Restoration choice: Attitudes, perceptions, and values in the Johnson Creek watershed

Ashlie Denton¹,²
Mary Ann Rozance²,³

¹Public Affairs and Policy, ²NSF IGERT Fellow, ³Urban Studies and Planning
Stewardship and Streamside Restoration

• Previous research emphasized rural and natural resource lands (e.g. Langpap, 2004; Lynch & Brown, 2000)

• Calls for study of residential lands (Armstrong & Stedman, 2012; Booth et al., 2004; Cook, Hall, & Larson, 2012)

• Mitigate increasing pressure from urbanization (Booth et al., 2004, p. 1361; Wahl, Neils, & Hooper, 2013)

• Streamside benefits (Thompson & Parkinson, 2011)
  – In-stream benefits (Shandas & Alberti, 2009; Thompson & Parkinson, 2011)
Perceptions and Values

• Perceptions
  – Nonmonetary values—aesthetic enjoyment
    (Koontz 2001; Kenwick, Shammin, & Sullivan, 2009; Kaplowitz & Lupi, 2012)
  – Doesn’t always translate to action
    (Shandas, 2007)

• Schwartz Value Survey (Schwartz 2012)
  – Environmental Values
    (Dietz, Fitzgerald, & Shwom, 2005; Nordlund & Garvill, 2002; Schultz et al., 2005)
Johnson Creek Watershed

• 2013 increase: (American Community Survey, 2014)
  – 3,200 to Multnomah County
  – 3,600 to Clackamas County

• Urban growth boundary

• 12 salmonids were listed as endangered during the 1990s (Harris, 2011)
Research Question:

Who engages in voluntary riparian restoration in Johnson Creek watershed?
Sampling

- Aligned with priority areas for restoration (Sunshine Creek, Badger Creek, Kelly Creek, and Upper Mainstem)
- Largely rural residential, small hobby farming, near newly incorporated City of Damascus
- Survey input from JCWC, Conservation Districts, landowners
- Sampling
  - All perennial streamside landowners
  - Sample of intermittent
  - Total: 500
  - 28% Response rate
Survey Questions

- Demographics
- Perceptions of overall/property stream health
- Stream improvement activities
- Incentives and barriers for stream improvement
- Schwartz values survey
Landowner Characteristics

- Gender: 57% male, 41% female
- Age: 84% between 41-74
- Education: 60% have a degree
- Home ownership: 45% ≥20 years; 22% 10-20
- 36% worked with agency doing restoration
- Political views:
  - 32% conservative
  - 28% independent
  - 32% liberal
- Over 90% of respondents vote in all elections
- 53% donate to environmental organizations
Percentage of respondents that felt $x$ was important or very important for taking advantage of projects/opportunities for creek improvement.

- Help fish and wildlife: 87.6%
- Avoid future regulations: 72.6%
- Financial incentives (tax breaks, payments): 71.5%
- Materials and work are free: 68.4%
- More visually appealing: 66.4%
- Property value increase: 54.9%
Percentage of respondents selecting $x$ barriers to participation.

- Don't know about projects: 55.1%
- Privacy: 29.9%
- Don't need assistance: 26%
- Maintenance: 22%
- Time: 18.9%
- Unsure of permitting: 13.4%
- Visual access to stream: 9.4%
- Livestock access: 3.1%
Percentage of respondents selecting important or very important for use.

- Enjoy knowing it's there: 77.7%
- Fish and wildlife: 77.1%
- Sitting alongside it: 47.3%
- Viewing it from home/other: 45.1%
- Spiritual/inspirational value: 40.4%
- Having it for children to use: 36%
- Swimming or playing alongside it: 23.2%
- Economic value (irrigation, etc.): 19.1%
Looking at the health of Johnson Creek, how clean is it?

<table>
<thead>
<tr>
<th>Quality</th>
<th>On its own</th>
<th>Compared to other rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>1.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Good</td>
<td>22</td>
<td>9.7</td>
</tr>
<tr>
<td>Fair</td>
<td>52.8</td>
<td>48.8</td>
</tr>
<tr>
<td>Poor</td>
<td>13.4</td>
<td>16.5</td>
</tr>
<tr>
<td>Very poor</td>
<td>1.6</td>
<td>3.1</td>
</tr>
</tbody>
</table>
Which image looks closest to your property along the creek?

Which image looks healthiest for a creek?

Which image is most appealing visually?
Thank you to:

- Institute for Sustainable Solutions
- National Science Foundation
- Johnson Creek Watershed Council
- East Multnomah Soil and Water Conservation District
- Clackamas County Soil and Water Conservation District

This material is based upon work supported by National Science Foundation IGERT Grant #0966376: “Sustaining Ecosystem Services to Support Rapidly Urbanizing Areas.”
References


