WSDOT Adaptive Management for Wetland Mitigation Sites

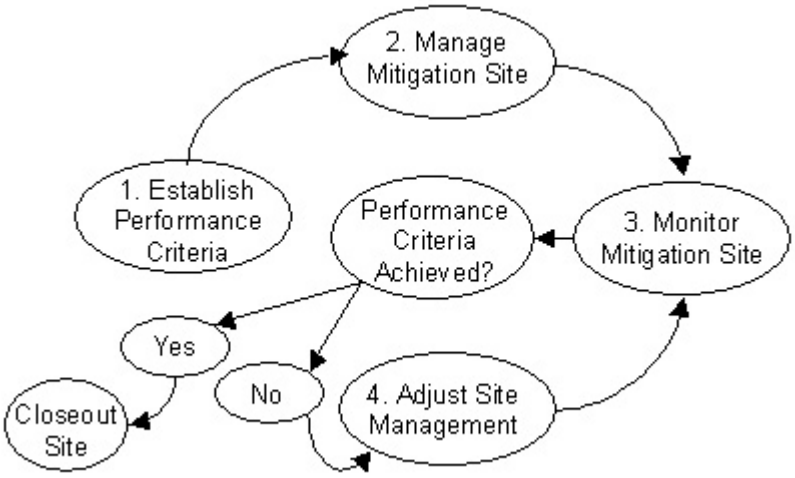
WSDOT Updated 2/16/09

WSDOT follows the following steps to manage wetland mitigation sites: adaptive site management, site closeout, and long-term site maintenance.

Adaptive Management Process

A critical component of WSDOT's monitoring and management of wetland mitigation sites is the process of adaptive management, which includes four steps illustrated below:

- Performance criteria are developed to describe the desired condition.
- Management action is carried out to meet the performance criteria.
- Response of the resource is monitored to determine if the performance criteria have been met.
- Management is adjusted if the performance criteria are not achieved.



The Adaptive Site Management Process (Redrawn from Elzinga et al. 1998)

Wetland mitigation site monitoring and responsive management are both integral to the success of an effective adaptive management strategy. Site managers rely on monitoring results to inform them of site performance.

If the monitoring results show that a site is not on a trajectory to meet performance criteria or permit requirements, the site manager will decide whether new management activities should be employed. Implementing management actions involves: type of action, timing of action, documentation, and evaluating effectiveness (follow-up site visits). WSDOT mitigation site managers submit a

Replanting efforts at an active site

work plan for each biennium, showing the planned management activities for mitigation sites. When preparing a Work Plan, please see the 2009-11 Biennium Programming Instructions for Management of Environmental Mitigation Sites (pdf 42 kb) for guidance and examples. WSDOT mitigation site managers may have management activities performed by contract or state force work. Sometimes the performance criteria for a mitigation site must be re-evaluated by the site manager, environmental coordinator, and regulatory agencies.

Site Closeout

When a site has reached the end of its specified monitoring period and achieved reasonable ecological success, the site manager can request that it be "closed out." The WSDOT Regional Environmental Manager sends a closeout report, prepared by WSDOT Monitoring Team, and a cover letter to the regulatory agencies to inform them that this milestone has been reached. The cover letter explains the rationale for closing out the site, and extends an invitation to regulatory agency staff to visit the site for their concurrence. After closeout, formal monitoring and reporting cease to occur.

Long-Term Site Maintenance

After a mitigation site has been closed out, stewardship responsibility of the site is transferred from environmental staff to maintenance staff. WSDOT is still responsible for protecting the site in perpetuity, unless other arrangements have been made, such as turning the site over to a local or federal agency, or conservation organization. Most sites are designed to be self-maintaining. However, some long-term measures may require periodic site management (e.g., fence repairs, noxious weed management). These long-term maintenance activities are considered on a site-by-site basis.