget Sound.

- Because of the small number (187) of respondents who said they would wait and watch, comparisons between demographic categories are statistically unreliable.

Q25.2 **IF WAIT:** I am going to list some things that may or may not motivate you to fix a fluid leak on your vehicle right away. As I read each one, tell me whether that would be Very Effective, Somewhat Effective or Probably Not Effective in motivating you to fix a fluid leak on your vehicle right away.

**If you were told that oil leaks eventually drain into local creeks, lakes and Puget Sound**

*Measures to Protect Water Quality*

### 47: Perceived Effectiveness of Measures to Protect Local Water Quality

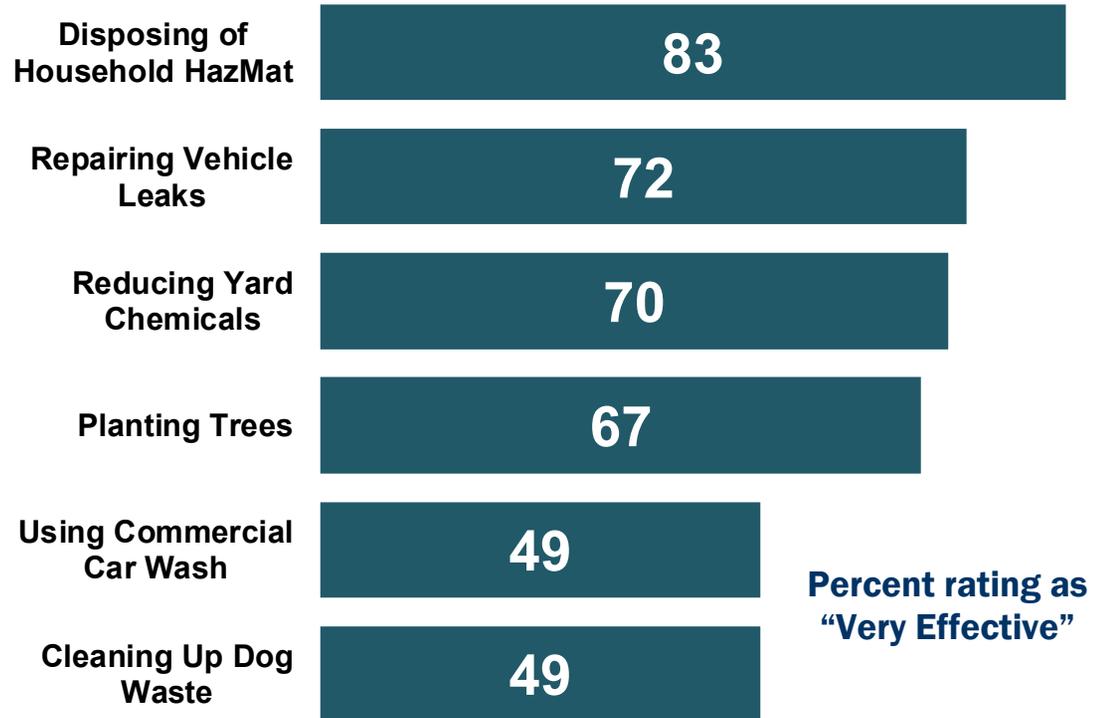
Respondents were asked to rate six measures – five of which had been covered in the interview – for their potential effectiveness in protecting local water quality.

This graph displays the percentage of respondent who said each measure would be “very effective.”

The measures are presented individually in the pages that follow.

Each measure was rated as very effective by at least 49% of the respondents.

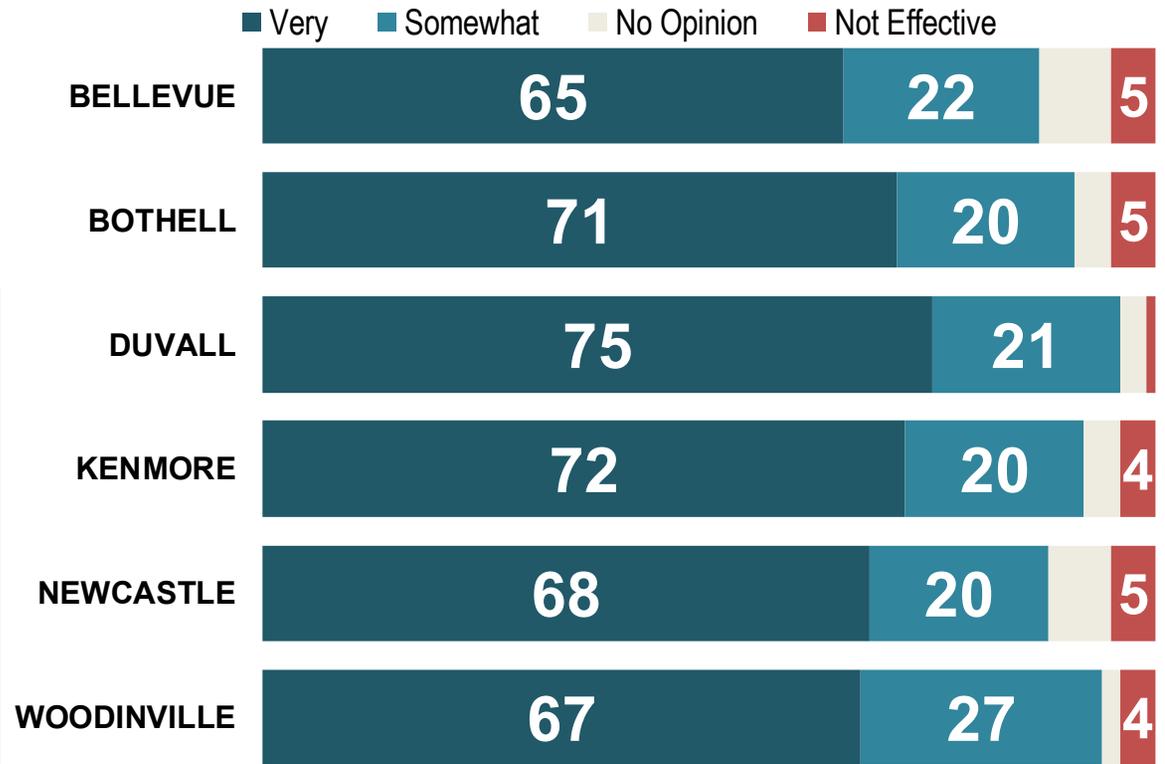
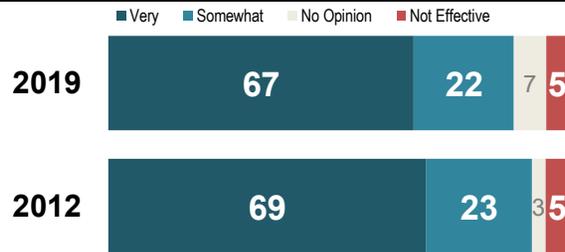
- Reflecting the earlier results, chemical pollutants received considerably more attention than obvious runoff issues.
- The perceived effectiveness of planting and protecting trees reflects the response earlier about the most important local environmental issue. Loss of open space and deforestation figured prominently in answers to that question.



Q26: Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I'd like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

Measures to Protect Water Quality

### 48: Planting Trees to Protect Water Quality



More than 2 in 3 thought that planting and protecting trees is very effective at protecting local water quality.

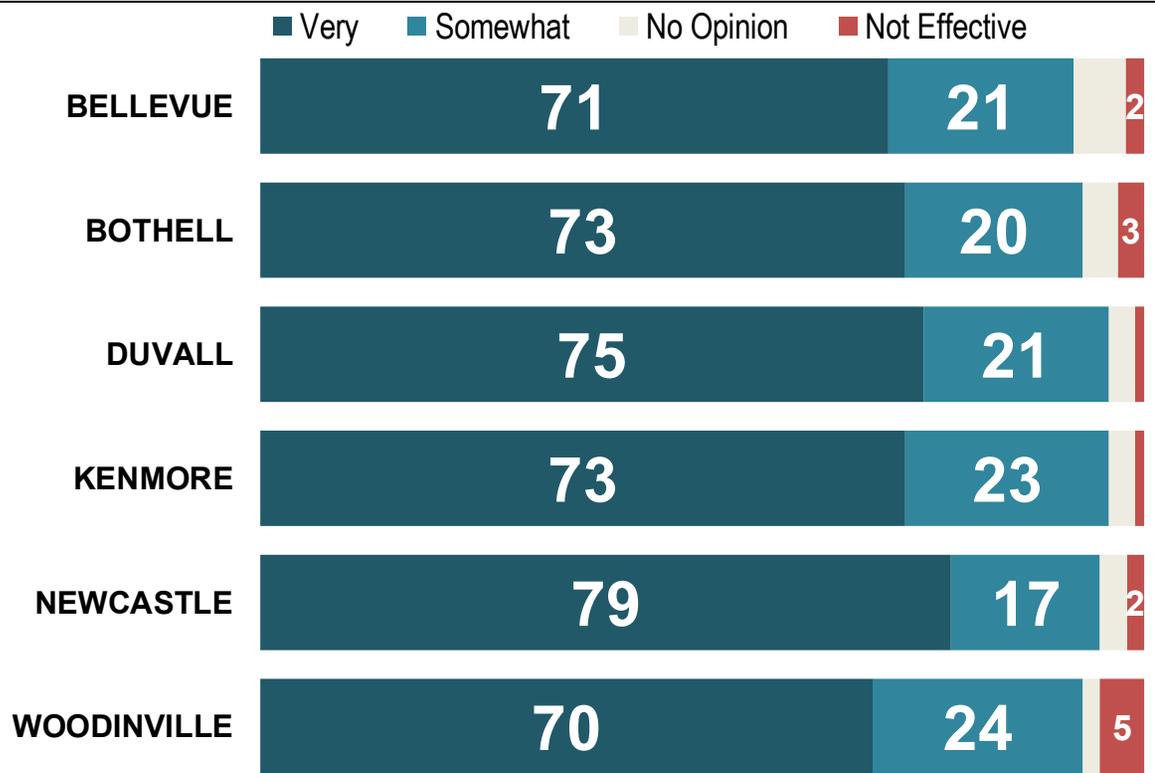
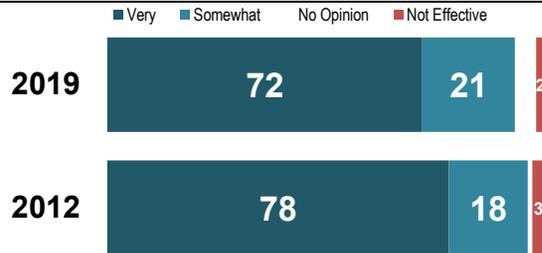
- At least 65% in every demographic category rated this as “very effective.”

Q26: Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I'd like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

**Planting and protecting trees**

Measures to Protect Water Quality

### 49: Repairing Vehicle Leaks to Protect Water Quality



More than 7 in 10 thought that repairing vehicle leaks is very effective at protecting local water quality.

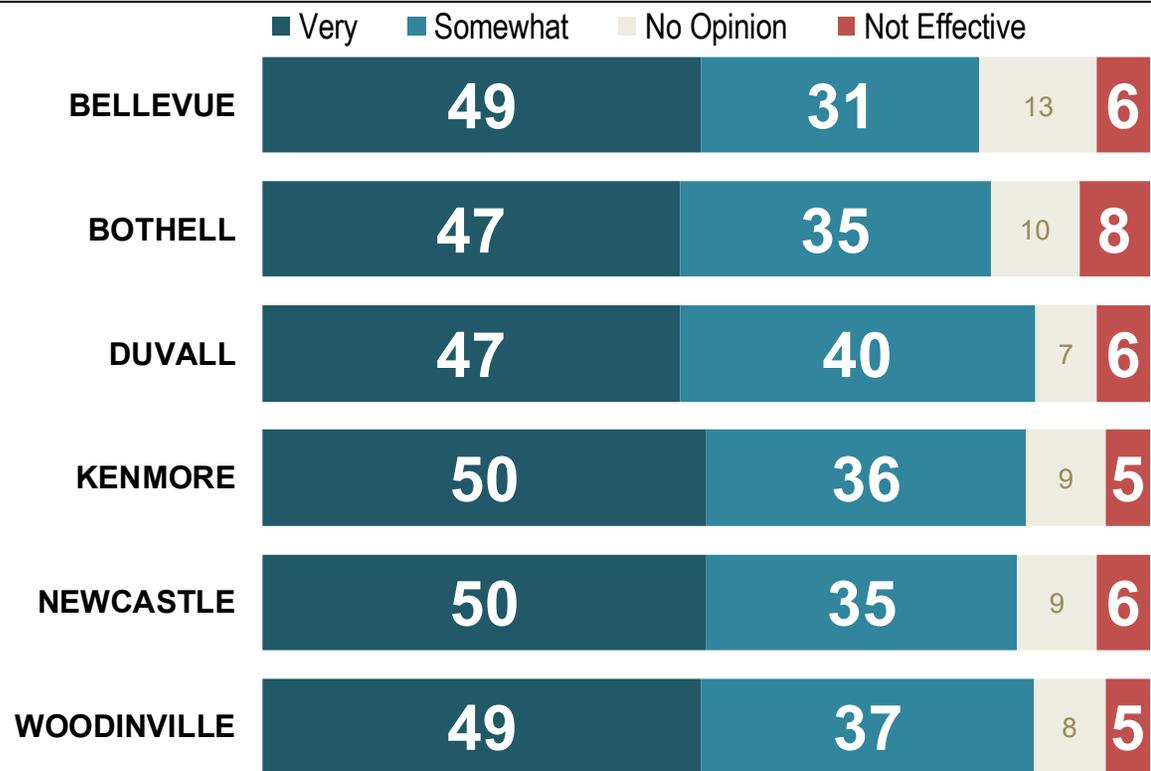
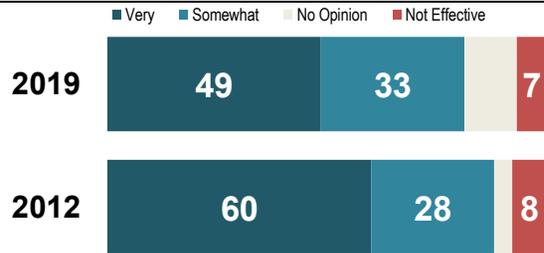
- At least 66% in every demographic category rated this as “very effective”.

Q26: Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I’d like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

Repairing leaks on vehicles

Measures to Protect Water Quality

### 50: Using Commercial Car Wash to Protect Water Quality



**Half thought that using a commercial car wash is very effective at protecting local water quality.**

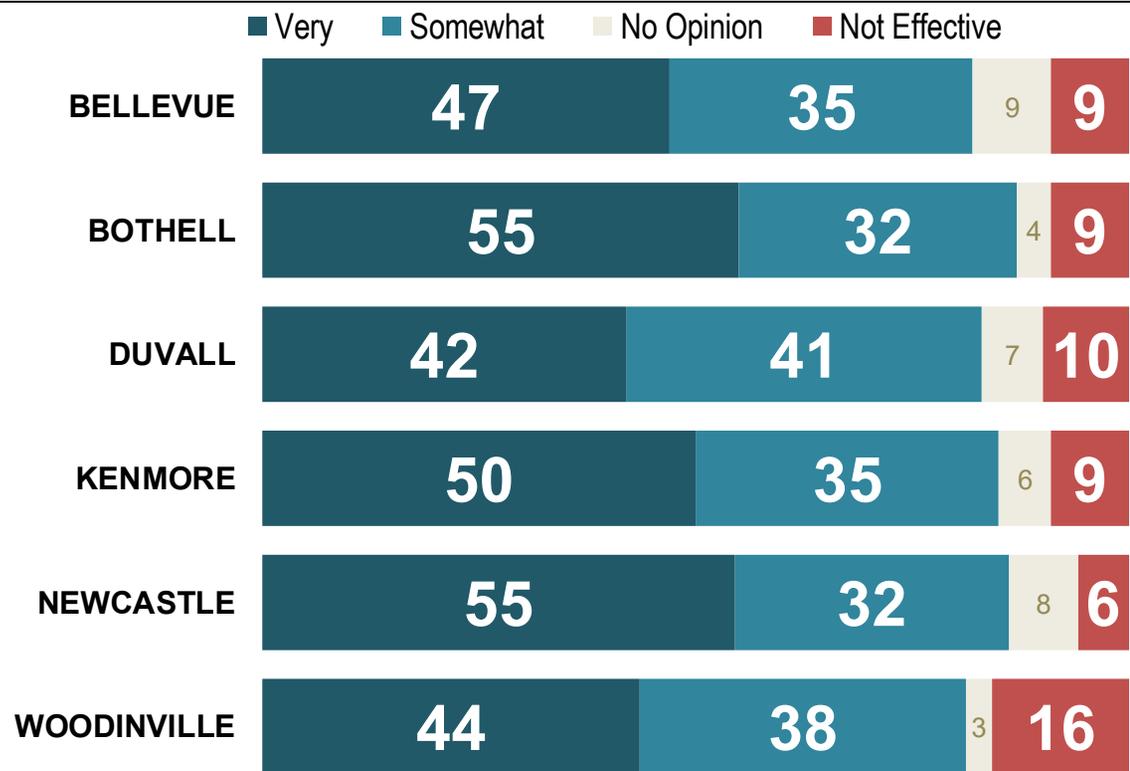
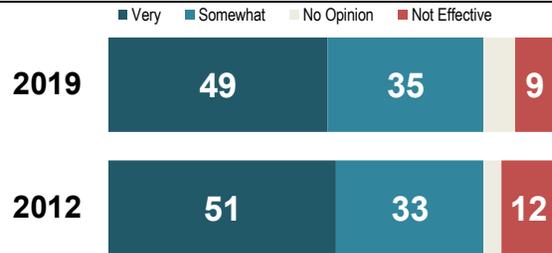
- Those who took their vehicle to a commercial car wash at least every couple of months were more likely than those who never did to say “very effective” (54% v. 35%)
- The youngest respondents were the least likely to think this would be “very effective” (34% of those under 36)
- In every other demographic category, at least 40% said “very effective”.

Q26: Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I'd like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

**Washing a car at a commercial car wash**

Measures to Protect Water Quality

### 51: Picking Up Dog Poop to Protect Water Quality



**Half thought that picking up dog poop is very effective at protecting local water quality.**

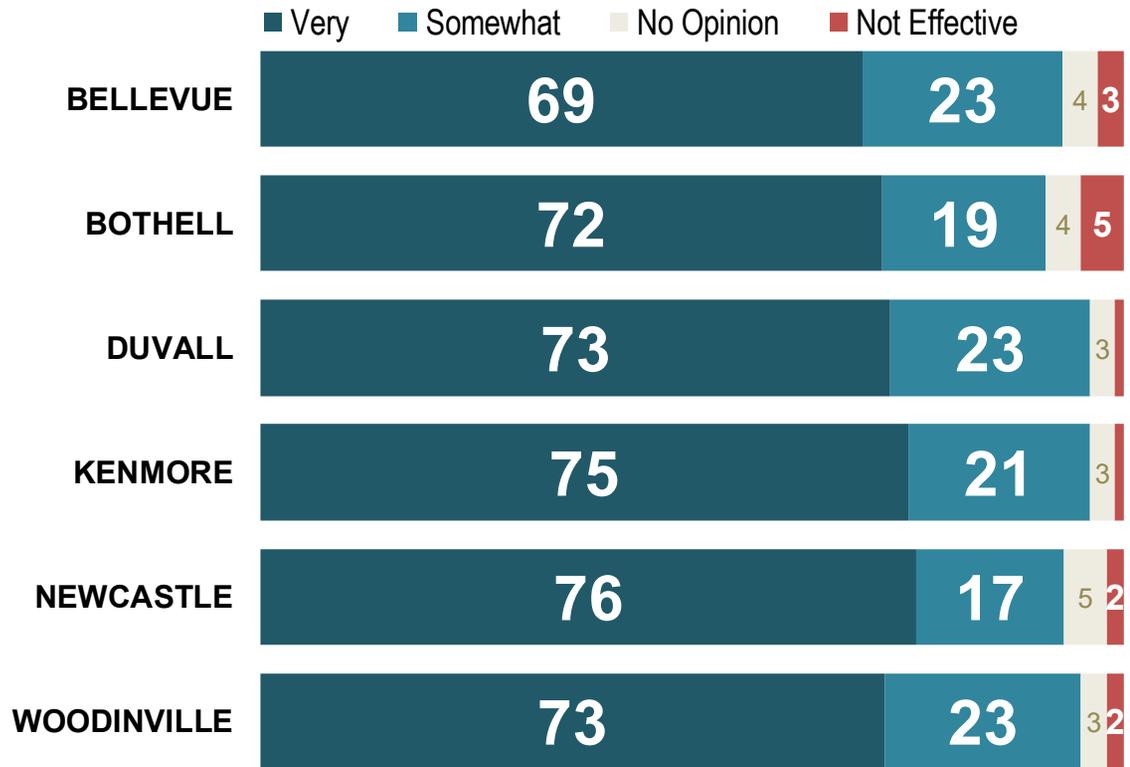
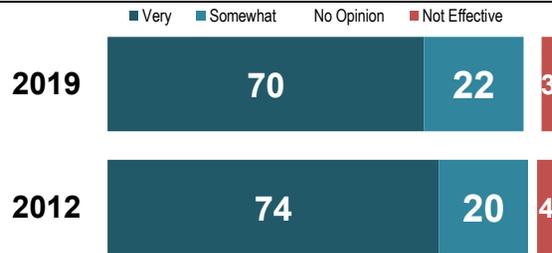
- There was no significant difference between dog owners and non-owners (48% of dog owners and 50% of non-owners said “very effective”).
- Again, the youngest respondents were the least likely to think this would be “very effective” (41% of those under 36).
- Women (58%) were more likely than men (40%) to say “very effective”.
- Single-family house residents were less likely than those in other types of home to say “very effective” (44% v. 59% of townhouse and 55% of apartment residents).

Q26: Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I'd like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

**Cleaning up dog poop**

Measures to Protect Water Quality

### 52: Reducing Use of Garden Chemicals to Protect Water Quality



**7 in 10** thought that reducing the use of garden chemicals is very effective at protecting local water quality.

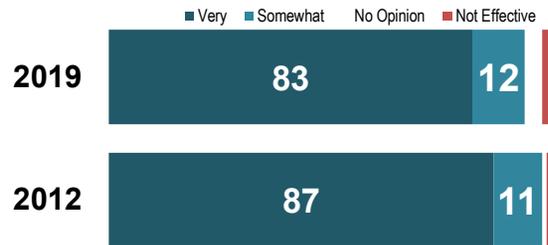
- Having a yard or not did not make a difference in answer to this question. It was rated “very effective” by 72% of those with a yard and 75% of those with no yard.
- At least 67% in every demographic category said “very effective”.

Q26: Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I'd like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

**Reducing chemical use in your yard**

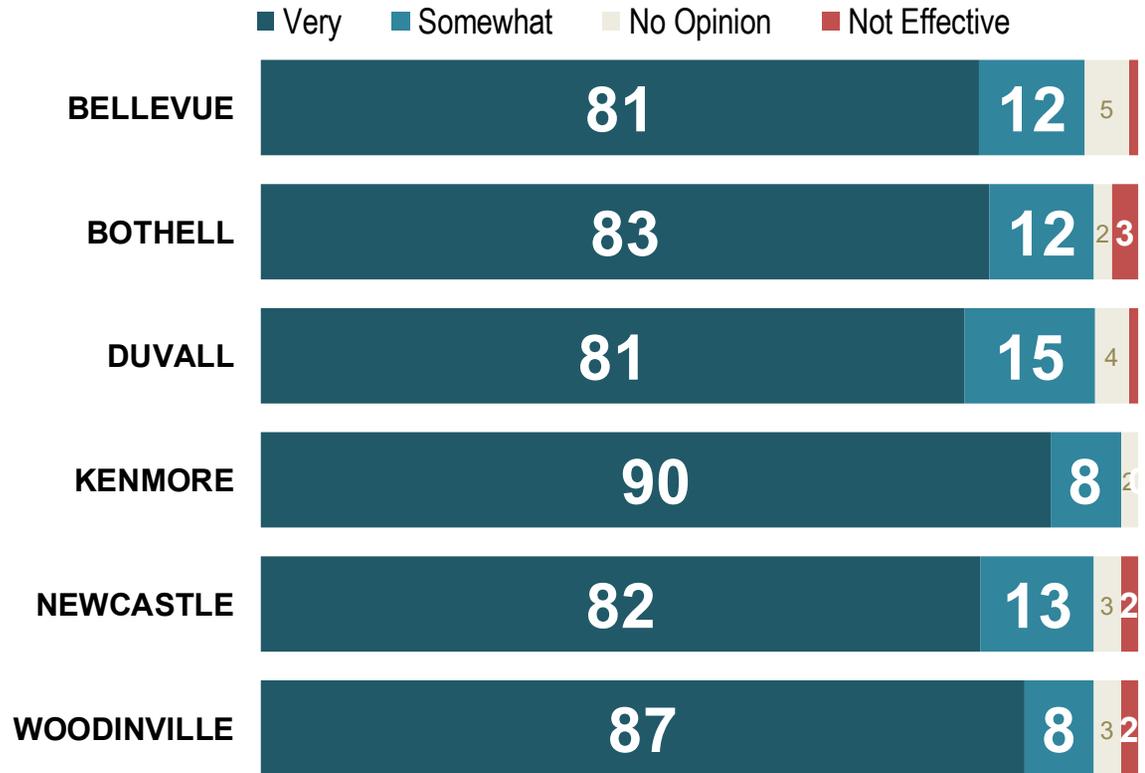
Measures to Protect Water Quality

### 53: Taking HHW to Facility to Protect Water Quality



More than 8 in 10 said that taking HHW to a collection facility is very effective at protecting local water quality.

- More than 80% of respondents in every demographic category said “very effective” – except one (77% of those under age 36).



Q26: Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I'd like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

**Taking cleaning fluids, paint and other household hazardous waste to a collection facility**

# APPENDIX

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## Topline Data (Questionnaire with Response Frequencies)

## TOPLINE DATA

<b>SAMPLE:</b>	2521 Heads of household in 6 King County cities
<b>SAMPLE FRAME:</b>	Registered voter household list + commercial list Respondent did not have to be a registered voter.
<b>FIELD DATES:</b>	October 16 – November 3, 2019
<b>DATA COLLECTION:</b>	Multi-mode: 273 telephone interviews with live interviewers 581 text to cellphones; online questionnaire 1667 mailed invitations to online questionnaire
<b>WEIGHTING:</b>	The data for each city were statistically weighted to more closely match the demographic profile of the city. The weighted variables were: gender, age, education and home ownership.
	<ul style="list-style-type: none"> <li>The questions are presented here as they were asked in the interview</li> <li>Not all questions were asked in all six cities</li> <li>The figures in the cells are percentages of respondents who gave each answer.</li> <li>A [ * ] in a cell indicates &lt;1%</li> <li>Percentages may not add to 100% due to rounding.</li> <li>Responses to open ended questions are listed at the end.</li> </ul>

### 1. SAMPLE SIZE BY CITY:

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Interviews	432	474	343	651	349	272
Margin of error	±4.7	±4.5	±5.1	±3.8	±5.2	±5.9

### 2. GENDER:

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Female	51	50	49	49	50	49
Male	49	50	51	51	50	50
(Other)	-	1	1	1	-	*

3. These first questions are about the environment. – What do you think is the single most important environmental issue facing <CITY> today? [Full list on p.15]

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Growth Issues	19	29	37	23	27	30
Traffic	18	13	11	9	13	13
Water Issues	12	11	30	12	10	9
Solid Waste	12	8	4	6	8	9
Air Quality	11	9	2	13	7	4
Climate Change	9	10	5	7	7	12

4. Are you aware of any water pollution problems in local waterways – like streams, rivers or lakes?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Yes	28	37	27	32	21	33
No	66	59	70	62	77	61
(No Ans)	7	4	3	7	3	6

5. To what degree do you believe that actions you and your family take affect the health of local streams, lakes, and rivers? Would you say your household has...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Significant	33	30	34	30	28	28
Insignificant	37	34	35	35	29	39
No Impact	15	21	16	17	20	16
Don't Know	16	15	15	18	22	17

6. When it rains, a lot of water runs off of roofs, driveways, parking lots, and streets. As you understand it, where does that water go? [multiple answers allowed]

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Storm Drain	57	58	64	60	68	58
Creeks, Lakes	37	42	50	47	40	39
Soaks into Ground	18	23	23	31	27	22
Puddles, Ponds	8	11	14	16	12	10
Sewer	9	10	7	13	12	6
Evaporates	8	9	10	7	9	10
Other	1	3	5	2	2	3
All of the Above	11	11	10	9	9	13
Don't Know	1	2	1	2	1	1

- 6.1. Where does it end up eventually?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Nearest Water	52	43	49	50	45	43
Puget Sound	36	44	44	35	34	43
Other	3	5	3	2	5	2
Don't Know	9	9	5	13	16	12

7. Which of the following views is closest to your own opinion about the impact of stormwater.
- Stormwater runoff has a significant harmful effect on water quality in local streams, lakes and rivers.
  - Stormwater runoff is part of the natural way of things. Any harm to water quality from stormwater is not enough to worry about.

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Significant Harm	-	75	79	74	66	75
Natural	-	22	18	23	28	19
Don't Know	-	4	3	4	7	6

8. To the best of your knowledge, is runoff water in <CITY> treated before it goes back into local waters? Or is runoff water not treated?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Treated	15	11	8	8	7	15
Not Treated	35	31	28	37	28	33
Mix	17	13	12	11	11	12
Don't Know	33	45	52	44	54	40

8.1. IF TREATED: Where does it go for treatment? [% based on respondents who said "treated"]

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Sewer	6	0	43	0	6	0
Vault	0	0	0	4	0	0
Pond	6	5	0	0	16	6
Filter	8	21	17	0	19	0
Treatment Facility	65	73	32	83	42	87
Don't Know	16	2	8	14	18	7

9. Now I'm going to read you a list of things that can get washed from towns and neighborhoods into lakes, streams and Puget Sound. As I read each one, tell me whether you think that is: 1) a significant source of local water pollution; it may contribute some small amount; or 3) Does not contribute enough local water pollution to worry about.

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>Soapy water from washing cars on pavement</b>						
Significant	37	35	33	32	29	32
Some/Small	51	53	57	58	60	59
Not	11	12	9	10	11	8
No Answer	1	1	1	1	1	2
<b>Pesticides and fertilizers from yards</b>						
Significant	73	73	69	76	69	71
Some/Small	20	22	29	20	28	23
Not	5	5	2	4	2	4
No Answer	2	1	*	7	*	2
<b>Dog poop left on the ground</b>						
Significant	27	33	27	30	30	28
Some/Small	51	50	53	53	52	54
Not	17	16	19	15	17	16
No Answer	5	1	2	2	1	2
<b>Soil erosion from exposed soil</b>						
Significant	27	27	33	21	24	29
Some/Small	49	47	46	53	54	50
Not	18	19	20	23	21	18
No Answer	7	7	1	4	2	2
<b>Oil leaks from cars and trucks</b>						
Significant	60	68	68	67	62	62
Some/Small	32	25	29	30	32	33
Not	5	7	2	3	5	5
No Answer	2	1	1	1	*	*
<b>Cleaning fluids, other household chemicals improperly stored or disposed of</b>						
Significant	51	57	52	59	58	56
Some/Small	39	32	41	34	34	35
Not	6	9	6	6	8	8
No Answer	4	3	1	*	1	2
<b>Runoff water from pressure washing</b>						
Significant	21	17	15	19	23	16
Some/Small	57	60	59	60	57	67
Not	19	21	25	18	19	16
No Answer	3	2	2	2	1	2
<b>Runoff from home improvement projects like tile cutting</b>						
Significant	22	20	27	25	30	23
Some/Small	58	54	52	58	53	56
Not	15	22	20	15	16	17
No Answer	5	5	1	2	1	4
<b>Leaking liquid from dumpsters</b>						
Significant	30	31	33	30	36	33
Some/Small	57	53	54	56	54	53
Not	11	13	11	10	9	12
No Answer	2	3	2	4	*	2

10. The following are some common household tasks. As I read each one, tell me who does that at your home: Yourself, a friend or relative? A hired company or professional? A property manager? If you have not done that at your home, just say that. The first one is...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>Shampoo your carpets</b>						
Self	30	-	-	35	32	-
Hire	40	-	-	32	43	-
Manager	4	-	-	3	1	-
Not Done	28	-	-	34	35	-
<b>Clean your roof and gutters*</b>						
Self	32	-	-	46	24	-
Hire	27	-	-	29	47	-
Manager	28	-	-	19	20	-
Not Done	15	-	-	11	12	-
<b>Pressure washing*</b>						
Self	32	-	-	51	44	-
Hire	16	-	-	11	20	-
Manager	19	-	-	15	14	-
Not Done	36	-	-	27	25	-
<b>Interior painting</b>						
Self	41	-	-	58	46	-
Hire	29	-	-	21	27	-
Manager	18	-	-	11	12	-
Not Done	20	-	-	16	22	-
<b>Exterior painting*</b>						
Self	15	-	-	25	16	-
Hire	38	-	-	34	43	-
Manager	26	-	-	17	20	-
Not Done	26	-	-	28	25	-
<b>Home improvement or construction projects</b>						
Self	25	-	-	34	26	-
Hire	44	-	-	46	48	-
Manager	20	-	-	14	12	-
Not Done	19	-	-	18	24	-
<b>Moss removal Moss removal</b>						
Self	30	-	-	41	28	-
Hire	22	-	-	21	31	-
Manager	19	-	-	17	16	-
Not Done	32	-	-	26	28	-
<b>Exterior window washing*</b>						
Self	37	-	-	50	37	-
Hire	28	-	-	19	29	-
Manager	17	-	-	15	19	-
Not Done	21	-	-	21	20	-

CONTINUED ►

**Q10.1 Where does the dirty water go when you...?**

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>Clean your roof or gutters</b>						
Toilet	1	-	-	*	0	-
Tub/ Sink	0	-	-	*	0	-
Floor Drain	5	-	-	1	*	-
Yard/Soil	53	-	-	64	62	-
Street/Gutter	42	-	-	34	38	-
<b>Pressure wash</b>						
Toilet	*	-	-	*	0	-
Tub/ Sink	*	-	-	*	0	-
Floor Drain	3	-	-	1	1	-
Yard/Soil	50	-	-	53	47	-
Street/Gutter	47	-	-	46	52	-
<b>Do exterior painting</b>						
Toilet	3	-	-	3	4	-
Tub/ Sink	17	-	-	25	13	-
Floor Drain	10	-	-	5	5	-
Yard/Soil	41	-	-	51	55	-
Street/Gutter	38	-	-	29	37	-
<b>Wash your outside windows</b>						
Toilet	4	-	-	5	2	-
Tub/ Sink	12	-	-	13	7	-
Floor Drain	5	-	-	4	3	-
Yard/Soil	57	-	-	67	70	-
Street/Gutter	30	-	-	21	31	-

**YARD CARE**

11. The next questions are about your home. When you clean places like your driveway, walkways, patio or deck, do you typically... (CHOOSE ALL THAT APPLY)

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
DON'T HAVE	21	22	10	16	18	25
SWEEP	43	52	61	48	48	43
BLOWER	38	38	43	44	39	31
PRESSURE WASH	17	21	32	22	23	25
HOSE	15	16	25	15	23	17
HIRE	10	10	4	7	10	11
CLEANING FLUID	3	2	1	2	2	1
OTHER	1	1	1	1	1	1
NO ANSWER	1	*	1	1	*	0

12. Does your home have a yard or garden?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
YES	69	68	95	79	78	64

13. Do you or someone in your household maintain the yard yourself? Or do you hire someone to take care of it?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Self, Friend	62	80	85	79	69	76
Hire Service	31	20	17	23	35	21
Both	8	4	1	3	1	5

14. I am going to read a list of products that people sometimes use on their yards and gardens. During a typical growing season would you say you used <INSERT> regularly, once in a while, or never.

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>Weed killers, like weed and feed type products</b>						
Regularly	3	5	3	5	3	4
Once / While	37	43	52	43	48	42
Never	56	49	45	49	44	52
Don't Know	4	3	*	3	5	1
<b>Organic or slow release fertilizer</b>						
Regularly	8	17	9	10	14	18
Once / While	48	46	58	57	53	46
Never	36	35	32	30	28	32
Don't Know	9	3	1	3	5	3
<b>Pesticides, insecticides or fungicides</b>						
Regularly	2	2	2	3	2	2
Once / While	26	28	31	29	32	27
Never	68	68	66	65	61	70
Don't Know	5	2	1	4	6	2

15. When you shop for yard and garden care products do you most often buy products that:

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Works Best	28	39	41	36	43	39
Least Expensive	5	6	8	5	5	4
Least Toxic	59	53	48	53	46	53
No Answer	8	3	3	7	6	4

16. What does your household typically do with products that may contain hazardous materials, such as cleaning fluids, paint and other household hazardous waste?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Haz Waste Site	-	44	51	57	59	55
Store @ Home	-	18	23	19	13	16
Wastemobile	-	14	11	8	4	11
Trash	-	13	4	9	10	8
Curbside	-	1	1	1	1	2
Other	-	5	5	2	4	3
No Answer	-	6	5	5	9	4

1. Take them to a hazardous waste collection site/facility
2. Take them to the Wastemobile
3. Put them in the trash
4. Store them in a garage, shed or basement at home
5. Put them in curbside recycling

**PET WASTE**

17. My next question is about pets. Do you have a pet dog or dogs?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
YES	26	39	48	38	33	35

18. When the dog is out for a walk, how is the dog poop dealt with? Would you say the waste is ...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
DON'T WALK DOG	4	6	6	12	5	4
Every Time	85	77	85	84	87	80
Most Times	8	10	7	4	7	10
Mostly Left	1	1	1	*	1	4
Left On Ground	0	0	0	*	0	2
Don't Know	1	5	1	1	0	0

1. Picked up every time
2. Picked up most of the time
3. Left on the ground most of the time
4. Always left on the ground

19. How about dog poop in the yard at home? Is that...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
NO YARD	12	14	2	12	10	15
Daily	41	40	39	35	48	35
Weekly	24	29	38	38	28	33
2x Per Month	8	7	13	9	7	2
Monthly	2	8	2	2	3	2
< Monthly	2	0	1	3	1	0
Left On Ground	9	2	5	2	3	13

1. Cleaned up daily
2. Cleaned up weekly
3. Every couple of weeks
4. Once a month or so
5. Less than once a month
6. Left on the ground

20. If the dog poop is picked up, how is it typically disposed of? Is it...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Trash	71	64	77	84	85	77
Yard Waste	16	24	13	9	4	11
Buried	3	3	2	2	2	4
Flushed	1	*	3	1	4	1
Other	1	3	2	2	1	4
Don't Know	8	6	4	2	5	3

1. Put in Trash
2. Put in compost or yard waste
3. Buried
4. Flushed down toilet
5. [OTHER]

**VEHICLE MAINTENANCE**

**21.** Let's talk about the vehicles at your home. When it comes to washing vehicles, how often do you [INSERT LIST]? Would you say once a month or more often? Every couple of months? Less often? Or never.

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>Take them to a car wash</b>						
Monthly +	21	15	17	19	23	23
Every 2 Mos	33	33	29	33	36	31
Less	30	30	40	31	32	30
Never	15	19	12	15	9	13
No answer	1	4	3	2	1	3
<b>Wash them at home</b>						
Monthly +	5	6	1	4	4	8
Every 2 Mos	8	5	7	7	3	2
Less	9	10	8	8	6	8
Never	74	69	75	73	77	72
No answer	5	10	9	9	9	9
<b>Hire a business to clean my car at home</b>						
Monthly +	4	6	6	5	5	5
Every 2 Mos	6	11	15	11	6	10
Less	10	13	29	19	23	20
Never	76	63	47	58	61	58
No Answer	4	7	4	6	6	6

**21.1. IF WASH AT HOME:** When you wash your vehicle at home, do you wash it...

1. On a paved driveway or parking spot that runs to the street or a drain
2. On a driveway or parking spot that drains to soil, grass or gravel
3. In the street
4. On gravel
5. On the lawn or dirt or sandy ground

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Paved Surface	42	63	65	50	66	20
Drains To Soil	27	23	14	33	19	47
Lawn / Soil	8	5	14	4	12	16
Gravel	3	1	4	6	2	0
Street	6	2	0	2	0	3
Other	8	4	2	4	0	2
No Answer	7	1	0	1	2	12

**22.** When it comes to changing the motor oil, anti-freeze or other fluids, do you or someone else in your household typically do it at home, or are the vehicles taken to a service shop for that?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Change @ Home	-	9	14	10	9	7
Home & Shop	-	9	7	9	6	5
Take To Shop	-	80	78	80	85	84
No Answer	-	3	2	11	1	3

1. Someone in the household changes the oil at home
2. We sometimes change oil at home/ sometimes take the vehicle to the shop
3. We always take vehicles to service shop to have oil changed

**22.1. IF MOTOR OIL IS CHANGED AT HOME:** When the motor oil or other fluid is changed at home, what is typically done with the used fluids?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Gas Station	-	69	68	85	80	67
Factoria	-	5	11	3	13	9
Wastemobile	-	7	12	4	1	14
Pour In Trash	-	5	3	3	2	4
Store @ Home	-	6	0	1	5	1
Storm Drain	-	0	0	1	0	0
Other	-	9	7	1	0	0
No Answer	-	1	0	3	0	5

1. Put it in the trash
2. Pour it down the storm drain
3. Pour it in a field or empty lot
4. Store it at home
5. Take it to a gas station or auto parts store that recycles
6. Take it to the Factoria Transfer Station's hazardous waste shed
7. Take it to a Haz Wastemobile collection event

**23.** What about oil or fluid leaks? Which of the following best describes you?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Check Regularly	-	45	51	49	45	41
When I Think Of It	-	11	12	13	10	12
Don't Check	-	39	36	36	45	45
No Answer	-	5	2	2	1	2

1. I make it a point to check for leaks under my vehicles regularly
2. I look under the vehicle for leaks when I think of it
3. I'll notice a leak if there is one, but I don't make a point of checking

**24.** If your vehicle leaked or spilled oil or antifreeze onto your driveway, which of the following would you most likely do:

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Hose It Off	-	12	7	6	7	8
Absorbent Pad	-	20	24	18	26	28
Absorb. Material	-	41	51	47	38	35
Drive Less	-	1	*	*	*	0
Nothing	-	10	6	9	10	9
Other	-	7	7	9	12	11
No Answer	-	9	4	11	7	10

1. Hose it off
2. Put an absorbent pad under the leak to soak it up
3. Put some absorbent material on the puddle
4. Drive it less
5. Probably not do anything

**25.** If you noticed a leak, would you...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Get It Checked	-	87	92	89	92	87
Wait & Watch	-	9	8	9	8	11
No Answer	-	4	0	2	*	2

1. Get it checked right away or 2) Watch to see if it got worse

**25.1. IF WAIT:** Here are some reasons we have heard about why people do not always fix an oil leak right away. Which comes closest to your thinking?

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
Expensive	-	56	50	53	45	62
Doesn't Hurt	-	14	10	8	17	11
Too Much Trouble	-	12	26	19	8	3
DK What To Do	-	0	0	6	12	2
No Answer	-	18	14	14	18	22

1. It could be expensive
2. A small leak doesn't really hurt anything
3. It would be more trouble than it is worth
4. I am not sure where I could take it to be fixed

**25.2. IF WAIT:** I am going to list some things that may or may not motivate you to fix a fluid leak on your vehicle right away. As I read each one, tell me whether that would be Very Effective, Somewhat Effective or Probably Not Effective in motivating you to fix a fluid leak on your vehicle right away. The first one is...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>If you were offered a discount at a shop to have a leak fixed</b>						
Very Effective	-	53	60	55	64	38
Somewhat	-	33	33	44	27	58
Not	-	13	7	0	9	4
Don't Know	-	1	0	2	0	*
<b>If you knew that it will extend the life of your vehicle</b>						
Very Effective	-	44	31	34	43	33
Somewhat	-	39	65	41	49	54
Not	-	17	4	24	8	13
Don't Know	-	0	0	2	0	*
<b>If you knew how to fix the leak yourself</b>						
Very Effective	-	58	33	58	47	44
Somewhat	-	30	46	29	27	52
Not	-	11	21	12	17	4
Don't Know	-	1	0	1	8	*
<b>If you were told that keeping fluid leaks off the streets will make them safer to drive on</b>						
Very Effective	-	17	11	21	12	13
Somewhat	-	64	72	51	47	67
Not	-	19	16	26	41	20
Don't Know	-	0	0	2	0	*
<b>If you were told that oil leaks eventually drain into local creeks, lakes and Puget Sound</b>						
Very Effective	-	30	19	34	40	32
Somewhat	-	52	73	46	43	62
Not	-	18	8	18	17	6
Don't Know	-	0	0	2	0	*

**26.** Some people think the things we have been talking about are effective at protecting water quality. Others say they are mostly for show or to make people feel better – They do not really do much for water quality. As I read this list, I'd like you to tell me if you think that each of these things is very effective, somewhat effective or not really effective at protecting water quality. The first one is...

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>Planting and protecting trees</b>						
Very Effective	65	71	75	72	68	67
Somewhat	22	20	21	20	20	27
Not	5	5	1	4	5	4
Don't Know	8	4	3	4	7	2
<b>Repairing leaks on vehicles</b>						
Very Effective	71	73	75	73	79	70
Somewhat	21	20	21	23	17	24
Not	2	3	1	1	2	5
Don't Know	6	4	3	3	3	2
<b>Washing a car at a commercial car wash</b>						
Very Effective	49	47	47	50	50	49
Somewhat	31	35	40	36	35	37
Not	6	8	6	5	6	5
Don't Know	13	10	7	9	9	8
<b>Cleaning up dog poop</b>						
Very Effective	47	55	42	50	55	44
Somewhat	35	32	41	35	32	38
Not	9	9	10	9	6	16
Don't Know	9	4	7	6	8	3
<b>Reducing chemical use in your yard</b>						
Very Effective	69	72	73	75	76	73
Somewhat	23	19	23	21	17	23
Not	3	5	1	1	2	2
Don't Know	4	4	3	3	5	3
<b>Taking cleaning fluids, paint and other household hazardous waste to a collection facility</b>						
Very Effective	81	83	81	90	82	87
Somewhat	12	12	15	8	13	8
Not	1	3	1	*	2	2
Don't Know	5	2	4	2	3	3

## Demographics

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>GENDER:</b>						
Male	51	50	49	49	50	49
Female	49	50	51	51	50	51
<b>AGE:</b>						
18-35	30	30	24	24	24	29
36-50	27	29	45	30	36	31
51-64	23	22	23	27	25	25
65+	17	17	8	19	15	15
<b>YEARS IN CITY</b>						
3 Years Or Less	26	30	27	32	32	23
4-9 Years	20	26	29	28	24	32
10 To 20 Years	23	19	28	17	24	23
More Than 20 Years	29	26	16	22	19	22
Na	3	*	*	1	1	*
<b>TYPE OF HOME</b>						
Single-Family House	63	65	94	73	69	60
Condominium	9	7	4	7	14	9
Townhouse	6	4	1	6	5	5
Apartment	22	23	1	14	12	27
Other / No answer	1	1	*	*	*	*
<b>OWN/ RENT</b>						
Own	57	66	89	72	77	59
Rent	43	33	10	28	23	41
Na	1	2	1	1	1	0
<b>PRIMARY LANGUAGE</b>						
English	89	94	96	94	89	92
Chinese	4	1	0	2	5	1
Spanish	0	*	2	1	1	*
Korean	2	*	0	*	1	0
Russian	1	1	1	*	*	1
Vietnamese	0	*	0	1	*	0
Tagalog	0	0	0	0	0	1
Persian (Farsi)	0	0	0	*	0	*
Other	4	2	1	1	4	5
Na	1	1	*	1	1	1

	BELLEVUE	BOTHELL	DUVALL	KENMORE	NEWCASTLE	W'VILLE
<b>EDUCATION LEVEL</b>						
High School Or Less	15	22	14	17	12	15
Some College /Tech. School	19	27	34	29	19	28
4-Yr College Degree	37	33	35	33	39	37
Post Graduate School	29	17	17	22	30	19
Na	1	*	1	1	1	1
<b>HOUSEHOLD INCOME</b>						
\$50,000 or Less	13	17	13	16	9	10
\$50 To 75,000	12	12	7	16	12	11
\$75 To \$100,000	13	17	10	15	11	14
\$100-125,000	14	12	13	13	16	18
Over \$125,000	39	32	51	32	44	36
No Answer]	9	10	6	8	8	12

Q3: What do you think is the single most important environmental issues facing your city today?

### 27 GROWTH

- 13 Growth Mgt / Overdevelopment / Overcrowding / Density
- 5 Land Use / Open Space
- 4 Deforestation / Loss Of Trees
- 3 Loss Of Habitat / Wildlife
- 1 Construction
- \* Waterfront Development / Access to Water

### 14 WATER

- 3 Water Quality / Clean Water
- 3 Runoff: Water / Stormwater / Rain
- 3 Flooding / Drainage
- 2 Polluted Waterways
- 1 Water
- 1 Water Pollution
- \* Water Supply / Management
- \* Waste Water / Sewage
- \* Groundwater Contamination
- \* Pesticides

### 13 TRAFFIC

- 11 Traffic / Congestion
- 1 Transportation Alternatives, Lack Of
- \* Better Roads

### 8 AIR

- 6 Emissions / Vehicle Emissions
- 3 Air / Air Pollution / Air Quality

### 8 CLIMATE CHANGE

- 8 Climate Change / Global Warming
- \* Weather

### 7 SOLID WASTE

- 4 Solid Waste / Trash/ Litter
- 3 Recycling
- 1 Plastics
- \* Pet Waste

### 1 POLITICAL

- \* Regulations
- \* Politicians
- \* Environmentalist

### 13 OTHER

- 3 "Pollution"
- 2 Fossil Fuel / Lack Of Alt. Energy
- 1 Noise Pollution
- 1 Industrial Pollution / Cement Plant
- 1 Parks
- 7 Misc.

### 3 NOTHING

### 7 NO ANSWER

Answers written in by respondents as "other" on multiple choice questions.

Number in [brackets] is the number of people who gave that, or closely similar, answer.

### Q6: When it rains, a lot of water runs off of roofs, driveways, parking lots, and streets. As you understand it, where does that water go?

- After treatment at the water facility, it goes into the streams, rivers, lakes etc.
- all of the above [3]
- Depends on circumstances
- Depends on the house and property. My home collects and allows surface runoff to soak back into the land. The houses that are all crammed together cannot do the same... All their surface runoff has to run into storm drains and then into nearby waterways.
- Goes into treatment plant in the case of the drain/sewer
- Into ditches on one or both sides of the streets
- It comes up in my basement.
- leaks into ground/ground water and streams due to deteriorating sewage pipes
- Runs into local river (Snoqualmie River) and creeks right off Main Street
- Snoqualmie River
- Some ends up in our treatment system.
- Storm water drainage ponds
- treatment plant
- ultimately into the Pacific Ocean
- water processing plant
- wetlands, ephemeral ponds

### Q6.1: Where does it end up eventually?

- after treatment into snoqualmie river than to the puget sound
- all of the above
- All of the above, also back into the water supply.
- Eventually? everywhere. Part of the water cycle, to the ocean and back again.
- in the ground
- Our oceans and water table
- Puget Sound and recycled through our water supply
- river then to the ocean
- settling pond
- The ground...we live in the forest.
- treatment plant

### Q8.1: To the best of your knowledge, is runoff water in <CITY> treated before it goes back into local waters? Or is runoff water not treated? IF TREATED: Where does it go for treatment?

- A water treatment facility.
- City of Duvall wastewater treatment plant [15]
- Dept. of Public Works
- Don't know. Assuming it does.[4]
- Duvall sewage treatment
- Everett
- Filtered by the local community tanks
- I believe there is a treatment plant on 203 and 145th
- IF treated (which is nearly impossible with the sheer amount) the water treatment plant that sits on Local
- Local stormwater treatment facility
- local treatment plant [6]
- Our subdivision (North Hill in Duvall) has a stormwater infrastructure to filter contaminants before retention ponds for filtration [2]
- the city filtration system

Treatment plant [3]  
 Water company off of Main Street  
 Water Processing Plant [3]  
 WTD in Carnation

**Q16: What does your household typically do with products that may contain hazardous materials, such as cleaning fluids, paint and other household hazardous waste?**

Depends. If empty paint can with dried paint put in garbage. others bring to collection site. Others store. depends; curbside recycling; take them to a hazardous waste collection site/facility.  
 Dispose of them properly at the most convenient location (wastemobile, collection site, oil to curbside recycling, etc.)  
 Dont buy dont use. Dont dispose .[2]  
 environmentally friendly  
 Find appropriate recycling solution  
 follow the instructions for the given material  
 Follow Waste Management's protocol on their website [2]  
 If cleaning containers and are recyclable, they are placed in the curbside recycling.  
 Open the can and let the product dry out. The dispose in the trash  
 store them in garage, then take them to hazardous waste site  
 store until recycling event locally  
 Take them to the dump  
 wait for the local hazardous waste disposal when it comes to town

**Q20: If the dog poop is picked up, how is it typically disposed of? Is it...**

put in woods  
 The scooping service takes it away.  
 Throw it in the revere  
 Throw it over the fence into the neighbor's yard.  
 Used as fertilizer

**Q22 When the motor oil or other fluid is changed at home, what is typically done with the used fluids?**

Dispose of Properly at the most convenient location (Duvall Auto Parts, curbside recycling properly labeled in clear milk jug)  
 My work has oil disposal so I do it there  
 Unsure how Husband disposes of it  
 We have curbside pick up of used motor oil that is properly labeled.

**Q24: If your vehicle leaked or spilled oil or antifreeze onto your driveway, which of the following would you most likely do:**

cat litter to aborb  
 Doesn't happen  
 get the car fixed [4]  
 My car is electric; it doesn't use these fluids.  
 put appropriate absorbant - depending on type of leak or spill  
 put cardboard under until getting it looked at  
 soak it up with pad, get oil leak fixed  
 Use absorbent material (sawdust works great) to clean it up, then fix the problem!  
 Wash with Soap & Water

**Q25.1: Here are some reasons we have heard about why people do not always fix an oil leak right away. Which comes closest to your thinking?**

I want to confirm that it is an ongoing problem before going out of my way to get it fixed.  
 With an oil leak i dont need to change the oil i just keep aÄ ding new oil and change the filter once in a while.

**Q31: What is the primary language spoken at your home?**

Arabic...German...American...Polish