

Acton Sustainability Strategies

7/27/2011: Sustainability Strategies for Acton

The language that goes with the Acton 2020 sustainability goal is deliberately grand and broad: **"..our health and well-being depend on protecting the web of life of which we are a part. Therefore, it is vital that we live and work here in a manner that supports that web and the well-being of people everywhere, including future Acton citizens."**

"The web of which we are a part" implies a recognition of the multiple many-way connections between the parts of our local ecosystems: people, food, water, wildlife, air, money, and the human and natural infrastructures. Each overlapping and interpenetrating. Picking out individual strategies is a challenge when there's an awareness of all these rich interdependencies.

Two types of interconnections add more rich confusion: (1) we've agreed that powerful strategies address multiple goals and (2) a lot of what success in sustainability looks like goes well beyond the scope of town government, and will need to focus instead on family, neighborhood and community strategy.

So, the strategies listed here are just a start. I think we need to keep laying all of our strategies against the other goals, and think creatively about addressing multiple goals with each action. I also think that a successful plan for all of Acton needs to go beyond the scope of what a state-mandated Community Plan includes: I think there will need to be a process of development beyond this written plan that includes the other parts of civil society: The religious institutions serving the people of Acton, local advocacy and political groups, neighborhood groups, business groups, and other special interest groups that bring together the people of Acton. That's the intent behind the strategy labeled **"Start a "Transitional Town Project"** - it's a structured way to go beyond the actions of school or town government. So, I'll recommend that in this plan we downplay some of the strategies that are mostly outside of what a town government can take on, or at least preface them with a clear prefix such as "encourage efforts to..." or "provide education on the importance of.." or some such.

Sources:

For the water section, I had a good meeting with Ron Beck, Doug Halley and Justin Snair, committee member and staff for the Water Resources Advisory Committee. For the carbon footprint stuff, I met with the Green Advisory Board. The material economy stuff was improved by meeting with my neighbor Kate Crosby, and overall I've been influenced by "Toward Sustainable Communities" by Mark Roseland, and "The Transition Handbook" by Rob Hopkins, the element inventory, the draft strategies and the comments that have been made about them already, and other sources.

I also share the confusion that Celia stated about what a 'good' strategy entails. I think it should be specific and measurable, and I'm missing that in some places. I think we should agree on some examples of well-written strategies.

OK, off we go:

Ensure Environmental Sustainability

As Acton residents, we recognize that our health and well-being depend on protecting the web of life of which we are a part. Therefore, it is vital that we live and work here in a manner that supports that web and the well-being of people everywhere, including future Acton citizens.

Over-all Strategies for Goal:

- Weave sustainability topics in to school curriculum.
- Expand on adult education options to teach skills that support sustainability and local resilience: gardening and farming, composting, making and repairing clothes, maintaining appliances, building community.

Objective 2.1: To protect the quality and quantity of the water 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.

Ideas for Strategies

[need a round of Health Department and Acton Water District review to bring more specificity here]

- Ask the Health Department and the Acton Water District to take the residential and business growth projections from the working plan here, and identify and plan for any capacity-related water infrastructure improvements for the period from now to 2030, These plans should be folded back in to this plan, if possible. In particular, developing one new wellfield is already anticipated and is in teh panning stage.
- Kelly's Corner and West Acton have stormwater flooding issues already, and more development there, as envisioned in the working plan, will require a proactive approach to bring these issues under control and avoid making them worse. [I have no idea what that would entail, however]
- West Acton has wastewater management issues already that preclude, for example, many types of restaurants. An advisory taskforce, like the W.A.N.T that is focused on the Flint/Spencer/Tuttle neighborhood, should be formed for West Acton. Some combination of additional Innovative/Alternative systems specific for the village, or sewerage to support both West Acton AND Flint/Spencer/Tuttle, is needed before West Acton can grow in to the denser mixed-use village envisioned in the working plan. Financing any combination of I/A systems or sewers will be fiscally and politically challenging, and will require championing by the selectmen and Town Manager.
- Utilize advanced package wastewater treatment with groundwater recharge for other concentrations of residential and commercial development, such as along Great Road.
- Continue and extend the monitoring of groundwater quality.
- Continue monitoring public well performance to look for quality AND quantity issues.
- Create better incentives and systems to ensure private well owners also monitor and report on their wells.
- Enhance the quality of all discharges in to the ground (stormwater & wastewater) in current and new sources, especially focusing on reducing phophorus discharges.
- For stormwater systems, a goal is to reduce total runoff by increasing total recharge. Strategies include requiring additional permeable surfaces for new and redeveloped areas.
- Consider incentives and infrastructure to create better managed runoff, and maintain recharge volume in targeted areas.
- Industrial risks are often in water-sensitive areas, near rivers & well areas. Consider zoning and incentives to slowly move industrial activity from those areas, to reduce future risks.
- Ensure that AWD land on Mass Ave between West Acton & Knowlton Drive, and a buffer zone around it, is not targeted for development.
- Revive the Acton Stream Teams to have citizens periodically monitor and report on the state of streams in Acton - tracking water flow, wildlife activity, quality and pollution issues, with the Town tracking changes and identifying and resolving issues.
- Continue and expand on AWD water conservation encouragement programs.

Objective 2.2: To move toward a material economy in which there is no waste or accumulation of toxins.

Ideas for Strategies

- Require that trash contractors report annually to the town on numbers of households they serve, and trash and recycling amounts, as a first step toward creating trash policies that include the curbside providers.
- Consider requiring a system of charging per bag of trash, for both curbside and transfer station customers. The Commonwealth has a lot of information and support for starting and monitoring such systems. These systems reduce trash and increase recycling dramatically and cost effectively.
- Educate and advocate for home composting, and provide more composting services at the transfer station. Study if requiring or encouraging curbside composting service would be practical and effective. Develop a food composting program at the schools, starting at the central campus.
- Collate, advertise and encourage local store's packaging reduction incentives (money off if you bring your own bags, sales of products in bulk, etc.)
- Develop policies that discourage the use of throw-away plastic (bottled water, single-use bags), including providing water pitchers and washable cups for town board and committee meetings (esp. for high-profile public meetings such as Town Meeting)
- Research single-stream recycling at the transfer center.
- Conduct e-waste education, and support events where cost effective certified ewaste specialist services are easily available.
- Expand drop/swap and hazardous waste day events, including a permanent drop/swap area at the transfer station.
- Support other ways of keeping temporarily unwanted items in use and out of the trash stream: Freecycle,

free sections at tag sales, etc.

- Research, support and encourage local producers of goods for local sale.
- Distribute information to residents on how they can reduce the amount of unwanted mail and catalogs they receive.
- Consider joining the Devens Hazardous Waste collection consortium, or a similar regional program elsewhere, to allow for much for frequent hazardous waste drop-off by citizens.
- Require larger condos to provide a recycling strategy for residents.

Objective 2.3: To reduce emissions of carbon dioxide and other greenhouse gases from residential, commercial, industrial, and municipal uses.

Ideas for Strategies

- Start ICLEI-mandated town-wide carbon footprint tracking and energy reduction plan.
- Continue to leverage Green Community grants for energy-reduction activities.
- Expand part-time school energy coordinator role to become a full-time job that includes the town side as well. (The energy savings more than paid for the position itself with the schools - the same can be anticipated with an extension to the town).
- Continue to find ways to increase the use of more local, safe, and/or renewable energy sources.
- Expand role of Green Advisory Board to include researching and advocating for energy savings in residential, commercial, and industrial sectors.
- Provide additional incentives to home-owners and businesses to undertake new building and renovation projects which promote sustainability both in the construction process (site development, choice of materials) and in their design, promoting water savings, energy efficiency, and a healthy indoor environment
- Retrofit existing public buildings to be energy efficient.
- Require new public buildings to be LEED certified Gold or better.
- Educate and enforce anti-idling laws, especially at schools and the train station.
- Organize web-based car pooling.
- Start a "Transition Initiative" toward local resilience and energy autonomy (more details: <http://transitionus.org/>),
- Turn part of the transfer station into a renewable energy power plant
- Support and expand on existing energy-saving 'barn raisings' (community-organized home energy audits followed by volunteer energy-reduction work: caulking, bulb changes, etc.).
- Encourage air-drying of clothing, and advocate for the removal of any home-owner association restrictions on outdoor line-drying.
- Help advertise any energy-effective utility or state sponsored appliance energy-efficiency upgrade programs.
- Encourage the use of white or light-colored shingling for roofing replacements. Make this legal in historic districts if it is not already.
- Consider providing technical or financial support (and removing legal and regulatory hurdles) for multi-building ground-source heating systems ("district heating"), especially for the new dense development and redevelopment targeted for town centers and villages.
- Track progress of Property Assessed Clean Energy legislation. (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) Roll it out enthusiastically if the option becomes available for Acton.
- Map where natural gas is unavailable in Acton, and advocate for extensions of gas lines in places where it would provide options for homeowners that want to switch away from oil or electric heat.

Objective 2.4: To move toward patterns of land use and land protection that support broad biodiversity, soil preservation, and healthy local agriculture

Ideas for Strategies

- Concentrate future residential growth to key centers and villages (see the over-all plan for more details on incentives and systems to make this happen).
- Provide expanded public transportation/walking/biking facilities linking the villages and Kelley's Corner
- Encourage denser zoning close to South Acton train station, and in South Acton and elsewhere, relate land use planning to transportation planning.
- Support the public and private planting and protection of large, long-lasting, carbon-sequestering trees. Disease-resistant Chestnut trees are becoming available.
- Support new and expanded farming.
- Identify existing prime agricultural land in Acton, and protect it for farming, including special incentives for new CSAs (Community Supported Agriculture) in Acton.

- Transition to low-fossil-fuel maintenance strategies on publicly-owned land, including organic methods where practical, and publicize how to do this for the benefit of private land owners.
- Identify and encourage the replacement of all or part of home lawns with low-maintenance perennials or gardens. Advocate for removing any home-owner association restrictions against this.
- Expand efforts to remove invasive plant species from public and private land [for info see: <http://www.newfs.org/protect/invasive-plants/index> and <http://actoninvasives.org/>] Discourage property owners and landscape contractors from planting them.
- Change zoning to allow small utility stores in cluster developments (the return of the 'corner store').
- Change zoning to encourage the use of cluster development common space for gardening and agriculture (consider density bonuses?).
- Complete acquisition of parcel behind Knowlton Drive in West Acton, develop it as community gardens or a CSA.
- Draft and pass at town meeting a tree-clearing bylaw, which would require notice and justification from landowners for certain large tree clearing operations on private parcels.