

PENOBCOT RESEARCH SUMMARY		
NB: Entries in gray shade have not been updated for 2009 yet.		
Principal Investigator	Affiliation	Title
Wright, J., Abbott, Alex, and Kanot	USFWS/MFS/TNC	Fish passage barrier inventory, assessment and prioritization
Amirbahman, A.	University of Maine	Mercury in water and sediment near Orrington, ME
Barnhardt, W., Brothers, L., Kelley	USGS and Univ of Maine	Geologic mapping of Penobscot River estuary
Bodaly, Drew et al.	MPA/NRDC	Extent of mercury contamination downstream of Holtrachem
Briggs, N.	University of Maine	Forest fragmentation in midcoast Maine
Call, E., M. Hunter	University of Maine	Penobscot River Bird Monitoring
Calhoun, A.	University of Maine	Preliminary Wetlands Assessment
Christensen, J.	NOAA NOS	National Status and Trends Program (Musselwatch and Benthic Surveillance)
Coglan, S.M. and J. Zydlewski	University of Maine, MCFWRU	Fish community response to dam removal in Sedgeunkedunk Stream watershed
Coglan, S.M. and J. Zydlewski	University of Maine, MCFWRU	Barrier removal and range expansion of key anadromous fishes in the lower Penobscot R
Coglan, S.M. and J. Zydlewski	University of Maine, MCFWRU	Interactive ecology of Atlantic salmon and smallmouth bass
Courtemanch, D.	ME DEP	Penobscot River Water Quality Modeling
Cowan, D.	The Lobster Conservancy	Juvenile Lobster Monitoring Program
CR Environmental and J. Reardon	Penobscot Trust	Bathymetric and sediment investigations from Bangor Dam to Milford
D'Auria, Danielle	DIFW	Heron Census
DeSorbo, C.	Biodiversity Research Institute	Bald Eagle dietary exposure to mercury contamination
Dill, R.	DIFW	Monitoring of illegally introduced Northern pike in Pushaw Lake and the Penobscot River S
Elskus, Adria	USGS Conte Laboratory & UMa	Monitoring Elliptio mussels, white suckers, smallmouth bass, common shiners for contami
Enterline, C.	DMR	Gulf of Maine Collaborative Rainbow Smelt Survey
Haro, A.	USGS Conte Laboratory	CFD-HSI modeling of velocityan depth barrier relevant to fish passage
Hawkes, J and Sheehan, T.	NOAA NMFS	Penobscot River Acoustic Telemetry Studies
Huntington, T.	USGS	Dissolved organic carbon export from the Penobscot River and its major tributaries
Kelley, A.	University of Maine	Postglacial development of Penobscot River, geomorphology, surficial geology, cultural re
Kramer, G.	DIFW	Penobscot River Smallmouth Bass Management
Kramer, G.	DIFW	Atlantic salmon / Brook trout Management Activities
Kusnierz, D.	Penobscot Nation	Water quality monitoring
Lane, O.	Biodiversity Research Institute	Belted Kingfisher dietary exposure to mercury contamination
Larsen, P.F.	Bigelow Laboratory for Ocean Sc	Benthic communities. Toxic contaminants and remote sensing in Penobscot Bay and estu
Leahy, J.	University of Maine	Implications of Land Use Change for Recreation Access on Private Forest Land
Leavenworth, B.	University of New Hampshire	Historical Fisheries Project
Lewis, L.	Bates College	Economic benefits of restoring a recreational fishery
McCormick, S.	USGS Conte Laboratory	Aluminum Water Chemistry and Impacts on Atlantic Salmon
Mierzykowski, S.	USFWS	Contaminants in bald eagle eggs
Mierzykowski, S.	USFWS	Contaminants in bald eagle livers
Mierzykowski, S.	USFWS	Contaminants in shortnose and Atlantic sturgeon from the Penobscot River
Mierzykowski, S.	USFWS	Contaminants in brook trout from Cove Brook
Mower, B.	ME DEP	Surface Water Ambient Toxics Monitoring
Normandeau Assoc. and J. Reard	Penobscot Trust	Mussel Survey for Veazie and Great Works
Peckenham, J.	University of Maine	Tracking Stormwater Quality Using Real-Time In-Situ Fluorescence
Pederson, J.	MIT Sea Grant	Marine Invasive Species Rapid Assessment

Roesler, C.	University of Maine	Remote sensing of chlorophyll, solar radiation, ocean color, DOM in PenBay using GoMO
Royte, Josh, Brandon Kulik, Tim S	TNC, Kleinschmidt, NOAA	Penobscot River Fish Community Survey
Sahl, L. and J. Boucher	MMA	Does an ETM exist in Penobscot Bay?
Saunders, R., and K. Mueller	NOAA NMFS	Merging Western and Traditional Ecological Knowledge Systems
Simon, K.	University of Maine	Fish community response to dam removal in Sedgeunkedunk Stream
Snyder, N	Boston College	Stream processes in northern New England
Sullivan, K.	DIFW	Barrow's Goldeneye Winter Survey
Swartz, B.	DIFW	Freshwater Mussel Survey
Swartz, B.	DIFW	Tomah Mayfly Survey
Todd, C.	DIFW	Bald Eagle nesting: distribution, abundance, and productivity
Trial, J.	BSRFH	Upstream migration of adult salmon
Trial, J.	BSRFH	Electrofishing surveys
Trial, J.	BSRFH	Redd surveys
Trial, J.	BSRFH	Water temperature
Tsomides, L.	ME DEP	Macroinvertebrate Biomonitoring
Tsomides, L.	ME DEP	Wetlands Biomonitoring
Tsomides, L.	ME DEP	Periphyton Biomonitoring
Wahle, R.	Bigelow Laboratory	Juvenile Lobster Benthic Sampling
Whitney, M.	UM Honors Student	Wetland Plant Inventory
Willis, T	University of Southern Maine	Genetic Diversity of Alosa spp. in Maine
Willis, T	University of Southern Maine	Homing and migratory behavior of Penobscot River alewife
Wilson, K	University of Southern Maine	Penobscot River Restoration: Monitoring Marine-Freshwater Food Web Linkages Using S
Wippelhauser, G.	DMR	Juvenile fish survey in the lower Penobscot
Wippelhauser, G., O. Cox, and K.	DMR	Veazie trap fish counts and alewife PIT tag study
Yoder, C.	Midwest Biodiversity Institute	Fish Assemblage and Qualitative Habitat
Zytlewski, G.	Cove Brook Watershed Council	Fish of Cove Brook
Zytlewski, G.	Cove Brook Watershed Council	Road crossing assessment
Zytlewski, G.	Cove Brook Watershed Council	Non-point source pollution mitigation
Zytlewski, G.; Kinross, M.; Fern	University of Maine	Distribution and abundance of Atlantic sturgeon and other diadromous species in the P.R.
Zytlewski, J.	CFWRU	Striped bass movement in the lower Penobscot
Zytlewski, J., C. Loftin	CFWRU	Marine Derived Nutrients
Zytlewski, J.	CFWRU	Sea-run brook trout in the lower Penobscot (Cove Brook)

Funding	Start Year	End Year	Status	Sample month	Sample Sites	UTMs?	Map?	Metadata?
FWS/NOAA/NFWF		2007	Ongoing		1,000	N	Y	Y
Sea Grant	2004	2009	Ongoing					
USGS	2006		Ongoing				Y	Y
court-ordered study	2006		Phase II			N	Y	Y
	2007	2008	Ongoing		NA NA	NA	Y	Y
U Maine	2008	2016	Ongoing					
Sea Grant, TNC	2006	2007	Ongoing	7,8,9,10,11	15	N	Y	Y
NOAA	1986		Ongoing		4	Y	Y	Y
NOAA, UM, USGS	2007	2010	Ongoing	5, 6, 7, 8, 9	10			
TBD	2008	2010	Ongoing	5, 6, 7, 8, 9	6			
UM, MOHF, USGS	2007	2010	Ongoing	6, 7, 8, 9	12			
EPA	2007	2007	Ongoing	7	31	N	Y	Y
	1998	2007	Ongoing		28	Y	Y	Y
NOAA and USFWS	2007	2007	Completed					
State Wildlife Grants, Oil Spill	2009		Ongoing	4,5,6,7,8	196	N	Y	Y
	2004	2007	Ongoing	5,6	21	N	Y	Y
System	2006		Ongoing			Y	Y	Y
USGS	2007	2009	Ongoing	8,9,10	2	??	N	not yet
NHFW, MADMF, NMFS	2008		Ongoing					
USGS	2007	2009	Ongoing					
	2005	2006	Ongoing	4,5,6,7	76	Y	Y	Y
NASA	2007	2009	Ongoing	1,2,3,4,5,6,7,8,9,10,11,12	1	Y	Y	Y
Maine Geological Survey	2007	2007	Completed	6		N	Y	N
	1996	2003	Completed	6,7	6	N	Y	Y
	1995	1996	Completed	4,5,6,7,8,9,10		N	Y	Y
EPA			Ongoing		114	N	N	Y
	2007	2007	Ongoing	5,6,7		N	N	N
Various	1983	2007	Ongoing		~75	N	Y	
	2007		Ongoing					
	2001	2007	Ongoing		NA NA	NA	NA	
USGS Mitchell Center	2006	2008	Completed					
	2007	2009	Ongoing	4,6,9,11	4	N	Y	Y
USFWS	2000	2009	Ongoing					
USFWS	2006	2009	Ongoing					
NOAA, USFWS	2006	2009	Ongoing	6, 8				
Maine DMR - BSRFH	2006	2008	Completed	7	2			
	1990	2004	Ongoing		12	Y	Y	Y
NOAA and USFWS	2007	2007	Completed					
	2007	2008	Completed	6,7,8,9, 10	4		Y	
	2007	2007	Completed	7				

OS	2004	2009	Ongoing	1,2,3,4,5,6,7,8,9,10,11,12	18	N	Y	N
TNC and NOAA	2004		ongoing	June and September	17	Y	Y	
			Ongoing			N	N	N
NOAA	2007	2009	Ongoing		NA	NA	NA	NA
USGS Mitchell Center	2007	2009	Ongoing					
	2007	2012	Ongoing	5,6,7,8		N	N	N
State Wildlife Grants, Oil Spill	2008	2009	Surveys Co	11,12,1,2,3,4	211	Y	Y	Y
	1992		Ongoing	7,8,9	580	N	N	Y
		2007	Ongoing	5,6		N	N	Y
	1962		Ongoing	4,6	517*	N	Y	Y
	1978		Ongoing	5,6,7,8,9,10,11	1	Y	Y	Y
	1975		Ongoing	7,8,9,10	365	Y	Y	Y
	1983		Ongoing	10,11		N	N	Y
	2001		Ongoing	5,6,7,8,9,10,11,12	81	Y	Y	Y
	1983	2006	Ongoing	7,8	120	Y	Y	Y
	1983	2006	Ongoing	6	12	Y	Y	Y
	2001	2006	Ongoing	7	35	Y	Y	Y
	2000		Ongoing			Y	N	Y
	2007	2007	Ongoing					
NMFS, USGS	2009	2011	Ongoing	5,6,7,8,9	14			
Davis Conservation Foundatio	2009	2009	Ongoing		6	1		
TNC, (TNC-NOAA pending)	2009	2009	Ongoing					
	2008		Ongoing	9	3	N	N	N
	2009	2009	Ongoing	5,6	1	N	N	N
	2004	2005	Completed	7,8,9	45	N	Y	Y
	2007		Ongoing	3,4,5,9,10,11	1	N	Y	Y
	2007	2007	Completed	7,8,9,10	25	N	Y	Y
Maine DEP, 319 through EPA	2008	2009	Ongoing	7,8,9,10	4	N	Y	Y
NOAA, TNC	2005	2010	Ongoing	4,5,6,7,8,9,10,11	30	N	Y	Y
Sea Grant	2008	2009	Planned	6,7,8,9				
	2008		Planned					
	2008	2010	Planned					

*number of total sites/includes sites outside Penobscot

Publication	Phone	Email	Study Category	Keywords	Web		
N	781-8364	jed_wright@fws.gov	fauna	fish passage, barriers, dams, culverts			
			water quality				
abstracts	508-457-2355	wbarnhardt@usgs.gov	geology	bathymetry, estuarine sediment, methane, pockmarks, sea level			
Y	287-2651	stacy.a.ladner@maine.gov	water quality	contaminants; mercury; sediment			
N		nathan.briggs@umit.maine.edu	human dimensions	forests, land use, development			
		Erynn Call - erynn.call@umaine.edu, Dr. Hunter@maine.edu	fauna	birds			
Y		John.Christensen@noaa.gov	flora	riparian wetlands, riverine wetlands, invasive plants			
Y		stephen.coghlann@umit.maine.edu	water quality; fauna	contaminants, water quality, sedi	http://ccma.nos.noaa.gov/about/cc		
	207-581-2880	stephen.coghlann@umit.maine.edu	fauna	fish passage, barriers, dams, fish-diadromous, salmon, fish-freshwa			
	207-581-2881	stephen.coghlann@umit.maine.edu	fauna, habitat	fish passage, barriers, dams, fish-diadromous, salmon, fish-freshwa			
	207-581-2882	stephen.coghlann@umit.maine.edu	fauna, habitat	salmon, smallmouth bass, habitat, competition, exotic species			
Y		Dave.L.Courtemanch@maine.gov	water quality	water quality; temperature; waste load allocation; modeling			
Y		jreardon@tu.org	fauna	Penobscot Bay, lobsters, habitat			
			bathymetry/sediment				
N	207-941-4478	danielle.dauria@maine.gov	fauna	Herons, great blue herons			
Y	207-839-7600	chris.desorbo@briloon.org	fauna	mercury; bald eagles			
N	207-732-4131	richard.dill@maine.gov	fauna	northern pike, invasive			
N	581-2579	aelskus@usgs.gov	fauna	mussels, YOY fish, contaminants			
Pending	413-863-3806	Alex_Haro@usgs.gov	hydrology	fish passage, water velocity, water depth, swimming performance, v			
N		James.hawkes@noaa.gov	fauna	fish-diadromous; migration; salmon			
Pending	207-622-8201	thunting@usgs.gov	water quality	DOC, TDN, ocean color, dissolved organic carbon export. Water ten			
N			geology				
N	207-732-4131	gordon.kramer@maine.gov	fauna	smallmouth bass			
M	207-732-4131						
N	207-817-7361	pinwater@penobscotnation.org	water quality	water quality; nutrients; algae			
N		oksana.lane@briloon.org	fauna	kingfisher; mercury			
Y	207-633-9652	plarsen@bigelow.org	fauna, habitat, sediment	benthos, contaminants, habitat	bigelow.org		
		jessica.leahy@umit.maine.edu	human dimensions	forestry, landscape change, land use			
N			fauna	history, fisheries	http://www.hmapcoml.org/Default.		
Y			human dimensions				
N		Steve_McCormick@usgs.gov	water quality	aluminum, water chemistry, salmon			
N	827-5938	steve_mierzykowski@fws.gov	fauna	bald eagle; contaminants; organochlorines; trace elements			
N	827-5938	steve_mierzykowski@fws.gov	fauna	bald eagle; contaminants; organochlorines; trace elements			
N	827-5938	steve_mierzykowski@fws.gov	fauna	shortnose sturgeon; Atlantic sturgeon; mercury; organochlorines			
Y	827-5938	steve_mierzykowski@fws.gov	fauna	brook trout; DDE, trace elements	http://www.fws.gov/northeast/main		
Y		Barry.f.mower@maine.gov	water quality	water quality; contaminants			
		jreardon@tu.org	fauna	mussels			
Y	207-581-3254	jpeck@maine.edu	water quality	stormwater, pollution, fluorescence	http://www.umaine.edu/waterresear		
	617-252-1741	jpederso@mit.edu	fauna	invasive species	http://massbay.mit.edu/exoticspec		

Y	541-929-5650		water quality	estuary; chlorophyll, organic matt	http://www.wetlabs.com/Research
yes	207-866-4049	rory.saunders@noaa.gov	fauna	fish community, index of biotic integrity, diadromous, resident	
Abs	326-2489		estuarine	water quality; estuary	
N			human dimensions		
Y	617-5520839	noah.snyder@bc.edu	geomorphology	fluvial geomorphology; river resto	http://www2.bc.edu/~snyderno/
N	207-941-4474	kelsey.m.sullivan@maine.gov	fauna	Barrow's Goldeneye, Winter Distribution	
N		beth.swartz@maine.gov	fauna	mussels	
N		beth.swartz@maine.gov	fauna	insects; tomah mayfly	
Y		charlie.todd@maine.gov	fauna	bald eagles	
Y		joan.trial@maine.gov	fauna	fish-diadromous; salmon; migration	
Y		joan.trial@maine.gov	fauna	diadromous; salmon; population surveys	
Y		joan.trial@maine.gov	fauna	habitat; salmon; redds	
Y		joan.trial@maine.gov	water quality	temperature, salmon	
Y		Leon.tsomides@maine.gov	fauna	macroinvertebrates; water quality	http://www.maine.gov/dep/blwq/docn
N		Leon.tsomides@maine.gov	flora		
N		Leon.tsomides@maine.gov	flora		
		r wahle@bigelow.org	fauna	lobster	
			flora		
	207-228-1673	theowillis06@aim.com	fauna	alewife, shad, microsatellite dna, fish-diadromous	
	207-228-1673	theowillis06@aim.com	fauna	alewife, passive acoustic, vemco	
	207-228-1674	kwilson@usm.maine.edu	fauna	stable isotope, food web	
N	207-624-6349	gail.wippelhauser@maine.gov	fauna	fish-diadromous	
N	207-624-6349	gail.wippelhauser@maine.gov	fauna	fish-diadromous	
N		yoder@rrohio.com	fauna	fish-freshwater; fish-diadromous;	
N		cbwc@covebrook.org	fauna	sea lamprey, smelt	www.covebrook.org
N		cbwc@covebrook.org	fauna	road crossings, barriers, culverts	www.covebrook.org
N		cbwc@covebrook.org	water quality	road crossings, barriers, culverts	www.covebrook.org
Y		gayle.zytlewski@umit.maine.edu	fauna	fish-diadromous; sturgeon	
it basin.					

[/barnard/penobscotabstract.htm](http://barnard/penobscotabstract.htm)

[nonitoring/biomonitoring/index.htm](#)