Title
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**Temporal Loss of Wetlands as Justification for Higher Mitigation Ratios**

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**Abstract**

“Temporal loss,” or the time between initiation of mitigation and maturation of anticipated ecological functions on a compensatory mitigation site, is a concept which has long been used by regulatory and commenting resource agencies as justification for higher mitigation ratios in compensatory mitigation. Also, preservation is typically given as the last alternative in a sequence of mitigation options in regulatory guidance, which runs restoration, enhancement, establishment, then preservation. This is in spite of the fact that preservation of exceptional resources at risk can provide full ecological functions over the period of time which would be required for establishment of a full suite of ecological functions on a restoration, enhancement, or establishment site. This time can be significant on sites such as bottomland hardwoods, scrub-shrub, or salt marshes, if indeed a full suite of functions is ever established.

If “temporal loss” is recognized, then it is logical that “temporal gain” of functions attendant to a preservation site in high functional condition should be similarly recognized. A more complete rationale for recognizing “temporal gain” is given, and alternative methods for measuring this gain are given. The concept of temporal gain provides a rational approach for accepting more reasonable mitigation ratios on preservation sites at risk. Absent the recognition of temporal gain by regulatory and resource management agencies, the concept of temporal loss should be abandoned in regulatory determination of mitigation needs.