FACT SHEET

Hydrogeomorphic Wetland Profiling:
An Approach to Landscape and Cumulative Impact Analysis

EPA has issued a report entitled Hydrogeomorphic Wetland Profiling: An Approach to Landscape and Cumulative Impact Analysis. The HGM-WP approach is used to summarize the abundance and diversity of wetland types within a given ecoregion or other landscape unit. Since wetland profiling utilizes a functionally-based wetland classification system, the evaluation of change in wetland landscape profile provides an index of the change of the specific wetland functions and condition within a broad geographical area.

Study results from research conducted in the southern Rocky Mountains of central Colorado show that HGM-WPs are consistent within ecoregions and differ between ecoregions. Within ecoregions, HGM-WPs differ between impacted and reference standard landscapes.

Project findings suggest that HGM-WP is a promising method to track, at multiple spatial scales, the cumulative gains and losses of wetlands and the environmental services that they provide.

In particular, the method can be used to help plan and implement compensatory wetland mitigation in a watershed context. Compensatory mitigation is often required under federal wetland protection regulations to offset wetland impacts caused by the discharge of dredged and fill material into waters of the U.S. In the 2001 report Compensating for Wetland Losses Under the Clean Water Act, the National Research Council (NRC) called for regulatory agencies to modify the boundaries of permit decision-making in time and space so that site selection for wetland conservation and mitigation can be conducted on a watershed scale. The HGM-WP approach offers regulators a new management tool that responds to NRC recommendations.

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Document Availability: The full report is posted on the EPA web site: http://www.epa.gov/owow/wetlands/monitor/#meth

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