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#### **Executive Summary**

This report covers the fourth Human Wellbeing survey iteration to monitor human wellbeing vital signs. The report presents findings for the following Vital Signs. Unless otherwise listed, there were no significant differences between 2018, 2020, 2022, and 2024 survey results:

2024 Survey Response Rate: 23%

**Good Governance**: **4.19** on a scale of 1-7 (where 1 is strongly disagree and 7 is strongly agree)

• Score equates to 'neutral' response. Respondents do not feel strongly in agreement or disagreement about how the environment around them is managed and whether they feel heard in decision making.

**Local Foods: 1.36** on a scale of 1-5 (where 1 is never and 5 is >10 times/season)

• The majority of residents never collected \or harvested local foods.

**Sound Stewardship: 3.30** on scale of 1-5 (where 1 is never and 5 is almost daily)

 Residents engage in stewardship activities at least once a month, or, 'occasionally'.

**Cultural Wellbeing: 3.84** on a scale of 1-5 (where 1 is dissatisfied and 5 is satisfied)

• Residents feel 'neither satisfied nor dissatisfied' with their level of participation in cultural traditions related to the natural environment.

**Sense of Place** is composed of 3 indicators:

**Sense of Place: 5.47** on a scale of 1-7 (where 1 is strongly disagree and 7 is strongly agree)

• Residents 'somewhat agree' that they have a sense of place associated with the Puget Sound.

**Psychological Wellbeing: 4.07** on a scale of 1-5 (where 1 is 1-4x/year and 5 is almost daily)

• Residents experience inspiration or stress reduction from the outdoors almost once a week, or 'regularly.

Overall Life Satisfaction: 5.92 on a scale of 1-5 (where 1 is dissatisfied and 7 is satisfied)

- Residents feel 'somewhat satisfied' with their life.
- This result is not comparable to previous scores due to a change in the question.

#### **Outdoor Activity** is composed of 2 indicators:

#### **Nature-Based Recreation:**

- Fall outdoor activity patterns Gardening/yardwork (73% of residents), use of paved paths/trails (55%), and unpaved paths/trails (51%) were the most frequently engaged activities (more than once per month). There were slight, non-significant declines in gardening/yardwork and wildlife viewing.
- **Spring outdoor activity** Gardening/yardwork (81%), use of paved paths/trails (60%), and wildlife viewing/birding (59%) were the most common activities (more than once per month). There were non-significant decreases in gardening/yardwork and wildlife viewing since 2020.

#### **Nature-Based Work:**

- 10.4% of respondents said their work involved time outdoors, lower than previous years.
- Roughly 53% of those respondents work more than 10 hours per week.

#### Introduction

This is the fourth report on the subjective human wellbeing Vital Signs created by the Puget Sound Partnership and Oregon State University. The first iteration was implemented in 2018, then following a biennial sampling scheme through 2024.

The Vital Signs are monitored to assess the overall health of the ecosystem in the Puget Sound, including aspects that directly measure human quality of life and healthy human populations. The data discussed in this report were collected through both a paper and online survey instrument that were sent directly to residents living in the Puget Sound. These indicators are considered "subjective" as they are based on or influenced by personal feelings, opinions, and experiences of respondents. Questions on the 2024 survey directly reflect the indicators chosen by the Puget Sound Partnership that were created using a collaborative research process. The specific categories of human wellbeing (HWB) covered in this report include good governance of natural resources, local foods, sound stewardship, nature-based work, physiological wellbeing, cultural practices and traditions, sense of place, outdoor activity, and life satisfaction in the Puget Sound. Demographic information, such as age, gender identity, education, income, race, and political leaning were also collected to determine the representativeness of our sample and determine if they can serve as predictors to Vital Sign responses. The appendices include detailed methodology, a copy of the survey instrument, and general comments of survey respondents.

The 2024 survey was implemented in Summer 2024 to a stratified random sample of Puget Sound residents with an initial sample of 9,000 participants. Due to 411 undeliverable addresses, 32 removals by phone, and 29 returned blank surveys, the total sample reached was 8,528. The response rate was 23% for a total of 1,968 individual responses.

The indicators were tested for significant differences across demographic variables. Unless otherwise indicated, there was no or minimal variation due to the following:

- Years in residence
- Gender
- Rural, Urban, and Suburban communities
- Education
- Income
- Race
- Age

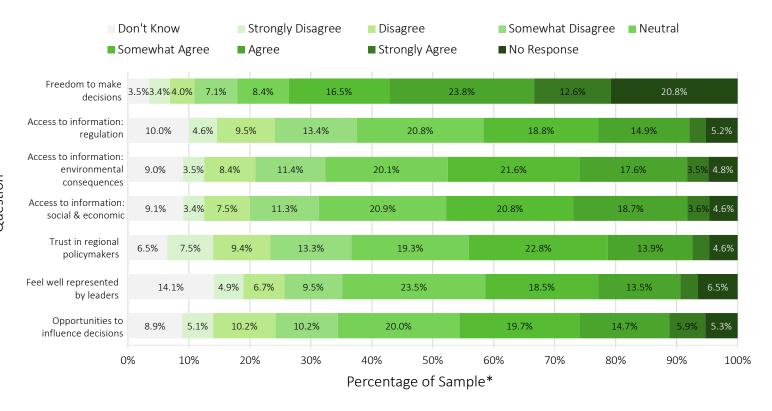
## **Vital Sign**

# **Good Governance**

What: Good Governance is participatory, consensus oriented, accountable, transparent, effective, efficient, equitable, inclusive, and follows the rule of law. It is also responsive to the present and future needs of society.

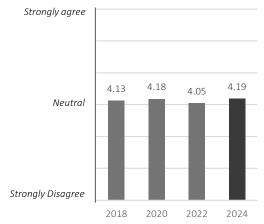
**Why:** Good Governance tells us whether people agree with how the environment around them is managed and whether they feel heard in decision-making.

How: We measure Good Governance by asking respondents to rate their agreement or disagreement with statements about the governance of natural resources on a seven-point Likert scale (See Appendix B for survey instrument)



**4.19** was the average response in 2024, which equates to a 'neutral' response. This means, on average, Puget Sound residents do not feel strongly in agreement nor disagreement.

This is consistent with responses in 2018, 2020, and 2022.

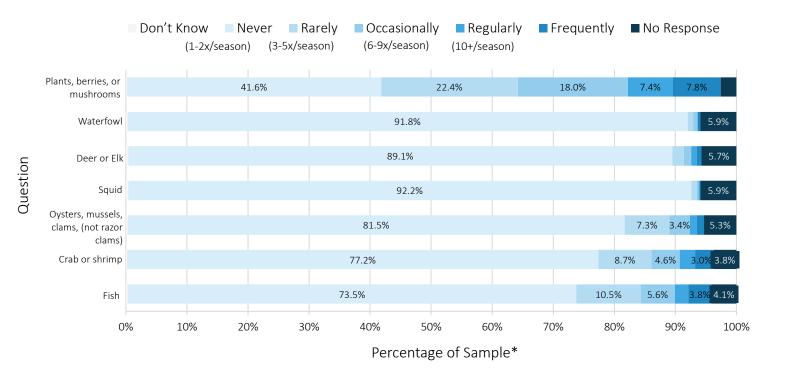


# Vital Sign Local Foods

What: Local Foods include a variety of locally harvestable plants, fungi, and animals in the Puget Sound, including but not limited to, fish and shellfish, other animals and birds, and plant-based greens, roots, nuts, and fruits.

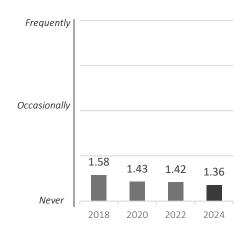
Why: Local Foods tells us about people's actual use of Puget Sound food resources for traditional, subsistence, and recreational uses, suggesting access to and importance of these resources.

**How:** We measure Local Foods by asking respondents to rate their engagement in hunting, fishing, or foraging on a five-point Likert scale (See Appendix B for survey instrument).



**1.36** was the average response in 2024, which equates to collecting and/or harvesting local foods 1-2 times a season, or, 'rarely'.

This score is consistent with 2022 results. Direct comparisons cannot be made with 2018 survey due to survey modifications.



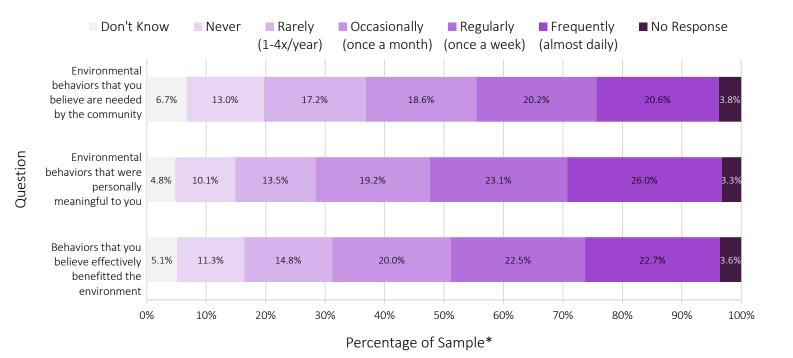
# **Vital Sign**

# **Sound Stewardship**

What: Sound Stewardship is about people engaging in activities that they believe will benefit the environment and are desired by their communities.

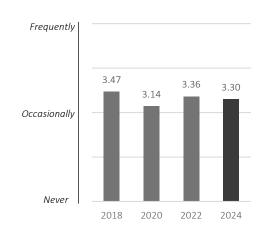
Why: Sound Stewardship tells us about people's engagement in stewardship activities and whether management actions that encourage more sustainable behaviors are effective.

How: We measure Sound Stewardship by asking respondents how often they engaged in stewardship behaviors/activities for different reasons using a five-point Likert scale (See Appendix B for survey instrument).



**3.30** was the average response in 2024, which equates to participants engaging in stewardship activities at least once a month, or, 'occasionally'.

This is consistent with responses in the past three survey iterations.

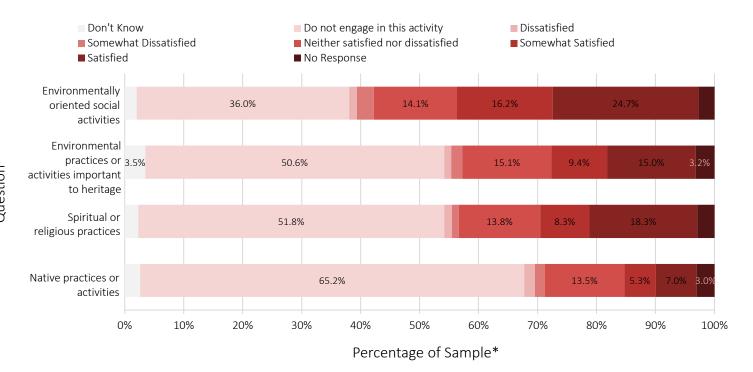


## **Vital Sign**

# **Cultural Wellbeing**

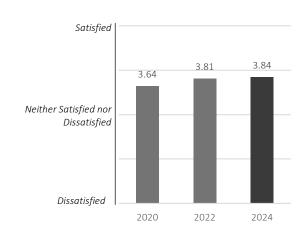
What: Cultural wellbeing is a measure of engagement with activities and/or traditions that are meaningful to individuals of any culture. Why: By measuring cultural wellbeing, we can recognize the inter-dependencies between, people, culture, and the environment. This indicator tells us whether people feel satisfied with their ability to participate in and maintain traditions related to the natural environment and whether management actions support diverse cultural expression.

How: We measure Cultural wellbeing by asking respondents to rank their satisfaction levels in regard to their participation in four categories of cultural activities or traditions, using a five-point Likert scale (See Appendix B for survey instrument).



**3.84** was the average response in 2024. Among those who participated in each activity type, this score indicates a neutral level of satisfaction, neither satisfied nor dissatisfied with their involvement. This is comparable with previous survey iteration responses.

Direct comparisons cannot be made with 2018 survey results due to a revision made in 2020.



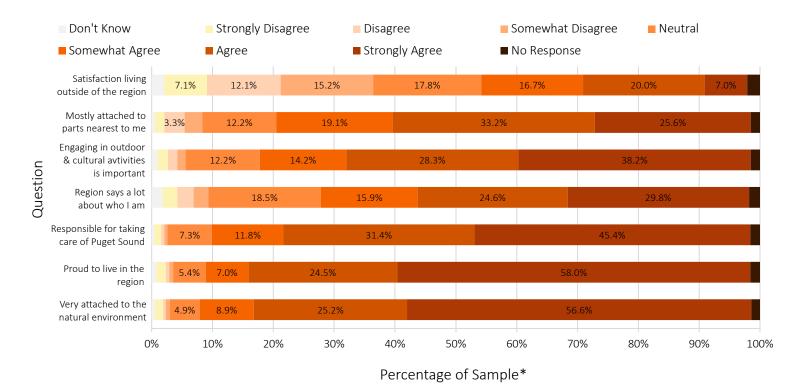
## **Vital Sign: Sense of Place**

# **Indicator: Sense of Place**

What: Sense of Place is the extent to which people identify with and feel positively attached to a specific place.

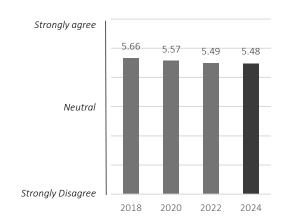
Why: Sense of Place is an important measurement because it tells us about peoples' emotional connection to Puget Sound, which can be associated with stewardship behaviors and ecosystem health.

How: We measure Sense of Place by asking respondents to rate their agreement or disagreement with seven statements about sense of place on a seven-point Likert scale (See Appendix B for survey instrument).



**5.61** was the average response in 2024, which means respondents "somewhat agree" that they have a sense of place associated with the Puget Sound.

This is consistent with responses in the past three survey iterations.



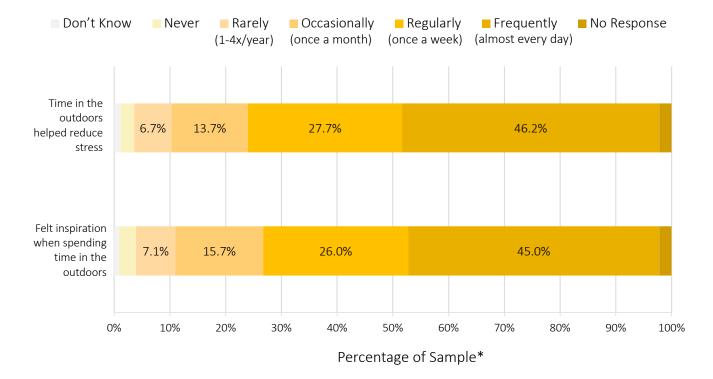
## **Vital Sign: Sense of Place**

# Indicator: Psychological Wellbeing

What: Psychological Wellbeing is a general term that refers to an individual's emotional and cognitive health.

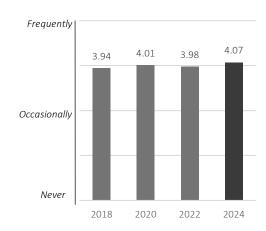
Why: Psychological Wellbeing tells us whether people are feeling psychological benefits from being outdoors in the Puget Sound, suggesting access to and health of ecosystem.

How: We measure Psychological Wellbeing by asking respondents how often they have felt inspiration and reduced stressed as a product of spending time outdoors using a five-point Likert scale (See Appendix B for the paper instrument).



**4.07** was the average response in 2024, which equates to participants experiencing inspiration or stress reduction from the outdoors almost once a week, or, "regularly".

This is consistent with responses in the past three iterations of this survey.

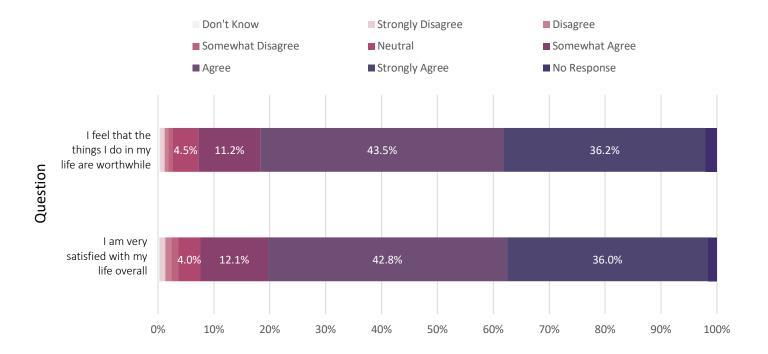


## **Vital Sign: Sense of Place**

# **Indicator: Life Satisfaction**

What: Life Satisfaction is the level of life satisfaction that residents in the Puget Sound perceive. Why: Life Satisfaction is a robust metric of subjective wellbeing that serves as a baseline to understand how trends in environmental health and engagement in activities related to the environment are affecting overall human wellbeing.

How: We measure Life Satisfaction using a standardized question that asks people how satisfied they are with their life, using a five-point Likert scale.



**6.05** was the average response in 2024 which means that the majority of respondents agree that they are satisfied with their life.

The 2024 result is not comparable with previous iterations due to a revision in the Life Satisfaction prompt. See <u>Appendix A, Survey Modifications</u> for the specific alteration.

### **Vital Sign**

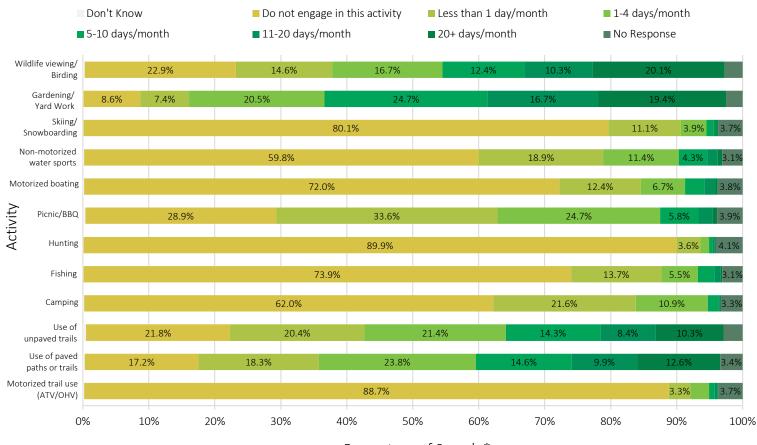
# **Outdoor Activity**

What: Outdoor Activity measures the frequency of recreational activity that is done within the Puget Sound region outdoors throughout the year.

Why: Outdoor Activity in the Puget Sound allows us to measure whether people are obtaining an adequate 'dosage' in nature, what activities are the most popular, and the extent to which people are able to engage in them.

How: We measure Outdoor Activity in the Puget Sound for the 11-12 activities across five frequency options over two seasons by the descriptions that follow:

# Indicator: Nature Based Recreation Spring Recreation (about March-May)



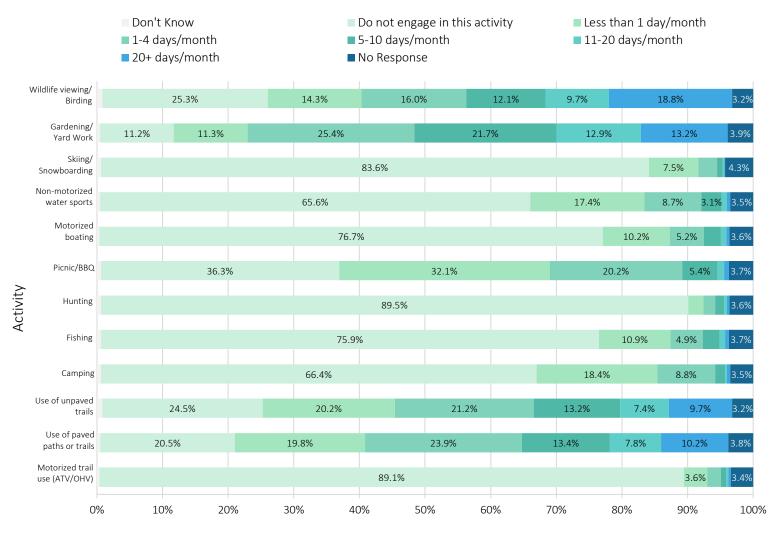
Percentage of Sample\*

The most frequent activities reported for spring are gardening/yardwork, the use of paved paths or trails, and wildlife viewing/birding, with 81%, 60%, and 59% of respondents, respectively, reporting use more than once per month. This is consistent with 2020 results for spring outdoor activity, though percentages of gardening/yardwork and wildlife viewing/birding have decreased, however insignificantly.

## **Vital Sign: Outdoor Activity**

# **Indicator: Nature Based Recreation**

**Fall Activity (about September-November)** 



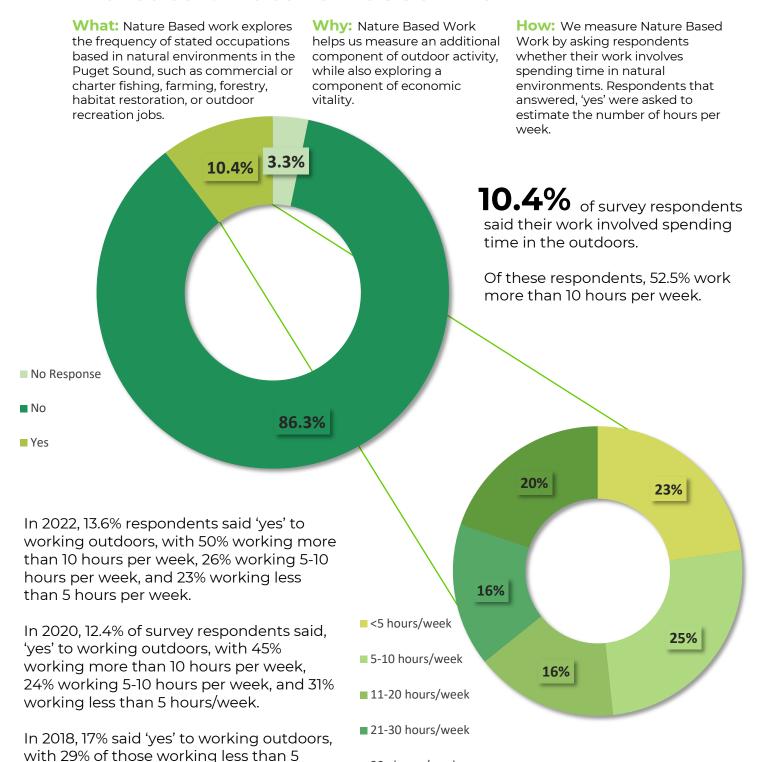
Percentage of Sample\*

During the fall months, the most frequently engaged activities were gardening/yardwork and use of paved and unpaved paths or trails, with 73%, 55%, and 51% of respondents, respectively, reporting use more than once per month. This is similar to 2020 results for fall outdoor activity, though percentages of gardening/yardwork and wildlife viewing/birding have decreased, however insignificantly.

## **Vital Sign: Outdoor Activity**

hours per week.

# **Indicator: Nature Based Work**



■ 30+ hours/week

# **Vital Sign Demographics**

The Puget Sound Partnership Survey on Subjective Human Wellbeing asks eight demographic characteristics. They include:

#### Age: The individual's age

The majority of survey respondents were in the '71-80 years' age class.

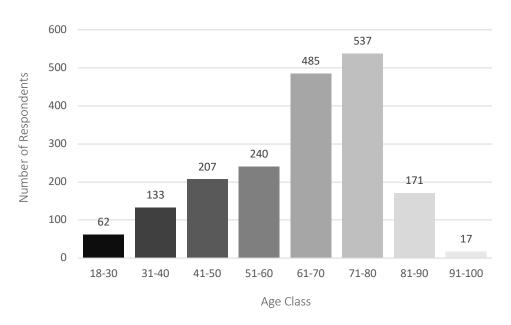
Respondents under the age of 18 were not included in survey data analyses due to ethics.

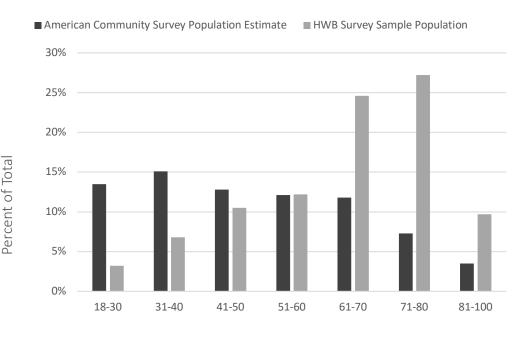
The American Community Survey (ACS) is an annual demographics survey program conducted by the U.S. Census Bureau.

The bottom graph shows the comparison of the Puget Sound population distribution alongside the 2024 Human Wellbeing (HWB) Vital Sign survey age distribution.

For this iteration of the survey, there is under-representation of 18–40-year age group, and an over-representation of 61-100-year age group.

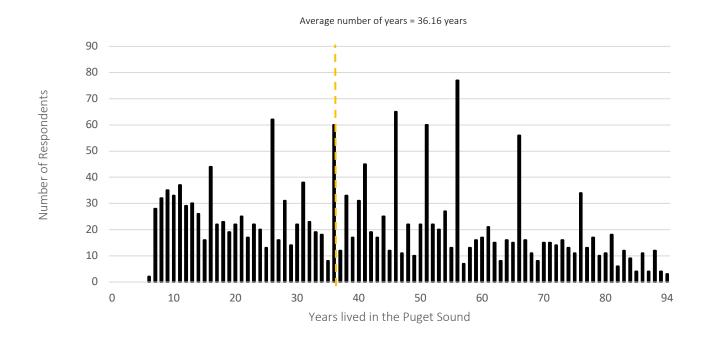
The 2024 HWB Vital Sign survey is not representative of the Puget Sound Population by age.



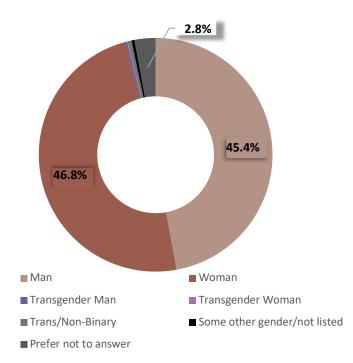


Age Class

## **Number of Years Lived in Puget Sound**



## **Gender:** Gender Identity

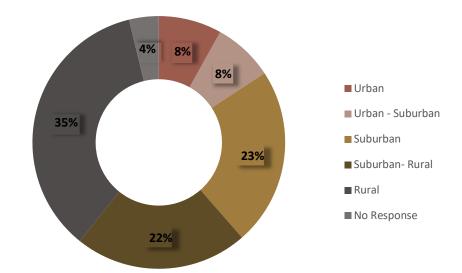


	Percent of
Gender Identity	Sample
Woman	46.8%
Man	45.4%
Transgender Man	0.3%
Transgender Woman	0.1%
Trans/non-binary	0.5%
Some other gender/not listed	0.4%
Prefer not to answer	2.8%
No Response	3.7%

The majority of survey respondents identified as women, contrary to the 2022 respondents. The table is included to show representation of minority gender identities.

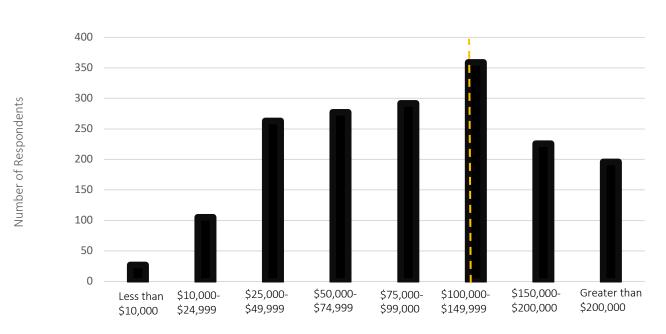
## Area Lived In: Urban, suburban, or rural area

The majority of survey respondents continue to live in rural areas, consistent with 2022 results. However, there has been a ~3% increase in respondents from urban areas and a ~8% increase in those from suburban-rural environments compared to 2022 results.



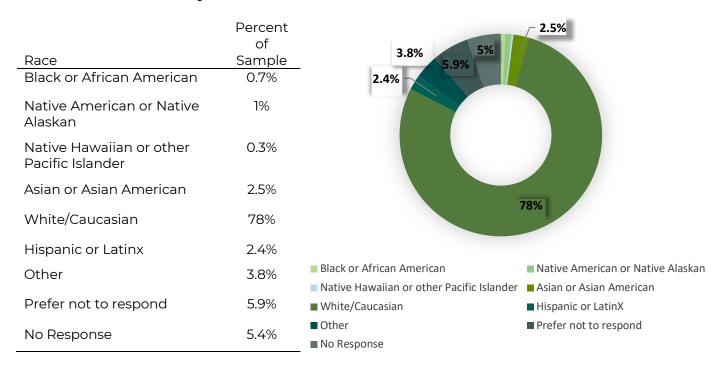
#### Income: Annual household income

Median household income for Puget Sound counties = \$104,923

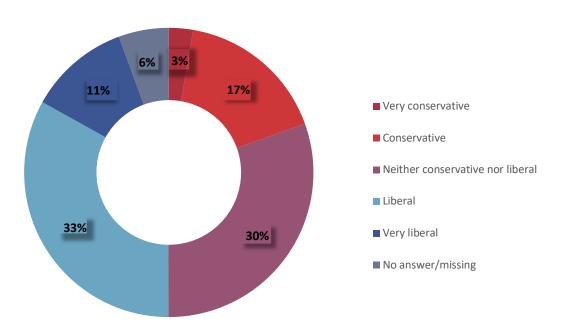


Annual Household Income Bracket

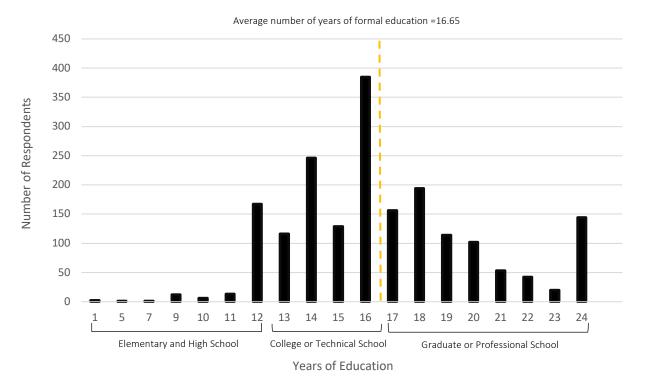
### Race: Racial identity



# **Political Ideology:** The degree to which the respondent identifies either conservative or liberal



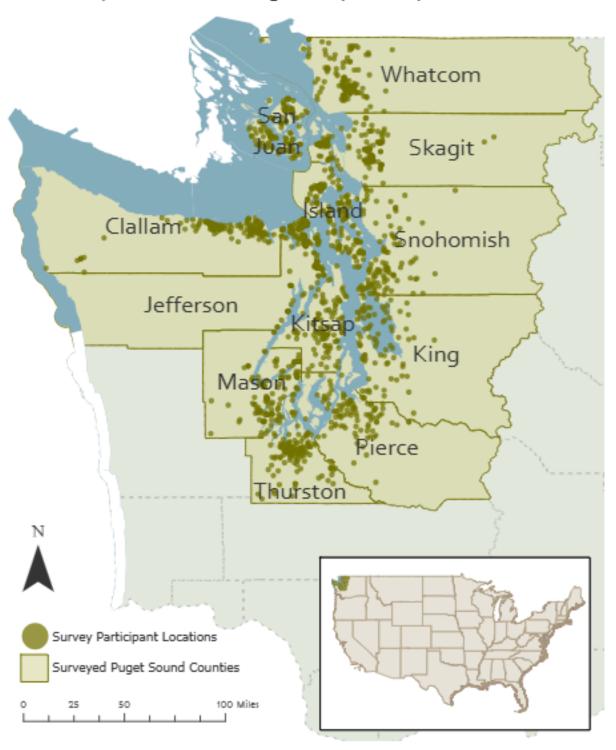
## Education: The number of years of formal education



On average, survey participants had 16.65 years of formal education, equating to a four-year college degree.

This is consistent with previous iterations of surveys.

# 2024 Human Wellbeing Survey Participant Locations



Map created by Krista Harrington Data Source: 2024 Human Wellbeing Survey & Data Washington Geospatial Open Data Portal Map Projection: WGS 1984

#### **Appendices**

# **Appendix A. Detailed Methodology**

#### Survey Design:

This survey was the fourth iteration of the biennial Survey of Subjective Human Wellbeing for the Puget Sound Partnership. Questions on the survey are based on Kayla Cranston and Kelly Biedenweg's "Recommended Human Wellbeing Specifications, Methods and Survey" (Cranston and Biedenweg (Weebly) 2017),¹ with continual updates as requested by the Partnership in collaboration with Oregon State University's Human Dimension's Lab. The 2024 online version of the survey was created by the authors using Qualtrics that mirrored the paper instrument.

#### **Survey Modifications:**

The 2024 survey questionnaire included few modifications compared to the 2022 version. Two major changes were implemented in the 2024 survey: (1) the Life Satisfaction vital sign was amended to include a second question, and (2) the Governance vital sign was moved toward the end of the survey, with the aim of hypothetically increasing participant engagement. The 2024 survey instrument is provided in Appendix B.

#### Modified Language

 Outdoor activity in Puget Sound Section: The 2018 survey version focused on outdoor activity during the summer and winter seasons. In 2020, the survey shifted its focus to fall and spring outdoor activities. The 2022 version returned to emphasizing summer and winter, while the 2024 survey once again concentrated on fall and spring activities, continuing this alternating seasonal pattern.

#### Questions added and removed

• Life Satisfaction Section: In past versions of the survey, the 'Life Satisfaction' section consisted of only one question: 'In general, how satisfied or dissatisfied are you with your life overall?' with an accompanied five-point scale ranging from (1) Dissatisfied to (5) Satisfied. In the 2024 survey, the section was expanded to create an index, posing two prompts on a seven-point scale ranging from (1) Strongly Disagree to (7) Strongly agree, 'I am very satisfied with my life overall' and 'I feel that the things I do in my life are worthwhile'. This modification was informed by Suchyta, Dietz, and Frank (2024)<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Cranston, K. and K. Biedenweg. 2016. <u>2015 Google Insights & General Public Opinion Survey Reports</u>. Report to Puget Sound Partnership.

<sup>2.</sup> Suchyta, M., T. Dietz, and K. A. Frank. 2024. Cross-National Social and Environmental Influences on Life Satisfaction. *Social Forces* 103(1): 66-86.

#### Survey Distribution:

#### Paper Survey Instrument

A sample of addresses was obtained from The Marketing Systems. which uses a United States Postal System Database for their surveys. A total of 9,000 addresses were purchased for a clustered random sample using Enhanced Matching, instead of Premier Matching used in previous iterations (which included phone numbers). To reduce undeliverable surveys, we included "Only Way To Get Mail" PO Boxes and excluded Traditional PO Boxes, since anyone can have a Traditional PO Box and this increases the risk of duplicate mailings. There were 750 records purchased per county using four counties classified as urban (King, Kitsap, Pierce, and Snohomish) and eight counties classified as rural (Clallam, Island, Jefferson, Mason, San Juan, Skagit, Thurston, and Whatcom).

The following types of addresses were excluded from purchasing:

- a. **Drops -** A drop is a single delivery point or receptacle that services multiple residences. Examples: Boarding Houses, Fraternities, a single door slot shared by two or more residences. In standard orders, if a client includes Drops, there are two options. Have the Drop Unit in the sample once, or, if a Drop Point is randomly selected, we can expand the Drop Point to list out the addresses each time for each address. Therefore, if drops are selected the address can be included once or get <u>all</u> the residents of that Drop (which will include duplicate addresses).
- b. **Seasonal -** An address given mail only during a specific season (i.e., summer only residence).
- c. Vacant Delivery points that have been unoccupied for 90 days or longer.

The paper survey instrument was printed and distributed by BMS Technologies using a modified Tailored Design Method<sup>2</sup>. For this method, a postcard was delivered to all usable addresses notifying the recipient that they would be receiving a survey packet. After the initial postcard, 32 individuals called in to opt out of the survey voluntarily. Additionally, 411 of the addresses were determined to be 'undeliverable' and subsequently not included to determine total response rate. Returned blank surveys were also tallied and removed from response rate.

Packets were distributed to the remaining sample after two weeks with an introduction letter that had a URL and a QR code included if participants would like to complete the survey online, as well as the paper survey, a pre-paid return envelope, and a \$2 incentive enclosed. Two weeks later, a second reminder postcard was sent that included the URL and QR code to the online survey hosted by Qualtrics.

<sup>&</sup>lt;sup>2</sup> Tailored Design Method (2) - Don Dillman, Jolene Smith, and Leah Christian, *Internet, Phone, Mail, and Mixed-Mode Surveys- The Tailored Design Method*, Fourth (John Wiley & Sons, Inc., 2014)

#### **Data Analysis:**

#### Response Rate

Analysis used all surveys that were returned excluding surveys that were returned blank. Our sample included 1,968 respondents.

1,612 paper surveys were completed, and 356 surveys were completed online. Using the initial sample size of 9,000, this would bring the response rate to 21.9%, while incorporating undeliverable addresses (calculated by returned to sender post-cards) and removals by email brings the response rate to 23%.

Number of responses by county are as follows:

Clallam	179	Pierce	126
Island	172	San Juan	177
Jefferson	230	Skagit	148
King	200	Snohomish	132
Kitsap	128	Thurston	156
Mason	145	Whatcom	142
		Other/ Unknown*	32

<sup>\*</sup>Unknown/other county respondents were documented from Qualtrics where location data could either not be found or indicated locations outside of the Puget Sound as location services collected from Qualtrics could differ from their physical location. For example, respondents could have taken the survey on vacation over the holidays or location services on a device may have been disabled. The authors decided to include these respondents in the data analyses because these respondents had access to the QR code from a postcard physically received in the Puget Sound. However, these respondents are not included in the map seen in this report.

From the Qualtrics responses, we were able to acquire a latitude/longitude point for each respondent which was used to determine county. From paper surveys, we were able to acquire counties based on the address data from MSG.

Statistical frequencies were calculated in statistical computing software, SPSS. All graphics were made in Microsoft Excel. Maps were created in ArcGIS Pro using data from Washington Geospatial Open Data Portal.

Although the age distribution of respondents does not align with regional census data, weighting the data by age revealed no significant differences in responses. Therefore, we chose to retain the raw data.

A Cronbach's alpha reliability estimate was calculated to confirm our ability to create indices for good governance, local foods, sound stewardship, psychological wellbeing, cultural wellbeing, sense of place, and life satisfaction. A score of 70% or higher is considered a reliable index. Each index score exceeded this threshold.

#### Limitations

The 2024 survey was launched during Election Season, which may or may not skew responses.

All surveys are subject to limitation due to error. An error refers to the difference between the sample and the true population. While the researchers did their best to limit errors, all of which have been addressed to the extent possible through the methods described.

**Coverage Error** occurs when the list from which sample members are drawn does not accurately represent the population on the characteristic(s) one wants to estimate with the survey data (whether a voter preference, a demographic characteristic, or something else). A high-quality sample survey requires that every member of the population has a known, nonzero probability of being sampled, meaning they have to be accurately represented on the list from which the sample will be drawn. Coverage error is the difference between the estimate produced when the list is inaccurate and what would have been produced with an accurate list.

**Sampling Error** is the difference between the estimate produced when only a sample of units on the frame is surveyed and the estimate produced when every unit on the list is surveyed. Sampling error exists anytime we decide to survey only some, rather than all, members of the sample frame.

**Nonresponse Error** is the difference between the estimate produced when only some of the sampled units respond compared to when all of them respond. It occurs when those who do not respond are different from those who do respond in a way that influences estimate.

**Measurement Error** is the difference between the estimate produced and the true value because respondents gave inaccurate answers to survey questions. It occurs when respondents are unable or unwilling to provide accurate answers which can be due to poor question design, survey mode effects, interviewer and respondent behavior, or data collection mistakes.

# **Appendix B. 2024 Survey Instrument**

# **PUGET SOUND HUMAN WELLBEING SURVEY**

IMPORTANT QUESTIONS TO UNDERSTAND YOUR EXPERIENCES
A STUDY COMPLETED COOPERATIVELY BY:







Thank you for participating in this survey of human wellbeing in the Puget Sound, funded by the Puget Sound Partnership. It should take less than 15 minutes of your time. Please complete the brief survey and return it using the pre-paid envelope. Participation is voluntary, and your responses are completely confidential.

If you have any questions about the survey, please contact Project Lead, Krista Harrington by e-mail at <a href="mailto:krista.harrington@oregonstate.edu">krista.harrington@oregonstate.edu</a>.

The results of this survey will be reported in the Puget Sound Partnership's *Puget Sound Info* dashboard. Please scan the QR code to the right for more details.



1.	In the past year, about how often did you hunt, harvest, gather, or forage for the following food in the Puget
	Sound Region? Please circle one number for each item:

Local Food	Never	Rarely (1-2 times a season)	Occasionally (3-5 times a season)	Regularly (6-9 times a season)	Frequently (More than 10 times a season)	Don't Know
Fish	1	2	3	4	5	
Crab or Shrimp	1	2	3	4	5	
Oysters, Mussels, Clams ( <u>not</u> razor clams)	1	2	3	4	5	
Squid	1	2	3	4	5	
Deer or Elk	1	2	3	4	5	
Waterfowl	1	2	3	4	5	
Plants, Berries, or Mushrooms	1	2	3	4	5	

#### In the past year, about how often did you engage in the following types of behaviors/activities in the Puget Sound? Please circle one number for each question:

Behavior/Activity	Never	Rarely (1-4 times a year)	Occasionally (Once a month)	Regularly (Once a week)	Frequently (Almost every day)	Don't Know
Behaviors that you believe effectively benefitted the environment	1	2	3	4	5	
Environmental behaviors that were personally meaningful to you	1	2	3	4	5	
Environmental behaviors that you believe are needed by the community	1	2	3	4	5	

3.	3. Does your work involve spending time in natural environments within Puget Sound (e.g. commercial or charter fishing, farming, forestry, habitat restoration, or outdoor-recreation jobs)? No  Yes → If Yes: About how many hours a week do you perform work that involves spending time in natural environments?								
	Less than 5 hours/week	5-10 hours/week	11-20 hours/week						
	21-30 hours/week	More than 30 hours/	week						

4. In the past year, about how often have you felt <u>inspiration</u> when spending time in the outdoors of the Puget Sound region? Please circle <u>one number</u>:

Never	Rarely (1-4 times a year)	Occasionally (Once a month)	Regularly (Once a week)	Frequently (Almost every day)	Don't Know
1	2	3	4	5	

In the past year, about how often has spending time in the outdoors of the Puget Sound region helped you reduce <u>stress</u>? Please circle <u>one number</u>:

Never	Rarely	Occasionally	Regularly	Frequently	Don't
	(1-4 times a year)	(Once a month)	(Once a week)	(Almost every day)	Know
1	2	3	4	5	

About how many <u>days</u> per month on average did you participate in the following recreation activities <u>in the Puget Sound region</u> this past <u>Spring</u> (about March - May). Please check <u>one box</u> for each question:

Outdoor Activity	I do not engage in this activity	Less than 1 day per month	1-4 days per month	5-10 days per month	11-20 days per month	More than 20 days per month	Don't Know
Motorized Trail Use (e.g. ATV or OHV Riding)	1	2	3	4	5	6	
Using Paved Paths or Trails for Walking, Running, Biking	1	2	3	4	5	6	
Using Unpaved Trails for Walking, Running, Biking, Horseback, Hiking, Backpacking	1	2	3	4	5	6	
Camping (Car or Back Country)	1	2	3	4	5	6	
Fishing	1	2	3	4	5	6	
Hunting	1	2	3	4	5	6	
Picnic or BBQ	1	2	3	4	5	6	
Motorized Boating	1	2	3	4	5	6	
Non-Motorized Water Sports (e.g. Kayak, Surf, Sailing, Swimming, Scuba)	1	2	3	4	5	6	
Skiing/Snow Boarding or Snowshoeing	1	2	3	4	5	6	
Gardening or Yard Work	1	2	3	4	5	6	
Wildlife Viewing/Birding	1	2	3	4	5	6	

7. About how many <u>days</u> per month on average did you participate in the following recreation activities <u>in the Puget Sound region</u> this past <u>Fall (about September - November)</u>. Please circle <u>one number</u> for each question:

	The state of the s	The state of the s		,				
Outdoor Activity	I do not engage in this activity	Less than 1 day per month	1-4 days per month	5-10 days per month	11-20 days per month	More than 20 days per month	Don't Know	
Motorized Trail Use (e.g. ATV or OHV Riding)	1	2	3	4	5	6		
Using Paved Paths or Trails for Walking, Running, Biking	1	2	3	4	5	6		
Using Unpaved Trails for Walking, Running, Biking, Horseback, Hiking, Backpacking	1	2	3	4	5	6		
Camping (Car or Back Country)	1	2	3	4	5	6		
Fishing	1	2	3	4	5	6		
Hunting	1	2	3	4	5	6		
Picnic or BBQ	1	2	3	4	5	6		
Motorized Boating	1	2	3	4	5	6		
Non-Motorized Water Sports (e.g. Kayak, Surf, Sailing, Swimming, Scuba)	1	2	3	4	5	6		
Skiing/Snowboarding or Snowshoeing	1	2	3	4	5	6		
Gardening or Yard Work	1	2	3	4	5	6		
Wildlife Viewing/Birding	1	2	3	4	5	6		

# 8. How much do you agree or disagree with the following statements related to the Puget Sound Region? Please circle one number for each question:

Statement	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree	Don't know
I am very attached to the natural environment in the Puget Sound region	1	2	3	4	5	6	7	
I am proud to live in the Puget Sound region	1	2	3	4	5	6	7	
I feel responsible for taking care of Puget Sound's natural environment	1	2	3	4	5	6	7	
Living in the Puget Sound region says a lot about who I am	1	2	3	4	5	6	7	
Being able to engage in outdoor activities or cultural practices is important to my connection to the Puget Sound	1	2	3	4	5	6	7	
I am mostly attached to parts of Puget Sound that are nearest to me	1	2	3	4	5	6	7	
I could be satisfied living in other places outside the Puget Sound	1	2	3	4	5	6	7	

#### 9. Have you personally experienced any of the following impacts in the last two years?

Environmental Impact	No	Yes
Direct wildfire exposure (e.g. property being within wildfire evacuation zone)		
Wildfire smoke or haze exposure		
Extreme heat or heat wave		
Flooded property from excess rainfall or ocean tides		
Flooded or eroded roadway from excess rainfall or ocean tides		
Levee failure or erosion from excess rainfall, flooding, or sea level rise		
Contamination of private well water from excess rainfall, flooding, or saltwater intrusion		
Agricultural well outage		
Permanently relocated due to environmental threats or damage		
Experienced loss of work due to environmental threats (hours/days, opportunities)		
Heat exhaustion or heat stroke		
Asthma or respiratory illness due to poor air quality (i.e. pollution, wildfire smoke, pollen)		
Sickness due to poor water quality		
Psychological distress due to environmental threats or changes (i.e. anxiety, stress, fear)		

10. Do you have access to the following resources? Please check one box per resource:

Resource	Never	Sometimes	Always	I don't have use for it	Don't Know
Air conditioning/climate-controlled environment	1	2	3		
Back-up power supply/generator	1	2	3		
Operable motorized vehicle	1	2	3		
Public transportation	1	2	3		
Domestic well for clean drinking water	1	2	3		
Local/community water system for clean drinking water (i.e. not your own well system)	1	2	3		
Sewage system or septic tank	1	2	3		
Financial resources (e.g. savings, stocks/bonds, credit, loans)	1	2	3		
Home or renters' insurance	1	2	3		
Flood insurance	1	2	3		
Health insurance	1	2	3		
Wildfire insurance	1	2	3		
Computer/mobile device with reliable internet connection at home	1	2	3		

11. In the past year, how satisfied were you with your level of participation in any of the following cultural activities or traditions <u>related to the environment?</u> Please circle <u>one number</u> for each question:

Environmental Cultural Activity or Tradition	Dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat Satisfied	Satisfied	I do not engage in this activity or tradition	Don't Know
Native practices or activities (canoe journey, Tribal center events, potlach, etc.)	1	2	3	4	5		
Spiritual or religious practices related to the environment (meditation, prayer, solstice observance etc.)	1	2	3	4	5		
Environmental practices or activities important to your heritage (formal or informal family or community events, etc.)	1	2	3	4	5		
Environmentally oriented <u>social</u> activities (environmental clubs, festivals, outdoor events, etc.)	1	2	3	4	5		

12. How much do you agree or disagree with the following statements related to your life in the Puget Sound Region? Please circle one number for each question:

Statement	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree	Don't know
I am very satisfied with my life overall	1	2	3	4	5	6	7	
I feel that the things I do in my life are worthwhile	1	2	3	4	5	6	7	

13. How much do you agree or disagree with the following statements related to the Puget Sound Region? Please circle one number for each question:

Statement	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree	Don't Know
I have plenty of opportunities to influence natural resource decisions in the Puget Sound region if I want to	1	2	3	4	5	6	7	
I feel well represented by the leaders of Puget Sound natural resource management processes	1	2	3	4	5	6	7	
I trust regional policymakers to protect Puget Sound's natural resources	1	2	3	4	5	6	7	
I have access to enough information regarding the social and economic consequences of how natural resources are managed in the Puget Sound	1	2	3	4	5	6	7	
I have access to enough information regarding the environmental consequences of how natural resources are managed in the Puget Sound	1	2	3	4	5	6	7	
I have access to enough information regarding the regulatory aspects of how natural resources are managed in the Puget Sound	1	2	3	4	5	6	7	

14. Do	you	own	property	in the	Puget	Sound	region?
	No		Yes				

→ If Yes: I have the freedom to make personal decisions about how natural resources are managed on my property

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree	Don't Know
1	2	3	4	5	6	7	

15. How important is the issue of global warming to you? Please circle one number:

Not at all important	Not too important	Somewhat important	Very important	Extremely important
1	2	3	4	5

16. How worried are you about global warming? Please circle one number:

Not at all worried	Not very worried	Somewhat worried	Very worried
1	2	3	4

17. How much do you think global warming will harm you personally? Please circle one number:

Don't know	Not at all	Only a little	A moderate amount	A great deal
1	2	3	4	5

18. How much do you think global warming will harm future generations of people? Please circle one number:

Don't know	Not at all	Only a little	A moderate amount	A great deal
1	2	3	4	5

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#### 26. Which of the following do you consider yourself? Please circle one number:

Very Conservative	Conservative	Neither Conservative nor Liberal	Liberal	Very Liberal
1	2	3	4	5

Thank you kindly for completing this survey.

If you have any additional thoughts on human wellbeing in your area, please write them here, as needed:

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