Introduction

• Attendee introductions and roles
• Purpose of quarterly update meetings
  • Provide summary of survey progress to date
  • Discuss feedback on the survey
  • Discuss any proposed changes to the survey form or guidelines

• Review of fishers study objective:
  “The objective of the fishers study is to gather information from people who either harvest or consume seafood from the LDW or who may assist in understanding aspects of the consumption of resident seafood from the LDW.”
Survey Progress and Observations
Survey Progress

• First quarter complete
  • Total of 18 survey days as planned
  • 6 days each in October, November, and December

• Total of 76 surveys administered
  • 71 verbally-administered (93%)
  • 62 conducted at Spokane St Bridge (82%)
  • 59 conducted in English (78%)
  • Other languages have included Khmer (n=6), Spanish (n=5), Miehn (n=3), and Vietnamese (n=3)
  • Short version of survey (for repeat survey takers) has been used 16 times (21%)
  • About half of survey takers were willing to answer additional questions (n=37)

• 50% success rate in fishers agreeing to take survey
  • Most declines because people don’t have time or are not interested
  • Three cases where language seemed to be the issue (two Vietnamese speakers and one Spanish speaker). Note that the Vietnamese speakers did not want to take the self-administered version (they may not have been literate).
## Summary by Month

<table>
<thead>
<tr>
<th>Statistic</th>
<th>October</th>
<th>November</th>
<th>December</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of surveys administered</td>
<td>51</td>
<td>18</td>
<td>7</td>
<td>76</td>
</tr>
<tr>
<td>Count by location where survey was administered:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spokane Street Bridge</td>
<td>43</td>
<td>14</td>
<td>5</td>
<td>62</td>
</tr>
<tr>
<td>T-105</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Tier 2 locations</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Count by method of administration:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbally-administered</td>
<td>46</td>
<td>18</td>
<td>7</td>
<td>71</td>
</tr>
<tr>
<td>Self-administered</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Count of declines</td>
<td>49</td>
<td>27</td>
<td>0</td>
<td>76</td>
</tr>
<tr>
<td>Success rate</td>
<td>51%</td>
<td>40%</td>
<td>100%</td>
<td>50%</td>
</tr>
</tbody>
</table>
## Progress towards targets

<table>
<thead>
<tr>
<th>Statistic</th>
<th>First Quarter (3 months)</th>
<th>Non-Summer Target (8 months)</th>
<th>On Target?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months completed</td>
<td>3</td>
<td>8</td>
<td>✓</td>
</tr>
<tr>
<td>Survey days</td>
<td>18</td>
<td>48</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Visits by location:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 1: Spokane St. Bridge</td>
<td>12</td>
<td>32</td>
<td>✓</td>
</tr>
<tr>
<td>Tier 1: T-105</td>
<td>6</td>
<td>16</td>
<td>✓</td>
</tr>
<tr>
<td>Tier 2: each group of locations</td>
<td>5 each</td>
<td>13 – 14 each</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Visits by days of the week:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekdays</td>
<td>6</td>
<td>16</td>
<td>✓</td>
</tr>
<tr>
<td>Fridays</td>
<td>3</td>
<td>8</td>
<td>✓</td>
</tr>
<tr>
<td>Weekends</td>
<td>9</td>
<td>24</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Tent days:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spokane St. Bridge</td>
<td>1</td>
<td>4</td>
<td>✓</td>
</tr>
<tr>
<td>T-105</td>
<td>1</td>
<td>4</td>
<td>✓</td>
</tr>
</tbody>
</table>
Survey Locations

- T-18 Public Access Park (2.1A)
- Spokane St Bridge (1.1)
- T-105 Public Fishing Pier (1.2)
- Herring House Park (2.1B)
- Diagonal Ave S street end (2.2A)
- T-107 Public Access (2.1C)
- Boat launch and public access area under 1st Ave Bridge (2.2B)
- Peninsula & SW Michigan Street end (2.1D)
- Gateway Park South (2.1E)
- Duwamish Waterway Park (2.1F)
- Boeing Public Access Area (2.2D)
- Gateway Park North (2.2C)
- South Park Marina (2.3A)
- Boeing Bridge (2.3C)
- Boeing Parking Lot Trail (2.3D)
- Seattle City Light Duwamish Substation/Hamm Creek Restoration Area (2.3B)
- The Rapids (North Winds Weir) (2.3E)
Locations where Surveys Have Been Conducted

Spokane St Bridge (1.1)
62 surveys and 67 declines
English (n=49), Khmer (n=8), Spanish (n=5), Vietnamese (n=2)

T-105 Public Fishing Pier (1.2)
3 surveys
English (n=3)

T-107 Public Access (2.1C)
3 surveys and 6 declines
English (n=1), Mienh (n=1), Vietnamese (n=1)

Boat launch and public access area under 1st Ave Bridge (2.2B)
1 survey and 1 decline
English (n=1)

Peninsula & SW Michigan Street end (2.1D)
2 surveys
English (n=2)

The Rapids (North Winds Weir) (2.3E)
5 surveys and 3 declines
English (n=3), Mienh (n=2)

Note: Surveys have only been conducted (or declined) at labeled locations. No fishers have been encountered at non-labeled locations. Languages in which the surveys were conducted are noted in the location labels.
Survey respondents have reported fishing for the following species (either on the survey day or in the past few years):

<table>
<thead>
<tr>
<th>Species</th>
<th>Percentage Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salmon</td>
<td>97% (n=74)</td>
</tr>
<tr>
<td>Resident Fish</td>
<td>22% (n=17)</td>
</tr>
<tr>
<td>Crab</td>
<td>11% (n=8)</td>
</tr>
<tr>
<td>Squid</td>
<td>5% (n=4)</td>
</tr>
<tr>
<td>Bait Fish</td>
<td>3% (n=2)</td>
</tr>
<tr>
<td>Shrimp</td>
<td>3% (n=2)</td>
</tr>
<tr>
<td>Clam</td>
<td>1% (n=1)</td>
</tr>
</tbody>
</table>

(70% only targeting salmon, n=53) (includes flounder/sole, rockfish, sculpin, and dogfish)
Game Wardens

• Some fishers have thought ECOSS surveyors were game wardens (despite the fact that surveyors tell them that they are not)

• October 22 –TV crew and game warden
  • TV crew and game warden arrived at the Spokane Street Bridge to film segment about a new animal planet reality TV show
  • Occurred right after ECOSS surveyors were talking to fishers there
  • Some concern that fishers thought ECOSS surveyors were connected to the game warden / TV crew

• December 18 survey day
  • Game warden showed up at T-105 when ECOSS was there
  • No fishers were present

• Better coordination possible?
Feedback and Input
Feedback on Survey

• Positive feedback from some fishers about this project; appreciate that this work is being done

• Some fishers not interested in taking survey, even for $10 card; only a few individuals appear to have answered just to get the $10 card

• One person mentioned that there should be more information about Duwamish River pollution in the news / on social media
Continued…

• Survey administration difficult in the rain; ECOSS has used a team approach where one surveyor holds umbrella while they other conducts the survey

• For safety, surveyors carrying only a limited number of $10 cards at any time
Additional feedback?
Opportunities for Additional Input

The following opportunities for community input are outlined in Section 8 of the Implementation Plan:

- Participate in key informant interview or survey
- Join an email list to receive notifications when documents are posted or when meetings will be held that community representatives may attend
- Review and comment on study documents (posted on the web)
- Attend a project meeting or receive a phone call from ECOSS to hear about study updates
Community Outreach and Input to Date

• Community outreach
  • Draft IP sent to several community member for review
  • Individuals who requested to join the email list have received the following notifications:
    • Announcement about the start of the year-long survey
    • Summary of first quarter progress (this presentation)
  • Individuals who expressed interest in attending meetings were invited to attend this quarterly update meeting

• Identifying key informants
  • Thus far, ECOSS has identified three contacts during the survey who would be good key informants.
  • This is in addition to already established contacts who could also be good for the key informant interviews
Changes to Survey Based on ECOSS Experience
Implemented Changes

• One change has been implemented thus far:
  • Guidelines for surveyor language capability targets changed to include languages encountered in the field.
  • New guideline text (blue text is new):
    “On any one survey day, the two surveyors will have the capability to communicate in English and at least one other language that is either included on the high priority language list (Hmong, Khmer, Lao, or Mienh) or has been encountered frequently in the field.”

• In addition, a verbal version of the survey will be translated into Khmer
Notes about Locations

• **T-105**
  - To date, very few fishers surveyed or observed at T-105
  - Total of 3 surveys conducted thus far

• **Tier 2 locations**
  - No fishers have been observed at 12 of the 16 Tier 2 locations
  - Some Tier 2 locations have more activity than T-105

• **Other locations with fishers**
  - One or two fishers have been seen at other locations:
    - Between locations 2.3D and 2.3E
    - S Myrtle Street near 7th Ave S (between locations 2.2B and 2.2C)
  - These are infrequently used locations
Notes about Tent Days

• Two tent days conducted in the 1st quarter
  • T-105: Saturday, October 11th
    • No fishers present
  • Spokane Street Bridge: Saturday, December 20th
    • One survey conducted
    • No other fishers observed
    • A few walkers passing by stopped and talked with ECOSS surveyors at the tent; they were interested and supportive of fishers study efforts

• Consider modifying two tent days in February and March to make better use of survey time?
## Survey Clarifications: Instructions for Introductory Questions

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q0</td>
<td><em>Do you have any questions about taking this survey?</em></td>
<td><strong>Issue:</strong> Feels repetitive with Q1</td>
</tr>
<tr>
<td>Q1</td>
<td><em>Have I answered all your questions about participating in the survey and may I begin asking my questions?</em></td>
<td><strong>Clarification:</strong> If the fisher does not have any questions when asked Q0, a shorter version of Q1 can be asked: “<em>May I begin asking my survey questions?</em>”</td>
</tr>
<tr>
<td>Q2</td>
<td><em>Have you participated in this survey before?</em></td>
<td><strong>Issue:</strong> Some fishers have appeared to wonder if this applies to any survey</td>
</tr>
</tbody>
</table>
# Survey Clarifications: Instructions for questions about non-salmon fishing

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Q11 | *In which seasons do you fish or collect seafood other than salmon from this river? The seasons are winter, spring, summer and fall.* | **Issue:** Need to clarify that question is about non-salmon fishing  
**Clarification:** Surveyor to emphasize the “other than salmon” portion of the question, or surveyor can re-phrase Q11 by starting with “*Excluding salmon*…” |
| Q13 | *Are there areas other than this river where you fish for species other than salmon or collect shellfish?* | **Issue:** Need to clarify that question is about non-salmon fishing  
**Clarification:** Surveyor to emphasize the “other than salmon” portion of the question, or can modify Q13 as follows: “*Excluding fishing for salmon, are there areas other than this river where you fish or collect shellfish?*” |
### Survey Clarifications: Instructions for questions about information sources

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Q17 | **What are your preferred sources of getting information?**               | **Issue:** Question feels too vague, unclear what information we are talking about  
**Clarification:** Surveyors can refer back to Q14 and use that language to clarify the type of information (Information about “how eating seafood caught from this river can affect people’s health”) |
| Q25 | **As a follow up to one of our earlier questions, how can we best get information to you about eating seafood from this river?** | **Issue:** Q25 feels repetitive with earlier questions about information sources  
**Clarification:** This is one of the additional questions - surveyors can re-phrase this question to clarify. Possible revision: “If we have any information about eating seafood from this river, how can we get that information to you?” |
Survey Clarifications: Instructions for question about safe seafood

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Q23| Are some types of seafood from this river safer to eat than others? [IF YES, ASK WHICH ONES.] | Issue: Question has been confusing to some fishers  
Clarification: This is one of the additional questions, and thus surveyors can re-phrase this question to clarify as needed |
Next Steps and Discussion
Next Steps

• Continue conducting surveys

• Next quarterly update
  • Second quarterly update scheduled for late April
  • Second quarter includes January to March

• Key informant interview process
  • Plan to start the process of designing these interviews after the second quarter concludes in March
  • Already working to identify possible interviewees
Thank you!

• Questions?
• Comments?