

Town Hall Meeting Summary

Town Hall Title

Eco Investment Game

Town Hall Description

The use of quantitative ecosystem services in environmental policy and investment decision making is a new concept. In this Town Hall Session, Environmental Incentives will facilitate the playing of an environmental investment simulation game – **the Eco Investment Game** - that we have created to 1) illustrate the use of performance-based accounting to increase the effectiveness of environmental policy and investment, and 2) expand understanding of high impact investment approaches for public and private initiatives with environmental and community improvement objectives.

The Eco Investment Game engages and challenges participants in a live simulation role play where they are placed into an active decision making role – either as a landowner or funder.

- **Landowners** determine the financial and environmental benefits of implementing conservation practices while considering the competitive landscape for accessing conservation payments.
- **Funders** use innovative investment mechanisms that are possible given quantified benefits to maximize the environmental return on investment within the parameters of their individual funding objectives.

Just like in the real world, participants are asked to make decisions under uncertainty. In the Eco Investment game, rolling dice determines both the quality and overall performance of different projects. This creates varying utility functions for projects based on 1) inherent conditions such as habitat quality and watershed connectivity, and 2) performance of as-built projects. Dice also represent quantification tools and the ability to screen for high performing projects when using a quantified approach.

Funders will have the opportunity to explore a variety of different investment approaches and cross-compare cost effectiveness of benefit per dollar spent. Potential investment approaches include:

- **Opportunistic Investing:** Providing funds for conservation and restoration project implementation as projects are brought forward by land managers or private landowners that align with funder's goals.
- **Project Selection Criteria:** Allocating funds based on selection criteria that incorporate the expected value of projects using a standard, quantified metric of performance.
- **Payments for Quantified Outcomes:** Purchasing existing verified credits at a set price per credit within a certain price cap to reduce risk and uncertainty for funder.
- **Reverse Auctions:** Setting up a market where landowners compete to obtain limited conservation funding, causing prices to decrease over time.
- **Joint Funding Ventures:** Bringing multiple funders together to pool resources and fund projects that meet their mutual funding goals.

All participants will leave the Eco Investment Game with a better understanding of how quantified information helps to inform project prioritization and increase the overall amount of environmental benefit for the system.

The Eco Investment Game illustrates the steps outlined in the general Operational Protocol for Regional Environmental Accounting programs developed by Environmental Incentives and the Willamette Partnership. This framework can guide multiple streams of investment using different funding

approaches within a single accounting system to generate and track benefits, all working towards broader environmental goals.

Goal

Provide a fun, interactive way for conference participants to 1) evaluate the tradeoffs involved with different investment strategies and 2) understand how performance accounting can accelerate progress towards environmental and community goals.

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The Eco Investment Game demonstrates that performance-based programs can result in the following:

- **Innovative Investment Approaches that Multiply Effectiveness** – the benefits from investments in the environment can be multiplied by clearly signaling the desired benefit, setting an expectation and checking to see if expectations are achieved/exceeded.
- **Ability to Use One System for Different Policy Approaches** – public and private investment can be prioritized using the same accounting system as regulatory offsets, and benefits can be cumulatively tracked for public reporting of accomplishments.
- **Ability to Use Outcomes to Prioritize Investments** – quantification tools enable funders to screen for and prioritize the highest performing projects.

Issue Statement

Many mitigation offsets are occurring around the country without a clear understanding of the direct impacts of restoration actions. Similarly, funders are investing billions of dollars in public and private funds on natural resource restoration without having a real understanding of the outcomes of these investments. Many high quality quantification tools are available that could provide information to inform project selection and reporting. Why aren't they being used?

Often, there are institutional barriers that prevent innovation in environmental policy and investment. The complication of learning to use new tools and approaches can be enough to stagnate the progress of new approaches, like performance-based restoration programs. The Eco Investment Game enables participants to grapple with the complexities and benefits of new investment approaches and work to overcome institutional barriers in a fun, low risk setting. Participants will gain a tangible understanding of how quantification and scientific understanding can inform decision making and practical applications.

Background

The Eco Investment Game began as a World Café Session at the 2011 Making Markets Work Conference in Madison, WI as an interactive way to explore the potential uses of a performance-based program in both a regulatory and non-regulatory context for multiple users. This was a highly facilitated, 12 minute version of the game that walked participants through scripted roles. It did not ask participants to make independent decisions but provided tangible examples of how performance accounting works on-the-ground. Environmental Incentives is now performing this version of the Eco Investment Game at conferences and special events around the country, including the 66th annual California Association of Resource Conservation Districts (CARCD) Conference and working sessions for stakeholders involved in the Mokelumne Environmental Benefits Program.

Since its debut at the Madison conference, we have invested significant resources to transform the Eco Investment Game into a high-engagement, interactive learning experience that places participants into active decision-making roles. This exercise generally lasts an hour or more. We have successfully executed this more interactive version of the Eco Investment Game for a broad array of audiences – from environmental economics graduate students at the University of Maryland to a consortium of agency executives in the Lake Tahoe Basin.

Target Audience

The Eco Investment Game is mainly targeted to individuals making policy and investment decisions. However, it is also a valuable learning tool for a broad array of participants who do not necessarily need much experience with performance-based programs.

- Investors
- Policymakers
- Practitioners
- Academics
- NGOs
- Public Agencies

Organizers

Jeremy Sokulsky, PE, MBA

Environmental Incentives, LLC - *President*
South Lake Tahoe, CA

Jeremy Sokulsky is the founder and president of Environmental Incentives. Mr. Sokulsky designs and implements multi-agency collaborative management systems and establishes performance measures related to environmental restoration and community enhancement. He is developing programs to leverage public and private investment to improve ecosystem services in the Lake Tahoe, Klamath River and Mokelumne River Basins. He regularly speaks at conferences focused on environmental markets where he leads policymakers to take a strategic and pragmatic approach to using ecosystem services to drive environmental and economic performance. He is leading the effort to link payments for ecosystem services to defined management systems to ensure they can incorporate new scientific information and political circumstances over time. He has performed comprehensive reviews of ecosystem service markets and analyzed financial opportunities for private equity funds investing in conservation real estate opportunities. Mr. Sokulsky holds an MBA from the Stanford Graduate School of Business and a B.S. in Chemical Engineering from the University of California, Berkeley, and is a certified Professional Civil Engineer in the state of California.

Katie Riley

Environmental Incentives, LLC - *Associate*
South Lake Tahoe, CA

Katie Riley initially developed the EcoInvestment Game as a World Café presenter at the 2011 Making Markets Work Conference and has since presented the expanded EcoInvestment Game for a number of different audiences, including as a guest lecturer at the University of Maryland. She is the EI project manager for the Mokelumne Environmental Benefits Program, which will support market-based investments in conservation practices that improve water availability, water quality and habitat viability in the Mokelumne River watershed. She is also the lead producer of the Tahoe Basin Annual Report, an

integrated approach to demonstrate the effectiveness of restoration actions in the Lake Tahoe Basin. Katie holds a M.S. in Environmental Science and Management from the Bren School at UC - Santa Barbara, where she specialized in environmental economics and policy. Katie completed her master's thesis quantifying the social and biophysical impacts of ecosystem services in urban environments.