

POW Logic Model Name: Coastal Ecosystems (2008)

Reporting years: 2008,2009,2010,2011,2012

Logic Model Overview:

Coastal Ecosystems -- Julia Peterson

Situation:

Coastal ecosystems are ecologically and economically valuable environments that are subject to multi-use demands ranging from food production and the purification of societies' wastes, to flood control, transportation and recreation. These systems provide essential habitat for fish and shellfish that constitute 75% of commercial landings in the United States and provide essential 'ecosystem services' valued in the trillions of dollars annually on a global scale. At the same time, these systems have become increasingly threatened by human-induced perturbations. These include non-point source pollution, invasive species, coastal development and habitat alteration.

Although New Hampshire is not a particularly populous state (1.3 million residents) and has a relatively short coastline, it in many ways mirrors other coastal states in the pressures of continued population growth and the demographics of that growth. Nearly 75% of New Hampshire residents live within 50 miles of the coast, and the rate of growth in the 'seacoast' region has grown at a rate of 10% over the past decade, a rate nearly double that of the rest of the state. Coastal communities, deeply rooted in the resources of the estuaries and ocean coasts that they inhabit, are struggling with how to manage growth and its associated waste streams. The Great Bay estuary is displaying indicators of nutrient over-enrichment, bacterial contamination and habitat loss, while coastal fishermen are dealing with harmful algal bloom related fisheries closures and the unknown effects of proposed offshore sewage outfalls.

Stakeholder Input:

Formal needs assessment conducted in late 1990s for local decision makers indicating community's desire to have assistance coordinated among agencies and organizations and to have assistance tailored and brought to the community

Open and inclusive processes that continually include community members' voices on locally based natural resource protection projects

Formative evaluation, typically through surveys and observations, interspersed throughout long term projects with community members

Discussions with business stakeholders including nursery and landscaping service managers

Discussions with program delivery partners working on particular aspects of community natural resource protection efforts

Discussions with staff from related programs at other New England Land Grant and Sea Grant institutions

Participation in scientific forums and workshops

Assumptions:

Despite differences among community members, natural resource protection is a shared value overall

Training and education, technical assistance, iterative contact and inclusive processes with communities will enhance their capacities to engage in community based natural resource protection

Local decision makers come to their positions with wide variation in knowledge, skill and attitudes

Knowledge about the benefits of desired behaviors and about possible harmful consequences of non-desired behaviors can influence community member behavior toward natural resources over time

External Factors:

Individual home and yard care practices are influenced by a wide variety of influences including commercial marketing

Development pressure in coastal areas is high and is related to market forces as well as demographic influences. Land use regulations often lag behind issues of concern

Outputs/Activities	Outcomes/Impact		
	Learning Outcomes	Action Outcomes	Condition Outcomes
<p>Land and Water Conservation: Provide towns and conservation groups with education, facilitation, and direct assistance regarding water and natural resource protection.</p> <p>Broadcast educational messages over low power radio (Great Bay Area Radio) to motorists about the estuary, research, educational opportunities and Sea Grant.</p> <p>Conduct at least 5 activity-based Great Bay Discovery Cruises.</p> <p>Provide information to homeowners about home and yard care practices that prevent or minimize contamination of water resources via runoff.</p> <p>Provide information to communities and development professionals to encourage the use of more innovative stormwater management.</p>	<p>Coastal watershed residents or visitors report gaining knowledge about New Hampshire's coastal resources, ecosystems, research, stewardship or educational opportunities.</p> <p>Community decision makers, conservation groups, and homeowners increase knowledge about sources of land and water degradation.</p> <p>Communities, conservation groups and development professionals increase knowledge of strategies, treatments and tools for preventing land and water degradation.</p>	<p>A variety of audiences take actions that prevent soil, water or land degradation</p>	<p>Water quality in lakes, streams and estuaries improves or is maintained at acceptable levels</p>
	<p>SGWR26 - At least 2 communities per year will develop action plans for making progress in community based natural resource protection projects.</p> <p>SGWR27 - At least 2 communities per year will implement or start to implement a natural resource protection project.</p> <p>SGWR 08-30 - At least 12 community decision makers, conservation groups or development professionals report gaining knowledge about preventing degradation from stormwater runoff.</p> <p>SGWR 08-32 - At least 100 residents, decision makers or visitors will report gaining knowledge about NH coastal ecosystems, research, sources of land and water degradation or improved yard care practices.</p>		