

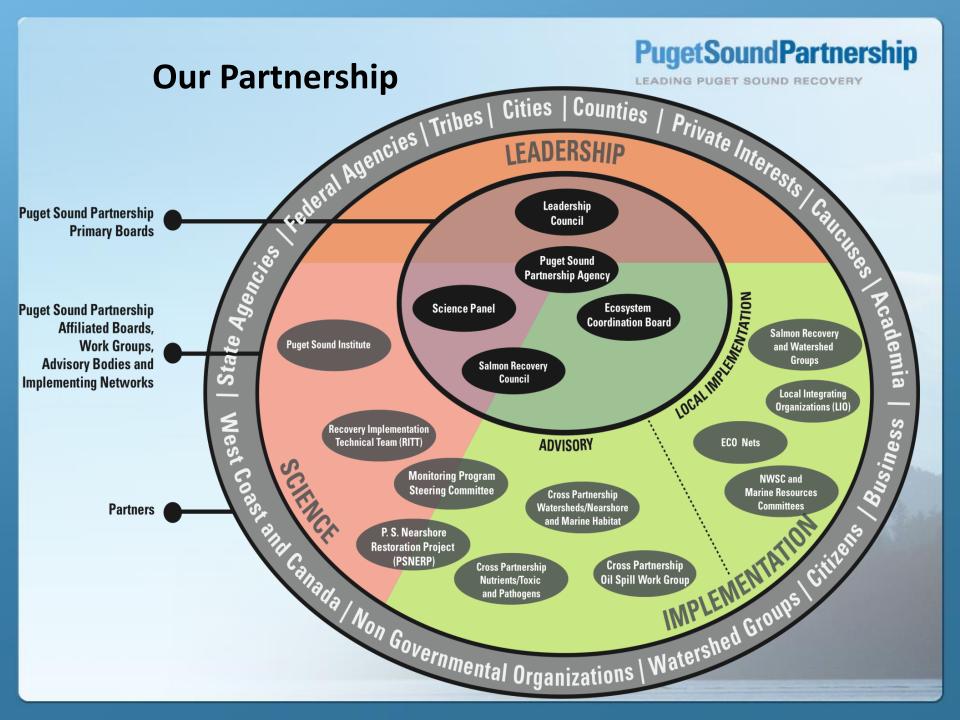


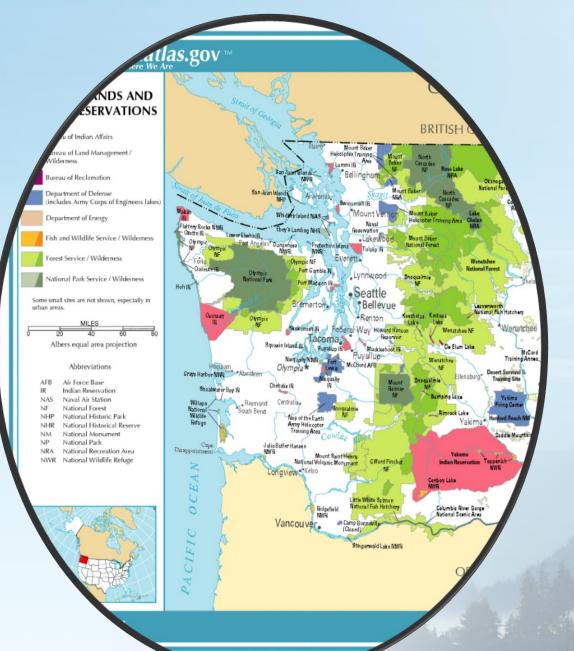
## The Puget Sound Partnership

- Sets science-based regional priorities
- Accelerates implementation of priority actions
- Provides

   accountability for results







LEADING PUGET SOUND RECOVERY

 15 Federally Recognized Treaty Tribes

## **Puget Sound**

- Roughly the size of Ireland,
   Panama, or Sierra Leone
- 4.5 million people
- 2,500 miles saltwater shoreline
- 19 major river systems
- *Elevation 0 − 14,000ft*
- Water temp. 7-12 degrees C
- Rainfall 18- 140"
- Snowfall 0 1,140"
- Orcas, salmon, mountain streams, old-growth forests
- 3 volcanoes
- Worlds largest octopus
- 3 National Parks





The Puget Sound Action Agenda is the plan for cleaning up, restoring, and protecting Puget Sound by 2020

May 2014

**PugetSoundPartnership** 

LEADING PUGET SOUND RECOVERY

## **PugetSoundPartnership**

LEADING PUGET SOUND RECOVERY

## Puget Sound Action Agenda

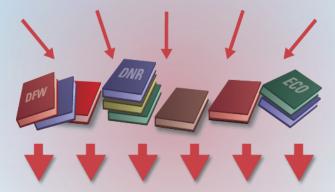
- Decisions based on sound science
- Action
- Accountability
- Building partners' and the public's capacity to contribute

LEADING PUGET SOUND RECOVERY

#### FORMER FUNDING METHOD

ECOLOGY BUDGET PRIORITIES NATURAL RESOURCES BUDGET PRIORITIES FISH AND WILDLIFE BUDGET PRIORITIES RECREATION &
CONSERVATION
BUDGET
PRIORITIES

OTHER STATE
AGENCY
BUDGET
PRIORITIES



STATE FUNDS A LOOSE
COLLECTION OF COMPETING PRIORITIES

#### PARTNERSHIP FUNDING METHOD

STATE \$ FEDERAL \$ LOCAL \$ PRIVATE \$



NGO IMPLEMENTS SPECIFIC ACTIONS

> ECOLOGY IMPLEMENTS SPECIFIC ACTIONS

DNR
IMPLEMENTS
SPECIFIC
ACTIONS

EPA
IMPLEMENTS
SPECIFIC
NISQUALLY ACTIONS
TRIBE

IMPLEMENTS

SPECIFIC ACTIONS

SNOHOMISH COUNTY IMPLEMENTS SPECIFIC

IMPLEMENT SPECIFIC ACTIONS TS



## **Strategic Initiatives**



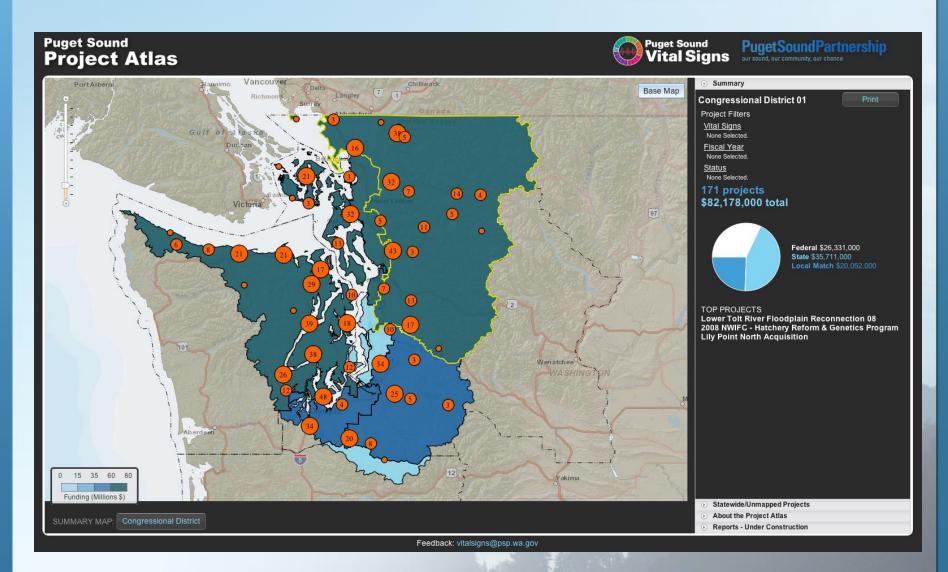




LEADING PUGET SOUND RECOVERY



LEADING PUGET SOUND RECOVERY



http://gismanager.rco.wa.gov/projectatlas

#### **PugetSoundPartnership** HEALTHY HUMAN POPULATION LEADING PUGET SOUND RECOVERY white dunity Puget Sound Vital Signs Sewage Choose a Vital Sign Shellfish Beds Reopened out 36,000 acres of shellfish beds - approximately 19 % - are HUMAN QUALITY **Puget Sound** Target Data QUANTITY WATER : 10,800 more acres of harvestable shellfish beds OF LIFE et for shellfish beds is to have a net increase of 10,800 acres of harvestable shellfish beds, of res must be from beds presently classified as prohibited. Achieving this goal will allow more recreational shellfish harvesting opportunities. In addition, it will document improved marine nd shoreline conditions in Puget Sound. pgraded and Downgraded Shellfish Beds in Puget Sound a dashboard of indicators on Target = 10,800 total net acres -Puget Sound's health and vitality PROTECT AND RESTORE HABITAT Sareigh Bay shellfish DOWNGRADED SPECIES AND FOOD WES 2006 2008 2010 2012 2014 **Eelgrass** Pacific More information about the graph Shoreline Armoring In the graph above, the green and red bars represent the annual upgraded and downgraded acres, respectively, while the black line represents the net increase in harvestable acres of commercial and recreational shellfish beds in Puget Sound toward the 2020 goal of 10,800. Net increase is the upgraded acres in existing shellfish growing areas (or the restoration of unclassified acreage) to allow harvest, minus any downgrades in classification that prevent harvest. Downgrades of the shellfish beds are generally caused by fecal bacteria or other pollutants in the water that makes the shellfish unsafe to eat.





## **Puget Sound Recovery**

## **Stewardship Program**

Nudging the behaviors of Puget Sound residents -4.5 million times



information & education (SHOW ME)

**Adopters** 

13.5%

social marketing approaches (HELP ME)

**Majority** 

34%

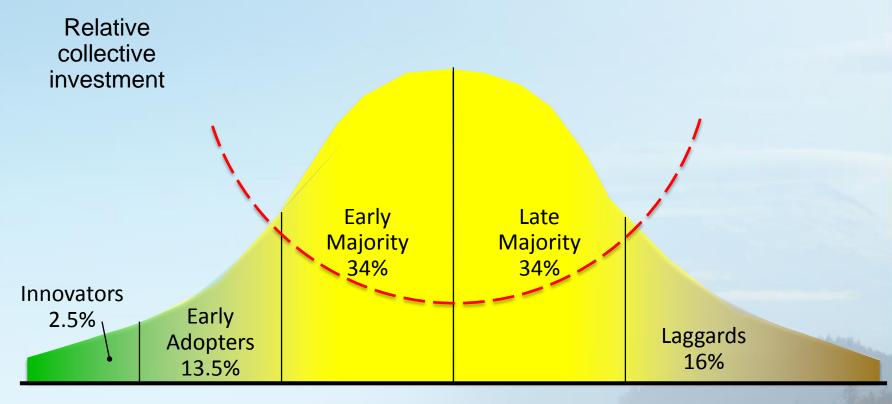
**Majority** 

34%

regulations & legal interventions (MAKE ME)

16%

LEADING PUGET SOUND RECOVERY



information & education (SHOW ME)

social marketing approaches (HELP ME)

regulations & legal interventions (MAKE ME)



#### STEWARDSHIP PROGRAM

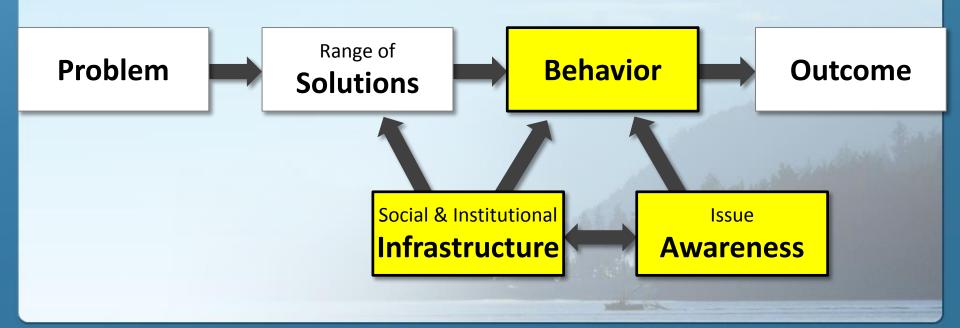
#### Changing behaviors that affect the health of Puget Sound

- 1. Focus on systemic change
- 2. Focus on environmental outcomes
- 3. Focus on 4.5 million residents, not just the eager minority
- 4. Focus on innovation and sustainability
- 5. Fill gaps
- 6. Enable others to conduct the work



## **Action Agenda Section E.4**

Now Sections D5, D6, and D7





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# ONE FAMILY BIG-FAMILY SHARING THE BEST BACKYARD.



liter by: show all articles photos video

sort by: date posted most popular random











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www.pugetsoundstartshere.org

http://www.pugetsoundstartshere.org/videos/underwater-filmmaker/#.VEmCIMmwWbE (4.5)

http://www.pugetsoundstartshere.org/videos/freshseafood/#.VEmD5MmwWbE (2.5)

https://www.youtube.com/watch?v=YqP9mFoqygM





## **ECO Network**

**PugetSoundPartnership** 

LEADING PUGET SOUND RECOVERY

- 470+ member organizations
- 12 chapters
- Trainings, resources, coordination, grants

SOCIAL CAPITAL







## K-12 Education

- Systemic change
- Pacific Education Institute, OSPI, PSP, Russell Family Foundation
- Incorporate Puget Sound Place-based content into K-12 curricula across the region
- Over 1/2 of Puget Sound Districts have place-based education programs by end of 2014 (on-target)
- PS Focused Senior Projects



## Citizen Action Training School Developing Tomorrow's Leaders

- Successful pilot: 22-year legacy of civic participation, leadership, public engagement
- Out Community Our Charge School

- Launched Puget Sound wide
- Focus on generating productive citizen engagement to build a base of future leaders in Puget Sound recovery

## SOCIAL MARKETING



#### **Training**

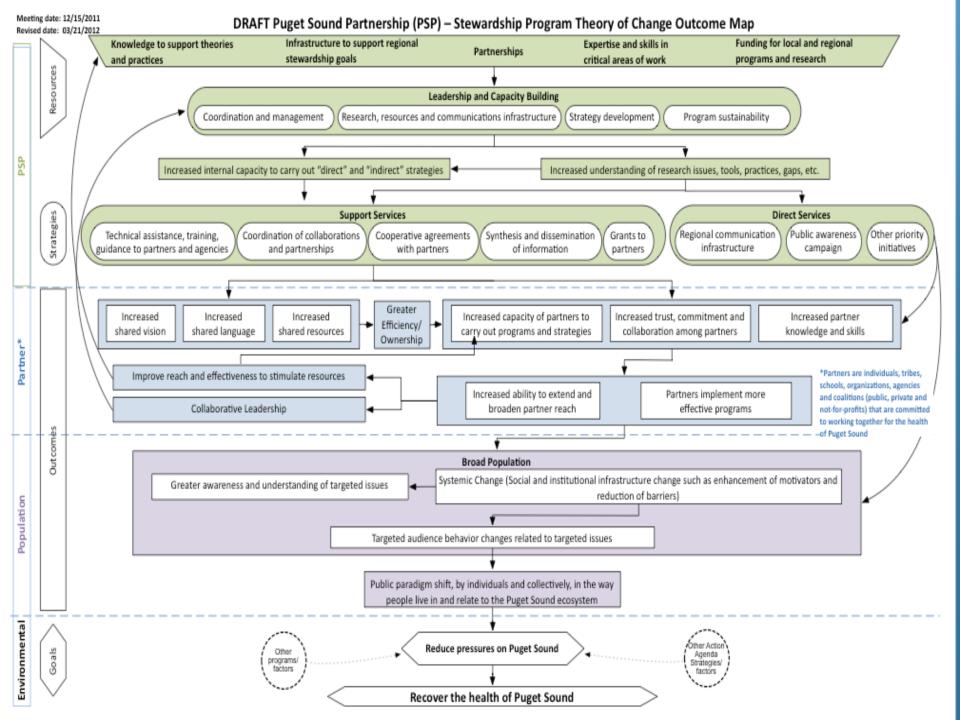
- UW Certificate course for ECO Net members
- Advanced training & technical assistance

#### **Grants**

- Local BMP initiatives via trained ECO Net members (\$372K)
- Regional Model Stewardship Program initiatives (\$2M)

#### **Support and Resources**

- Technical assistance for grant recipients
- Topical audience research
- Formative Research data repository



Resources

Strategies

## **INPUTS**

#### **PUGET SOUND PARTNERSHIP**

**LOCAL PARTNERS** 

**PUGET SOUND'S HUMAN POPULATION** 

**PUGET SOUND'S ENVIRONMENT** 

Resources

## **INPUTS**

## **PUGET SOUND PARTNERSHIP**

## **LOCAL PARTNERS**

**PUGET SOUND'S HUMAN POPULATION** 

**PUGET SOUND'S ENVIRONMENT** 



## **POR Tasks**

**PugetSoundPartnership** 

- 1) Sound Behavior Index & Social Capital Index (2012 only)
- 2) General Opinion Survey
- 3) Barriers and Motivators Formative Research (completed)
  - -> 2 surveys/ sets of focus groups
  - -> Pesticide Use & Residential Tree Planting







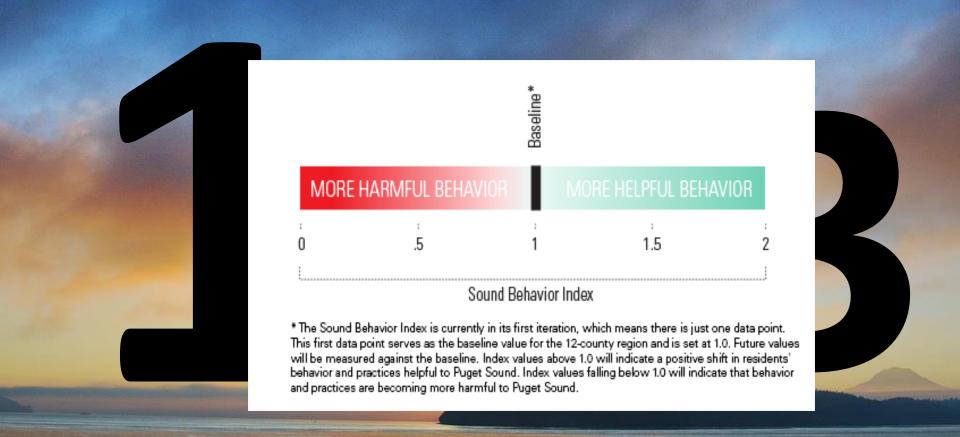
## **SOUND BEHAVIOR INDEX**

- Index development
  - 28 indicator behaviors (+/-)
  - Track individual behaviors over time
  - Track collective progress over time
  - Index values for region and by co.



- Sample size: 3,600+
  - 300 per county
  - 12 Puget Sound counties
  - Random phone survey

## 2012 and 2013



Puget Sound	Behavior	Index	Survey	Results

ex Survey nesures				رجي	
	ALWAYS	USUA	Y SOME	MIL SELDO	M NEVER
Plant or keep native plants on property	40%	16%	21%		14%
Pull weeds by hand or with tool	43%	24%	20%		6%
Plant or keep native vegetation on the banks of waterways on property	29%	6%	8%		53%
Check vehicle for fluid leaks or have it checked	46%	24%	16%		
Dispose of recreational vehicle wastewater at an approved facility	35%				52%
Use non-toxic or natural household cleaners	25%	25%	29%	11%	10%
Pick up dog's waste from yard	65%	12%	8%		11%
Place dog's waste in trash	40%		11%		36%
Spread out laundry loads	35%	16%	17%		21%
Get septic tank pumped when recommended	46%	17%	13%		15%
Get septic system annually inspected	27%	8%.	16%	16%	29%
Cover and compost manure	40%		8%	10%	36%
Rotate pastures to let grass recover	42%		17%	7%	24%
Use pumpout stations for boat wastewater	20%		7%	6%	65%
Check for boat engine fluid leaks	56%	17%			10%
	Plant or keep native plants on property  Pull weeds by hand or with tool  Plant or keep native vegetation on the banks of waterways on property  Check vehicle for fluid leaks or have it checked  Dispose of recreational vehicle wastewater at an approved facility  Use non-toxic or natural household cleaners  Pick up dog's waste from yard  Place dog's waste in trash  Spread out laundry loads  Get septic tank pumped when recommended  Get septic system annually inspected  Cover and compost manure  Rotate pastures to let grass recover  Use pumpout stations for boat wastewater	Plant or keep native plants on property  40%  Pull weeds by hand or with tool  43%  Plant or keep native vegetation on the banks of waterways on property  Check vehicle for fluid leaks or have it checked  46%  Dispose of recreational vehicle wastewater at an approved facility  Use non-toxic or natural household cleaners  25%  Pick up dog's waste from yard  65%  Place dog's waste in trash  40%  Spread out laundry loads  Get septic tank pumped when recommended  46%  Get septic system annually inspected  Cover and compost manure  Rotate pastures to let grass recover  Use pumpout stations for boat wastewater  20%	Plant or keep native plants on property  Pull weeds by hand or with tool  Pull weeds by hand or with tool  Plant or keep native vegetation on the banks of waterways on property  Check vehicle for fluid leaks or have it checked  Dispose of recreational vehicle wastewater at an approved facility  Use non-toxic or natural household cleaners  Pick up dog's waste from yard  Place dog's waste in trash  Spread out laundry loads  Get septic tank pumped when recommended  Get septic system annually inspected  Cover and compost manure  Rotate pastures to let grass recover  Use pumpout stations for boat wastewater  24%  Lighthric lighthric lighthrich law and wastewater at an appropriate and appropriate an	Plant or keep native plants on property  40% 16% 21%  Pull weeds by hand or with tool  43% 24% 20%  Plant or keep native vegetation on the banks of waterways on property  Check vehicle for fluid leaks or have it checked  Dispose of recreational vehicle wastewater at an approved facility  Use non-toxic or natural household cleaners  25% 25% 29%  Pick up dog's waste from yard  65% 12% 3%  Place dog's waste in trash  40% 8% 11%  Spread out laundry loads  Get septic tank pumped when recommended  46% 17% 13%  Get septic system annually inspected  Cover and compost manure  40% 7% 8%  Rotate pastures to let grass recover  42% 11% 17%  Use pumpout stations for boat wastewater  20% 2% 7%	Plant or keep native plants on property  40% 16% 21% 9%  Pull weeds by hand or with tool  43% 24% 20% 7%  Plant or keep native vegetation on the banks of waterways on property  Check vehicle for fluid leaks or have it checked  46% 24% 16% 7%  Dispose of recreational vehicle wastewater at an approved facility  Use non-toxic or natural household cleaners  25% 25% 29% 11%  Pick up dog's waste from yard  65% 12% 8% 5%  Spread out laundry loads  Get septic tank pumped when recommended  46% 17% 9%  Get septic system annually inspected  Cover and compost manure  40% 7% 8% 10%  Rotate pastures to let grass recover  42% 11% 17% 7%  Use pumpout stations for boat wastewater  20% 2% 7% 6%

LEADING PUGET SOUND RECOVERY

HARMFUL BEHAVIORS		ALWAY	USUA	LY SOME	SELDO	'N ME
Residents with yards	Use weed and feed products on lawn			22%	21%	45%
	Use chemical products to control or kill moss, weeds, or other plants in yard			24%	24%	41%
	Use chemical products to control or kill insects in yard			15%	25%	53%
	Use fertilizers on lawn or garden		10%	31%	21%	30%
Residents with motor vehicles	Wash vehicles in the driveway, street, or parking lot	10%	7%	22%	20%	40%
All residents	Use chemical drain uncloggers			14%	36%	48%
	Flush or pour chemicals such as paint thinners down the drain			0%	3%	96%
	Flush prescription drugs down the toilet or drain					94%
	Use moss killer on roof			13%	14%	68%
	Use pressure washer with deck cleaners or soap			10%	18%	68%
Residents with on-site septic systems	Use garbage disposal	14%		37e	9%	58%
	Use septic tank additives	7%		12%	12%	67%
	Pour used cooking oil down the sink			5%	8%	87%

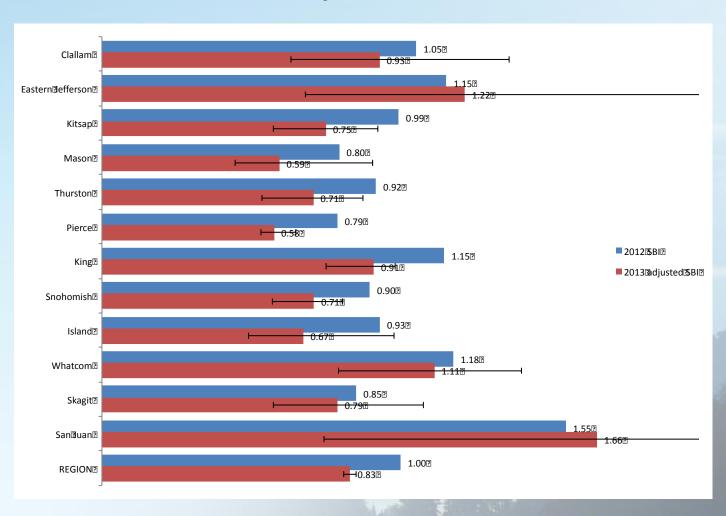
Marie Control

Table 1.

Source: The Puget Sound Partnership



## **County Behavior**





## **County SBI Characteristics**

Characteristics more likely to be associated with higher SBI scores for the counties indicated with an X.												
	Clallam	Eastern Jefferson	Kitsap	Mason	Thurston	Pierce	King	Snohomish	Island	Whatcom	Skagit	San Juan
Females				Χ	Χ							Χ
Lived fewer years in county						Χ	Χ			Χ		X
More urban area	Χ				Χ	Χ	Χ			Χ		
Fewer children under 18	Χ									Χ		
More children under 18								Χ			Χ	
Rent home	Χ				Χ	Χ	Χ	Χ			X	
Smaller property	Χ	Χ			Χ	Χ	Χ			Χ	Χ	Χ
Lived more years in Puget Sound					Χ							
More years of education									Χ			
Fewer years of education								Χ				
More liberal political views	Χ				Χ		Χ			Χ	Χ	Χ
More conservative political views								Χ				
Hispanic/Latino background							Χ	Χ				
Non-white race	Χ					Χ	Χ					
Lower income	Χ	Х	Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
Younger age								Χ				Χ
Older age	Х								Х			



## **2013 Considerations**

- Appears to be 'going backwards'
- Will have a better gauge with SBI 2015
- Very few behaviors are universal across a population

- Lessons Learned:
  - Continue focus on specific behaviors
  - End State Behaviors and Segmentation is important for on the ground programming.

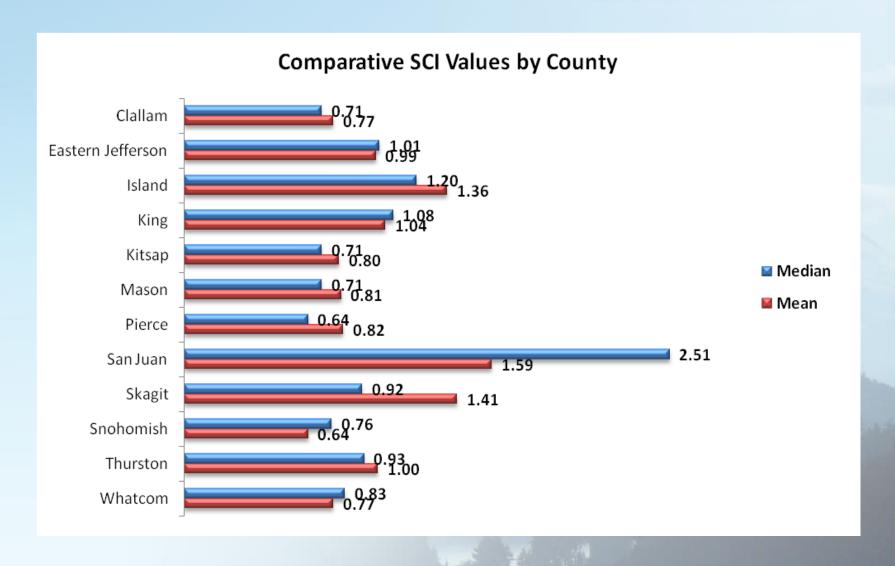


## Social Capital Index

- Measures how connected people are to each other across the 12-county PS region
- Method was a locally adapted version of a SCI survey from Harvard's Kennedy School



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The following characteristics are more likely to be associated with higher SCI scores for the counties indicated with an X.												
	Clallam	Eastern Jefferson	Kitsap	Mason	Thurston	Pierce	King	Snohomish	Island	Whatcom	Skagit	San Juan
Females	Χ										Χ	
Lived more years in county							Χ					
More rural area									Χ			
Fewer children under 18					Χ	Χ						
More children under 18								Χ				
Rent home	Χ					Χ					Χ	
Larger property					Χ			Χ				
Lived fewer years in Puget Sound		Χ										
Lived more years in Puget Sound					Χ							
Expect to live in county 5 yrs hence					Χ							
More years of education	Χ	Χ	Χ			Χ			Χ		Χ	
Fewer years of education				Χ				Χ				
More liberal political views	Χ	Χ	Χ			Χ	Χ	Χ	Χ	Χ		
Hispanic/Latino background						Χ						
Non-white race		Χ										
White race												Χ
Lower income	Χ	Χ		Χ						Χ		
Older age	Χ		Χ	Χ	Χ	Χ	Χ		Χ		Χ	

### SBI / SCI

### **PugetSoundPartnership**

- 3 X
- Internal and external use/demand for data
- Hope to see some shifts related to programmatic investments
- Utilized by many partners

- 1 X
- Long time to produce shifts
- Not anticipating "our" collective programming to produce measurable impacts (near term)
- Used to inform the Human Well Being Indicators Vital Sign





# **GENERAL PUBLIC OPINION SURVEY**



- Phone survey
- Sample size: 2,003
- 400 per breakout area
- 5 breakout areas across 12-county region
  - Clallam, Eastern Jefferson, Kitsap, Mason
  - Thurston, Pierce
  - King
  - Snohomish, Island
  - Whatcom, Skagit, San Juan

### **Public perception**



#### Accurate understanding

- portion of the public that can accurately rate the health of Puget Sound
- LOW

#### Optimism

- portion of the public who think the health of the Sound will improve
- VARIABLE

#### Public value

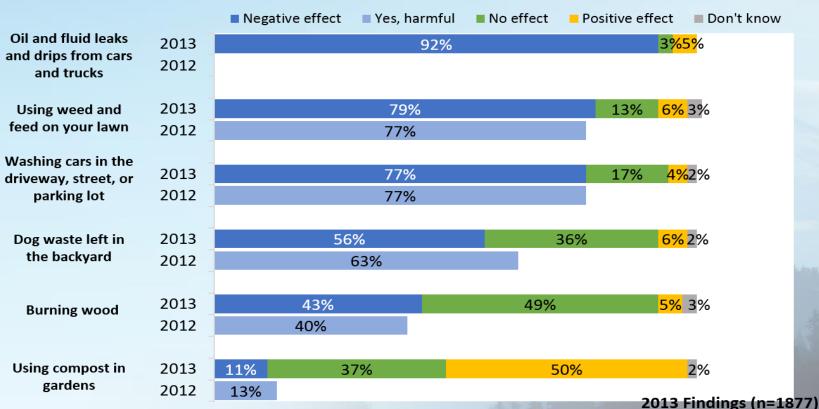
- public sense of urgency to PROTECT Puget Sound
- HIGH

### **Effect of Behaviors**



Do you think the following behaviors have a negative effect, positive effect, or no effect on the quality of Puget Sound waters?

Base: All respondents who participated in the survey



013 Findings (n=1877)

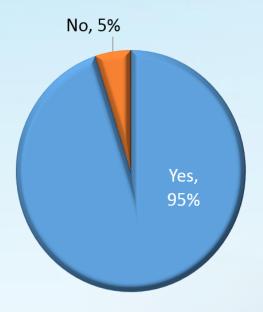
2012 Findings (n=2003)

### **Community Identity**



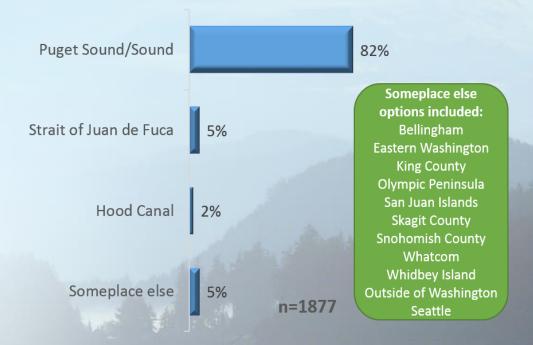
Do you think of yourself as a resident of the Puget Sound region?

Base: All respondents who participated in the survey

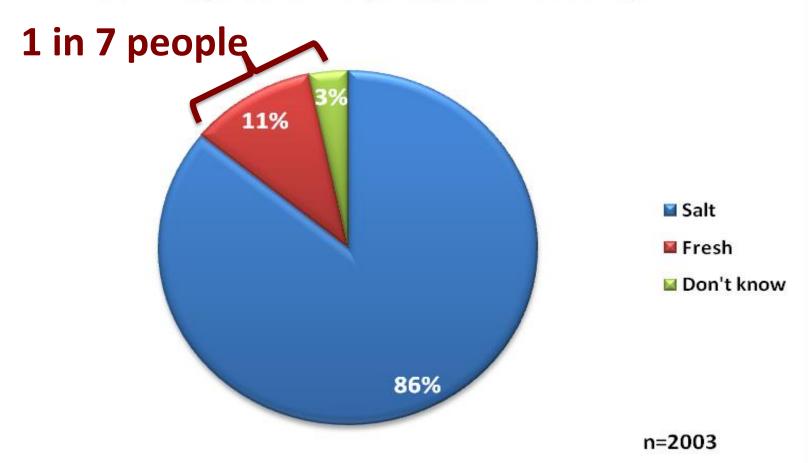


n=1877

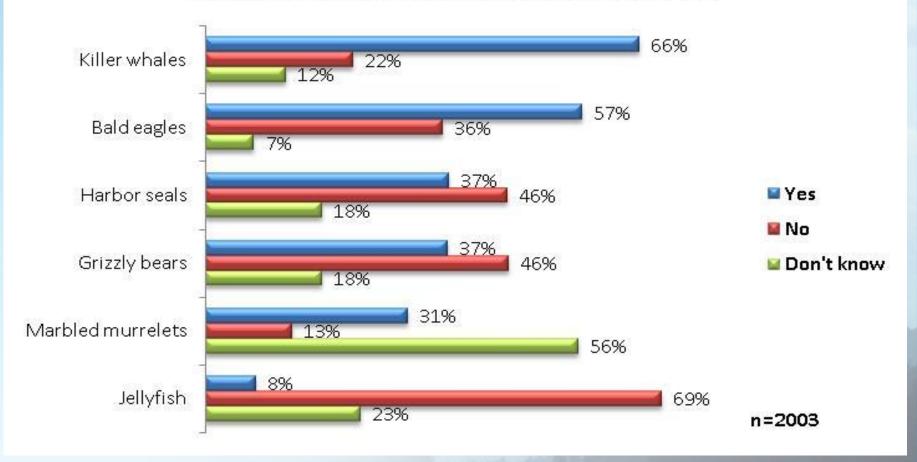
Do you think of yourself more as a resident of Puget Sound, Hood Canal, the Strait of Juan de Fuca, or someplace else?



#### Is the water in Puget Sound freshwater or saltwater?

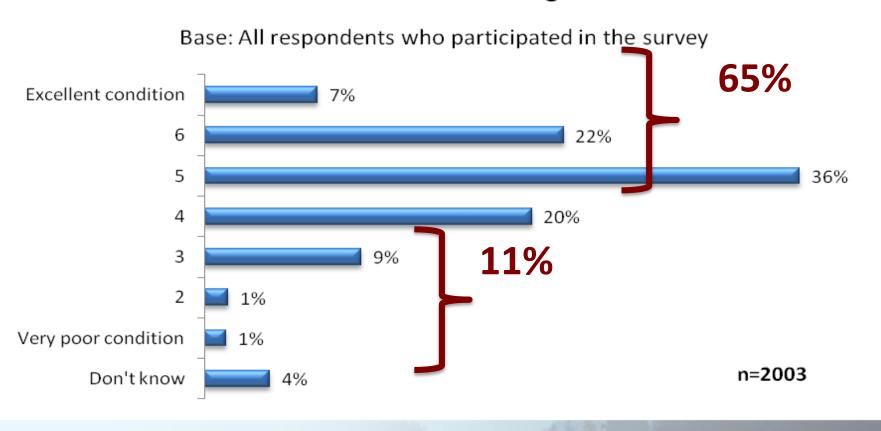


## Which of the following animals, in the Puget Sound area, are listed under the Endangered Species Act?

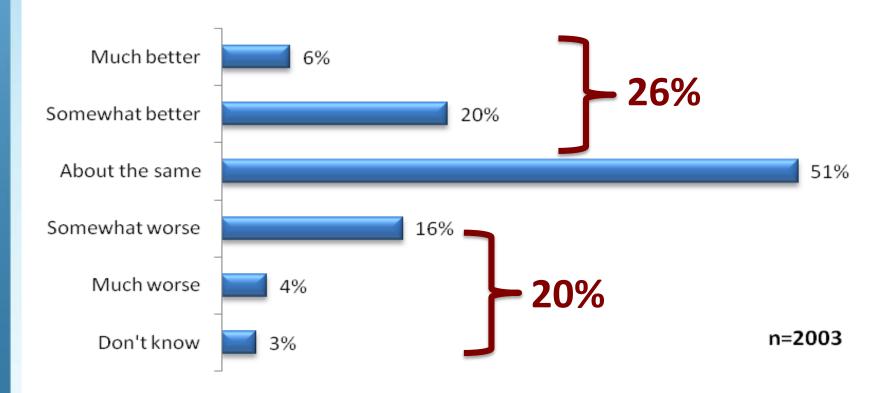


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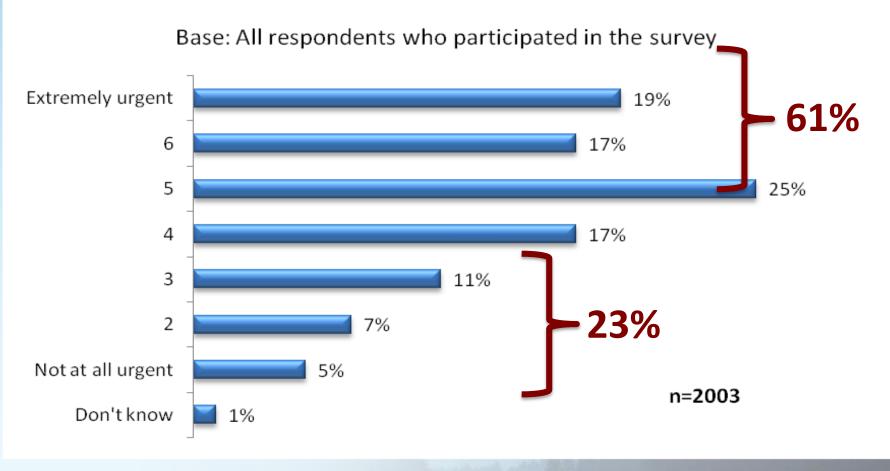
#### Overall, how would you rate the health and condition of the waters in and around Puget Sound?



# Looking ahead over the next five years, would you say you expect the health and condition of waters in and around Puget Sound to get:



# How urgent would you rate the need to clean-up and protect waters in and around Puget Sound?





### Values / Sense of Place

#### **Place Attachment**

I feel that Northwestern Washington is a part	•
of me	

73% agree/strongly agree

Northwestern Washington is very special to me

82% agree/strongly agree

Northwestern Washington means a lot to me

85% agree/strongly agree

I identify strongly with Northwestern Washington

74% agree/strongly agree

Northwestern Washington says a lot about who I am

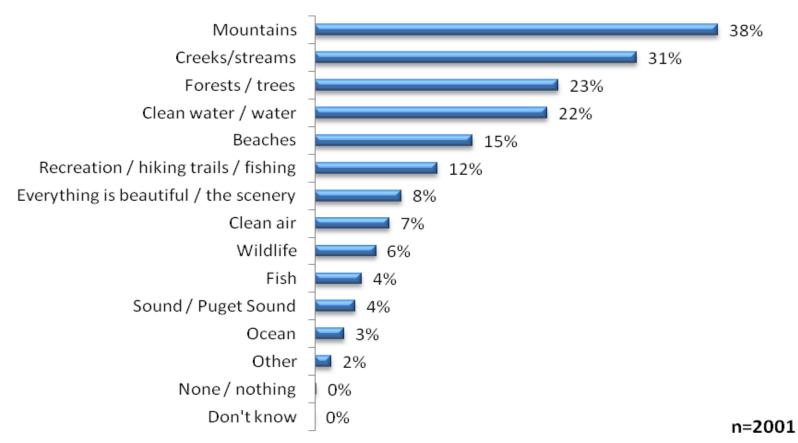
56% agree/strongly agree

I am very attached to Northwestern Washington

75% agree/strongly agree

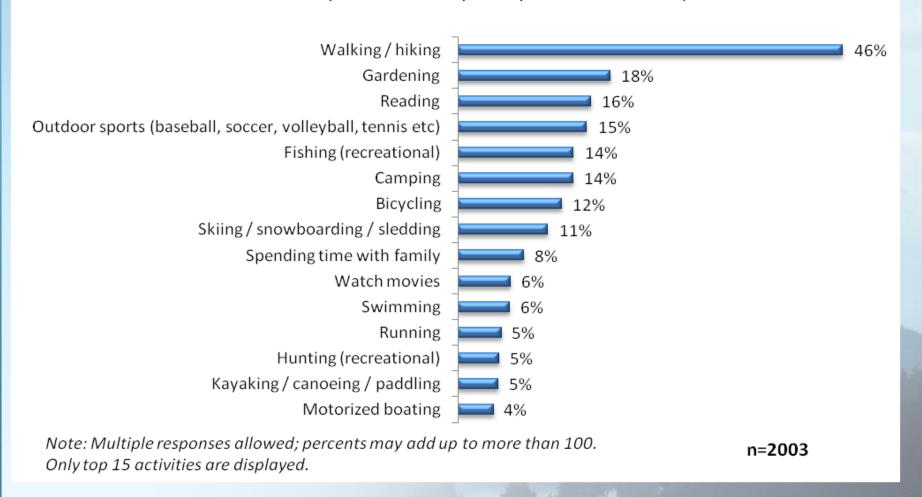
## What are the top two things about the Puget Sound region's natural resources that you value the most?

Base: All respondents who participated in the survey



Note: Multiple responses allowed; percents may add up to more than 100.

## In your free time, what types of activities do you value participating in?



### Considerations

- Consider what you want to measure carefully
  - Seek feedback from stakeholders
  - Start thinking big what kinds of indicators are there for your outcomes?
  - Consider multiple methods of research
  - Do your collective programs impact what you are measuring?
  - One time measurement? Or repetitive?
  - Build on what you have
  - Scope (s) and scale (s) of "problems "



### **CB Stewardship Outcomes**

- Citizen Stewardship Outcome- trained mobilized volunteers, knowledge, skills
- Local Leadership Outcome- knowledge and capacity of local officials, implementation of policies that incentivize local conservation efforts
- Diversity Outcome- increase engagement and representation of minority stakeholder groups

### Resources

- PS Vital Signs and other factsheets
- Public Opinion Research
  - RFQQ
  - Copies of all PSP POR reports
- SCI- Kennedy School Saguaro Seminar
- Puget Sound Network Analysis
- Coastal Management Journal Article – SBI
- Human Well Being Indicators





LEADING PUGET SOUND RECOVERY

### **Human Well Being Indicators**

Recommended Indicators of Human Wellbeing

Domain	Attribute	Indicator
Cultural Events		Number of opportunities and % of residents who participate in natural resource-inspired cultural activities (such as salmon homecoming, farmers market, outdoor recreation events, etc.)
	Cultural Practices	% of residents who feel they are able to maintain cultural practices associated with natural resources
Social	Trust	% of residents who trust people in their immediate and broader communities (2-3 levels)
	Community Cohesion	Frequency of outdoor activities with friends/family
	Index	Frequency of working with other community members to steward environmental resources, prepare cultural events, or solve problems
		Ability to get sufficient natural resources from formal and informal networks
Psychological	Psychological Safety	% of residents who feel safe in their neighborhood, open spaces and natural areas
	Sense of Place	% of residents who express a positive connection to the region % of residents who express (or nurture) a sense of stewardship for the watershed

# Human Well Being Indicators Puget Sound Partnership

	Positive emotions	% of residents who describe experiencing positive
		feelings/emotions from being in nature, such as awe, inspiration,
		fulfillment, appreciation, solitude, relaxation, sense of peace and
		reflection
	Subjective Wellbeing	Average response to overall life satisfaction question
Physical	Outdoor Activity	% of households within 1/2 mile of parks, urban plazas, public
	,	courtyards, community gardens or trailheads (10miles rural)
		Average number of hours per week of outdoor activity (by activity:
		outdoor work, gardening/farming, walking, bicycling, swimming,
		etc.)
	Air Quality	Number of moderate air quality days in urban and rural areas per
		year
	Drink water	% of drinking water tests results comply with appropriate standards
	Healthy Foods Index	Average household distance to fresh produce (personal farm,
		grocery store, farm stand)
		Availability of commonly harvested food species
		# shellfish bed closures per year
Economic	Natural resource-based	% of regional economic activity that is from natural resource-based
	industry	industries: agriculture, commercial shellfish, commercial fishing,
		timber, non-timber products and tourism
	Natural resource-based	Number of living-wage jobs by resource-based industry categories
	jobs	Unemployment rate in natural resource-based jobs
Governance	Trust in Government	% of residents who trust local and regional government to make the
		right decisions to protect natural resources
	Democratic Engagement	% of residents who feel they have the opportunity to influence
		natural resource decisions if they wanted to
	Representativeness	Diversity of perspectives and participants in natural resource
		decision-making (advisory boards, councils, etc.)
		% of residents who feel represented by community and
		government leaders (see themselves reflected in leadership)
	Stewardship	Percent of participants engaging in a natural resource stewardship
		activity/year
		# of natural resource development projects

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### Thanks!



emily.sanford@psp.wa.gov



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friendly and preserve the Soun primary Wag, secondary Wag

### **PugetSoundPartnership**

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#### www.pugetsoundstartshere.org

#### Laura James

http://www.pugetsoundstartshere.org/videos/underwater-filmmaker/#.VEmCIMmwWbE (4.5)

#### Fresh Seafood

http://www.pugetsoundstartshere.org/videos/freshseafood/#.VEmD5MmwWbE (2.5)

#### TV Commercial:

https://www.youtube.com/watch?v=YqP9mFoqygM



