Sustainable Belmont will soon release a draft of a Climate Action Plan (CAP) for Belmont. The message: to reduce global warming, use less fossil fuel through conservation and improved energy efficiency. The plan will become available online in January at www.sustainablebelmont.net and on the Belmont town web site.

Sustainable Belmont, part of Belmont’s Vision 21 Implementation Committee, started its work in 2005. One of Sustainable Belmont’s goals is to work with the community to reduce Belmont’s heat-trapping emissions by 80 percent by 2050, reductions that the Intergovernmental Panel on Climate Change has concluded are necessary to avoid the most dangerous consequences of global warming. The CAP describes how to get started.

What we can do at the local level is learn to live with less energy from fossil fuel. Research for the CAP found that heating takes about 42 percent of all energy used in Belmont, transportation about 35 percent, and electricity 22 percent. Almost 80 percent of this energy is used by residents, not businesses or government offices. If we are going to reduce our use of fossil fuels, most of us will need to change our behavior.

Homeowners can improve their insulation, install new windows and a more efficient furnace, buy more efficient appliances, turn off unnecessary lights, turn down the heat, buy more fuel-efficient cars, drive less, and eat less meat. Some conservation efforts will also save money; some changes in habits can make us healthier and happier. Still, how enthusiastic will Belmont be about these changes?

Belmont Citizens Forum board members David Chase and I talked to Jan Kruse and John McAlpin of Sustainable Belmont about Belmont’s Climate Action Plan.

**BCF:** What’s next for Sustainable Belmont?

**Sustainable Belmont:** Our Climate Action Plan’s executive summary will be available in January, online and in public places such as the library and the Council on Aging. We will be asking for feedback. Based on the community’s feedback, we will complete the Climate Action Plan for Belmont and present it to the Selectmen. Perhaps Town Meeting will vote on a resolution related to the plan.

---

**Belmont Carbon Dioxide Emissions by Sector**

- Residential: 79.8%
- Municipal: 4.3%
- Institutions: 7.7%
- Businesses: 8.3%

Based on data collected from 2005 to 2007.
**BCF:** Your executive summary said almost nothing about the problems that global warming can bring. Why?

**Sustainable Belmont:** Almost everyone knows what is happening, so we focused on what we can do here in Belmont. People know that the sea level rose about a foot in the last century and the rate of sea-level rise is accelerating. There may be environmental instabilities that will make sea level surge. If the Greenland ice cap melts, most of Precinct 8 will be under water. The high school will be at sea level. If the Antarctic ice cap melts, some of Precinct 2 will be all that is left of Belmont....

While the full CAP report has an extensive section on climate change evidence and predictions, the executive summary focuses on what we contribute here in Belmont to lessen the impact. Our belief is that the community is aware of the potential effect of dramatic sea-level rises and more intense and frequent extreme weather events. There is evidence that across the country historical 100-year floods may begin to occur every 10 years, and the 500-year floods could visit us each century.

**BCF:** Most people in Belmont recognize that global warming is a genuine threat, but how many of us are ready to sacrifice for a problem that is still in the future?

**Sustainable Belmont:** We do not know, but we think Belmont’s recent nonbinding vote in last November’s election is a clear signal of the community’s concern. Those who voted on ballot question 4 overwhelmingly supported action on climate change at a level even more aggressive than our proposal. [The question advocated a 20 percent reduction in greenhouse gases by 2020. More than 80 percent of Belmontians who voted on it voted yes.]

The first step is education. Most people in Belmont recognize the problem but they do not know what they can do and how effective various responses will be. We hope that Belmont will come together and realize that reducing fossil fuel consumption is part of responsible citizenship. If everyone does something, collectively we could make a big impact in making our carbon footprint smaller. Other benefits include cleaner air, financial savings, and less dependence on foreign oil. It’s all about making mindful choices.

---

**Belmont Emissions by Sector and Source**

<table>
<thead>
<tr>
<th>Category</th>
<th>Tons of Carbon Dioxide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>200,000</td>
</tr>
<tr>
<td>Businesses</td>
<td>150,000</td>
</tr>
<tr>
<td>Institutions</td>
<td>100,000</td>
</tr>
<tr>
<td>Municipal</td>
<td>50,000</td>
</tr>
<tr>
<td>Transportation</td>
<td>30,000</td>
</tr>
<tr>
<td>Electricity</td>
<td>20,000</td>
</tr>
<tr>
<td>Fuel Oil</td>
<td>10,000</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>5,000</td>
</tr>
<tr>
<td>Waste</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Based on data collected from 2005 to 2007.
**BCF:** My intuition is that if everyone in Belmont conserved energy, we would still be far short of an 80 percent reduction in our greenhouse gas production. What will be next after conservation?

**Sustainable Belmont:** One person in Sustainable Belmont thinks we can accomplish 80 percent with local action alone. Most of us [in Sustainable Belmont] think improved alternative fuel technologies are needed to reach 80 percent. Wind power and photovoltaics [devices for generating electricity from solar energy] are getting less expensive while fossil fuels are going up, except during worldwide recessions. In Massachusetts, clean energy is the tenth largest business sector, and it is growing fast.

**BCF:** American suburbs are not energy efficient. Did Sustainable Belmont consider an evolution of Belmont from a town of homes to a town of apartments, nearby workplaces, and open spaces?

**Sustainable Belmont:** That is an interesting thought. It may be about to happen at a limited, local level, with planning and zoning, such as with the Cushing Square Overlay District. It makes sense to have a comprehensive master town plan, incorporating principles of smart growth and the siting of new areas of growth near public transportation, where appropriate.

**BCF:** Your Climate Action Plan charts do not show any carbon dioxide cost associated with general consumption such as food. However, your text mentions that 17 percent of American's carbon footprint results from food. That is a lot.

**Sustainable Belmont:** Food is a very important sector but very difficult to reliably quantify. We could not reliably determine how to get meaningful data on the carbon consequences of Belmont’s food. So we worked on the components we could measure.

**BCF:** Your executive summary mentions an energy officer. What is that?

**Sustainable Belmont:** An energy officer would be a hired position or a town-appointed volunteer, perhaps working for a stipend... The Energy Officer would work with a representative committee of all community stakeholder groups to implement recommendations in the CAP and to monitor progress. This position will function as a resource to the entire community advising people of the most cost-effective ways to spend money—and to save money—through energy efficiency. The town’s successful ESCO project [an audit of town buildings’ energy use and subsequent actions to reduce energy consumption] demonstrates this potential. Education and outreach would be an important component of this job.

**BCF:** Good luck with your Climate Action Plan for Belmont.

**Sustainable Belmont:** Good luck with your bike path.

Sumner Brown is a Director of the Belmont Citizens Forum.
Dutch Planning Makes Biking Safe for All

Most Residents Ride every week

By Thomas Lingner

Less than one percent of all travel trips in America are made by bicycle, and less than half of one percent of the population uses a bicycle to commute to work. These numbers have changed little over the past 20 years despite increased government spending and federal programs to raise cycling awareness; according to the U.S. Department of Transportation, federal funding for pedestrian and bicycling facilities and programs rose from $22.9 million in 1992 to $541 million in 2008.

In stark contrast to these figures, 30 percent of the workforce in the Netherlands commutes by bicycle, and 80 percent of the Dutch ride a bike at least once per week. What keeps Americans from using their bikes to get where they are going? And what makes the Dutch ride so often? One cycling enthusiast went looking for answers at the Livable Streets headquarters in Central Square, Cambridge, on November 20, 2008, when the International Coordinator of the Dutch Bicycle Council, Hans Voerknecht, gave a talk on “Bicycle Planning in the Netherlands.”

The Netherlands is one of the most densely populated countries in the world, with nearly 400 inhabitants per square mile; the U.S. has about 30. The landscape is flat, there are no mountains, and the climate is temperate, with normal winter lows in the thirties, and summer highs in the eighties. But even with all these bike-friendly conditions, biking has not always been as popular in the Netherlands as it is today.

Traffic, Oil Crisis Inspire Bike Planning

After the Second World War, cars became more affordable and cycling steadily decreased. In the 1980s, still stinging from the oil crisis of the ’70s and suffering from increased inner-city car congestion, the Netherlands developed a master plan to improve the cycling infrastructure and increase bicycle use. Traffic-calming measures were put into place in inner cities, more bike paths were created, and strict traffic laws were passed making the automobile driver responsible in all bicycle/car accidents. Today, according to Dutch law, if any collision occurs between a car and a bicycle, the car is at fault. Period. At the end of any road test for a driving license, if the driver gets out of the car without looking over his shoulder for bicyclists who could be hit by his opening door, he fails.

In the United States, many drivers see bikes as a nuisance hindering the flow of traffic, and many cyclists fear that riding a
bikes in traffic is dangerous. As Mr. Voerknecht put it, “Bicycles aren’t unsafe — cars are!” Very few adult riders in the Netherlands wear a bike helmet, yet the death rate per kilometer traveled is over 25 times lower than it is in the U.S. where bicycle helmets are much more widely used.

The Dutch example shows that given the proper incentives and safety measures, people will choose to ride.

This disparity is due in part to the laws and in part to infrastructure improvements that have increased Dutch drivers’ awareness of bicycles. These improvements include visible bike lanes that run along both sides of every street, the separate traffic signals for bikes that are also visible to drivers, and road signs that say “LOOK OUT” (“Het Op”) wherever bike lanes cross roadways and vice-versa. Newer bike lanes are paved in red asphalt, which stands out from grey asphalt roadways.

Some people see the state of American bicycling as a “chicken-and-egg” problem. Not much money is invested in bicycling because no one uses a bike, and people are unwilling to use a bike because there is no infrastructure. The Dutch example shows that given the proper incentives and safety measures, people will choose to ride. In the U.S., change will take time, but bike paths, bike lanes, and new legislation (not to mention higher gas prices) could all help to increase bicycle use.

A lot of effort is going into producing more fuel-efficient cars, but the zero emissions vehicle has already been invented! Bikes are much cheaper and easier to maintain than automobiles. Cycling creates very little noise and no exhaust. Several studies have shown that bicyclists’ productivity is higher and their absenteeism is lower compared to non-cyclists. Cyclists are sick less often, have longer life expectancies, and feel younger than their sedentary peers.

If those incentives aren’t enough, consider the following new bicycling programs. One element of the recently passed $700 billion Wall Street bailout package is the “Bicycle Commuter Act,” which, beginning in January 2009, will give a $20 per month credit to businesses for every employee who bicycles to work. For more details, consult your employer or see http://www.bikeleague.org/news/100708faq.php. Earlier this fall, the MBTA opened a new, free, bicycle storage facility at Alewife station. It is a covered, enclosed space with security surveillance and controlled access (a free Bike Charlie Card is required) that can accommodate up to 300 bikes. Steps like these will surely help to grease the wheels; now all that is needed is more feet on the pedals.

Thomas Lingner is a freelance photographer living in Belmont. He began bicycling to work at age 12, when he got his first paper route.

Best Bike Sites

- [www.bicyclinginfo.org/](http://www.bicyclinginfo.org/) The Pedestrian and Bicycle Information Center, a national clearinghouse for information for pedestrians and bicyclists.
- [www.wikihow.com/Commute-By-Bicycle](http://www.wikihow.com/Commute-By-Bicycle) A primer on how to commute by bicycle.
Volunteers Build New Western Greenway Links

By Dan Lech

A unified Western Greenway is a few steps closer to reality. In July 2008 Governor Patrick signed legislation to permanently preserve Lot 1, a portion of the Greenway on the former Middlesex County Hospital site (See “Lot 1 Saved by Grassroots Groups,” BCF Newsletter, September 2008, p. 12). A planned boardwalk on the northern portion of the Greenway’s Beaver Brook North Reservation will connect that property with Lot 1.

Over the past few years, citizens groups and government agencies have worked together to set aside land for conservation, improve infrastructure and obtain grant money for the Western Greenway, a chain of over one thousand acres of open space in Waltham, Lexington, and Belmont. Advocates would like to see this entire circle of land connected by trails and permanently protected from development. Some Greenway member properties include Habitat, Rock Meadow, and the Beaver Brook North Reservation in Belmont; the Lot 1 property in Lexington; and the Paine and Lyman Estates in Waltham.

Rock Meadow Improved

Last fall, over 50 volunteers gathered at Rock Meadow and built a 200-foot boardwalk in a marshy meadow area and a bridge over Beaver Brook to the Beaver Brook North Reservation. The crew also installed benches and three new kiosks. All these projects were paid for by a grant from the Massachusetts Department of Conservation and Recreation’s (DCR) Recreational Trails Program, jointly obtained by the Belmont Conservation Commission, the Friends of the Western Greenway, and the New England Mountain Bike Association. A donated sign at the Mill Street entrance and a new edition of the trail map will make Rock Meadow more accessible to visitors sometime in 2009.
Beaver Brook North Boardwalk Planned

The New England Mountain Bike Association was awarded a DCR grant to construct a boardwalk to extend trails from Beaver Brook North to Lot 1’s Walnut Street border in Lexington. This walkway will make it possible to hike, bike, snow shoe or cross country ski from Habitat across Mill Street to Rock Meadow over the bridge to Beaver Brook North all the way to the Lot 1 property in Lexington.

A three-foot-wide walkway will span 1000 feet of wetlands on the northern tip of BBN, providing an all-weather, all-season path. Plans for the boardwalk have not been finalized pending the restructuring of land management agencies at the state level.

Work on the trail should start in late 2009.

Dan Lech is a 10-year Belmont resident, wine professional, and musician who is attempting to think globally and act locally.

Debbie Hartman tests the new bridge connecting Rock Meadow to Beaver Brook North.
New State Lease May Revive Weston Rail Trail

by Anne-Marie Lambert and Sumner Brown

Eleven years ago, the residents of Weston voted to stop a portion of the Mass Central Rail Trail from being built through their town on the abandoned Central Massachusetts Railroad right-of-way. Now, Weston may finally be back on track, thanks to a new plan for the trail from the Massachusetts Department of Conservation and Recreation (DCR). If the Weston segment is developed, it will provide another link in the Mass Central Rail Trail (MCRT), a proposed trail running from Boston through Belmont and Weston all the way to Northampton. Several portions of the MCRT have already been built. About 25 miles of the trail are currently open.

Dan Driscoll of the DCR presented the DCR’s plan for the right-of-way to the Weston Board of Selectmen on December 9, 2008. In January, the DCR expects to sign a 99-year lease with the MBTA for the 26 miles of Central Massachusetts Railroad land between Waltham and Berlin, including the portion that runs through Weston. That lease would give the DCR full authority to develop trails along the former railway. However, there is currently no money allocated for improvements in Weston; right now the DCR is focusing on Waltham and Wayland, both of which may provide Community Preservation Act funds to support bike-path development.

Rail Trail Provides ‘Backbone’ for Travel, Tourism

The vision for the Weston path is to include soft and paved surfaces side by side to accommodate multiple uses. During a question-and-answer session following his presentation, Driscoll cited as a model the paths along the Charles River: a paved path about 10 to 12 feet wide runs alongside a soft surface 5 to 8 feet wide, giving the elderly a safe place to walk while cyclists go by. Dual paths on the Cape have a 10-foot path and a 5- to 7-foot shoulder.

Driscoll also complimented the volunteers who are currently maintaining the Weston trail, a worn dirt path which is used for horseback riding, mountain biking, walking, and hiking. According to Driscoll, the MCRT corridor (including Weston) could serve as a “backbone” to other bike trails in the Commonwealth and link to other regional trails, providing a base for ecotourism in Massachusetts.

Driscoll Details Bike-Path Planning

Driscoll answered a series of questions from the Weston selectmen and the audience about specific aspects of rail-trail construction. In response to questions about costs, Driscoll said that the DCR estimates that bike paths cost about $1 million per mile. Ten to 15 percent is typically for design; the rest is for construction including paving, fencing, shrubs for screening and other landscaping.

The funds usually come from a variety of local, state, and federal monies as well as grants from non-profits and foundations. Design expenses include the costs of environmental permits from agencies, including the state Department of Environmental Protection and local conservation commissions. The DCR is hopeful that a future federal economic-recovery
package will include public-works money for bike trails, but, said Driscoll, “Only time will tell.”

According to Driscoll, the DCR typically holds large public meetings to gather community input: when a trail is first proposed, at the 25 percent design phase (when plans are one-quarter complete), at the 75 percent design phase, and sometimes when the plan is complete. The DCR also holds special meetings for abutters early in the planning as well.

The Nova Biomedical facility in Waltham requested that the DCR install a six-foot-tall fence with barbed wire next to an abutting path. Today, vandals avoid the active trail, and Nova employees are asking the DCR to put in a gate.

Facilities such as parking and bathrooms are planned at the 25 percent design phase, and on/off ramps and fencing are included in early plans as well. Driscoll recalled locations where the DCR had to put up high security fences next to commercial properties with active cranes and equipment. However, some abutters come to regret their fencing requests. The Nova Biomedical facility in Waltham requested that the DCR install a six-foot-tall fence with barbed wire next to an abutting path and asked for assurances that the DCR would deal with any vandalism. Today, vandals avoid the active trail, and Nova employees are asking the DCR to provide gate access, Driscoll said. In residential areas, the DCR has addressed abutters’ concerns about noise and privacy by planting 15-foot-tall white pines and other landscaping.

The DCR has also been concerned about paths’ effects on nearby wildlife. Driscoll said that protecting wildlife and leading wildlife or birding walks is a high priority at the DCR and that on many occasions wildlife has received special attention. For example, fencing has been installed as protection during turtles’ egg-laying season, and in Cambridge there are plans to replace invasive plant species with native. No motorized vehicles are allowed on bicycle paths except police and utility maintenance vehicles.

A town has no liability for the path or the planning, but legislation passed within the last five years allows local police joint jurisdiction with state agencies on state property. Since all state rail trails have a dawn-to-dusk use policy and no lighting, local police have the authority to remove any nighttime trail users—a policy typically used to vacate loiterers, not to remove bicycle commuters, Driscoll said.

Bicycle paths can be quite popular. The Cape Cod paths get busy in the spring, and certain parts of the Minuteman trail get congested. Some can be widened to increase capacity, but others cannot. The DCR has been very careful to make transitions from bike paths to roadways safer. The path from Waltham to Alewife via Brighton Street in Belmont has not yet entered the design phase, Driscoll said, but the DCR will plan for those transitions.

Towns Come to Support Rail Trails

One questioner asked whether the previous Town Meeting vote rejecting the rail trail could be repeated. Driscoll explained that while the DCR is not subject to local legislation and has every right to develop the leased land regardless of local zoning, the agency wants local support.

Driscoll recounted how a group of 55 Newton residents once mounted a strong opposition to the Upper Charles River Reservation trail, based on fears such as increased crime and lowered property values—fears that have not materialized around any of the bike paths developed by the DCR in the past 20 years. After much debate and accommodation during the design phases, the Newton path was developed. Driscoll said that many of these same residents are now delighted...
with the path and the benefits it has brought to Newton: higher property values, community spirit, and recreation facilities.

The opposition 11 years ago to a rail trail in Weston was led by the man who is now the head of Weston’s Board of Selectmen. He was silent during the December 9 meeting. Global warming and rising fuel prices make bicycles look even better than they did 11 years ago, and the state is now vigorously supporting rail trails. Weston’s previous decision may have contributed to loss of momentum for developing Belmont’s own portion of the Mass Central Rail Trail a decade ago. This time, the tone and questions at Weston’s public Q&A were very supportive.

Sumner Brown and Anne Marie Lambert are Directors of the Belmont Citizens Forum.

Environmental Events

Whole Tree Identification.
**Sunday, January 25, 1-3:30 p.m.** Let the Friends of Fresh Pond Reservation introduce you to 12 extraordinary trees that have shapes, bark, and branching patterns that you will easily remember. Wear footgear for walking off path and expect to be outside for at least 90 minutes. Information: 617-349-6480, friendsoffreshpond@yahoo.com, www.friendsoffreshpond.org. **Meeting place TBA.**

Arlington Land Trust Annual Meeting.
**Monday, January 26, 7-9 p.m.** Belmont Representative Will Brownsberger will speak on “Making Land Conservation a Priority in the Alewife Area.” Information: 781-643-3156, info@arlingtonlandtrust.org. **Robbins Library Community Room, 700 Mass Ave., Arlington.**

Judith K. Record Memorial Conservation Fund Concert.
**Saturday, January 31, 7:30 p.m.** Join the Record Player musicians for chamberworks by Hayden, Gaubert, Mozart and Debussy. The evening will feature the world premiere of “The Life of Trees,” a slide presentation of photographs of trees worldwide with live musical accompaniment. All proceeds will benefit the Judith K. Record Memorial Conservation Fund. Information: 617-489-4727, www.jkrfund.org. **The First Church in Belmont, 404 Concord Avenue, Belmont.**

Reflections on the Pond: A Fresh Pond Reservation Art Show.
**Reception Friday, February 27, 6-8 p.m.; additional exhibit hours Saturday, February 28–Sunday, March 8, 3-8 p.m.** Enjoy works of art by local artists that were inspired by Fresh Pond Reservation. This free exhibit will include paintings, drawings, photographs, poetry, and other artwork. If you are interested in sharing your own artwork, call 627-349-6489 or email friendsoffreshpond@yahoo.com. Information: 617-349-6480, www.friendsoffreshpond.org. **Neville Place, 650 Concord Avenue, Cambridge.**

Sustainable Belmont Meetings.
**Wednesdays February 4, and March 4, 7-9 p.m.** Join Sustainable Belmont members to discuss Belmont’s Climate Action Plan (see p. 1).

Uplands Group Seeks Funds

The Coalition for Alewife has hired wetlands scientist and wildlife expert Charles Katuska to testify on wildlife issues at the Belmont Uplands site before the Massachusetts Department of Environmental Protection. Mr. Katuska has agreed to work for a reduced fee. However, money is needed to pay him.

Please mail a check with “Wildlife Expert” in the memo line - to the organization of your choice:

The Friends of Alewife, 186 Alewife Brook Parkway, Suite 304, Cambridge, MA 02138 or The Belmont Citizens Forum, P.O. Box 609, Belmont, MA 02478
Winter Mushrooms.

**Sunday, March 2, 10 a.m.-noon.** The program starts indoors with field guides, a slideshow, lore, and ID techniques. Then the class will visit outdoor spots where there might be examples of fungal life...even in winter. Sponsored by Habitat. $12 Mass Audubon members, $15 nonmembers. To register, contact Habitat: 617-489-5050, habitat@massaudubon.org, www.massaudubon.org. Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont.

Sugaring Celebration.

**Sunday, March 9, 1-3 p.m.** Bring the kids and grandparents and learn how maple syrup is made from sugar maple trees. Try your hand at a few sugaring activities, hear stories, and visit a few places on the property including tapped sugar trees. Sponsored by Habitat. $8 Mass Audubon adult and child members, $10 nonmembers. To register, contact Habitat: 617-489-5050, habitat@massaudubon.org, www.massaudubon.org. Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont.

---

**We need you.**

If you can volunteer even a few hours a month, you can make a difference. You do not need to be an expert—just a person who cares about our town.

**I can devote time to:**

- [ ] Archaeology & Historic Preservation
- [ ] Environmental Protection
- [ ] Planning & Zoning
- [ ] Community Path
- [ ] Walking in Belmont
- [ ] Mailings
- [ ] Newsletter

**I can help pay for this newsletter:**

It costs about $4000 to publish each issue of our newsletter. Please donate for this purpose:

- [ ] $25
- [ ] $50
- [ ] $100
- [ ] $250

Name ____________________________
Address ____________________________
Phone/E-mail ________________________

If you have questions, please call (617) 484-1844. The Belmont Citizens Forum is a nonprofit 501(c)(3) organization. Your donation is deductible from federal taxes to the full extent provided by law.

Make checks payable to *Belmont Citizens Forum* and mail to Belmont Citizens Forum, P.O. Box 609, Belmont MA 02478.

*Thank you.*
Jan/Feb 2009

Sustainable Belmont Preps Climate Plan . . 1
Dutch Planning Makes Biking Safe . . . . 4

Volunteers Build Greenway Links . . . 6
State Gets Lease For Weston Rail Trail . 8
Environmental Events . . . . . . . . 10