SPOKANE RIVER WATER QUALITY SURVEY

May 2015

Kootenai County

Robinson Research was commissioned by The Spokane River Forum to conduct a telephone survey with households in Kootenai County. Surveys were also conducted in Lincoln, Stevens, and Spokane Counties.

Spokane River Water Quality Survey

Contents

METHODOLOGY

Robinson Research was commissioned by The Spokane River Forum to conduct a telephone survey with adults living in portions of Kootenai County. The zip codes surveyed were all adjacent to the Spokane River. The overall purpose of this study was to evaluate public attitudes and perceptions regarding pollution in the Spokane River. The survey was conducted as part of the Center for Justice's public participation grant from the WA Department of Ecology.

For this wave, the telephone interviews in Kootenai County were conducted at our facility from May 2, 2015 to May 9, 2015. The first wave was conducted in 2009.

No fewer than fifteen percent (15%) of the interviews were monitored in their entirety, and an additional ten percent (10%) were called back by a supervisor for verification of key points of the data. Interim trial runs of the data were cross-tabulated by interviewer as a quality assurance procedure.

A total of 800 telephone interviews were completed. Fifty percent (400) were conducted in Spokane County, thirteen percent (100) in Lincoln County, thirteen percent (100) in Stevens County, and twenty-five percent (200) in Kootenai County.

To allow for tracking Robinson Research has produced two reports for this project. This report is based on interviews conducted in Kootenai County and excludes all responses from Spokane, Stevens, and Lincoln Counties. The Spokane, Stevens, and Lincoln Counties' results are presented under separate cover.

Respondents who reported working for a market research or advertising agency were excluded from this survey.

A 200-sample survey has a margin of error of +/- 6.94% percent. In theory, survey results have a ninety-five percent (95%) chance of coming within +/- 6.94 percentage points of results that would have been obtained if all households in Kootenai County zip codes adjacent to the Spokane River had been interviewed.

In total 3,079 attempted calls were required to obtain the quota of 200 completed interviews.

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EXECUTIVE SUMMARY

- Half of respondents reporting seeing, reading, or hearing something about the Spokane River over the previous twelve months, consistent with responses from 2009 and similar to respondents in Washington State.

- One in five respondents who had seen, read, or heard something about the river reported that it was about recreation, similar to respondents in Washington State.

- The most often cited sources of information was television news, *Coeur d'Alene Press*, and *The Spokesman-Review*.

- The average respondent reported visiting the Spokane River 37.81 times a year, nearly four more times per year than respondents in Washington State. Thirty-nine percent reported visiting the river more than ten times a year.

- Nearly half of respondents who interacted at least once with the Spokane River in a typical year reported walking, running, or biking along it. Washington State residents engaged in similar activities.

- Three in five respondents who interacted at least once with the Spokane River in a typical year reported most often visiting the river between Coeur d'Alene and Post Falls, nine in ten visit the river in Idaho (between Coeur d'Alene and Stateline). While the number of visits and the activities in which respondents engage is similar to Washington State residents, respondents typically stay on their side of the border.

- A majority of respondents described the water quality in the river as excellent or pretty good, compared to two in five respondents across the state line.

- Perceptions of water quality were nearly unchanged from 2009.

- Half of respondents reported having no concerns about the river pertaining to human health. From a pollution perspective, heavy metals/mining waste was the primary concern. The level of concern regarding mining waste has decreased significantly since 2009 (from one in five to one in ten). In Washington, respondents were more concerned about pollution from industry and sewage/combined sewer overflows.

- Four in five respondents perceived that the river was safe to swim in, somewhat higher than their counterparts in Washington State.

- Two in three respondents perceived that the fish are safe to eat, a higher proportion than recorded across the state line.

- Nine in ten respondents perceived that the beaches are safe to use, similar to respondents in Washington State.

- One in five respondents reported that mining and sewage spills/releases were major sources of pollution in the river. There was also concern with household hazardous waste, litter, and pollution from industry. Washington respondents showed similar concerns, but somewhat stronger, and ranked pollution from industry and sewage spills/releases higher than pollution from mining.

- Nine in ten respondents reported that it was very important or somewhat important that the Spokane River be protected and/or cleaned up, consistent with the responses received from Washington State residents.

- One in five respondents reported that there were no cleanup efforts being conducted on the river. A majority reported not to know if there were cleanup efforts. Awareness of a phosphate dishwasher/detergent ban had greatly receded from 2009. Responses were similar to those from across the border.

- Respondents were read a list of contaminants/pollutants and asked to rate how contaminated the river was by each. Stormwater, phosphorous, and heavy metals were rated at the top of the list. The ranking of concerns was consistent with those of respondents in Washington State. However, Washington State respondents generally gave overall higher ratings.

- A majority of respondents reported that the motivation for individuals or businesses to help protect water quality should be mandatory, which was consistent with their Washington counterparts.

- One in six respondents reported awareness of advisories about eating fish from the river. Awareness among Washington respondents was significantly higher, accounting for two in five respondents. However, Idaho lists no fish advisories for the Spokane River. Ninety percent of this subset of Idaho respondents who reported that someone in their household caught fish from the river, caught those fish in Idaho.

- Of the respondents who reported that someone in their household caught fish from the river, the average respondent reported that household members ate 1.66 fish in a typical month. Nine in ten respondents whose household members ate fish from the river reported not taking any precautions in how the fish were prepared for cooking.

- Statements about perceptions of the Spokane/Rathdrum Prairie Aquifer reflected the following:

    - Confidence in the water quality from the aquifer was high and was consistent with results from 2009 and similar to their counterparts in Washington State.
    - There was some increase in concern that the aquifer is well protected from pollution, similar to respondents in Washington. Although, Washington residents were more likely to be more concerned.
    - Confidence that sufficient water resources would be available to meet future needs was fairly neutral and consistent with the last wave. Responses from Washington residents were similar, but showed less confidence.
    - A majority of respondents understood that withdrawals form the aquifer affected river flows. There was, however, less understanding of the interchange of water between the river and aquifer.

- Four in five participants reported being very or somewhat interested in learning more about the challenges facing the river, similar to results from the Washington portion of the study.

- Three in five respondents reported that a message about how big the problem is was the most likely to inspire change or willingness to pay for improvements, similar to results from Washington.

- Statements to measure strengths of opinions regarding river issues showed:

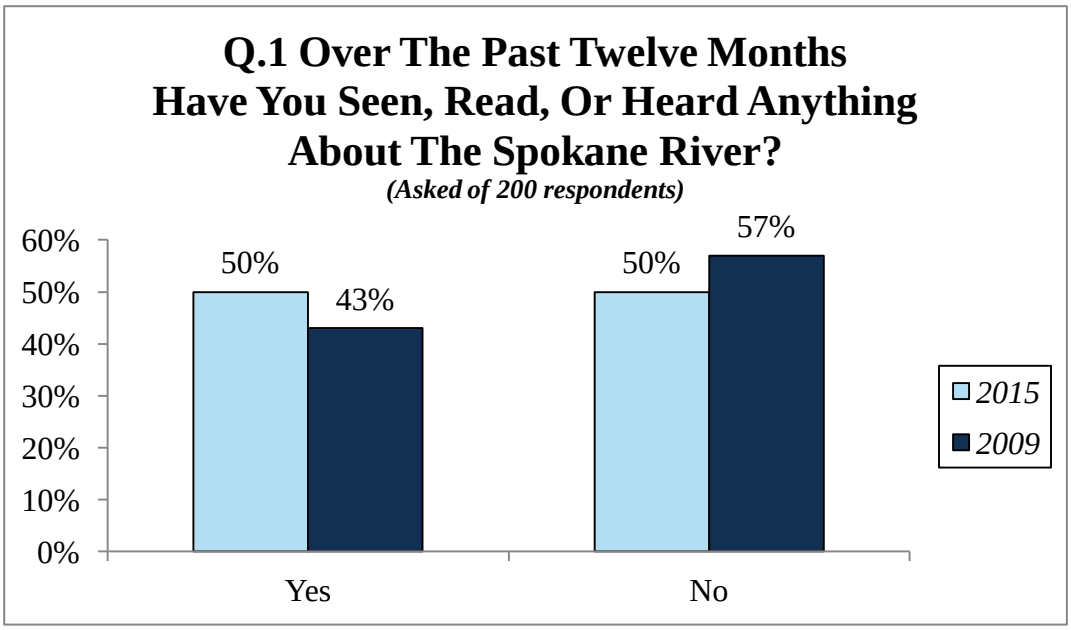
    - Strong support, as in the previous survey, to protect the river for future generations.
    - Belief that the river is important to the regional economy.
    - Belief that there are things households can do to both conserve water and reduce contaminants/pollutants in the river.
    - Belief, although less strong than among Washington respondents, that it will cost more to take action later and that we should develop water conservation programs.
    - Support, but less strongly, for banning products that pollute the river and agencies restricting action to protect water quality. The strength of that support was less than that shown among Washington respondents. As with Washington respondents, this provides a sideboard perspective to the 56% of respondents expecting that the motivation for individuals or businesses to help protect water quality should be mandatory.
    - A belief that water quality has significantly improved since 2000 and less belief that water quality will be significantly improved by 2025.
    - Respondents did not agree that “The Spokane River is fine just the way it is,” but not as much as residents of Washington.

- Respondents had the most confidence in conservation districts managing restoration and/or clean-up efforts in the Spokane River. Respondents trusted each of the following in descending order:
    - Indian tribes
    - University professors/scientists
    - Washington State Department of Ecology
    - State and local health agencies
    - Cities and counties
    - Non-profit environment groups
    - State environmental agencies
    - EPA
    - Industry

Idaho respondents have much less confidence in non-profit environmental groups than those in Washington. In addition, their confidence in EPA is also less while their confidence in industry is higher than their counterparts in Washington.

DETAILED OBSERVATIONS

Q.1 Over the past twelve months have you seen, read, or heard anything about the Spokane River?[1]

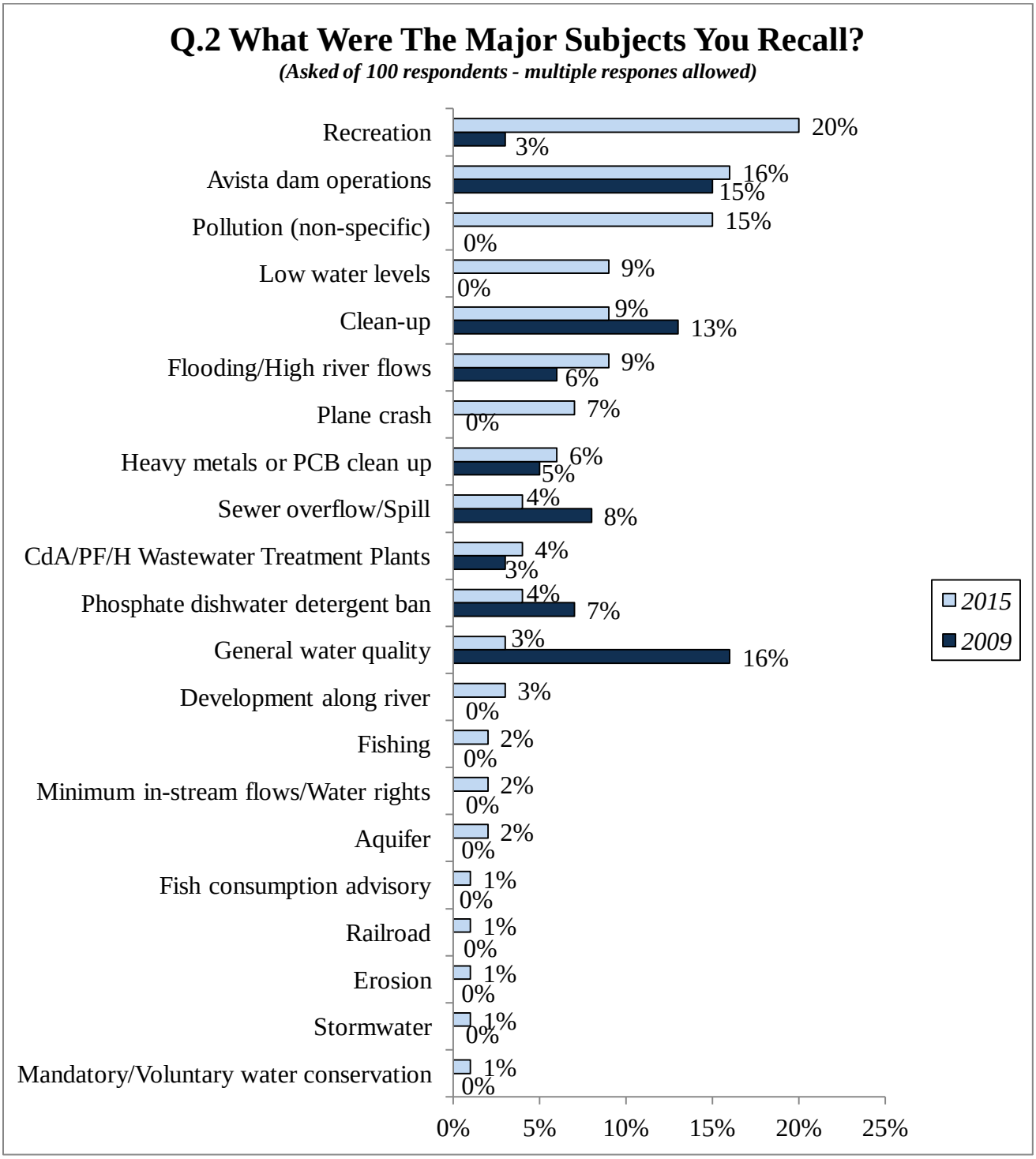


Half (50%) of respondents reported seeing, reading, or hearing something about the Spokane River.

Participants who reported that it was not at all important to clean up the Spokane River were more likely than average to have responded in the affirmative.

[1] This question was asked of all respondents (n=200).

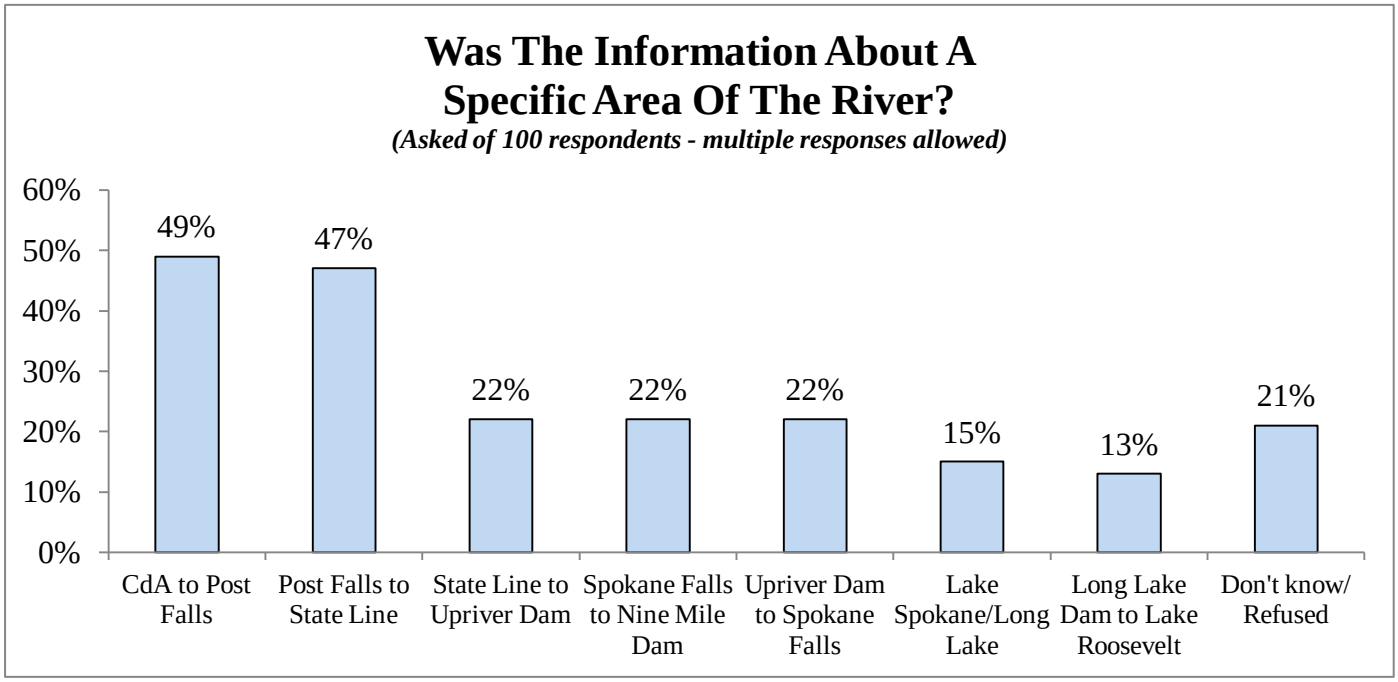
Q.2 What were the major subjects you recall?[2]



It should be noted that the 2009 study was conducted in the middle of winter, possibly accounting for the major swing in percentage of respondents mentioning recreation.

Q.3 Was the information about a specific area (reach) of the river?[3]

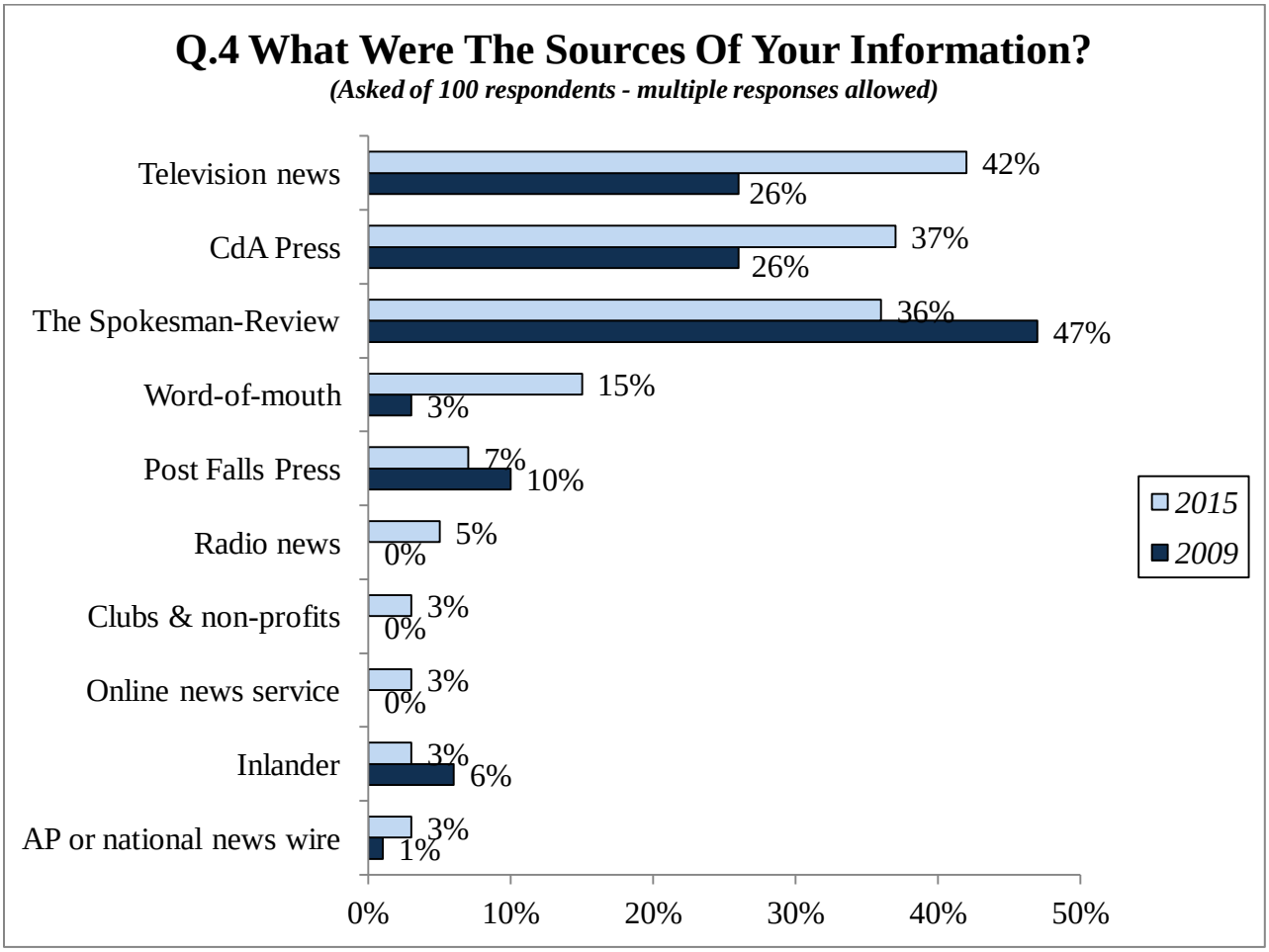
[2] This question was asked of respondents who reported seeing, reading, or hearing something about the Spokane River (n=100). Respondents were not read a list of possible responses from which to choose. Multiple responses were allowed.



Half (49%) of respondents reported that the information was about the river from Coeur d'Alene to Post Falls.

[3] This question was asked of respondents who reported seeing, reading, or hearing something about the Spokane River (n=100). Multiple responses were allowed. This question was not asked in 2009.

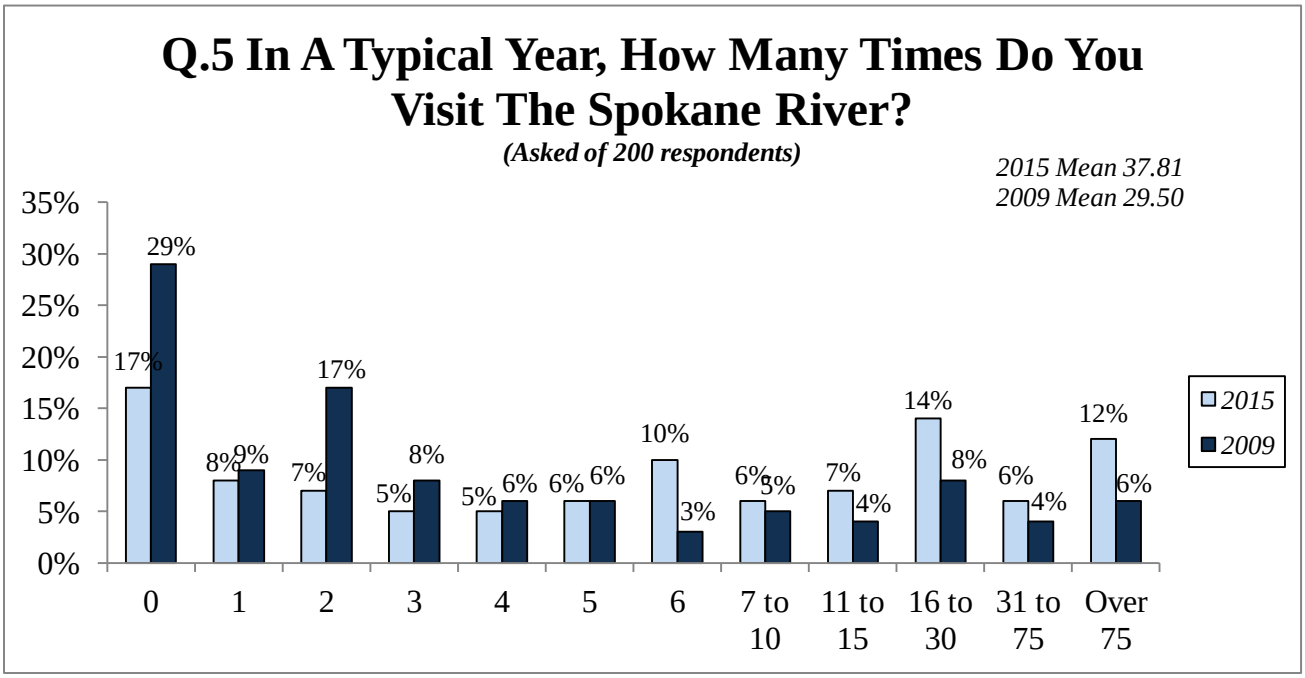
Q.4 What were the sources of your information?[4]



Two in five (42%) respondents reported receiving the information from television news.

[4] This question was asked of respondents who reported seeing, reading, or hearing something about the Spokane River (n=100). Respondents were not read a list of possible responses from which to read. Multiple responses were allowed.

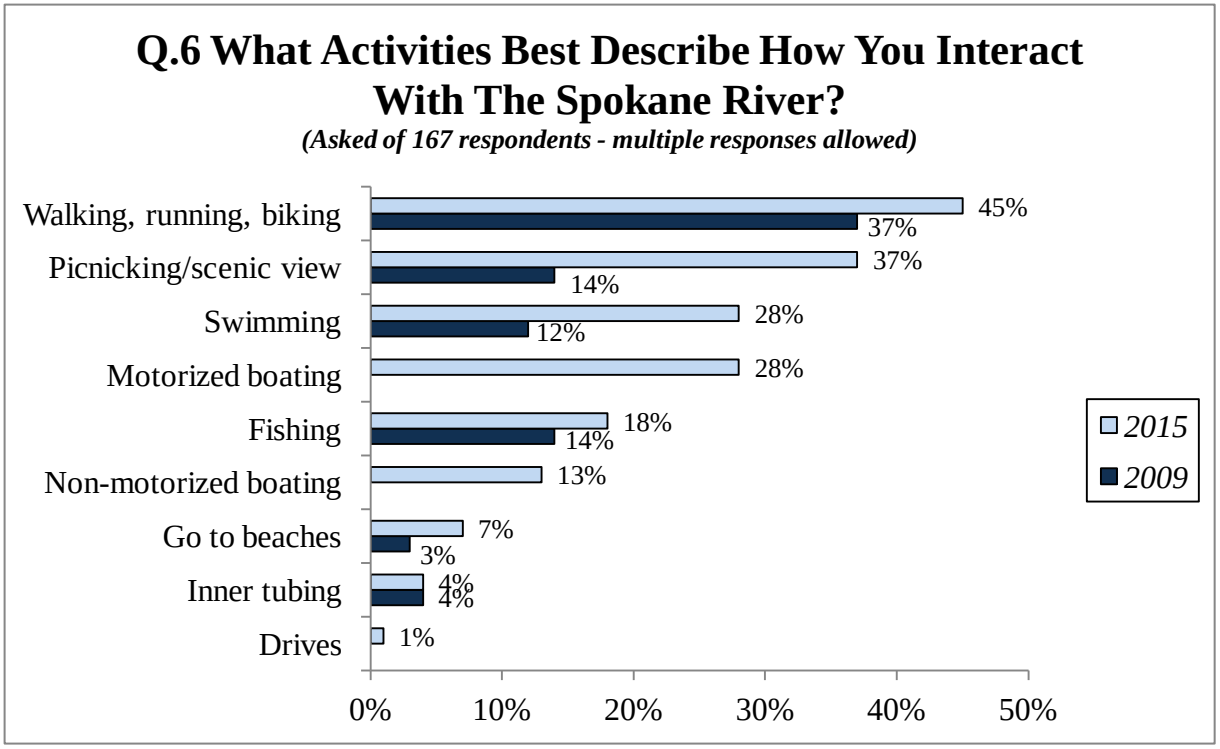
Q.5 In a typical year, how many times do you visit the Spokane River?[5]



The average participant reported visiting the river 37.81 times in a typical year.

[5] This question was asked of all respondents (n=200). This question was not asked of all respondents in 2009.

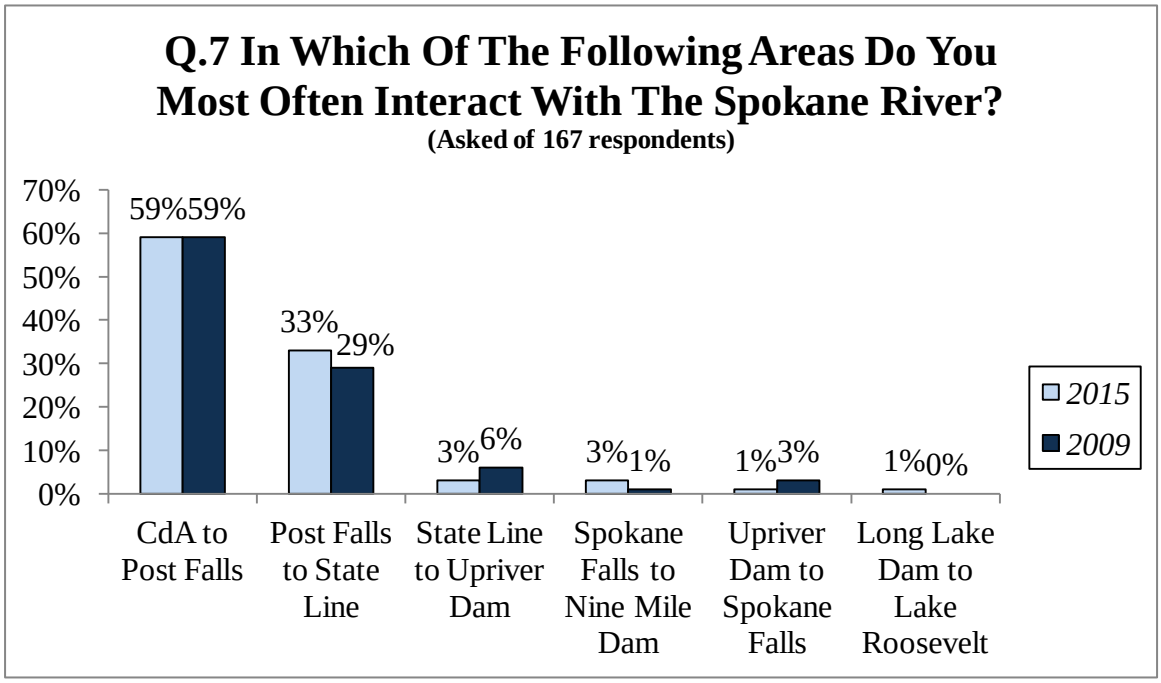
Q.6 What activities best describe how you interact with the Spokane River?[6]



Nearly half (45%) of participants mentioned walking, running, or biking as an activity they did at the river.

[6] This question was asked of respondents who reported visiting the river at least once in a typical year (n=167). Respondents were not read a list of possible responses from which to choose. Multiple responses were allowed. This question was asked of all respondents in 2009 and new response categories were added this year.

Q.7 In which of the following areas do you most often interact with the Spokane River?[7]

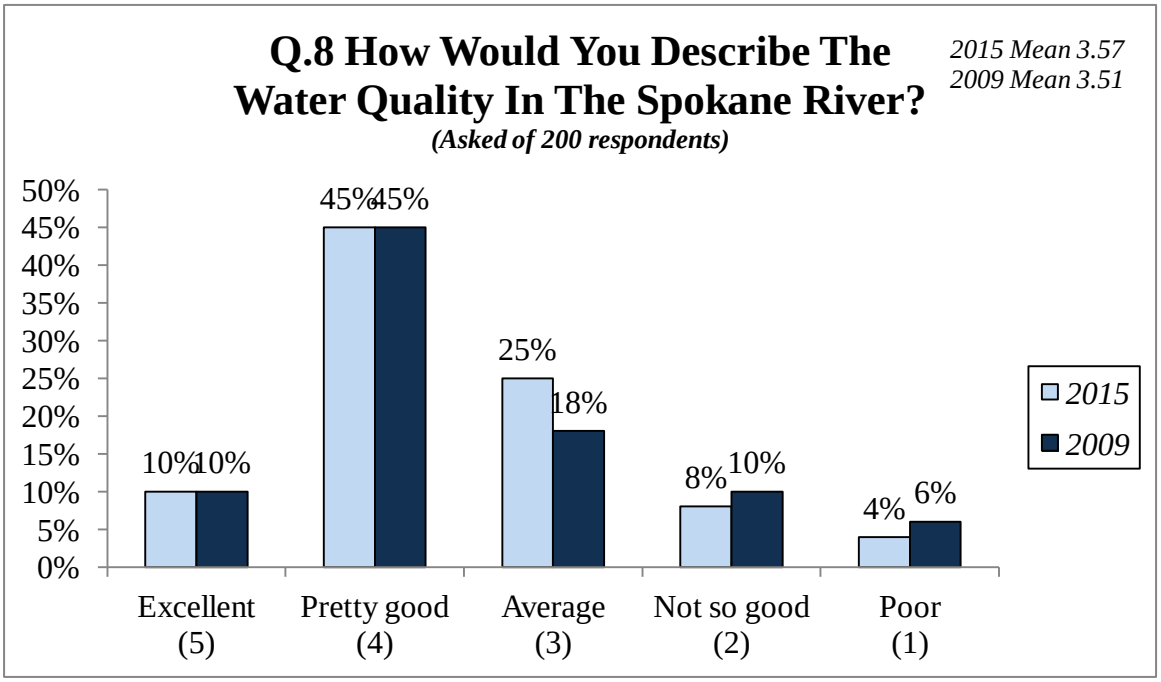


Three in five (59%) respondents reported most often interacting with the river between Coeur d'Alene and Post Falls.

Q.8 How would you describe the water quality in the Spokane River?[8]

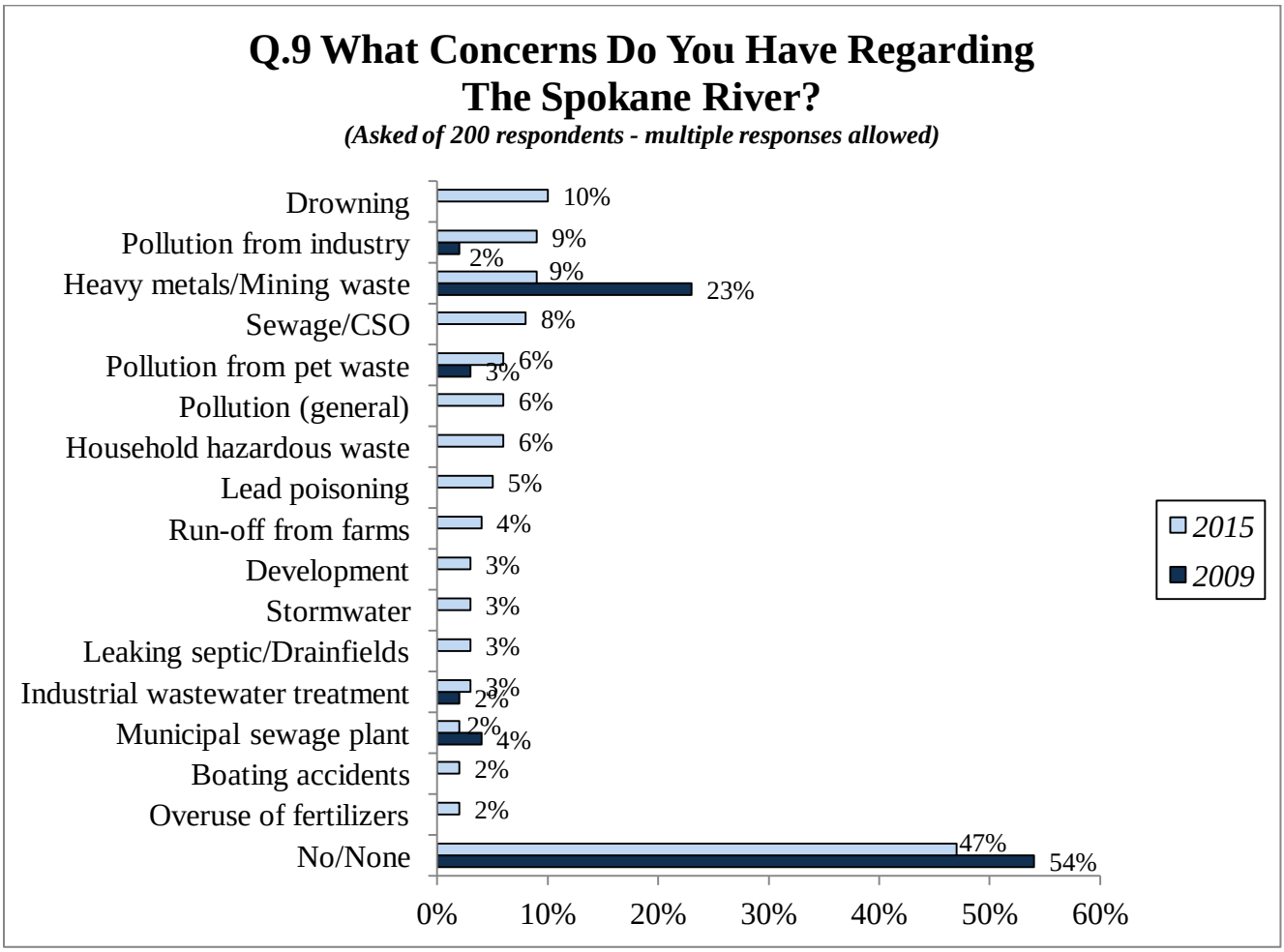
Nearly half (45%) of participants' perception of the water quality of the river was pretty good.

Responses spanned the tested subsets quite evenly.



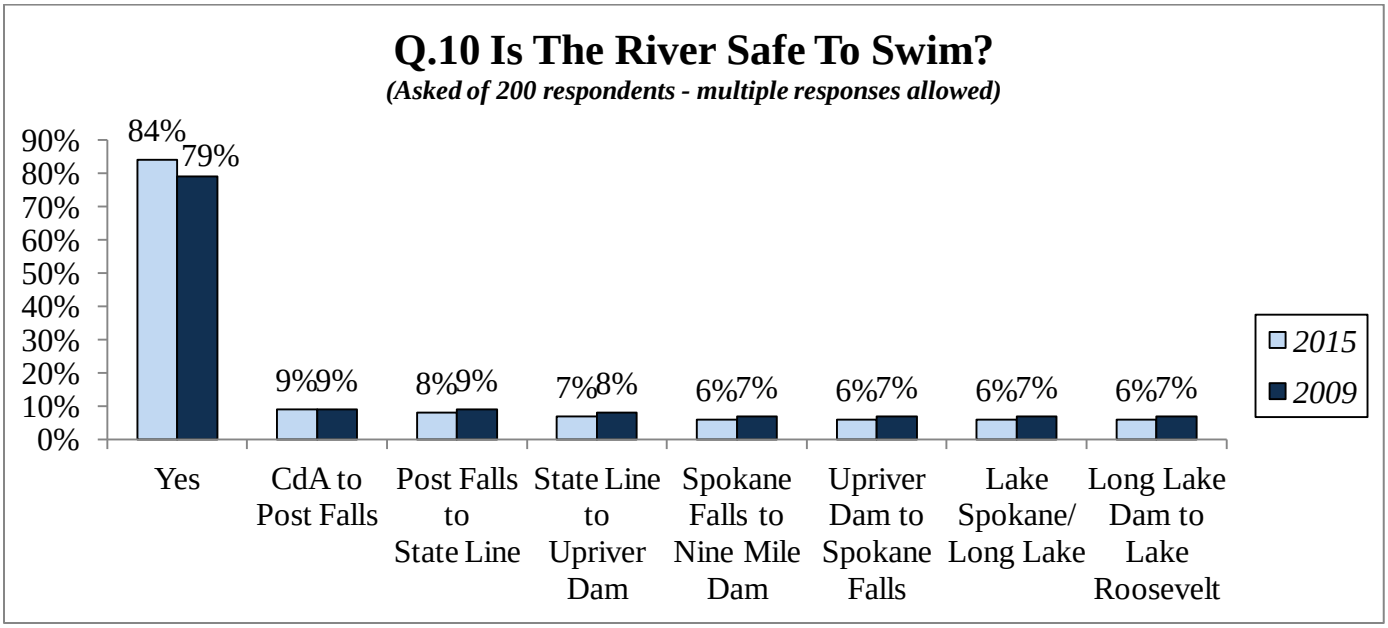
[7] This question was asked of respondents who reported visiting the river at least once in a typical year (n=167).
[8] This question was asked of all respondents (n=200).

Q.9 Thinking specifically of human health concerns, what, if any, concerns do you have regarding the Spokane River?[9]



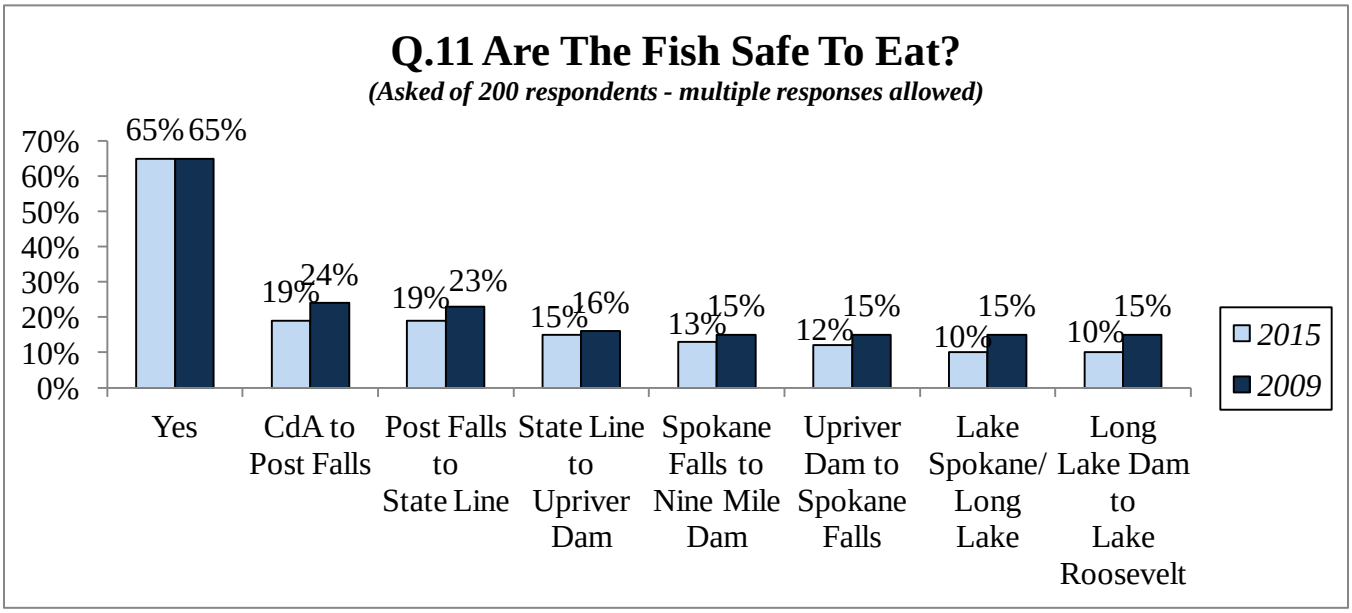
[9] This question was asked of all respondents (n=200). Respondents were not read a list of possible responses from which to choose. Multiple responses were allowed. This question and the response options were changed slightly from 2009.

Q.10 Is the river safe to swim in?[10]



Four in five (84%) participants reported that it was safe to swim in the river.

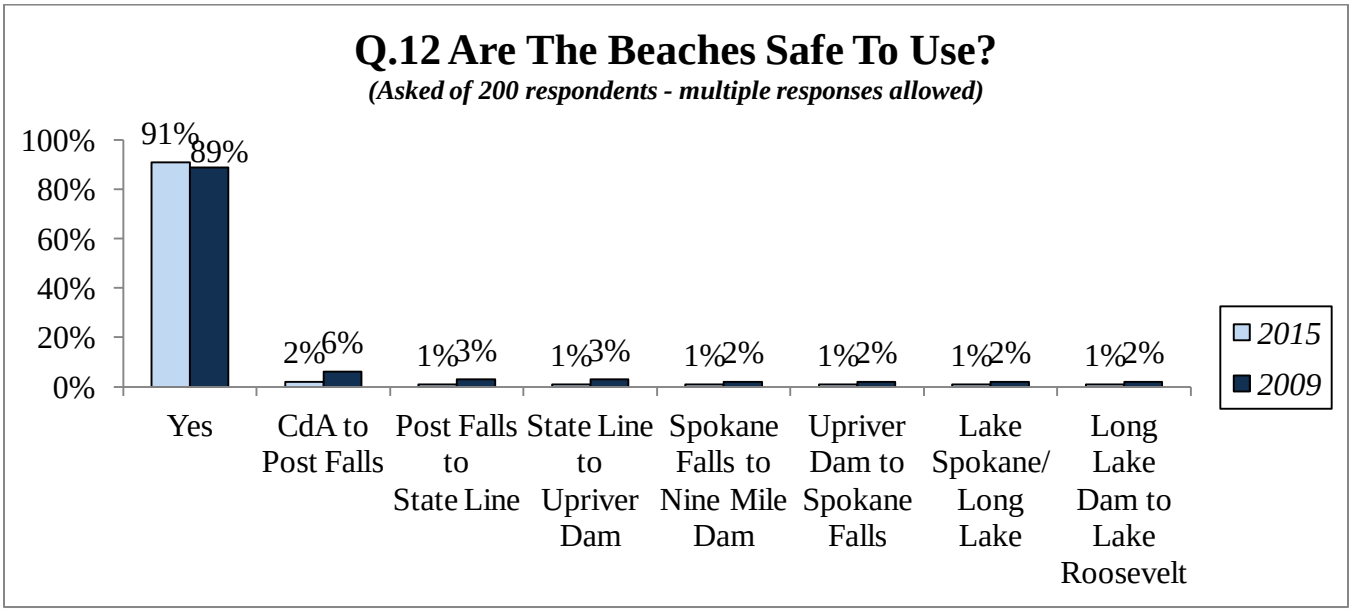
Q.11 Are the fish safe to eat?[11]



Two in three (65%) respondents reported that fish caught in the river were safe to eat.

[10] This question was asked of all respondents (n=200).
[11] This question was asked of all respondents (n=200).

Q.12 Are the beaches safe to use?[12]

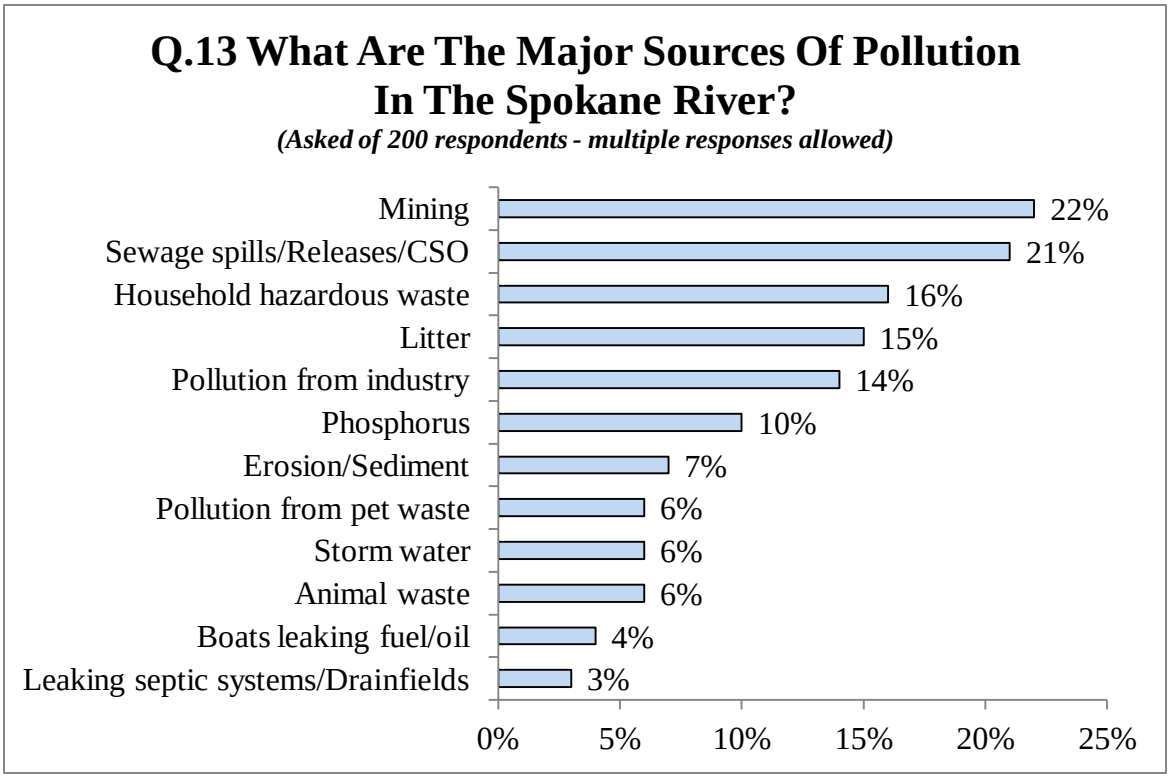


Nine in ten (91%) respondents reported that the beaches along the river were safe to use.

Male respondents were more likely than their female counterparts to perceive the beaches as safe to use.

[12] This question was asked of all respondents (n=200).

Q.13 To the best of your knowledge, what are the major sources of pollution in the Spokane River, if any?[13]

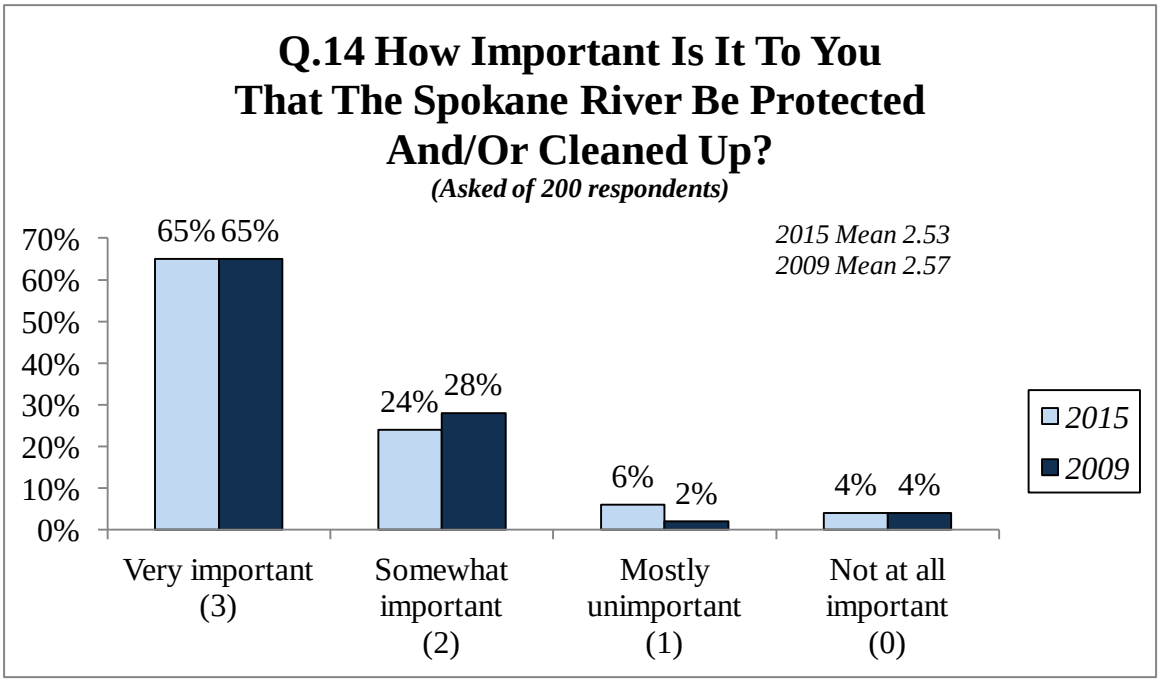


One in ten (10%) respondents reported that there were no major sources of pollution.

One in five (17%) were unaware of any major sources.

[13] This question was asked of all respondents (n=200). Respondents were not read a list of possible responses from which to choose. Multiple responses were allowed.

Q. 14 How important is it to you that the Spokane River be protected and/or cleaned up?[14]

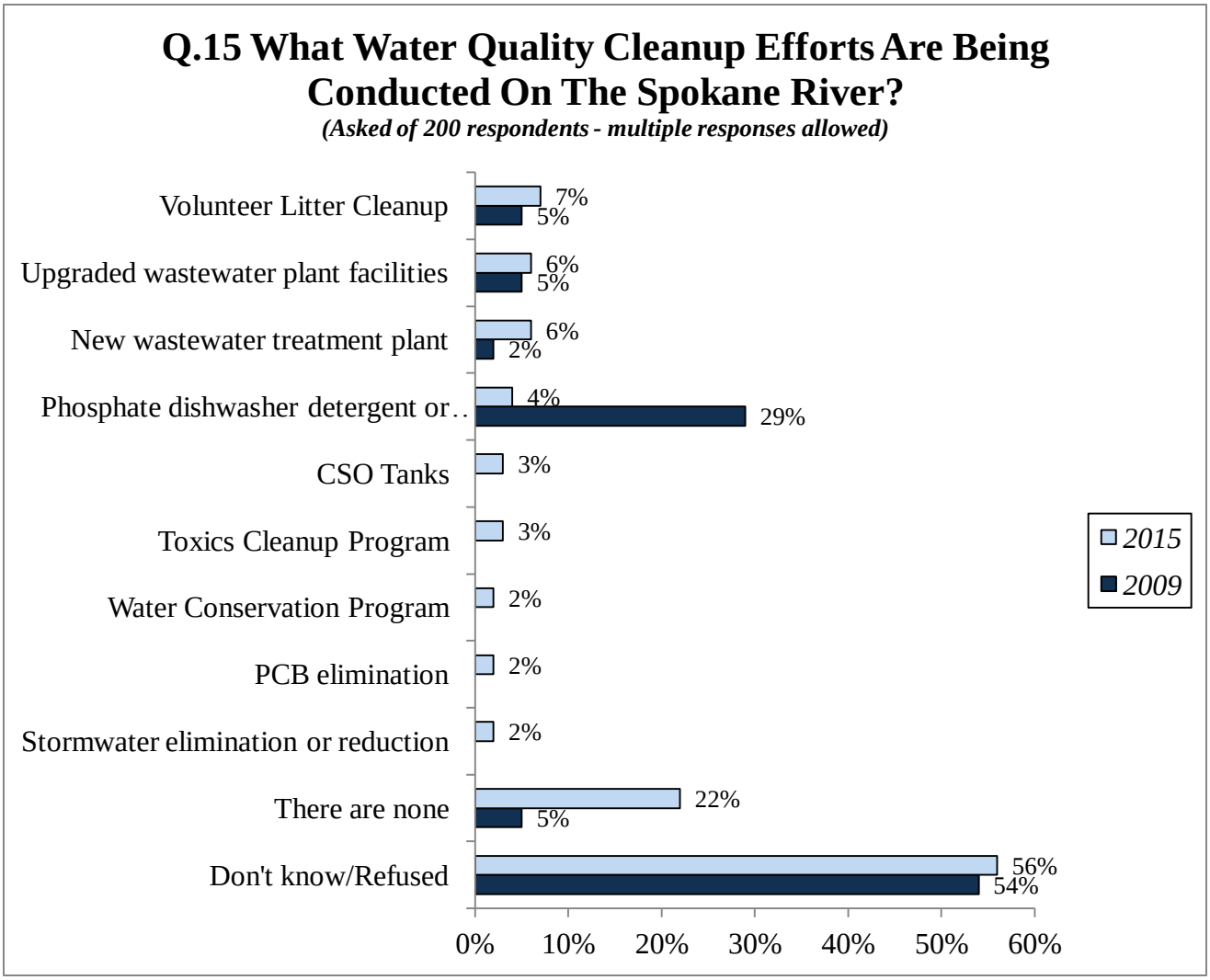


Two in three (65%) respondents reported that it was very important that the Spokane River be protected and/or cleaned up.

Respondents who perceived the water quality as being excellent were more likely than average to give a lower rating.

[14] This question was asked of all respondents (n=200).

Q. 15 To the best of your knowledge, what water quality cleanup efforts are being conducted on the Spokane River, if any?[15]

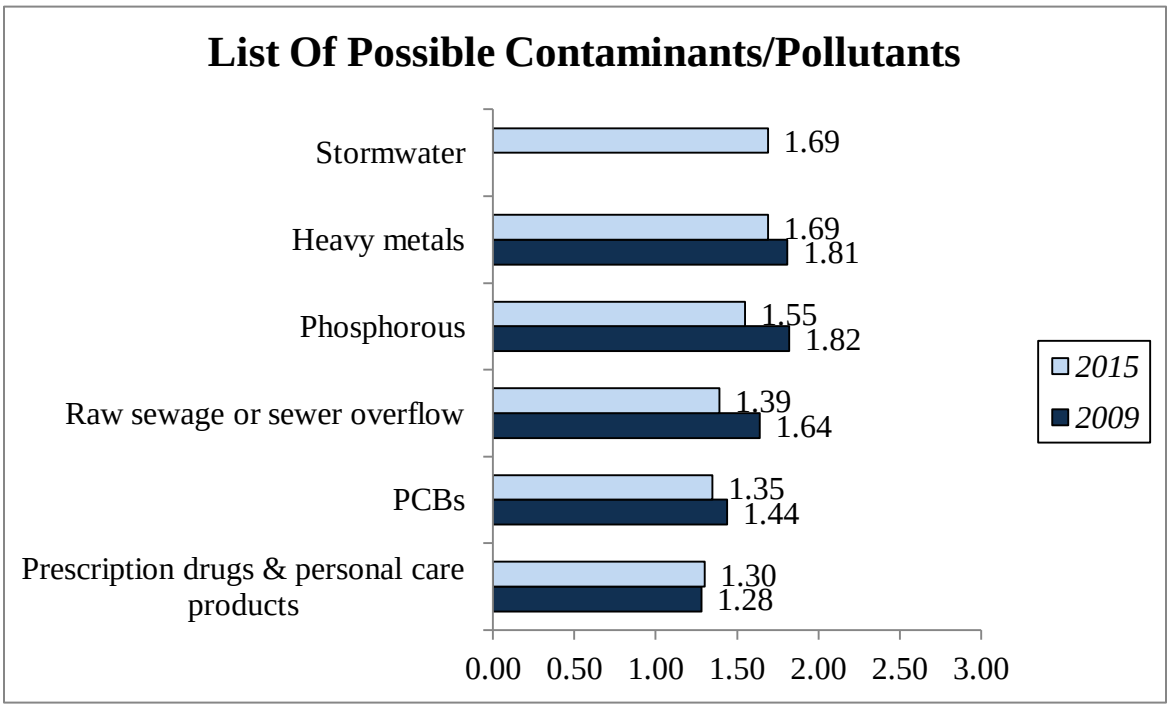


Four in five (78%) respondents were unaware of any cleanup efforts or reported that there were none.

It should be noted that the dishwasher phosphate ban came into effect in Spokane County in 2008.

[15] This question was asked of all respondents (n=200). Respondents were not read a list of possible responses from which to choose. Multiple responses were allowed.

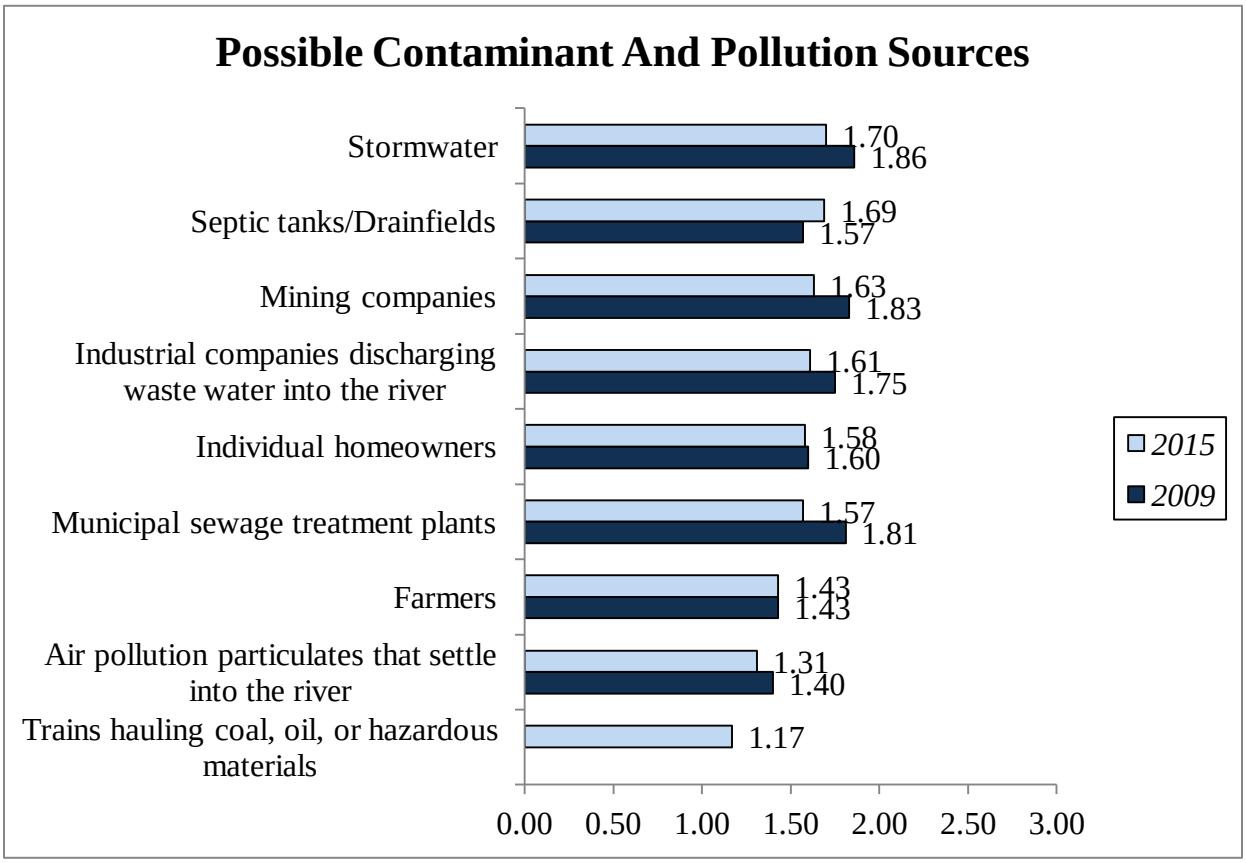
I'm going to read a list of possible contaminants/pollutants to rivers and lakes in our area. For each one, would you say the Spokane River is: Very contaminated, Somewhat contaminated, Not very contaminated, or Not at all contaminated? If there are any that you are unfamiliar with, just let me know.[16]



Q.16 Heavy metals (e.g.—arsenic, lead, zinc, cadmium, etc.)
Q.17 PCBs (Polychlorinated Biphenyls)
Q.18 Prescription drugs and personal care products
Q.19 Raw sewage or sewer overflow
Q.20 Phosphorous (which comes from fertilizer, dish soap. and treatment plants and natural sediments)
Q.21 Storm water

[16] This series of questions was asked of all respondents (n=200). They were asked in a randomized order. Stormwater was not asked in 2009.

I'm going to read a list of possible contaminant and pollution sources to area rivers and lakes. For each one, would you say this source of contamination/pollution for the Spokane River is: Very significant, Somewhat significant, Not very significant, or Not at all significant?[17]



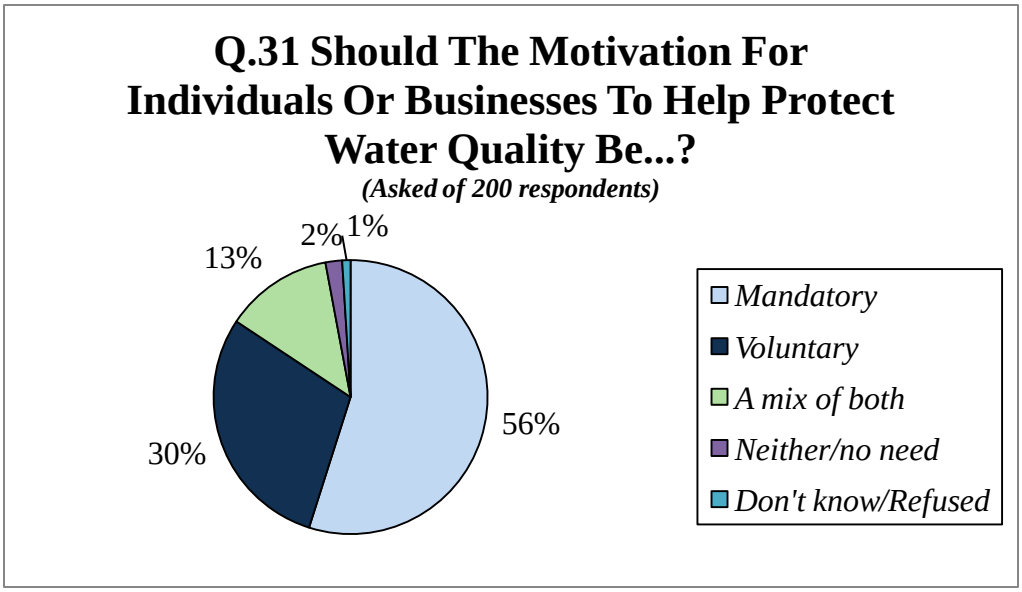
Q.22 Mining companies
Q.23 Industrial companies discharging waste water into the river
Q.24 Municipal Sewage treatment plants
Q.25 Septic tanks/Drainfields
Q.26 Farmers
Q.27 Individual homeowners
Q.28 Stormwater
Q.29 Air pollution particulates that settle into the river
Q.30 Trains hauling coal, oil, or hazardous materials

Respondents in the 18 to 34 age group were more likely than average to give a higher rating to stormwater.

Females were more likely than males to give a lower rating to air pollution particulates.

[17] This series of questions was asked of all respondents (n=200). The questions were asked in a randomized order. Trains hauling coal, oil, or hazardous materials was first asked this year.

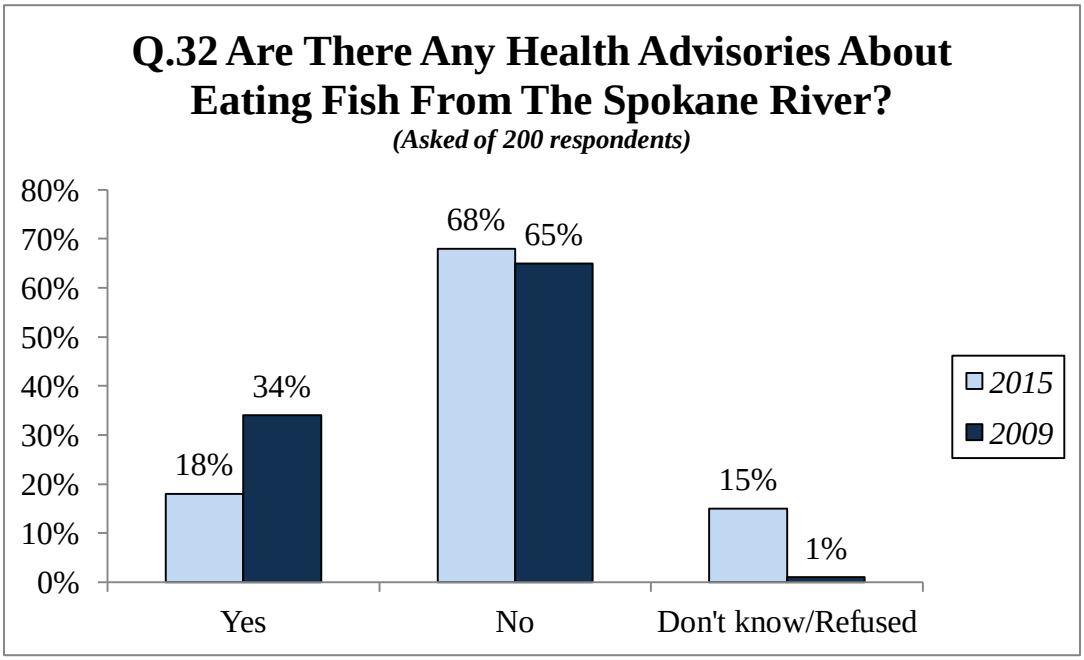
Q.31 In your opinion, should the motivation for individuals or businesses to help protect water quality be…?[18]



The majority (56%) of respondents reported that motivation for individuals or businesses to protect water quality should be mandatory.

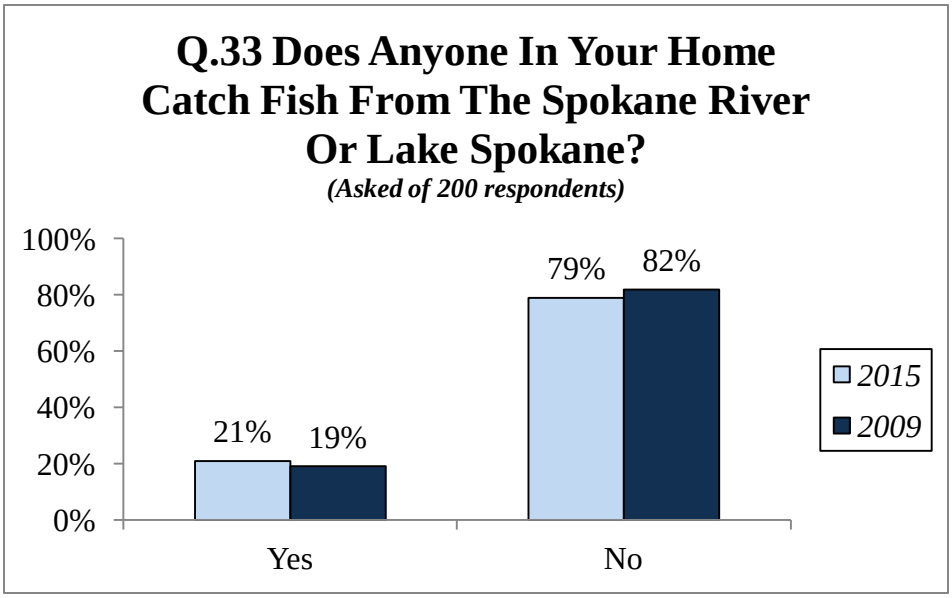
Q.32 To the best of your knowledge, are there any health advisories about eating fish from the Spokane River, or not?[19]

One in six (18%) participants responded in the affirmative.



[18] This question was asked of all respondents (n=200).
[19] This question was asked of all respondents (n=200).

Q.33 In a typical year, does anyone in your home catch fish from the Spokane River or Lake Spokane, also known as Long Lake?[20]

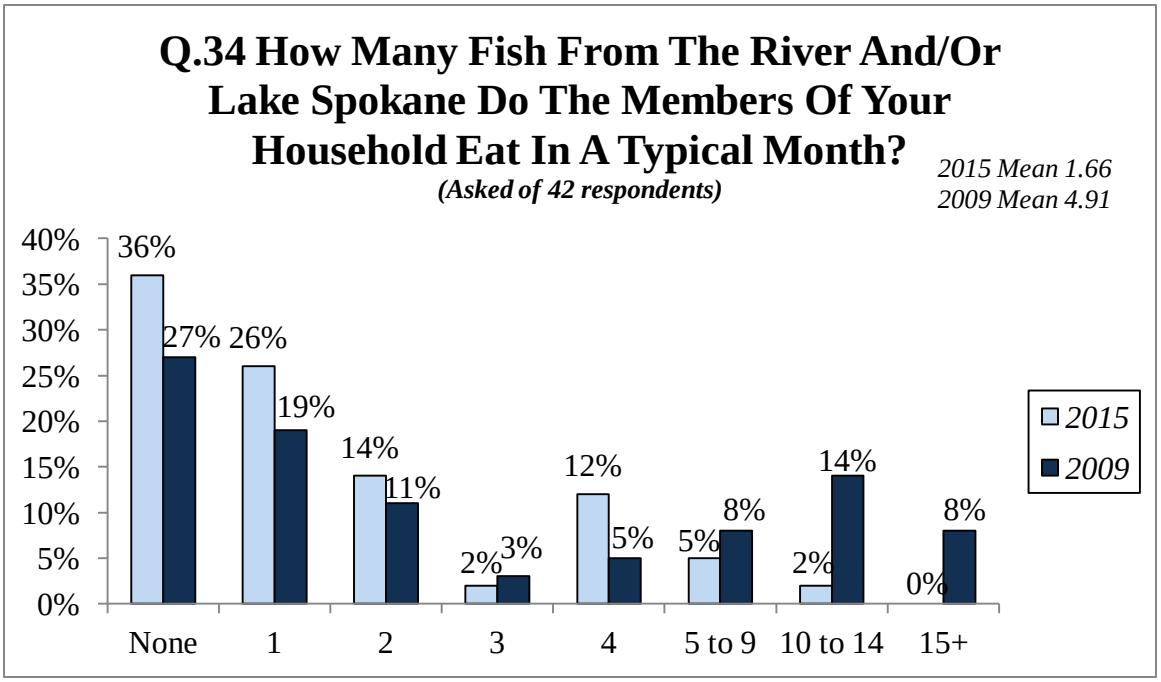


One in five (21%) respondents reported that someone in their household caught fish from the river in a typical year.

Q. 34 How many fish from the Spokane River and/or Lake Spokane, also known as Long Lake, do the members of your household eat in a typical month?[21]

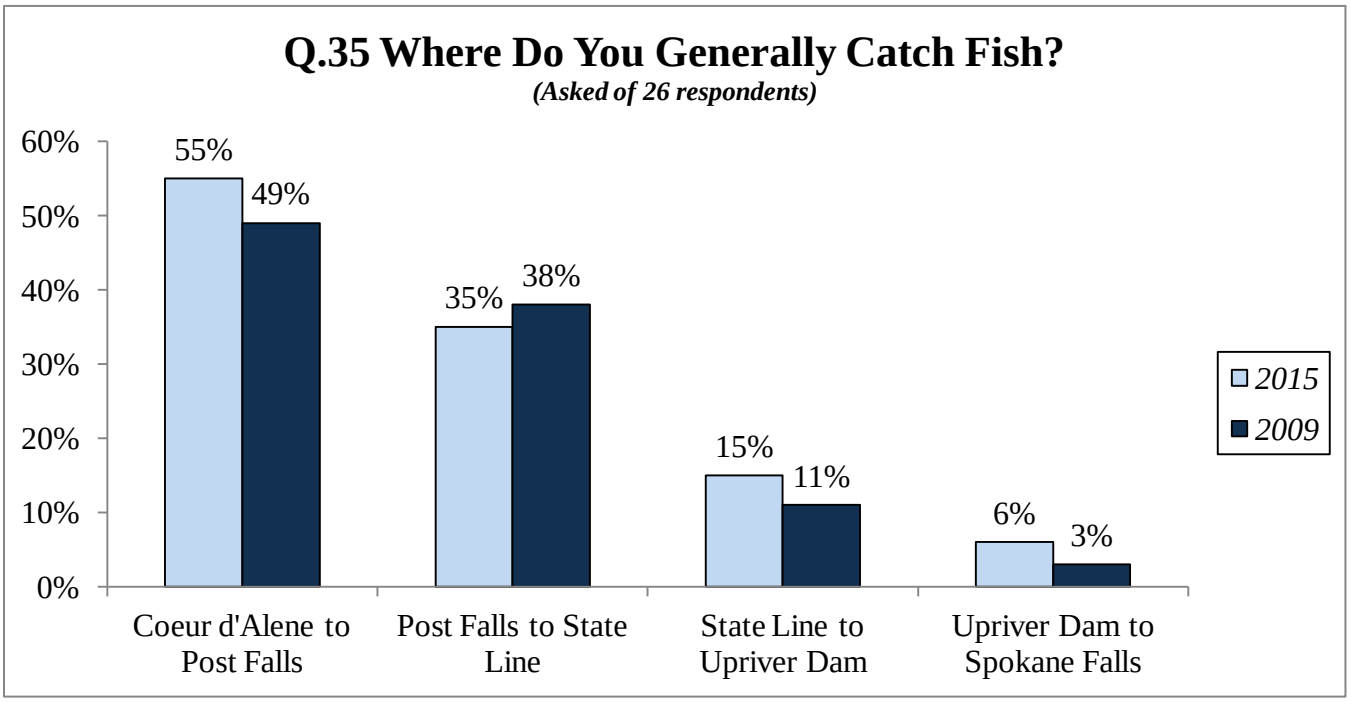
Respondents who caught fish from the river reported eating 1.66 fish in a typical month.

Participants in the 18 to 34 age group were more likely to report eating fewer fish.



[20] This question was asked of all respondents (n=200).
[21] This question was asked of respondents who reported catching fish from the river (n=42).

Q.35 Where do you generally catch fish?[22]

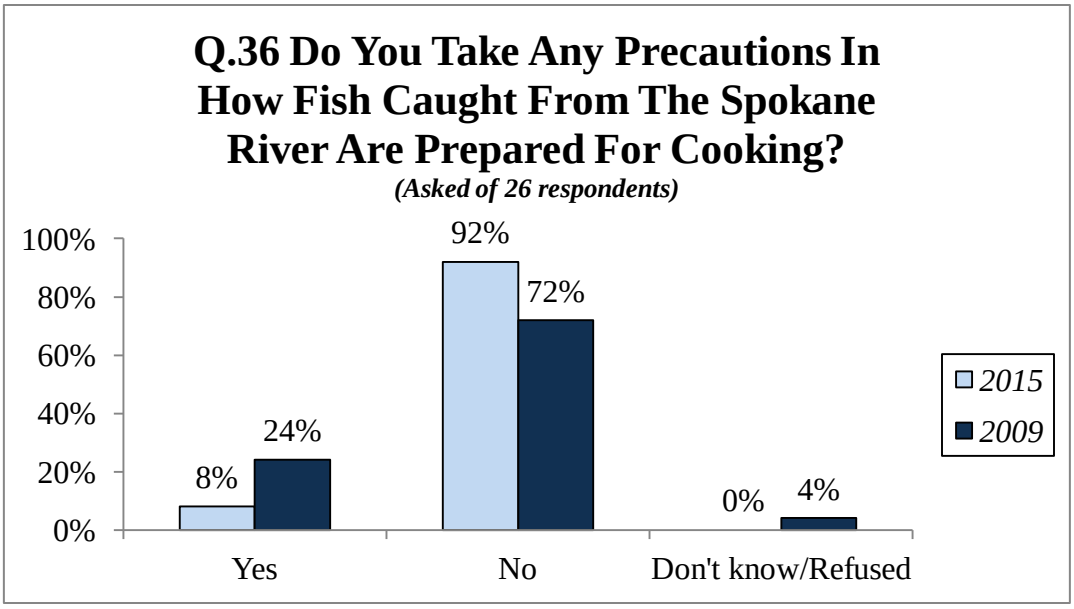


A majority (55%) of respondents who reported eating at least one fish a month caught from the Spokane River reported generally catching fish between Coeur d'Alene and Post Falls.

[22] This question was asked of respondents who reported eating at least one fish caught from the river during a typical month (n=26).

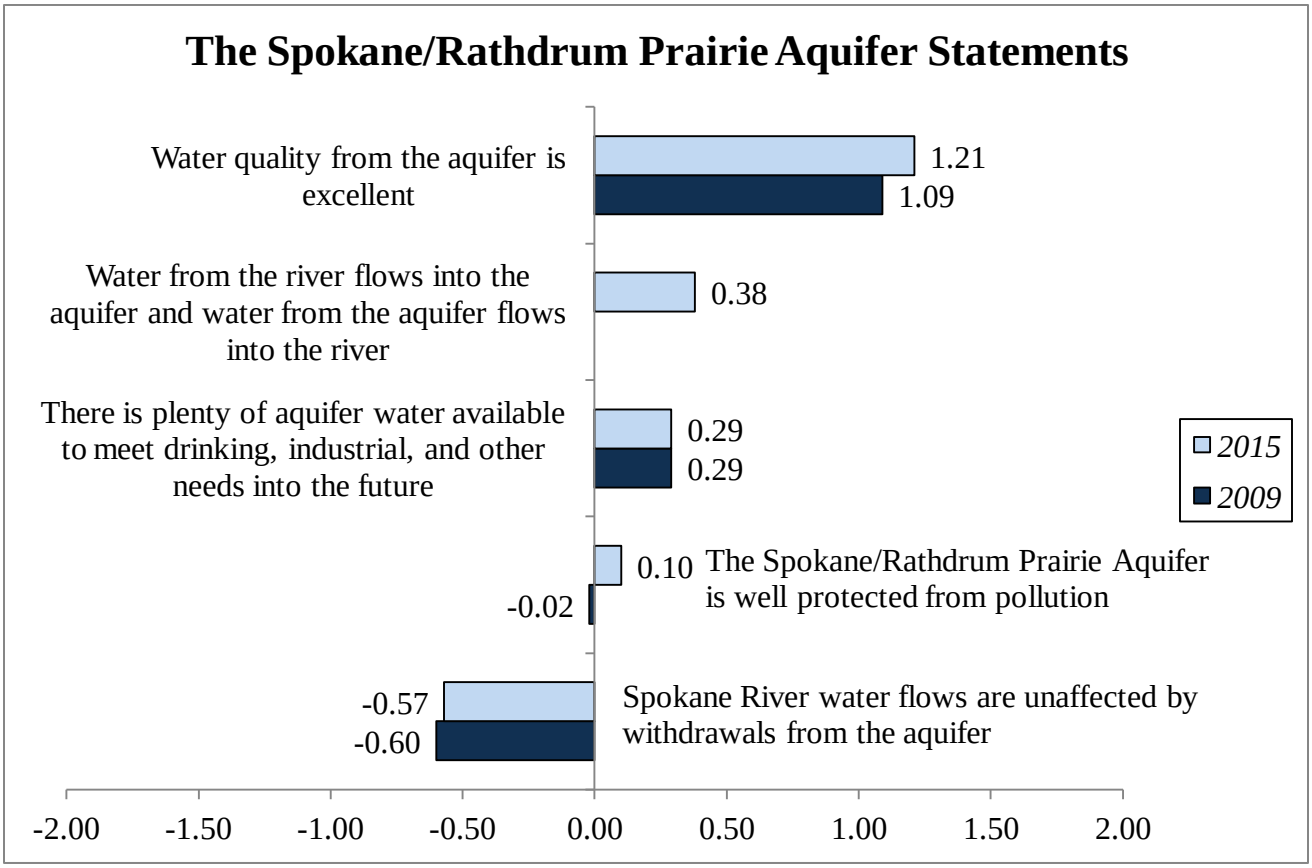
Q.36 Do you take any precautions in how fish caught from the Spokane River are prepared for cooking, or not?[23]

One in twelve (8%) respondents whose household members ate at least one fish caught from the river in a typical month responded in the affirmative.



[23] This question was asked of respondents who reported eating at least one fish caught from the river during a typical month (n=26).

The Spokane/Rathdrum Prairie Aquifer is our sole source of drinking water. After I read each statement, please indicate the degree to which you agree or disagree with it. Would you say: Strongly agree, Somewhat agree, Somewhat disagree, or Strongly disagree?[24]

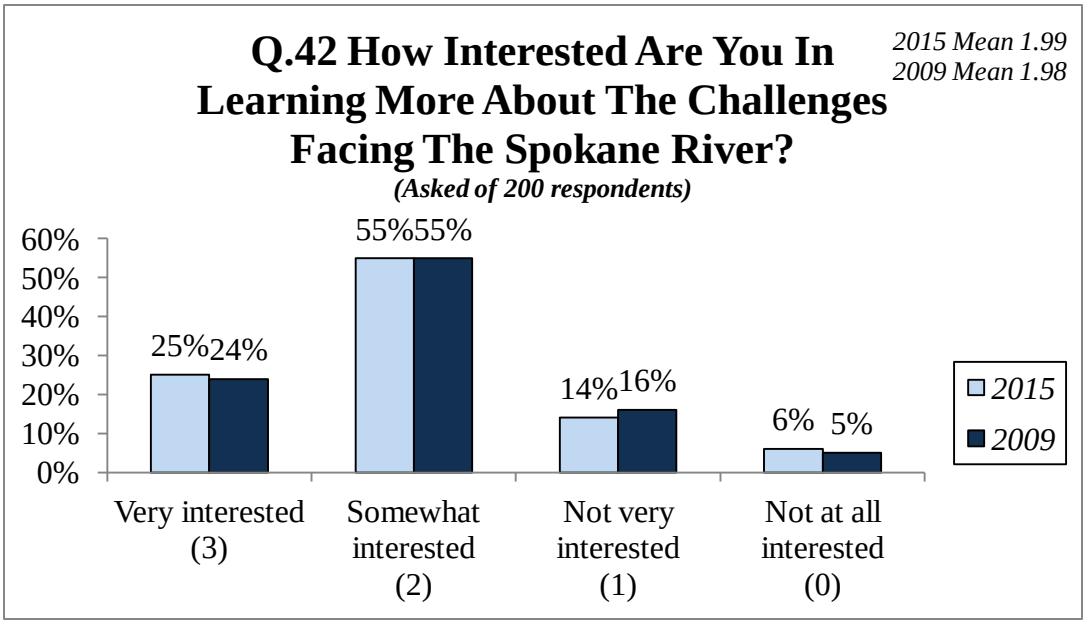


Q.37 The Spokane/Rathdrum Prairie Aquifer is well protected from pollution
Q.38 There is plenty of aquifer water available to meet drinking, industrial, and other needs into the future
Q.39 The Spokane River water flows are unaffected by withdrawals from the aquifer
Q.40 Water quality from the aquifer is excellent
Q.41 Water from the river flows into the aquifer and water from the aquifer flows into the river

Respondents in the 18 to 34 age group were more likely than average to agree that water from the river flows into the aquifer and water from the aquifer flows into the river.

[24] This series of questions was asked of all respondents (n=200). The questions were asked in a randomized order. The question regarding water from the river and aquifer interacting was first asked this year.

Q.42 How interested are you in learning more about the challenges facing the Spokane River and the opportunities for protection and cleanup?[25]

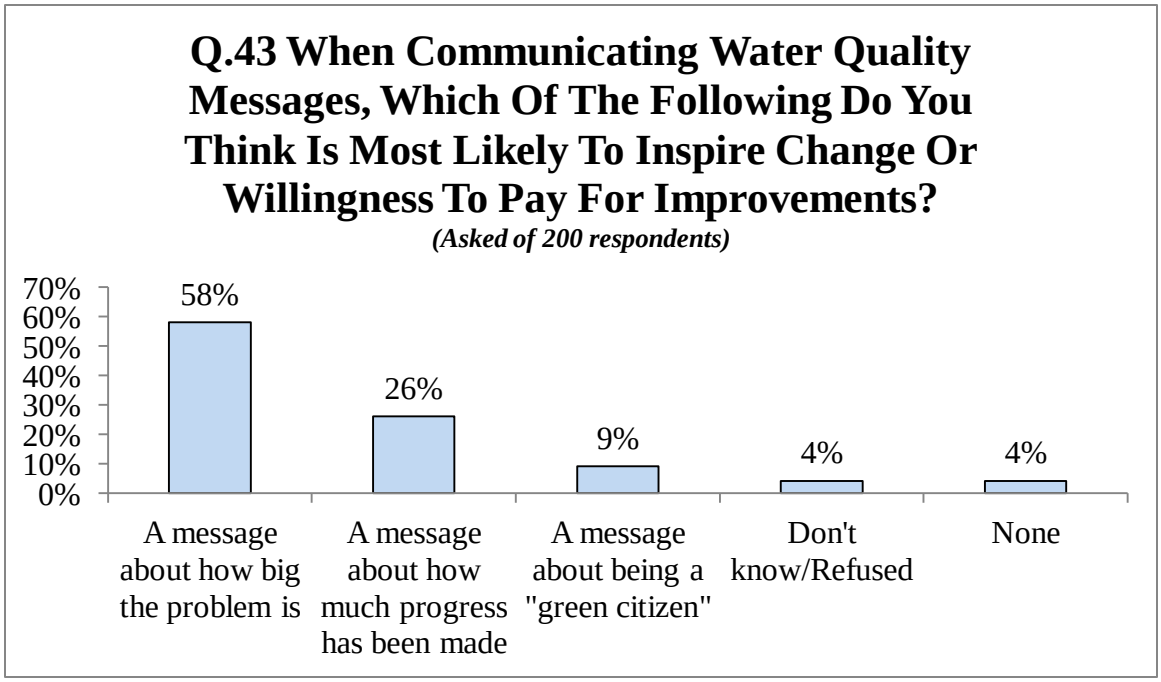


Four in five (80%) respondents reported that they were very or somewhat interested in learning more about the river.

Q.43 When communicating water quality messages, which of the following do you think is most likely to inspire change or willingness to pay for improvements?[26]

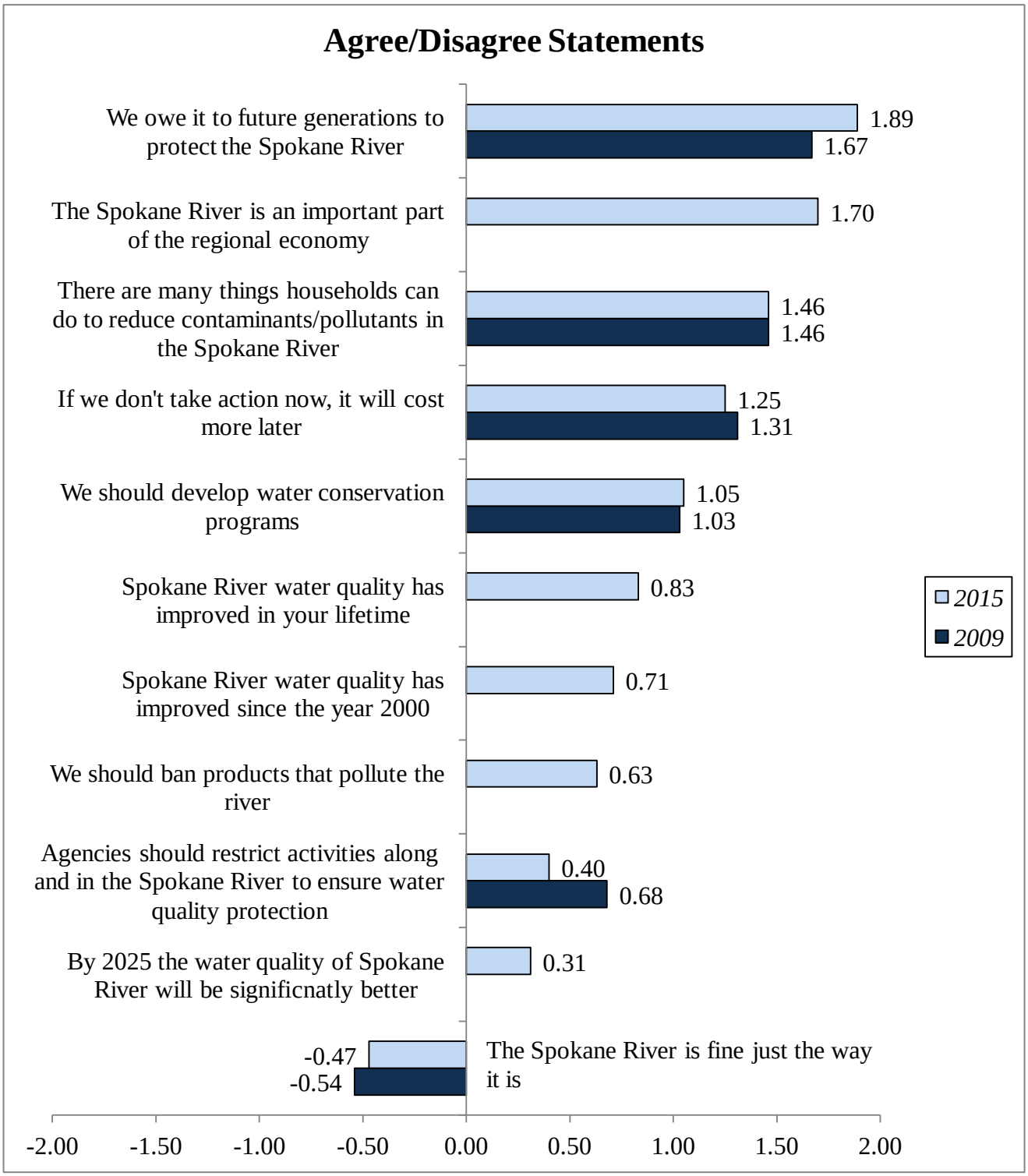
Three in five (58%) respondents thought that a message about how big the problem is was the most likely to inspire change.

Females were more likely than males to select a message about how big the problem is.



[25] This question was asked of all respondents (n=200).
[26] This question was asked of all respondents (n=200).

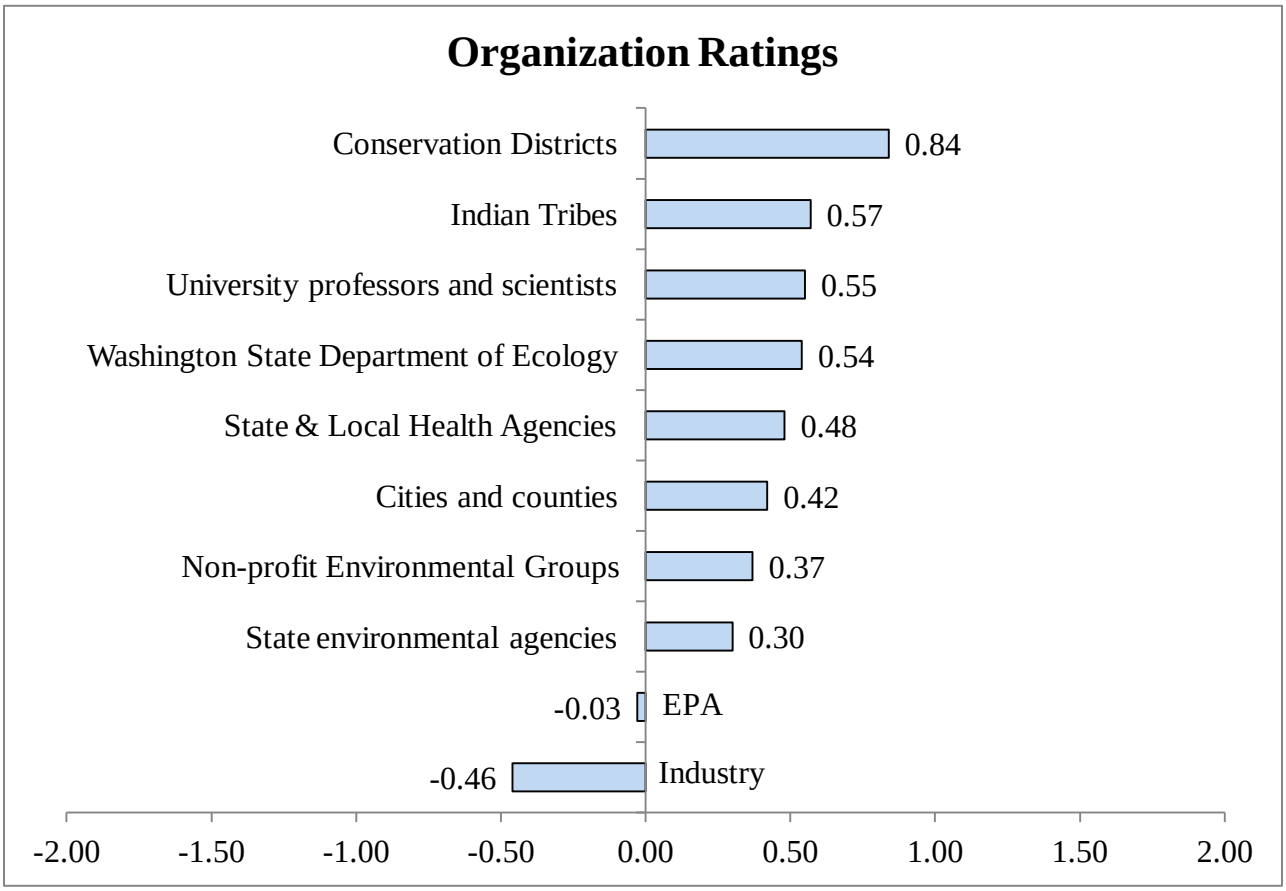
After I read each of the following statements, please indicate the degree to which you agree or disagree with each.



Q.44 We owe it to future generations to protect the Spokane River
Q.45 There are many things households can do to reduce contaminants/pollutants in the Spokane River
Q.46 The Spokane River is fine just the way it is
Q.47 If we don't take action now, it will cost more later
Q.48 We should develop water conservation programs
Q.49 We should ban products that pollute the river
Q.50 Spokane River water quality has improved since the year 2000
Q.51 Spokane River water quality has improved in your lifetime
Q.52 Agencies should restrict activities along and in the Spokane River to ensure water quality protection
Q.53 By 2025 the water quality of the Spokane River will be significantly better
Q.54 The Spokane River is an important part of the regional economy

Male respondents were more likely than females to give a higher rating to the Spokane River is fine just the way it is.

After I read each organization or group, would you say your trust and confidence in them managing restoration or clean-up efforts in the Spokane River is: Very confident, Somewhat confident, Not very confident, or Not at all confident? If you are not familiar with that organization or group, just let me know.



Q.55 EPA (U.S. Environmental Protection Agency)
Q.56 State & Local Health Agencies
Q.57 Conservation Districts
Q.58 Cities and counties
Q.59 Indian Tribes
Q.60 Industry
Q.61 Non-profit Environmental Groups
Q.62 University professors and scientists
Q.63 State environmental agencies
Q.64 Washington State Department of Ecology

Females were more likely than males to give higher ratings to each of the organizations.

Respondents in the 18 to 34 age group were more likely than average to give higher ratings to the Washington State Department of Ecology and state environmental agencies.

DEMOGRAPHICS

- The average respondent was 58.84 years old
- Eighty-five percent of respondents reported owning their home
- The mean years lived in the area was 29.79
- Half of respondents were male (quotas in place)