

MER Assessment Corporation

Area of expertise	Experience	Specifics
Video monitoring	<ul style="list-style-type: none"> • 20 years of recordings • 1,800+ recordings • 620 tapes • 530+ hours recorded 	<ul style="list-style-type: none"> • Diver-held to 80 ft. or remote drop to 300 ft. • Standard and high definition quality video • Qualitative and quantitative video analysis • Rapid DVD turn-around time of 24-48 hrs possible • MER-developed icon-based video graphic allows rapid visual interpretation of video recordings
Benthic infauna	<ul style="list-style-type: none"> • 20 years of sampling and identification • 2,000+ analyses • 2 taxonomists on staff 	<ul style="list-style-type: none"> • Sample sieving at 500µm or 1.0mm • Taxonomic identification at family level, in most cases at species level • 400 species identified and in inventory • Statistical analyses using Primer 6 v 6.1.5, Systat 11.0, Microsoft Excel
Water chemistry	<ul style="list-style-type: none"> • 1800+ profile records • T°C/F; psu, D.O. • Turbidity (NTU) • Depth to 100m/300 ft 	<ul style="list-style-type: none"> • Data imported into Excel for statistical analysis and graphing • Data imported into Ocean Data View (public sector data only) for geo-referencing for areal or bathymetric data presentation
Sediment granulometry and chemistry	<ul style="list-style-type: none"> • 1,000+ samples processed • Redox/sulfide • Grain size • Metals / % moisture 	<ul style="list-style-type: none"> • MER laboratory certified by DEP for redox-sulfide Lab ID: ME1020 Certificate No. 2008016; Exp. 4/10 • Sediment granulometry subcontracted to S.W. Cole Engineering, Gray, Maine • Metals – Sawyer Environmental Chemistry Research Laboratory (SECRL)
Ichthyo/zooplankton sampling	<ul style="list-style-type: none"> • Multi-depth towing • 333µm mesh nets • NOAA Fisheries sampling protocol • Simultaneous sampling parameters recorded 	<ul style="list-style-type: none"> • Zooplankton identification subcontracted to Dr. Ray Gerber, Acadia Productions, Brunswick, Maine • Ichthyoplankton (fish larvae) identification subcontracted to Dr. Lou VanGuelpen, Atlantic Reference Centre (ARC), Huntsman Marine Sciences Centre, St. Andrews, N.B., Canada
Lobster sampling	<ul style="list-style-type: none"> • Resource assessment/ impact mitigation • Morphometrics on 22,900 lobsters (1998-99) 	<ul style="list-style-type: none"> • Lobster relocation project – Portland Harbor 1998-99 • Fishery-dependent and fishery-independent assessments of lobster resource – Casco Bay, St. Croix River • Assessment of habitat quality and lobster resource
Eelgrass <i>Zostera marina</i>	<ul style="list-style-type: none"> • Delineation, habitat characterization, impact mitigation 	<ul style="list-style-type: none"> • Video determination of areal distribution • Condition and biomass assessment • Impacts causes and mitigation options assessment
Paralytic Shellfish Poisoning (PSP)	<ul style="list-style-type: none"> • 2006-2009 Intensified PSP Program 	<ul style="list-style-type: none"> • Program development and execution • Integration of multi-parametric sampling