

Dear MAIP&L members and friends,



*Man did not weave the web of life; he is merely a strand in it.
Whatever he does to the web of life, he does to himself
~ Mahatma Gandhi*

COMING THIS FALL: SPIRITUALITY AND SUSTAINABILITY; MOVING FROM FAITH TO ACTION

MAIP&L will introduce a new series of workshops called ***Spirituality & Sustainability; Moving from Faith to Action***, this fall. In case you think a workshop like this isn't necessary consider some surprising facts revealed by a recent study of public opinion in Massachusetts entitled *"The 80% Challenge: A Survey of Climate Change Opinion and Action in Massachusetts"*, by independent think tank MassINC.

- 77% of Massachusetts residents believe that global warming is occurring;
- 75% think there will be very, or somewhat serious consequences if solutions aren't found; and
- **83% believe that "we have a moral obligation to do what we can to reduce global warming".**

Most of the public believes that addressing global warming is a challenge that each sector of society should work to address. But while 56% of us think the federal government should be doing a lot, only 45% percent say that **people** in Massachusetts need to do a lot and **only 4% believe that residents are now meeting that standard.** That opinion may underestimate what people are actually doing, but it's a disturbing indication that there's a big gap between what we believe and what we're doing.

Spirituality and Sustainability will bridge that gap in three critical ways. First it will give people spiritual grounding to help them clarify their core values around living in harmony with the rest of creation. Second it will provide interactive opportunities to learn the most effective practical actions we can take—and the resources available to help; Third it will facilitate the formation of support groups that will develop action plans focused on action at the personal, faith community, and larger community levels.

If your faith community is interested in hosting a series of workshops in October or November of 2011 contact vince@MIPandL.org. Stay tuned for further details.

NOAH Challenge A Success



Jim Nail giving Ted Wade of First Baptist Newton "Leadership By Example" award for winning the NOAH CHALLENGE

Thanks to your tremendous response the NOAH CHALLENGE was a great success. The results of surveys of those who signed up to obtain free home energy assessments clearly demonstrate that the faith community doesn't just "talk the talk" but also "walks the walk".

The surveys show that:

- 291 of you agreed to obtain free energy assessments;
- 164 of you obtained assessments;
- 146 of you received recommendations to make energy upgrades; and
- 76 of you have made the upgrades or plan to do so.

52% of those who received recommendations to do work have done so or plan to do so. Even more impressive, 69% of those who have done, or plan to do work have chosen to do 2 or more kinds of work like free air sealing, adding insulation, upgrading heating or hot water equipment, or upgrading appliances. Although we would have liked more folks to have followed through, the above results are far better than typically achieved by existing programs, and enabled MAIP&L to significantly exceed all of our targets.

Not only that, MAIP&L completed the free Environmental Stewardship Assessment (ESA) that the **First Baptist Church of Newton (FBC)** won for signing up more participants than any other congregation. The ESA, a comprehensive evaluation of house of worship behaviors, building energy systems and thermal envelope, recommended upgrades to components of FBC's heating and hot water heating equipment, the addition of insulation and the installation of interior plexiglass storm windows. For more on **MAIP&L's Environmental Stewardship Plan** go to: <http://www.mipandl.org/ees.html>

Thanks again to all of you at First Baptist Newton; First Parish UUA, Waltham; First Congregational, UCC, Cambridge; Trinity Episcopal, Topsfield; The Unitarian Universalist Church of Worcester; Eliot Church of Newton, UCC; Sacred Heart/St. Brigid's, RC, Lexington; United Parish, Upton; Iglesia Evangelico Getsemame, Lawrence and everyone else for making the Noah Challenge a success!

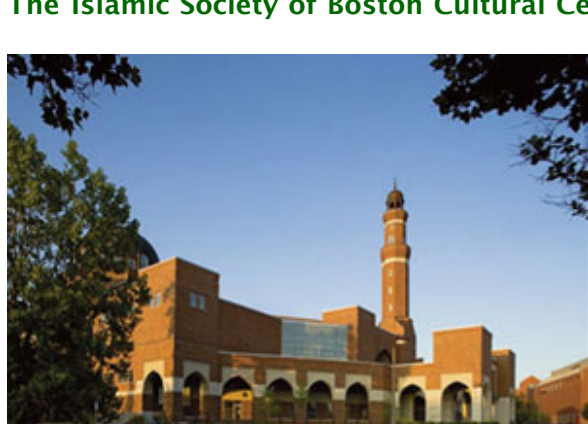
Three Massachusetts Congregations Receive Energy Star Labels

The US EPA is recognizing three congregations in Massachusetts for receiving the Energy Star label in 2011. They are: The Islamic Society of Boston Cultural Center (ISBCC), Roxbury, Mass.; the Dennis Union Church, Dennis, Mass.; and the Winchester Unitarian Society, Winchester, Mass. The ISBCC and the Winchester Unitarian Society are members of MA Interfaith Power & Light.

An Energy Star label indicates that a building operates at least 75 percent more efficiently than the average for that building category. MAIP&L member, First Parish in Needham received an Energy Star label in 2010.

"These congregations are setting a solid example of financial and environmental stewardship. They have successfully reduced their energy use and are showing all houses of worship across New England that environmental stewardship is possible for all sorts of organizations," said Curt Spalding, regional administrator of EPA's New England office. "We hope more small businesses and congregations will follow their lead and maximize energy efficiency opportunities in their own operations."

The Islamic Society of Boston Cultural Center, Roxbury, Mass.



The Islamic Society of Boston Cultural Center is the first Islamic center in the U.S. to earn the Energy Star Label. The Center became an Energy Star partner in June of 2010. Jawad Benazzi, the facility manager, spearheaded the Center's energy efficiency initiative, purchasing energy efficient appliances in the kitchen and offices and putting signage in areas such as bathrooms and classrooms to remind members to conserve whenever possible. The Center had electrical and gas audits conducted by their local utility for free and that helped them to identify energy saving opportunities. This led to upgrading more than 70% of their interior lights. Other improvements included adding motion detectors in bathrooms, and putting reducers on the bathroom faucets.

Dennis Union Church, Dennis, Mass.

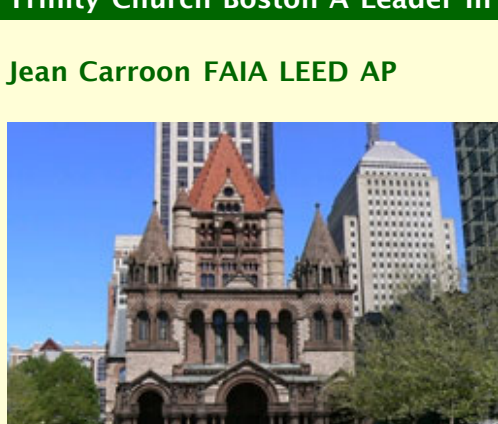
Dennis Union Church was able to add 5,000 square feet of new space, renovate and add central air conditioning to their facility and still lower their annual energy bills. Even with the addition of 5,000 square feet of space, an increase of more than 40% in the size of their facilities, Dennis Union Church is saving 1,308 kilowatt hours (kWh) of electricity annually and has reduced their overall electric bill by \$262. In total, this represents a reduction in greenhouse gas emissions of nearly one ton. All four congregations, with the help of their dedicated congregants, made substantial efforts to mitigate their environmental impact, while at the same time reducing the cost of energy for the congregations.

Winchester Unitarian Society, Winchester, Mass.

"With an initial investment of just \$7,000, we have made significant gains in energy efficiency and cut our heating bills by more than half. Our success is proof that a congregation – even one with an older building like ours – doesn't need to spend a lot to make meaningful reductions in its carbon footprint," says Chuck Khuen, co-chair of the Winchester Unitarian Society's Building Committee. After a full assessment of the building and its heating system, the church tuned and repaired their heating system and vents, weather stripped windows and doors, and added heating zones in the building to reduce energy use during off-peak hours. The improvements paid for themselves in the first year, substantially reducing the congregation's carbon emissions and freeing funds for uses directly supportive of the congregation's mission and vision.

Trinity Church Boston A Leader In The Use Of Geothermal Heat Pumps

Jean Carroon FAIA LEED AP



Almost ten years ago, ground-source heat pumps (GSHP) often referred to as National Geothermal systems, were proposed and installed for an expansion of Trinity Church (GSH) in Boston, a National Historic Landmark designed by H.H. Richardson. At the time, although not a new technology, the system was relatively unknown and extensive research was done to verify that it was viable and cost effective. Today, there are over one million installations according to the Geothermal Exchange Organization, www.geoexchange.org.

GSHP uses the principle that heat energy always flows from warmer areas to cooler ones and depending on the season a GSHP either rejects or collects heat from a ground temperature that might range from 45°F in northern latitudes to about 70°F in the deep south. A GSHP can be an ideal energy conservation strategy for historic buildings because it replaces more traditional mechanical systems and the ground-source is usually located outside of the building footprint, which in some cases also reduces the potential impact of traditional systems.

In the case of Trinity Church, the creation of 15,000 square feet of new community meeting space underneath the building brought with it a desire for air conditioning for maximum full-season use. A traditional chiller system was considered, either air or water cooled, but all potential locations were untenable either aesthetically or physically. The decision to use GSHP's was the most architecturally beneficial because it removed the cooling tower completely as well as the resulting plume and possible boiler flue. Cooling was the primary need at Trinity Church, but the system also meets heating needs.

The ground-source varies according to geographic location and design requirements. A system can be horizontal or vertical, closed or open. For instance, at Trinity Church, with a very small site and known bedrock below, a closed vertical "well" system was used.

Six wells or holes were drilled around the church with a diameter of 8 inches to a depth of 1500 feet. Water is used as the medium for transferring heat and flows in a 3000 foot loop down the well and back up through a PVC tube attached to a pump which moves the water from the well to one of thirteen heat exchangers located in the mechanical room of the church. The heat pumps either extract heat from or transfer heat to the well water, depending upon the mode (cooling vs. heating). This heat is exchanged with a "house loop", a separate water loop that circulates between the heat pumps and the interior fan coil units and radiators.

The wells may stay operational for 50 to 100 years and the system is completely outside the footprint of the building. When visiting the church, look for the six metal plates set in the paving about ten feet from the edge of the building. There are three in the front and three along St. James Street. When you stand on one of these, look up because the well beneath your feet is an 8" hole that is twice as deep as the Hancock Tower is tall.

Jean Carroon is a Principal of Clancy, an interdisciplinary design firm with offices in Boston, Massachusetts and Washington, D.C. responsible for the expansion and partial renovation of Trinity Church in Boston.

UPCOMING EVENT

This Fragile Earth, Our Island Home: An Ecological Spirituality of Lament and Hope

August 5-7 (Friday dinner – Sunday lunch)

Today's environmental realities call us to examine anew how we live. Spirituality is the way we walk on the earth, work together, build community, honor our bodies, celebrate and struggle, and listen to the promptings of the Spirit. This weekend will include short presentations as well as meditation, prayer, sharing of resources, and personal and group reflection. The themes of lament and hope will be woven throughout our times of prayer. We will be nourished by the insights of theologians from several continents and become more deeply aware of Earth's body, our bodies, and the Body of Christ. The theologians include **Dorothee Soelle, Mercy Amba Oduyoye, Rosemary Radford Ruether, and Ivone Gebara.**

Leader: **Jane Carol Redmont, PhD**, author of *When in Doubt, Sing: Prayer in Daily Life*, is a theologian, writer, spiritual director, preacher, and worker for justice. Before this, she worked at a Catholic parish, and as an urban minister including a time as Social Justice Minister at Boston's Paulist Center. She teaches Religious Studies and Women's Studies at Guilford College and is a Campus Ministry Associate at St. Mary's House, Greensboro, NC. Website: <http://actsofhope.blogspot.com/>

Program fee \$120
Room & board \$200
Total cost \$320

Program check-in 4:00-6:00 pm Friday

Adelynrood Retreat and Conference Center, Byfield, MA 01922-2812. Visit: www.Adelynrood.org for applications.



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Peace and blessings,

Your friends at MIP&L