

Screening-Level Ecological Risk Assessment and Baseline Ecological Evaluation

One component of contaminated site management is to address the likelihood that a chemical release has or will degrade sensitive ecological receptors, especially surface waters and wetlands. Princeton Hydro's experienced scientists conduct Surface Water and Sediment Investigations and Baseline Ecological Evaluation (B.E.E.) in accordance with New Jersey Department of Environmental Protection's *Technical Requirements for Site Remediation* (NJAC 7:26E—3.8 and 3.11, respectively).

Effective screening-level ecological risk assessment begins with a thorough understanding of each site's chemical storage and release history, the fate and transport traits of particular chemicals of concern, environmental toxicology, and the ecological resources subject to exposure.

Owing to a suite of inherently conservative assumptions, screening-level ecological risk assessments frequently result at an end-point that requires further ecological risk considerations. Princeton Hydro's diverse scientific expertise and extensive regulatory experience equip us with the skill sets necessary to answer complex questions about ecological effects.

We go beyond simple comparisons between chemical concentrations detected in abiotic media (i.e., water, sediment, soil) and generic *ecological screening levels* (ESL) invoked by regulatory framework and strive to discern whether measurable biologic effects exist. Our portfolio of BEE projects has encompassed sites located throughout New Jersey and that spanned a wide array of land uses.



