ECONOMIC MONITORING OF COLLABORATIVE FOREST LANDSCAPE RESTORATION OUTCOMES

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Monitoring Accelerated Restoration

1. Forest Service Eastside Restoration
   - Blues NEPA team projects
   - Coalition of Collaboratives
   - Malheur 10-year Stewardship Contract

2. Oregon Governor’s Eastside Forestry Strategy
   - OWEB grants, ODF contracts, new business model

3. CFLR
   - Malheur, Deschutes, and Fremont-Winema

4. Dry Forest Zone

All accelerated restoration investments
Outcomes for Today

1. Annual reporting vs. multi-party monitoring
2. Applying economic impact analysis
3. TREAT (not the tasty kind)
4. Calculating restoration project economic impact
5. Example economic outcomes of two Oregon CFLR projects
6. Opportunities in future monitoring
Economic Impact Analysis for CFLR

**FS Annual Reporting**
- Included in annual report due in the fall of each year
- Metrics are local area jobs and income
- Analysis requires use of TREAT
  - Local FS provides inputs
  - FS economists run model

**Multi-party Monitoring**
- Included as a social and economic component
- Questions are defined by the monitoring committee
- Economic analysis may or may not include economic impact modeling
  - Methods are determined by the monitoring group
CFLR Annual Reports of Economic Impacts

Southern Blues Restoration

Lakeview Stewardship
Multi-party Monitoring

• Involves multiple stakeholders with varied interests and concerns

• Groups develop monitoring questions, participate in implementation, and review monitoring results

• Questions/metrics are determined by the multi-party group

• http://ewp.uoregon.edu/sites/ewp.uoregon.edu/files/BP_55.pdf
<table>
<thead>
<tr>
<th><strong>Lakeview Stewardship</strong></th>
<th><strong>Southern Blues Restoration</strong></th>
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<td>• What are the overall economic impacts of the CFLR projects?</td>
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# Lakeview Multi-party Monitoring Metrics

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<tr>
<th>Question</th>
<th>Metrics</th>
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<tr>
<td>What are the overall economic impacts of the CFLR projects?</td>
<td>1) Job and labor income creation and retention</td>
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<td>How much and what kinds of CFLR work are captured locally?</td>
<td>1) Project dollars captured by local businesses; 2) types of work captured and not captured; 3) the importance of CFLR in the work of local businesses</td>
</tr>
<tr>
<td>What are the costs, local capture, and treatment outcomes of different project implementation mechanisms?</td>
<td>1) Type of work completed through different implementation mechanisms; 2) number of acres treated; 3) amount of stewardship receipts reinvested in restoration.</td>
</tr>
<tr>
<td>What are the total and matching funds in CFLR?</td>
<td>1) Use of direct CFLR funds; 2) matching funds provided by the agency; 3) contributed funds by partner organizations; 4) leveraged funds.</td>
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## Southern Blues Multi-party Monitoring Metrics

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<tr>
<td>How much and what kinds of CFLR restoration work are captured locally?</td>
<td>1) Number of CFLR contracts awarded to local contractors; 2) types of contracts that are issued for CFLR work</td>
</tr>
<tr>
<td>How does timber harvest from forest restoration affect local industry?</td>
<td>1) Are local mills successful in purchasing timber sold as part of CFLR projects; 2) species and types of timber being sold from CFLR projects</td>
</tr>
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<td>What are the overall economic impacts in the local area from the CFLR projects?</td>
<td>1) Number of local jobs supported by CFLR restoration service contracts and timber sales; income to local worker from sales and contracts</td>
</tr>
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Economic Impact Analysis

- Economic impact analysis
- Economic contribution analysis
- Economic effects analysis
- Input/output analysis (I/O analysis)
- “running IMPLAN”
- Economic benefit
Economic Impact Analysis

• Quantifies how new demands for goods and services generate economic activity in a location

• Provides information on direct, indirect, and induced economic activity

• Measures how much economic activity “leaks out” of the local community
Things to Consider

• Results assume that economic changes are linear
  • The first $500,000 of new restoration contracts has the same effect as the second $500,000 of new restoration contracts

• Models are based on national-level patterns of how businesses spend money

• Models aggregate the economy into several hundred different types of businesses and government activities

*Despite limitation, economic impact analysis is still the industry standard best practice
Job Estimates

• Jobs reported are *not* full-time equivalents
• Jobs reported are based on a year’s worth of work
  • two 6-month jobs = one year-long job
• Jobs are full and part-time
• “created jobs” vs. “supported jobs”
## Oregon CFLR Job Estimates
(CFLR funds only, TREAT)

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<tr>
<td><strong>Type of projects</strong></td>
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<td></td>
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<tr>
<td>CFLR FUNDS:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial forest product activities</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Other project activities</td>
<td>8.3</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td><strong>Type of projects</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CFLR FUNDS:</td>
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</tr>
<tr>
<td>Commercial forest product activities</td>
<td>22.6</td>
<td>44.5</td>
<td></td>
</tr>
<tr>
<td>Other project activities</td>
<td>31.9</td>
<td>38.4</td>
<td></td>
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<td>11.6</td>
<td>14.9</td>
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Key Things to get Right

• Correctly defining the “impact area” so it corresponds to your monitoring questions
• The restoration contract value awarded to impact-area businesses (and for what types of work)
• The amount of timber harvested by businesses in the impact area
• How much timber of harvested timber is processed in the impact area (and into what products)
Defining the ‘Impact Area’

Malheur National Forest
Oregon CFLR Impact Areas

**Lakeview Stewardship**
- Lake County
- Bly, OR

**Southern Blues Restoration**
- Grant County
- Harney County
- Umatilla County*
- Union County*

**Deschutes Collab.**
- Crook County
- Deschutes County
- Klamath County
- Jefferson County
- Douglas County
New thinning project

Direct effects

- Restoration business
- Employees
- Fuel
- Retail
- Banking
- Employees
- Energy

The rest of the world

- Employees
- Tires
- GPS
- Advert.
- Paper
- Lawyers

Impact area
New thinning project

Impact area
- Restoration business
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Impact area

Restoration business

- Employees
- Fuel
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Leakage

- Tires
- GPS
- Employees
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The rest of the world
New thinning project

Impact area

- Restoration business
- Employees

Induced effects

- Banking
- Groceries
- Healthcare

Leakage

- Clothes
- Electronics

The rest of the world
Treatments for Restoration Economic Analysis Tool (TREAT)

• FS tool for calculating economic impacts from CFLR

• A streamlined version of the approach the FS uses in economic analysis for other projects

• Generally seems to create consternation at the forest level
Accounting for Project Economic Activity

Direct effects
- Restoration work
- Mill processing
- Services/supplier work

Indirect effects
- General sector jobs
- Services/supplier work

Induced effects
- General sector jobs
Malheur 10-year stewardship contract

• Year 1 of Task Order 1
• Timber harvesting, service work, and local mill processing
Defining the ‘Impact Area’
Year 1 Restoration Projects

- Service contract - $1,484,734
- Timber sale—15.5 MMBF

Direct effects

- Restoration work—14 jobs
- Timber harvesting—29 jobs

Indirect effects (Services / Supplier Work)

- Mill processing —15 jobs
  - 6 jobs
  - 7 jobs
  - 17 jobs

Induced effects (General Sector Jobs)

- 3 jobs
- 5 jobs
- 5 jobs

101 jobs total
CFLR Local Capture and Restoration Jobs

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All accelerated restoration investments
Volume Sold, Blue Mountains National Forests

- A 12.5% increase compared to pre-2012
- Increase in 2012 reflects Malheur 10-year contract
- Sawtimber sold volume has increased by 58%
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All accelerated restoration investments
Local Jobs from Restoration Contracting, Lakeview Stewardship Area

- 2007: 1.0
- 2008: 1.0
- 2009: 6.0
- 2010: 7.0
- 2011: 1.0
- 2012: 2.0
- 2013: 2.0

Fiscal year
Baseline
CFLR years
Local Jobs from Restoration Contracting, Malheur NF