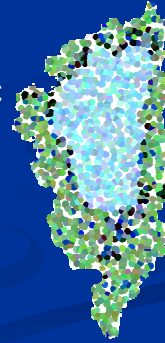


Water Quality Credits Engaging Adaptive Management in Support of the Lake Tahoe TMDL

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Environmental Incentives, LLC

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Overview

- Water quality credits
- Continuous Improvement & Adaptive Management
- Making effectiveness monitoring & experimentation relevant to policy

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What is a Water Quality Credit?

- An estimate of a mass of one pollutant, multiple pollutants or a surrogate
- A tool to quantify and track estimated water quality improvement and compliance with load-based limits
- A testable, verifiable and adaptable unit to support adaptive management

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Credit Characteristics

- Correlated to the highest current level of science
- Simple to use by many
- Practical for significant sources and controls
- Adjustable over time
- Supports adaptive management

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Credit Uses

- Estimating project benefits
- Project prioritization
- Program tracking & reporting
- Compliance tracking
- Project funding
- Trading

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Lake Tahoe Credit Options Considered

- Focus on TMDL Parameters of Concern
 1. Fine sediment only
 2. Combined Fine Sediment & Phosphorus
 3. Individual Fine Sediment, Phosphorus & Nitrogen Parameter Credits
- Focus on Surrogate Measures
 - Urban Flow Credits

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Credit Verification & Project Performance

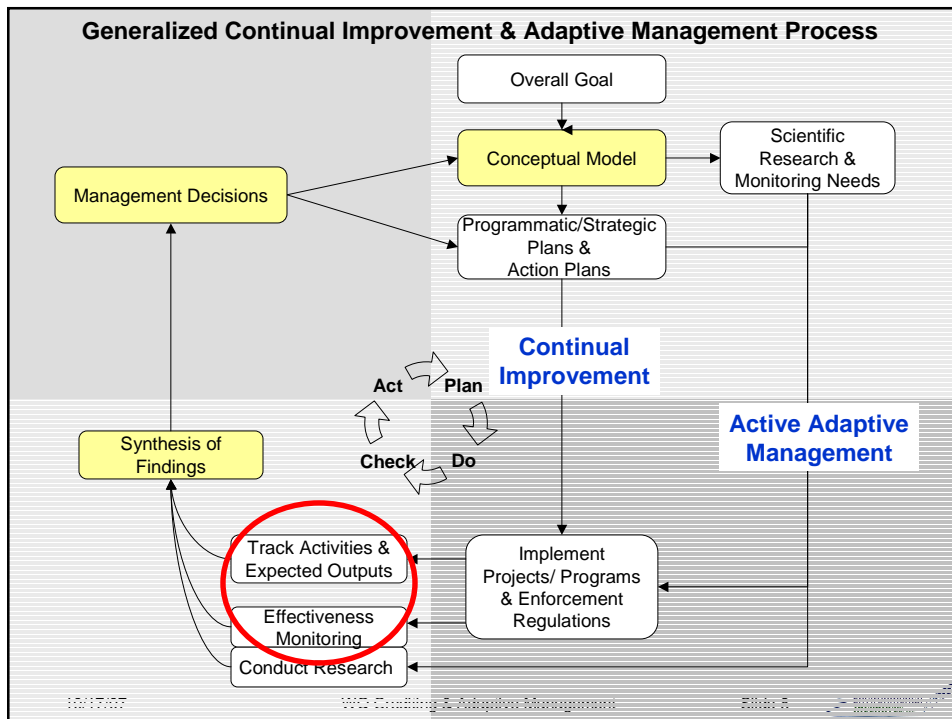
- Credit based on as-built
 - Performance based incentive
- Standard protocols to verify performance for compliance quickly
 - Design
 - Maintenance
- Opportunity for performance incentives

Estimated Credit * Verification Score = Assigned Credit

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Continual Improvement Working Definition

- Continual improvement is the formal process of enhancing performance over time.
- It is the systematic practice of developing plans with performance standards, tracking and reviewing actual performance, and using information to improve actions over time.

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Adaptive Management Working Definition

- Adaptive management incorporates research into actions.
- It is the integration of design, management and monitoring to systematically test assumptions in order to adapt and learn.

Adapted from Adaptive Management: A Tool for Conservation Practitioners, Foundations of Success

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Credits & Adaptive Management

Bringing It Together

- Credits provide a common & desirable unit
- Standard estimation tools & field verification protocols are required
- Effectiveness monitoring validates estimation tools and verification protocols
- Adaptive management project experimentation supports innovation