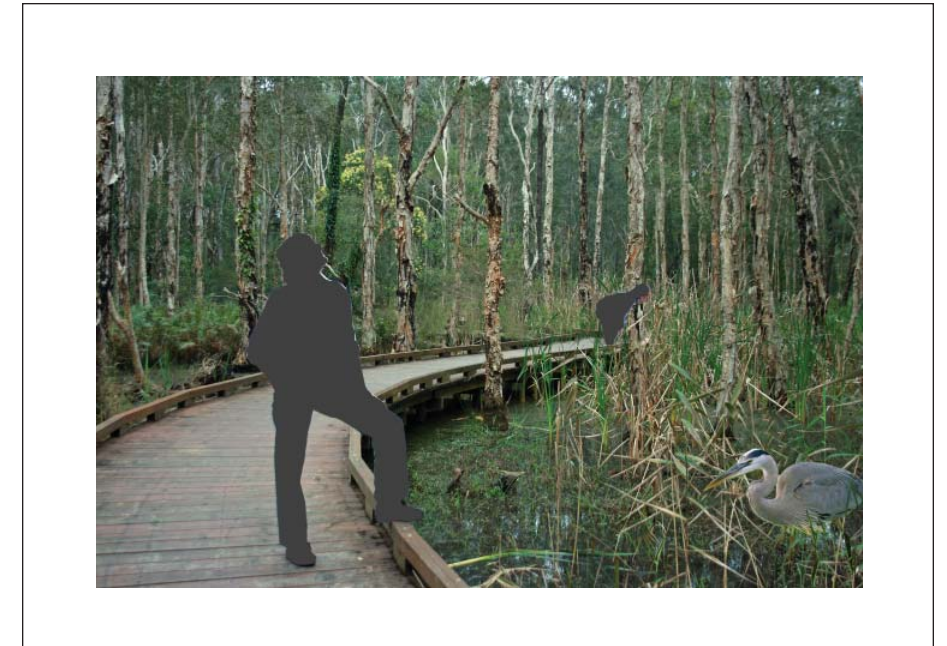


# TAN BROOK WATERSHED

AMHERST, MA

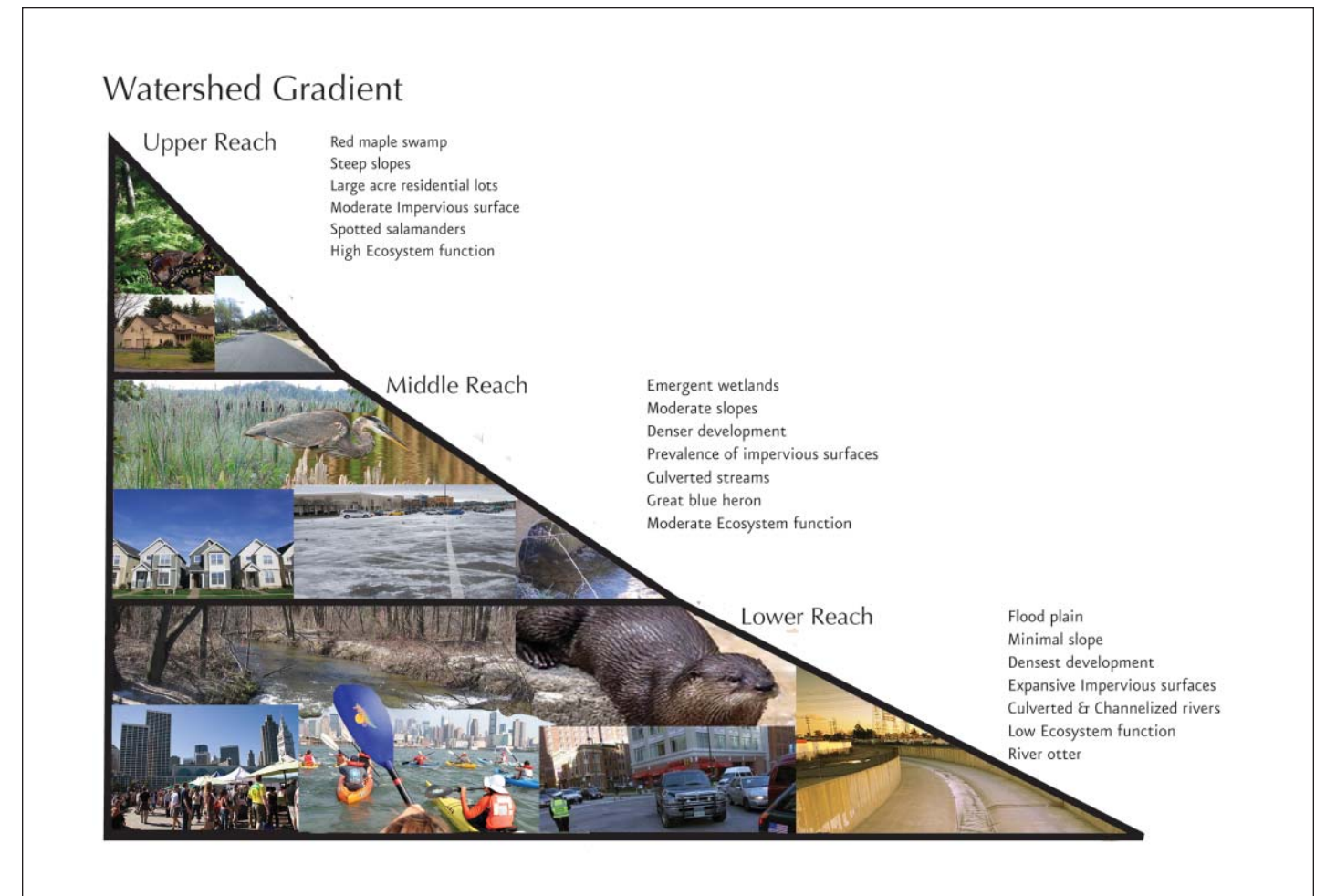
The Tan Brook Watershed becomes a resilient ecosystem that sustains ecological, economic and social systems and serves as a model for other communities. Water quality improvement, social benefit and habitat restoration are the objectives that support the vision. These objectives can be realized through physical actions, policy actions and educational/research actions, these actions in the matrix are represented in different colors for ease of differentiation. These actions are prioritized by time frame according to importance and position in the overall process of the improvement recommendations. The matrix is keyed to the Tan Brook Watershed Vision Map using the same numeric system that the map uses to show an image of that action and its location within the watershed and surrounding area.



RENDERING OF PROPOSED BOARDWALK AT HIGH SCHOOL

Objectives	Actions •physical •policy •research/educational		
	0-1 years	1-5 years	5-10 years
Water Quality Improvement - site specific	<ul style="list-style-type: none"> <li>•Disconnecting Downspouts (2)</li> <li>•Rain Barrels (2)</li> <li>•Rain Gardens (1)</li> <li>•Use eco-sensitive ice control for streets – like calcium to eliminate effects of salt and sand</li> <li>•Initiate stream restoration and design recommendations at the High School (1,2,5,6,7 &amp; 8)</li> <li>•Incentives for Public Transportation</li> <li>•Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>•Bioswales</li> <li>•Pervious paving</li> <li>•Green Roofs</li> <li>•Vortechs Filters and subsurface parking lot storm storage (3 &amp; 4)</li> <li>•Planting strips for trees and stormwater infiltration (5)</li> <li>•Remediation of contaminants at the Carriage shops</li> <li>•Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>•Tree planting</li> <li>•Monitoring</li> </ul>
Water Quality Improvement - non-site specific	<ul style="list-style-type: none"> <li>•Litter clean up (8)</li> <li>•Reduce impervious pavement</li> <li>•Post drop off dates for paint, oil and household cleaning products disposal days at the town dump</li> <li>•Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>•Sewer Repair</li> <li>•Tree planting</li> <li>•Building Codes promote Low Impact Development</li> <li>•Bylaws to promote stormwater capture and reuse for buildings</li> </ul>	<ul style="list-style-type: none"> <li>•Relocation of Gas station from downtown Amherst</li> <li>•Create green streets overlay zoning for all major arteries in town (5)</li> </ul>
Habitat Restoration - site specific	<ul style="list-style-type: none"> <li>•Litter clean up (8)</li> <li>•Invasive plant removal</li> <li>•Plant native species</li> <li>•Monitoring</li> <li>•Sponsor "BioBlitzes" to collect data and build community</li> </ul>	<ul style="list-style-type: none"> <li>•Stream restoration or daylighting (6)</li> <li>•Restore riparian buffers (6)</li> <li>•Maintain restored areas</li> <li>•Monitoring</li> <li>•Sponsor "BioBlitzes" to collect data and build community</li> </ul>	<ul style="list-style-type: none"> <li>•Wetlands restoration</li> <li>•Maintain restored areas</li> <li>•Monitoring</li> <li>•Sponsor "BioBlitzes" to collect data and build community</li> </ul>
Habitat Restoration - non-site specific	<ul style="list-style-type: none"> <li>•Litter clean up (8)</li> <li>•Invasive plant removal</li> <li>•Plant native species</li> <li>•Monitoring</li> <li>•Sponsor "BioBlitzes" to collect data and build community</li> </ul>	<ul style="list-style-type: none"> <li>•Identify potential wildlife corridors</li> <li>•Identify wildlife patches and significant ecological areas</li> <li>•Monitoring</li> <li>•Sponsor "BioBlitzes" to collect data and build community</li> </ul>	<ul style="list-style-type: none"> <li>•Link wild life corridors and patches to each other and the region</li> <li>•Sponsor "BioBlitzes" to collect data and build community</li> </ul>
Public Use & Social Value - site specific	<ul style="list-style-type: none"> <li>•Litter clean up (8)</li> <li>•Invasive removals</li> <li>•Create visual links showing path of culverted stream (yellow line)</li> </ul>	<ul style="list-style-type: none"> <li>•Establish Watershed Walk with ecological and historical information about the watershed to link the headwaters with the mouth (yellow line)</li> <li>•Create interpretive installations that connect people with the watershed and deepen their understanding of ecosystem process while having fun or exercising (7)</li> </ul>	<ul style="list-style-type: none"> <li>•Establish a watershed walk network within Amherst to showcase the diverse ecosystems and watersheds within the town.</li> </ul>
Public Use & Social Value - non-site specific	<ul style="list-style-type: none"> <li>•Create Watershed group or council</li> <li>•Public Information - signs, websites newsletters</li> </ul>	<ul style="list-style-type: none"> <li>•Improve visibility of stream (yellow line)</li> <li>•Connect people to watershed and stream (7)</li> <li>•Art installations (7)</li> <li>•Have concerts or poetry slams that raise awareness of ecosystems (7)</li> </ul>	<ul style="list-style-type: none"> <li>•Improve visibility of stream (yellow line)</li> <li>•Connect people to watershed and stream (7)</li> <li>•Art installations (7)</li> <li>•Have concerts or poetry slams that raise awareness of ecosystems (7)</li> </ul>

TAN BROOK WATERSHED RECOMMENDATION MATRIX



CONCEPTUAL DIAGRAM OF WATERSHED GRADIENT

