

Measuring Mitigation Success: *Improving Mitigation Site Performance Standards*

Mitigation Stakeholder Forum

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Portland, Oregon





Improving Performance Standards

- What are performance standards?
 - Definitions, examples
- How they fit into the mitigation process
- Documented concerns
- Actions to address concerns





Performance Standards Defined:

- Observable or measurable attributes used to determine whether a compensatory mitigation project meets its objectives (Streever 1999)
- “Measurable outcome...of a mitigation project (e.g., measure of wetland structure or type or a functional assessment score)” (NAS, 2001)



Suggested Performance Standards

- Herb/woody plant cover and density
- planted species survival
- cover by invasives
- plant species diversity
- Slope
- aquatic invertebrate diversity
- Specific aquatic invertebrate taxa
- Specific hydrological conditions
- Specific soil conditions
- Site use by specific wildlife taxa





Performance Standards and the Mitigation Process

1. Develop concept and general watershed location
2. Translate concept into design plans expected to secure target functions over time
3. Acquire project site and construct/modify according to design
4. Inspect site to determine compliance with **design standards**
5. Monitor site over time to determine whether **performance standards** are being met (trending toward target?)
6. Certify that site has achieved **performance criteria** and site preserved in perpetuity. (NRC, 2001)



Documented Concerns

- Performance standards are often:
 - Not included in permit/banking instrument
 - Inconsistent with definition
 - Vaguely worded, not enforceable
 - Narrowly focused on vegetation





Recommendations:

- NRC, 2001 Mitigation Report
 - Mitigation goals must be clear and those goals specified as measurable performance standards
- GOA, 2001 ILF Study
 - Agencies should establish criteria to determine ecological success



Mitigation Action Plan: Clarifying Performance Standards

- Analysis of existing research to determine the effectiveness of using biological indicators and functional assessments for evaluating mitigation performance - 2003
 - Bio-assessments: community of plants and animals living in a wetland will reflect wetland health
 - Functional assessments: designed to inform decisions regarding impacts to wetlands and restoration to offset these losses





Analysis of Existing Research

- Compiling peer-reviewed scientific literature
 - Draft bibliography
- Provide basis for better performance standards
- Indicate areas where research is necessary
- Inform the development of 2005 performance standards and monitoring Guidance



QUESTIONS?





Workshop Approach to Improving Performance Standards

1. Identify region and wetland type
2. Identify workshop participants and Coordinator
3. Review existing information
4. Discuss among participants
5. Draft guidelines or templates
6. Review draft guidelines or templates
7. Final drafting/distribution of guidelines or templates



GAO Report to Congress Effectiveness of ILF Mitigation

“We continue to believe that establishment of ecological success criteria is not only possible, but essential to determine if the objectives of compensatory mitigation are being fulfilled and to measure whether progress is being made toward achieving the national goal of not net loss of wetlands.”

