

UUCB ENVIRONMENTAL TASK FORCE

**Final Report
May 10, 2007**

MEMBERS

Members of the Environmental Task Force include Gay Canough, Cindy Cotton (resigned for personal reasons), Scott Clarke, Glenn Dolphin, Wes Ernsberger, Trebbe Johnson (joined April 24), Dick Rehberg (Chair), Chris Rounds (resigned because of demanding schedule and to prepare to resume as Co-Moderator), and Keenan Taylor.

CHARGE

The preamble to the charge of this Task Force began with these quotations from Harvard conservation biologist Edward O. Wilson:

The Creation—living Nature—is in deep trouble Half the species of plants and animals on Earth could be either gone or at least fated for extinction by the end of this century.

The two most powerful forces in the world today, especially in the United States are religion and science. If religion and science could be united on the common ground of [the environment], the problem would soon be solved. If there is any moral precept shared by people of all beliefs, it is that we owe ourselves and future generations a beautiful, rich, and healthful environment (Wilson, E.O. *The Creation*. New York: W. W. Norton & Company, 2006, pp. 4-6).

Central to the work of the Task Force has been the concept of “ecological footprint”, that is, the total amount of the natural resources and environmental services, in land acre equivalents, each of us “consumes”. Scientists estimate that in an equitable and sustainable world, each person’s ecological footprint would be equivalent to about 4.7 acres. Worldwide, however, humankind now consumes 5.4 acres per person. Most importantly, with our resource intensive life-styles, we in the United States consume almost 25 acres per person. It is worth noting that these estimates are for the human species only with not provision made for other species!

In concert with our Minister, Douglas Taylor, the Task Force defined for itself these three objectives. Measurable progress toward each of these objectives would reduce the “ecological footprint” of our Congregation and community.

1. A set of *actionable* proposals including preliminary time lines and cost estimates for transforming our physical plant into an more environmentally friendly and sustainable presence within our larger community.
2. A set of *actionable* proposals including preliminary time lines and draft text for one or more covenants to be forged, cooperatively and voluntarily, between the Congregation and individual members and households that will inform and specify how each signatory member or household can reduce his/her, its, “ecological footprint” and thus contribute to a more sustainable habitat.

3. **A set of *actionable* proposals including initial plans and contacts, for extending the reach and impact of our congregation and the work of this task force into our larger community, including but not limited to, municipal, city, and county governments, other beliefs and faiths and places of worship, and appropriate institutions.**

The Task Force met bi-weekly from January 2 through May 8 of this year. At various points in time we were pleased to have Douglas Taylor, John Smiglelski, and Eileen and John Hamlin join our meetings.

RECOMMENDATIONS

Reducing the Ecological Footprint of Our Physical Plant

Our primary concern with our physical plant is the electric and natural gas energy we consume for lighting, heating, and other services. Because the combustion of coal to generate electricity and the burning of natural gas to generate heat produces carbon dioxide, the primary gas responsible for global climate change, we sought to measure or “audit” the energy use of our facilities and then to develop a set of recommendations that, if implemented, would reduce our “carbon footprint”.

Gay Canough assumed primary responsibility for that energy audit, the carbon reducing recommendations that follow from that audit, and the cost estimates for those recommendations.

From her own initial audit, a “blower door” and an infra-red heat loss assessment, as well as a subsequent independent energy audit funded by the New York State Energy Research and Development Authority (in process), Gay concluded that (See Appendix A for all UUCB Energy Audit reports):

1. **We (UUCB) spend more than \$11,000 each year on energy (electricity and gas). Although energy is just slightly more than 5% of our annual budget, because of what economists refer to as “market imperfections” or “market failures”, this dollar amount fails to “internalize” or include the “real” or “true” costs of that energy use to the environment; specifically the environmental costs of pollutant emissions, including carbon dioxide.**
2. **In heating, cooling, and lighting our physical facilities, we emit more than 76 tons of carbon dioxide per year. Although estimates of the environmental per ton costs of carbon dioxide vary widely, a reasonable figure is ca. \$40 per ton. The true cost, then, of our carbon dioxide emissions would be almost 50% higher than the accounting cost, i.e., \$11,000 + \$76(\$40) or ca. \$15,000 per year.**
3. **Consistent with the UU Ministry for Earth, we can recommend congregational adoption (and financial support) of Gay’s recommendations: Specifically:**
 - a. **Ensure that all electricity purchased from NYSEG is “green power”. *Cost estimate: ca. 15 to 20% surcharge (which could be offset if energy conserving measures are adopted).***

- b. **Turn off computers and printers when not in use; use energy saving power settings on all computers. Use power strips, timers or simply “turn off” the 24/7 electricity drain of “always on” or “vampire” appliances and devices. *Cost estimate: \$300 for timers for computers and other appliances.***
- c. **Replace CRT screens with LCD screens. *Cost Estimate ca. \$200 - \$225 each.***
- d. **Replace major obsolescent appliances with Energy Star efficient appliances *Cost estimate \$ Energy Star Refrigerator ca. \$950.***
- e. **Reduce significantly the electric and gas consumption of our sanctuary:**
 - 1) **Replace sanctuary incandescent with fluorescent lighting and eliminate the seldom used dimmer switch. *Cost Estimate \$ ca. \$2,000***
 - 2) **Purchase and install window quilts for all windows. *Cost estimates:***

a) <i>West classrooms</i>	\$	2,385
b) <i>Sanctuary</i>		5,701
c) <i>Social hall</i>		1,680
d) <i>Downstairs</i>		1,738
e) <i>Fireside Room</i>		1,881
f) <i>East classrooms</i>		8,381
 - 3) **Insulate both the walls and the ceiling of the sanctuary. As part of this process, secure cost and feasibility estimates for solar panels or shingles for at least a portion of the roof replacement that is already overdue. *Cost estimate from Binghamton Slag Roofing: \$69,000 including tearing off old shingles, installing new sheathing over insulation, putting on new shingles.***
 - 4) **Evaluate installation of ceiling fans in sanctuary. *Cost estimate (to be obtained).***

Implementing these recommendations will require a significant capital investment by the Congregation. The Congregation must first decide whether we are going to remain in our current location and building for the intermediate or long-range future.

If the decision is to remain, then the Congregation must decide whether to invest the requisite funds to reduce the carbon footprint of our facilities.

If the decision is to seek a new location, then the Congregation should evaluate the projected energy consumption of any new facility and include the results of that evaluation in its decision making processes. Any new facility should be as energy conserving and efficient as resources and technology will permit

Whether in the present facilities or in new facilities, energy conserving and efficiency investments produce at least three benefits. They: 1) reduce our carbon emissions and thus benefit the environment, 2) result in over-time, life-cycle, real dollar savings on annual expenditures for electricity and natural gas, the costs for which are likely to rise at a rate faster than the cost of living, 3) establish our Congregation and our physical facilities as an environmental beacon for our community and region.

Reducing the Ecological Footprint of Our Congregation

When historians reflect on the year 2007, they may well designate it as the year in which a majority of the citizens of the United States became aware of the many cumulative environmental stresses (depleted fisheries, water shortages, vanishing honey bees, species extinction, *inter alia*) confronting human kind. Most notably, historians may designate 2007 as the year that Americans became as aware as Europeans of the threat climate change poses to our collective and individual well-being. Education and information are requisite if we are to transform that awareness into action.

The Environmental Task Force initiated the following education and information actions:

1. **Preparation and distribution to the Congregation of an Environmental IQ Test and Key (See Appendix B)**
2. **Moments of “Zen” about trees and about our environment**
3. **A presentation by Gay Canough on Climate Change at the UUCB on April 18th and at the UU Congregation in Buffalo on April 25th.**
4. **Distribution on Sunday April 29, of Norway Spruce tree saplings to each member of the Congregation**
5. **“How to” workshops for the Congregation on home energy audits (Fall 2007)**

Beyond these initial steps, the Task Force recommends for the Congregation year beginning September/October of 2007:

1. **A series of discussion groups on environmental issues (see proposed “curriculum in Appendix C). These discussion groups may occur in various formats, including:**
 - a. **Book groups focused on a particular book on one or a range of environmental issues (See Appendix C for a suggested list of books and other resources). NOTE: Wes Ernsberger has an intense interest in population and the environment and plans to use one of these sessions to present his thoughts for consideration and discussion.)**
 - b. **Forums with speakers addressing one or a range of environmental issues.**
2. **A special Sunday morning service prepared and led by Trebbe Johnson designed to heighten awareness about and appreciation of our environment. In her service, Trebbe will be attentive not only to the “cognitive” dimensions of our environment but to the emotional and aesthetic dimensions as well (proposed date is October 14).**
3. **On that very same Sunday, beginning in the early afternoon, a “Day in The Wild” at Scott Clarke’s home in Windsor where we can walk and hike his many acres of woods and meadows. (Note: carpools will be environmentally necessary and participation may be limited by available parking space.)**
4. **That the UUCB commit itself to become a UUA affiliated “Green Sanctuary” (See immediately below.)**

5. Drawing on his attendance at the “Seminar on Sustainability Using the Natural Step Framework”, sponsored by the Binghamton Neighborhood Assemblies Project, April 28th at the Regency Hotel, Scott noted that the primary presenter, Terry Gips, had said that in Sweden a number of major cities and rural towns have become “eco-municipalities” thereby decreasing costs and waste while creating jobs. Scott suggested that the UUCB, following its “Sister City” program with Borovichi, might wish to establish a sister city relationship with one of the Swedish eco-municipalities. The Task Force enthusiastically endorsed this suggestion.

Responsibility for these educational and informational activities will be shared among a number of individuals. Glenn Dolphin has offered to assume significant responsibility for the coordination of these events.

**Creating a Green Sanctuary (Source: Unitarian Universalist Ministry
for Earth, sponsors of the Green Sanctuary Program
www.ministryforearth.org)**

Definition:



A Green Sanctuary is a congregation that lives out its commitment to the Earth by creating a sustainable life style for its members as individuals and as a faith community. Sustainable living is not about our material comfort (though these choices are an important part of the overall life style); it is about choosing to live in a way that nurtures life, builds relationships, and rejects material consumption as the sole determinant of happiness.

Goals:

- To build awareness of societal environmental issues among UUs.
- To generate commitment for personal lifestyle changes.
- To motivate Uus to community action on environmental issues.
- To build a connection between spiritual practice and environmental consciousness.
- To build awareness of and rectify environmental injustices.

Program activities (four focus areas):

Worship and Celebration
Religious Education
Environmental Justice
Sustainable Living

A participating congregation is asked to complete at least twelve activities or projects spread over the four program elements. Some projects will be one time events, others will be on going over a period of months. Note that:

- A minimum of two activities is required in each of the first three elements, while at least four must be carried out in the category of Sustainable Living, including at least one energy conservation activity. Two additional activities can be selected from any of the four program elements.

- **One social justice project will be a major on-going activity in collaboration with another congregation or organization to address an issue of environmental justice in your community or in the world.**

The UU Ministry for Earth enumerates these five critical steps (See Appendix D for additional UU Ministry information on the Green Sanctuary.)

- 1. Establish a Green Sanctuary Committee**
- 2. Conduct an Environmental Audit**
- 3. Create an Action Plan**
- 4. Apply for Green Sanctuary Candidacy and complete all activities**
- 5. Apply for Green Sanctuary Accreditation**

Should the UUCB decide to become a Green Sanctuary, it would be living testimony to our commitment to the seventh principle of our religion: “Respect for the interdependent web of all existence of which we are a part”.

Extending Our Reach To Our Larger Community

Time constraints permitted only a brief discussion of this objective. During that brief discussion, Task Force members suggested: 1) the UUCB becoming an “environmental catalyst” among religious organizations in Broome County, extending its reach through various organizations including the Broome County Council of Churches and our contacts with various Jewish and Muslim organizations; 2) through those vehicles, offering other interested religious organizations energy audits similar to that just completed for our building. We noted also that becoming a Green Sanctuary involves significant outreach efforts.

CONCLUSION

In the comparatively brief period the Task Force has been meeting, we believe that we have made significant progress toward achieving two of our three objectives. We believe that Board and Congregation acceptance of our recommendations and favorable action on the investments required to implement energy use conservation and efficiency and Green Sanctuary certification enable our Congregation to become a stronger and more resilient community, a community better prepared to meet the critical challenges of the 21st century.

With this Final Report, the Task Force completes its time-defined mission. To implement the initiatives contained in the report, we recommend the creation of a standing committee, effective no later than September 2007.

Respectfully submitted on behalf of the Task Force.

Dick Rehberg

