Rogue River Basin: Literature Review

Samantha Hamlin
People and Ecosystems of the Rogue Basin: Assessing Risks and Sustaining Values
July 31, 2014
Why topic selected
This presentation will focus on...
Brief socioeconomic background
Describe different topics found in literature (wildfire, dam removal)
Most recurring topics
Start pulling out specifics from these recurring/important/salient topics
Pull out specific concerns that are particularly apropos
# Demographics (2010)

<table>
<thead>
<tr>
<th>County</th>
<th>Population</th>
<th>Median Income</th>
<th>Poverty Level</th>
<th>Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson</td>
<td>203,206</td>
<td>43,664</td>
<td>16.6%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Josephine</td>
<td>82,713</td>
<td>36,699</td>
<td>20.0%</td>
<td>14.2%</td>
</tr>
</tbody>
</table>
## Non-Farm Employment

<table>
<thead>
<tr>
<th>County</th>
<th>2002-2012 Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jackson</strong></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>-24</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>28</td>
</tr>
<tr>
<td><strong>Josephine</strong></td>
<td></td>
</tr>
<tr>
<td>Mining and Logging</td>
<td>-62</td>
</tr>
<tr>
<td>Wood Product Manufacturing</td>
<td>-46</td>
</tr>
<tr>
<td>Construction</td>
<td>-32</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>54</td>
</tr>
<tr>
<td>Educational and Health Services</td>
<td>24</td>
</tr>
</tbody>
</table>
Economically Distressed Counties

1. Local Support
2. Federal Timber Payment Dependence
3. Debt Burden
4. Liquidity
5. Fund Balance
6. Retirement Benefit Obligation
7. Public Safety
8. Personal Income
10. Unemployment
Topics in Literature
## Agriculture

### Real Market Value of Agricultural Products Sold ($1,000)

<table>
<thead>
<tr>
<th>County</th>
<th>2012</th>
<th>2007</th>
<th>2002</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson</td>
<td>64,127</td>
<td>79,123</td>
<td>54,192</td>
<td>50,957</td>
</tr>
<tr>
<td>Josephine</td>
<td>18,807</td>
<td>13,940</td>
<td>13,007</td>
<td>16,204</td>
</tr>
</tbody>
</table>
Climate Change

- Increased storm, fire, and drought frequency
- Water quality concerns
- Fish habitat impacts
- Decreased summer hydropower availability
- Increased water competition for agriculture and shifts in crop viability
Dams and Dam Removal

- Seven existing dams in Rogue River Basin Project
- Three dams removed with over $35 million in state and federal support
Drought

- Area predicted to have one severe extended drought event in next 35-75 years
- No personal injury or death; less than $1 million in damage

July 22, 2014 Drought Monitor

Legend:
- D0 - Abnormally Dry
- D1 - Moderate Drought
- D2 - Severe Drought
- D3 - Extreme Drought
- D4 - Exceptional Drought
Forestry and Social License

- Environmentalists question whether agencies and industry still have social license
- Industry concerned with not losing social license
- Agencies think they still have it to some degree
Recreation

- River-based recreation: ~$30 million annually and over 400 jobs
- This is only economic activity associated with visitor spending
  - Short run, market-based
  - Not total economic value of river or river recreation
Critically important to Tribes

- Takelma performed first Sacred Salmon Ceremony in more than 150 years in 1994

Rogue River salmon and steelhead estimated to be worth $1.5 billion to West Coast residents in non-use values

For Rogue River Basin, salmon worth over $17 million for sport and commercial fishing
Wildfire

- Increasing average summer temperatures strongly associated with increased wildfire
- Substantial economic impacts
  - Biscuit Fire: Over $150 million to extinguish
- In recent survey, 50% of residents consider wildfire as extremely serious or very serious issue
- Almost 60% worry about personal risk from wildfires
Wildfire

- Over $1.5 billion spent fighting Oregon wildfires since 2000
- Biscuit Fire: Over $150 million just to extinguish
Knowledge Gaps

- Socioeconomic impacts of dam removal
- Effects of drought and water scarcity in the Basin, particularly when compared to neighboring Klamath River Basin
- Social and economic impacts of climate change (e.g. on agriculture); effects on future drought events
Key Points

◊ There is a question as to whether federal agencies have maintained social license to operate regarding forest thinning and management

◊ Climate change, drought, and wildfire are critical concerns—ecologically, economically, and socially
Acknowledgements

- Sara Vickerman
- Gwyn Myer
- Nikola Smith
- Dave Ervin
- Fletcher Beaudoin
- Vicky Sturtevant
What is the single most important problem that you face?
References

- Birch, Kevin. 2004. "Use of criteria & indicators and sustainable forest management at different scales." Salem, OR. Oregon Department of Forestry.
References