

## GOAL 2 Ensure Environmental Sustainability

### Objective 2.1 Protect the quality and quantity of the water<sup>1</sup>.

<p>Make specific plans to identify and address the limits to development implicit in our water systems that take our groundwater, stormwater, and surface water into account.</p>	<ul style="list-style-type: none"> <li>▪ Monitor groundwater quantity (i.e. groundwater surface elevation) and quality, and plan for necessary Acton Water District (AWD) service expansion, quality improvements, and well-head protection.</li> </ul>		
<p>Locate and design new development and supporting infrastructure to limit and mitigate impacts on groundwater quality</p>	<ul style="list-style-type: none"> <li>▪ Prioritize the development and redevelopment of Kelley's Corner, which has sewer service.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Consider extension of sewer to West Acton Village to serve redevelopment of the commercial area north of Massachusetts Ave and also to serve existing high priority neighborhoods.<sup>2</sup>.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Where possible utilize advanced package wastewater treatment with groundwater recharge for other concentrations of residential and commercial development.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Enhance the quality of all discharges into the ground (both stormwater &amp; wastewater) in current and new sources, especially focusing on reducing phosphorus discharges.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Consider zoning and incentives to slowly move industrial activity from rivers &amp; wellfield recharge areas.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Ensure that AWD land and buffer zone on Mass Ave in West Acton is not targeted for development.</li> </ul>		
<p>Manage stormwater to reduce impacts on streams and to recharge groundwater</p>	<ul style="list-style-type: none"> <li>▪ Use a proactive approach to existing stormwater issues in Kelly's Corner and West Acton, and use planning and development review to address these issues.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ In reviewing development, consider incentives and infrastructure to create better managed runoff recharge by limiting impervious surfaces.</li> </ul>		
<p>Inform the public and encourage private action to</p>	<ul style="list-style-type: none"> <li>▪ Provide broad-based education on how our water systems work;</li> </ul>		

conserve water and reduce impacts to groundwater quality.	where our water resources are located, and how water flows through withdrawal, use, and disposal of wastewater; and promote sustainable use by residents and businesses.		
	<ul style="list-style-type: none"> <li>▪ Continue and expand on AWD water conservation encouragement programs.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Create better incentives and systems to ensure private well owners also monitor and report on their wells.</li> </ul>	CoA	
	<ul style="list-style-type: none"> <li>▪ Revive the Acton Stream Teams to have citizens periodically monitor and report on the state of streams in Acton - so the Town can track changes and identify and resolve issues.</li> </ul>		
<b>Objective 2.2 Move toward a material economy in which there is no waste or accumulation of toxins.</b>			
Reduce Size of Waste Stream	<ul style="list-style-type: none"> <li>▪ Distribute information to residents on how they can reduce unwanted items and make no longer needed available for use by others.<sup>3</sup></li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Encourage the public to reduce the use of throw-away plastic (bottled water, single-use bags). Provide water pitchers and washable cups for Town board and committee meetings (especially for high-profile public meetings such as Town Meeting))</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Encourage local stores to implement packaging reduction incentives.<sup>4</sup></li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Support the state initiative to expand beverage container deposits</li> </ul>		
Increase Recycling and Reuse	<ul style="list-style-type: none"> <li>▪ Transfer Station <ul style="list-style-type: none"> <li>○ Create a permanent drop/swap site at the transfer station.</li> <li>○ Research single-stream recycling at the transfer center.</li> <li>○ Re-consider implementing a ‘pay as you throw’ system.</li> <li>○ Allow any Acton resident to get a “recycling only” sticker for free.</li> </ul> </li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Private Waste Haulers <ul style="list-style-type: none"> <li>○ Require larger residential developments to provide a recycling strategy for residents.</li> <li>○ Require that trash contractors report annually to the town on numbers of households they serve, and trash and recycling</li> </ul> </li> </ul>		

	amounts, as a first step toward creating trash policies that include the curbside providers.		
	<ul style="list-style-type: none"> <li>▪ Composting <ul style="list-style-type: none"> <li>○ Educate and advocate for home composting</li> <li>○ Provide more composting services at the transfer station.</li> <li>○ Study if requiring or encouraging curbside composting service would be practical and effective.</li> <li>○ Develop a food composting program at the schools, starting at the central campus.</li> </ul> </li> </ul>		
Manage Hazardous Waste Appropriately	<ul style="list-style-type: none"> <li>▪ Conduct e-waste education, and support events where cost effective certified e-waste specialist services are easily available.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Have more hazardous waste days at the transfer station.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Consider joining the Devens Hazardous Waste collection consortium, or a similar regional program elsewhere.</li> </ul>		
<b>Objective 2.3 Reduce emissions of carbon dioxide and other greenhouse gases.</b>			
Encourage use of cleaner energy sources.	<ul style="list-style-type: none"> <li>▪ Turn part of the transfer station into a renewable energy power plant.<sup>5</sup></li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Advocate for extensions of natural gas lines where this would provide options for homeowners to switch away from oil or electric heat.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Permit and encourage the use of multi-building ground-source heating systems (“district heating”) for new dense development and redevelopment.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Permit (and encourage) the use of geo-thermal heat pumps in new construction.</li> </ul>		
Reduce Energy Use in New and Renovated Buildings.	<ul style="list-style-type: none"> <li>▪ Provide tax incentives and advice to home-owners, businesses and contractors to undertake new building and renovation projects that reduce energy use.<sup>6</sup></li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Adopt a policy that new public buildings are to be LEED certified Gold or better.</li> </ul>		

Reduce Energy Use in Existing Buildings.	<ul style="list-style-type: none"> <li>Expand the part-time school energy coordinator role to become a full-time job that includes municipal buildings as well.</li> </ul>		
	<ul style="list-style-type: none"> <li>Support Property Assessed Clean Energy (PACE) legislation.<sup>7</sup> Implement this program if it becomes available for Acton.</li> </ul>		
	<ul style="list-style-type: none"> <li>Continue to retrofit existing public buildings to increase energy efficiency. Establish a policy on the minimum pay-back period for these investments.</li> </ul>		
	<ul style="list-style-type: none"> <li>Encourage or require the use of white or light-colored shingling for roofing replacements. Allow white roofing in historic districts if it is not already. [Needs discussion re flat or pitched roofs, in historic districts, etc. ]</li> </ul>		
Reduce transportation-related CO2 emissions.	<ul style="list-style-type: none"> <li>Organize web-based car pooling and ride sharing.</li> </ul>		
	<ul style="list-style-type: none"> <li>Encourage the growth of local businesses that can provide local shopping opportunities and employment. (See Goals 1 and 7)</li> </ul>		
	<ul style="list-style-type: none"> <li>Educate the public and enforce anti-idling laws, especially at schools and the train station.</li> </ul>		
	<ul style="list-style-type: none"> <li>Continue to support alternate methods of transportation (shuttle, train, bike trails, sidewalks) (See Goal 3)</li> </ul>		
Inform and educate Acton residents and businesses regarding energy efficiency	<ul style="list-style-type: none"> <li>Increase awareness and educate people on the need to reduce their carbon footprint.</li> </ul>		
	<ul style="list-style-type: none"> <li>Help promote utility and/or state sponsored energy-efficiency upgrade programs for appliances, lighting, and weatherization.</li> </ul>		
	<ul style="list-style-type: none"> <li>Encourage air-drying of clothing, and advocate for the removal of any home-owner association restrictions on outdoor line-drying.</li> </ul>		
	<ul style="list-style-type: none"> <li>Support and expand on existing energy-saving 'barn raisings'.<sup>8</sup></li> </ul>		
Continue planning for reducing Acton's carbon footprint.	<ul style="list-style-type: none"> <li>Continue to leverage Green Community grants for energy-reduction activities.</li> <li>Expand the role of the Green Advisory Board to include researching and advocating for energy savings in residential, commercial, and industrial sectors.</li> </ul>		
	<ul style="list-style-type: none"> <li>Conduct town-wide carbon footprint tracking and prepare and</li> </ul>		

	implement an energy reduction plan.		
	<ul style="list-style-type: none"> <li>Evaluate starting a “Transition Initiative” toward local resilience and energy autonomy (more details: <a href="http://transitionus.org/">http://transitionus.org/</a>)</li> </ul>		
<b>Objective 2.4 To move toward patterns of land use and land protection that support broad biodiversity, soil preservation, and healthy local agriculture</b>			
Adopt land use strategies that reduce the development of open land.	<ul style="list-style-type: none"> <li>Guide growth to designated centers like Kelley’s Corner and use both acquisition and zoning provisions to protect open land from development (See Objectives 1.1 and 1.5)</li> </ul>		
	<ul style="list-style-type: none"> <li>[removed bullets on transportation because it’s implicit in Objectives 1.1 and 1.5]</li> </ul>		
Maintain and increase biodiversity on Town conservation land and private land	<ul style="list-style-type: none"> <li>Organize efforts to remove invasive plant species from public and private land.<sup>9</sup></li> </ul>		
	<ul style="list-style-type: none"> <li>Discourage nurseries from selling invasive plants and property owners and landscape contractors from planting them.</li> </ul>		
	<ul style="list-style-type: none"> <li>Plant and protect large, long-lasting, carbon-sequestering trees.</li> </ul>		
	<ul style="list-style-type: none"> <li>Develop and implement a public education program on the role of native plants in supporting Acton’s biodiversity.</li> </ul>		
Conserve farm land and support agriculture in Acton	<ul style="list-style-type: none"> <li>Protect existing agricultural land through acquisition or transfer of development rights and promotion of agricultural tax abatements. See Objective 1.1.</li> </ul>		
	<ul style="list-style-type: none"> <li>Support new and expanded farming, including farming and community gardening on Town-owned land.</li> </ul>		
	<ul style="list-style-type: none"> <li>Involve Acton’s ethnic communities; many come from cultures that have a history and tradition of sustainability.</li> </ul>		

CI- Capital Investment, P – Planning, M – Management, R – Regulatory, E - Encouragement

<sup>1</sup> The full objective states: **Objective 2.1:** To protect the quality and quantity of the water<sup>1</sup> that cycles through our ground water, surface water, drinking water, waste water, and storm water systems, and to ensure that future development fits within the constraints of these local water cycles.

<sup>2</sup> These locations are addressed in the Comprehensive Water Resources Management Plan. These issues should be included in planning for development of West Acton Village and other designated growth centers; see Objectives 1.4 and 1.5.

---

<sup>3</sup> Examples of unwanted items include catalogs and junk mail; ways of making items available for re-use include Freecycle and tag sales.

<sup>4</sup> Examples: money off if you bring your own bags, sales of products in bulk, etc.

<sup>5</sup> A Power Purchase Agreement with NStar is in progress; it would involve placing photovoltaic panels on unused Transfer Station property.

<sup>6</sup> . This includes both the construction process (site development, choice of materials) and their design – promoting energy efficiency (as well as water savings, and a healthy indoor environment in weather-tight buildings.)

<sup>7</sup> PACE allows home-owners to pay for energy upgrades over time with a line item on their local tax bill, with financial backing from the Commonwealth.

<sup>8</sup> “Barn raisings” refers to community-organized home energy audits followed by volunteer energy-reduction work: caulking, bulb changes, etc.

<sup>9</sup> For information on this topic see: <http://www.newfs.org/protect/invasive-plants/index>]. An example is the work that has been done on garlic mustard eradication on Acton property.