**2011 EEN Forum Notes**

**Session Name**: Conservation Investments: Analyses of Returns, Adaptation, and Effectiveness

**Speakers**: Adena Rissman, University of Wisconsin-Madison

 James Boyd, Resources for the Future

**Session Date/Time**: 6/24/2011, 11:00 AM

**Note Taker**: Jake Lyonfields

**Main Themes**:

* Case Studies to Highlight the benefits of mores specifically analyzing returns and adapting to changing situations in Conservation Investment
* Case Studies to Highlight the benefits of ROI in Conservation investment

**Detailed Notes**:

* Adnea Rissman Presentation – Evaluating the Effectiveness and Adaptability of Conservation Easements in Dynamic Landscapes
* Are conservation easements effective? We can think of that in a variety of ways, but basically, we consider whether they meet their intended goals. Parts of presentation: (1) Case study of conservation easements, (2) Modeled future scenarios, (3) Quantitative Survey (adaptability criteria)
* What is successful environmental policy? We will be focusing on whether it achieves some measure of laid out environmental goals (effectiveness), however, we can evaluate it in terms of efficiency, equity, legitimacy, and feasibility.
* Framework for Environmental Policy Analysis: Outputs, Outcomes, and Impacts.
	+ Variety of frameworks for defining impacts and outcomes: Outcomes are they ways in which policies and laws change human behavior, and the way impacts are changing environmental conditions
	+ Human behavior is an interim outcome for the actual eventual goal, which is a change in environmental conditions
* We should also recognize that there is dynamic change in plans, and some of the complexity comes from this dynamic behavior
* There is a greater emphasis in today’s environment on the effect of globalization and devolution in governance, and many are purporting market-based solutions as a solution to environmental problems
* Conservation easements – agreements between private entity and NGO/government bodies. There is an investment, and then the NGO/government body is granted certain rights for action on that land
* Conservation easements are increasingly used because of the promise of perpetuity
* Case: Lassen Foothills, CA, Grasslands and Oak Woodlands: “The Conservancy’s goal in the Lassen Foothills is…to ensure the sustainability and viability of private land uses and the ongoing health of the area’s plans and animals” (The Nature Conservancy is an actor here)
* Output here is the conservation easement document itself, the outcome is changing land use and Management, and the impact is changing environmental conditions
* Direct Effects: Easement Monitoring, Enforcement, and the Indirect Effects: Information, etc
* LF Easements outputs: Rock harvesting, riparian management, and Grazing: RDM, season, type
* LF Easements outcomes: Direct: No change for grazing; change in riparian management, rock harvesting, indirect: fire, invasives, restoration, monitoring
* LF Easements Impacts: Vegetation plots, etc
* Malpai Borderlands (comparative case study): Landowner-controlled, Fewer direct outcomes on changed behavior, important indirect outcomes in changed social networks, restoration
* To allow for adaptive management, we would expect: (1) Clear statement of goals, (2) CE goals linked to compliance terms, (3) Monitoring of compliance and broader indicators of goals, (4) mechanisms for altering management based on monitoring (administrative discretion, management plans, amendment, termination)
* Adaptive Land Management: (1) Newer agreements have increasingly complex specific terms, (2) Terms attempt to allow for adaptive land management, (3) Challenges remain: (a) multiple potentially conflicting goals, (b) goals linked with compliance terms, (c) monitoring, (d) altering management based on monitoring
* Enforcement is sometimes necessary for permanence: ie options for adaptation may lead to requests from landowners to modify uses to detriment of conservation purposes
* Development-Related Impacts for Vegetation and Fire Regimes: Limited effects on development in low-threat landscape, little change in habitat conservation, effect on fire suppression and prescribed burning options
* Mechanisms for Adaptation: federal agencies have lots of mechanisms for adaptation
* Conclusions: Conservation effectiveness is not a fixed target, but is influenced over time by social and ecological landscape change, Improve outputs: draft conservation easements with clear purposes, rights, restrictions, and a process for adaptive decision-making, improve outcomes: invest in social relations and capacity for monitoring and dispute resolution…
* James Boyd Presentation – Can We Evaluate Conservation Projects’ “Return on Investment”?
* Desire to Mainstream Conservation Return on Investment (ROI)
* What is ROI Analysis: (1) Quantitative outcome measures, (2) costs, budget constraints taken into account
* Motivation: Numerous studies have shown that ROI-based planning (1) alters the location and targets of “optimal” conservation, (2) achieves more protection and higher-quality conservation outcomes, and (3) saves money
* Despite these benefits, ROI is rarely used. Another motivation for this work is to help TNC think through changing conservancy missions because of the benefit of ROI
* The TNC-RFF ROI project – key questions: (1) How do we define the “R” in ROI?...
* The Project Plan – Phase 1: Evaluate current ROI analysis capabilities, what ROI products would actually be used by managers and to what end?, Phase 2: Depending on phase 1…
* Phase 1 Activities: TNC identified six project level case studies. Asking things like “What is the project’s ROI story?”, “What are the outcomes associated with this story?”, etc
* Internal Demand – A portfolio strategy (use ROI to tell us where to invest over broad areas), a project-level evaluation (use ROI to measure project effectiveness, manage adaptively (like RBM)), and communications
* The Pilot TNC cases were listed.
* What we’re looking for: (1) What is the conservation objective? Is it clearly defined, and can it be measured? One objective or multiple, and biophysical or social outcomes, (2) measured baselines? Analysis of threats to conservation objectives…
* Biophysical Impact: What is the biophysical “lift”? Measurable improvements over baseline
* Results (Broadly Painted): Projects chosen (biodiversity planning and opportunism, some analysis of threats, but not systematic), evaluation of biophysical outcomes (sporadic, with some innovative examples, very limited support for monitoring), evaluation of social outcomes (almost non-existent), and costs (usually, but not in consistent formats)
* Implications for Phase 2: Social data, measures of ecosystem service benefits, project-level models, data on production functions (eg InVEST), Demonstration of portfolio-level social objectives planning, the ROI of ROI

**Points for Discussion**:

1. ROI is beneficial because different sets of ecological values always want more of what they see as important. ROI provides a mechanism to achieve that
2. Costs of adding social data to project? Will become increasingly necessary to evaluate these aspects of projects
3. Would there possibly be a drawback to retaining these ecosystems?
4. It might be bad to use these evaluation tools to prioritize the things we value. Walking away from biodiversity in the interest in the overall amount of conservation might not be good.