Socio-Economic Measures for Watershed Restoration: The Middle Fork John Day IMW Project

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Overview

- Background of the project
- Process of developing the socio-economic measures
- The measures
- Implications – for policymakers; for communities
Background: Healthy watersheds and healthy communities
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- the Oregon policy context:
  - ORS 541.353 declares that “the long-term protection of the water resources of this state, including sustainable watershed functions, is an essential component of Oregon’s environmental and economic stability and growth”
  - OWEB’s vision statement declares the agency’s purpose is “to help create and maintain healthy watersheds and natural habitats that support thriving communities and strong economies”
Background: Healthy watersheds and healthy communities

- NOAA Fisheries, OWEB, and the IMWs
  - Bio-physical monitoring
  - Socio-economic monitoring

- My role
  - Earlier studies of socio-economic and civic engagement outcomes of WSC efforts
  - Statewide “how-to” manual
  - Upper Middle Fork John Day IMW case study
Background: Healthy watersheds and healthy communities

- The concept
  - The aims of restoring, maintaining, and conserving natural and built environments are bio-physical and cultural
  - Such actions also have socio-economic effects
  - In the interest of sustainability, we should consider the socio-economic as well as bio-physical and cultural effects
Background: Healthy watersheds and healthy communities

 “symbiotic sustainability” (Edward Weber) – the pursuit of environmental restoration and management activities in ways that produce economic benefit and respond to the needs of the local community
Background: Healthy watersheds and healthy communities

- Some Examples
  - Country Natural Beef
  - Bio-mass production
  - Watershed restoration

- Limitation: can’t entirely replace primary/commodity production, but may form a part of a new rural economic base
Socio-Economic Monitoring
Socio-Economic Monitoring of the Restoration Economy

- Our measurement project
  - Despite the acknowledged connection between healthy ecosystems and thriving communities and economies, little has been done to monitor the results
  - We are conducting a five year pilot project with Oregon watershed councils to identify and test socio-economic measures
Socio-Economic Measures: Issues from the Literature and Expert Informant Interviews

- Multiple agents: the idea of the local “watershed restoration machine”
- The problem of determining causality
- What to measure?
  - What are the community’s goals? What is it trying to sustain?
  - The measures should be useful for citizen action, management of the watershed stewardship organization, and policymaking
  - Goal development is a participatory as well as a technical process
Socio-Economic Measures: General Community Goals for the Restoration Economy in Oregon

- Support for local jobs and businesses – directing restoration and maintenance work to local contractors
- Diversification of the local economy while strengthening the traditional agriculture and natural resource sectors
- Promoting outdoor recreation activity while also encouraging the transition to more sustainable agriculture and logging practices
- Finding market-based ways to finance environmental restoration and maintenance
Types of Socio-Economic Measures

- Direct effects - measures of the socio-economic output from doing restoration projects
- Outcome measures: measures of specific changes that have occurred, that can reasonably be tied to restoration projects and related activities
- Socio-economic Indicators: measures of the overall socio-economic health of the community
Developing Socio-Economic Measures

- Organize a small “expert panel” of locally involved people from diverse backgrounds, known to have a good understanding of how restoration activities connect to the socio-economic health of the community.

- Engage them in a workshop process to identify a draft set of measures.

- Confirm the technical feasibility of the measures (are the data available and accessible at a reasonable cost in time and money?), develop data collection protocols, and conduct an initial round of data collection.

- Ground-truth the measures through a community education/public involvement process.

- Create a system to collect, assess, and report the measures.
Upper MFJD Socio-Economic Measures

- Direct Effects
  - Number and size (in dollars) of restoration contracts
  - Local/non-local firm?
  - % of contract dollars spent locally
  - % of contractor employees who are local residents
  - Number of new “restoration-related” jobs
Upper MFJD Socio-Economic Measures

- **Outcome measures**
  - Changes in land use/land management practices – on public, tribal and private lands throughout the county
  - Annual travel spending in the county
  - Estimated number of jobs generated by travel spending in the county
  - Total local lodging tax receipts for the county
  - Camping activity in the county
Upper MFJD Socio-Economic Measures

- Socio-economic Indicators
  - Total Population
  - Population by Age
  - Per capita personal income
  - Median household income
  - Non-Farm Employment
  - Total Payroll
  - Economic Diversification Index
Conclusions
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- Socio-economic measures have no intrinsic meaning
  - They only take on meaning in use
    - to inform public discussions and decisions – for policymaking, for management, and for public education/citizen action
    - to interpret community values, culture, ideology
  - Tangible measures can help the community think about the potential and limitations of the restoration economy
  - May contribute to cultural and political re-linking of urban and rural places
Comments? Questions?