

STREAM AND FLOODPLAIN RESTORATION FOLLOWING REMOVAL OF CONTAMINATED SEDIMENTS FROM GAY BROOK, RAYMOND, MAINE

Client: Private Landowner - *under an order from MEDEP to cleanup and restore the site*

FOLLOWING A SIGNIFICANT DISCHARGE OF HOME HEATING OIL in mid-winter into forested wetlands adjacent to a tributary of Gay Brook in Raymond, Maine, Woodlot was contracted to assess the extent of wetland impacts and characterize the functional loss from the spill contamination. In addition, we were responsible for developing the mitigation design, overseeing restoration work, and are currently performing long-term monitoring.

Site visits were conducted in both the impact area and the surrounding undisturbed areas to characterize community types that would need to be mimicked by later restoration efforts, and to physically map the disturbed areas identified by the client for restoration activities. Mapping was completed with a Laser Technologies Impulse™ laser rangefinder, and a Trimble™ Pro XR GPS receiver.

Woodlot also evaluated naturally occurring soil conditions, and



conducted winter wetland delineations and wetland function-value assessments within the project area.

Restoration efforts were designed to provide short and long-term soil stabilization within the disturbed portions of the stream corridor. Plant materials were selected to mimic natural site conditions so that a distinct transition from undisturbed

portions of the site to the planted restoration area would not be noticeable to property owners.

Overall restoration included stream channel reconstruction, streambank stability, fish habitat enhancement, and riparian planting. Post-restoration monitoring will include evaluation of hydrology, soils, and vegetation, and assessment of wetland functioning and soil erosion.

This project received significant media coverage, and agency personnel were frequent visitors during the reconstruction period. In addition to conducting the field work and mitigation design under tight time constraints, Woodlot completed the project within budget estimates despite several fluctuations in the scope of work.

