



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
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WASHINGTON, D.C. 20314-1000

CECW-PB

31 AUG 2009

MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMANDS

SUBJECT: Implementation Guidance for Section 2039 of the Water Resources Development Act of 2007 (WRDA 2007) – Monitoring Ecosystem Restoration

1. Section 2039 of WRDA 2007 directs the Secretary to ensure that when conducting a feasibility study for a project (or component of a project) for ecosystem restoration that the recommended project includes a plan for monitoring the success of the ecosystem restoration. The monitoring plan shall include a description of the monitoring activities, the criteria for success, and the estimated cost and duration of the monitoring as well as specify that monitoring will continue until such time as the Secretary determines that the success criteria have been met. Within a period of ten years from completion of construction of an ecosystem restoration project, monitoring shall be a cost-shared project cost. Any additional monitoring required beyond ten years will be a non-Federal responsibility. A copy of Section 2039 is enclosed.
2. Applicability. This guidance applies to specifically authorized projects or components of projects as well as to those ecosystem restoration projects initiated under the Continuing Authority Program (CAP) or other programmatic authorities.
3. Guidance.
  - a. Monitoring includes the systematic collection and analysis of data that provides information useful for assessing project performance, determining whether ecological success has been achieved, or whether adaptive management may be needed to attain project benefits. Development of a monitoring plan will be initiated during the plan formulation process for ecosystem restoration projects or component of a project and should focus on key indicators of project performance.
  - b. The monitoring plan must be described in the decision document and must include the rationale for monitoring, including key project specific parameters to be measured and how the parameters relate to achieving the desired outcomes or making a decision about the next phase of the project, the intended use(s) of the information obtained and the nature of the monitoring including duration and/or periodicity, and the disposition of the information and analysis as well as the cost of the monitoring plan, the party responsible for carrying out the monitoring plan and a project closeout plan. Monitoring plans need not be complex but the scope and duration should include the minimum monitoring actions necessary to evaluate success. The appropriateness of a monitoring plan will be reviewed as part of the decision document review including agency technical review (ATR) and independent external peer review (IEPR), as necessary. The estimated cost of the proposed monitoring program will be included in the project cost estimate and cost-shared accordingly.

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c. Upon completion of the construction of the ecosystem restoration project (or component of a project), monitoring for ecological success will be initiated. Monitoring will be continued until ecological success is determined. Once ecological success has been documented by the District Engineer in consultation with the Federal and State resources agencies, and a determination has been made by the Division Commander that ecological success has been achieved (may be less than ten years), no further monitoring will be required. Ecological success will be documented through an evaluation of the predicted outcomes as measured against the actual results. The law allows for but does not require a 10 year cost shared monitoring plan. Necessary monitoring for a period not to exceed 10 years will be considered a project cost and will be cost shared as a project construction cost and funded under Construction. Costs for monitoring beyond a 10 year period will be a non-Federal responsibility. Financial and implementation responsibilities for the monitoring plan will be identified in the Project Partnership Agreement. For CAP projects, or for those projects that may be authorized with an explicit dollar cap, any cost shared monitoring costs cannot increase the Federal cost beyond the authorized project limit of the CAP or other authority under which the project is being considered.

d. Contingency Plan (Adaptive Management). An adaptive management plan (i.e., a contingency plan) will be developed for all ecosystem restoration projects. The adaptive management plan must be appropriately scoped to the scale of the project. If the need for a specified adjustment is anticipated due to high uncertainty in achieving the desired outputs/results, the nature and cost of such actions should be explicitly described in the decision document for the project. The reasonableness and the cost of the adaptive management plan will be reviewed as part of the decision document. Costly adaptive management plans may indicate the need to reevaluate the formulation of the ecosystem restoration project. The information generated by the monitoring plan will be used by the District in consultation with the Federal and State resources agencies and the MSC to guide decisions on operational or structural changes (adaptive management) that may be needed to ensure that the ecosystem restoration project meets the success criteria. The adaptive management plan cost should be shown in the 06 feature code of the cost estimate.

If the results of the monitoring program support the need for physical modifications to the project, the cost of the changes will be cost shared with the non-Federal sponsor and must be concurred in by the non-Federal sponsor. The appropriate HQUSACE RIT should be advised at such time that it is determined a modification to a project is required. Any changes to the adaptive management plan approved in the decision document must be coordinated with HQUSACE at the earliest possible opportunity. If a needed change is not part of the approved adaptive management plan and is determined by HQUSACE to be a deficiency correction the annual budget guidance to initiate a study for such corrections should be followed. Significant changes to the project required to achieve ecological success and which cannot be appropriately

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addressed through operational changes or through the approved adaptive management plan may need to be examined under other authorities, such as Section 216, River and Harbor and Flood Control Act of 1970.

4. This guidance is effective immediately and will be incorporated into ER 1105-2-100 upon the next revision.

FOR THE COMMANDER:



THEODORE BROWN, P.E.  
Chief, Planning and Policy Division  
Directorate of Civil Works

Encl

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## **SEC. 2039. MONITORING ECOSYSTEM RESTORATION.**

*(a) In General- In conducting a feasibility study for a project (or a component of a project) for ecosystem restoration, the Secretary shall ensure that the recommended project includes, as an integral part of the project, a plan for monitoring the success of the ecosystem restoration.*

*(b) Monitoring Plan- The monitoring plan shall--*

- (1) include a description of the monitoring activities to be carried out, the criteria for ecosystem restoration success, and the estimated cost and duration of the monitoring; and*
- (2) specify that the monitoring shall continue until such time as the Secretary determines that the criteria for ecosystem restoration success will be met.*

*(c) Cost Share- For a period of 10 years from completion of construction of a project (or a component of a project) for ecosystem restoration, the Secretary shall consider the cost of carrying out the monitoring as a project cost. If the monitoring plan under subsection (b) requires monitoring beyond the 10-year period, the cost of monitoring shall be a non-Federal responsibility.*