

A preliminary approach to adding indicators of ecosystem service benefits to a wetlands functional assessment tool

Marisa J. Mazzotta¹ and **Walter Berry²**

¹Consulting Environmental Economist, Charlestown, Rhode Island, USA

²U.S. Environmental Protection Agency, Office of Research and Development, Atlantic Ecology Division, Narragansett, Rhode Island, USA

State-level managers and restoration advocates have expressed a desire for approaches that address wetlands services and benefits for two purposes: to demonstrate the benefits of money budgeted for restoration, and to compare proposals when awarding restoration funds for specific projects. Many wetlands functional assessment tools have been developed (e.g, WET, HEP, HGM, and others). While a number of these implicitly address ecosystem services and associated benefits, few address ecosystem services and benefits explicitly. Many of the existing tools are not routinely used, or are used only in very specific situations requiring in-depth analysis, because of the complexity of data collection required. In some cases, a comprehensive tool that addresses the inherent complexity of wetlands is needed, but there are many situations where a simplified approach can facilitate communication and decision making.

We will be presenting a simplified approach to evaluating ecosystem services provided by freshwater wetlands restoration. Our approach is based on an existing functional assessment approach developed by Golet and Miller for the State of Rhode Island, and modified by Miller for application by The Nature Conservancy in Wisconsin. The approach is based on extensive research on existing functional assessment tools, and can be applied relatively easily using GIS measures and minimal field work.

In addition to being used in demonstrating the benefits of money budgeted for restoration, and in comparing restoration proposals, our approach may also be used for preliminary screening of projects that require further evaluation, as a template for discussion when making mitigation decisions, and to develop watershed "report cards" used to educate the public about the benefits from wetlands in a watershed, and about where these benefits may be at risk.

Contact Information: Marisa J. Mazzotta, EcoBenefits Research, 10 Kickapoo Run, Charlestown, RI 02813 USA, Phone: 401-552-7927; Fax: 401-213-6567, Email: marisa@mjmazzotta.com

Keywords: Wetlands; Ecosystem Services; Restoration; Decision Support