

# FIRST UU ENVIRONMENTAL AUDIT 2005-2006 REPORT

## Introduction

The Green Sanctuary Committee conducted an environmental audit of the First UU building and congregational life as a first step towards attaining Green Sanctuary Certification through the UUA Ministry for Earth.

The environmental audit reviewed policies, procedures and practices in ten (10) areas to determine current practices and opportunities for enhanced earth-friendly actions:

1. Energy Usage & Conservation
2. Recycling
3. Use of Environmentally Friendly Products
4. Investment Strategies
5. Youth Religious Education
6. Adult Religious Education
7. Worship Services
8. Social Justice Program
9. Transportation
10. Landscaping

This report summarizes the basic findings of the audit and identifies preliminary opportunity areas to consider for projects to fulfill our Green Sanctuary requirements. The Green Sanctuary Committee intends to expand those opportunity areas and define specific projects based on input from the congregation. Congregational input will be collected during Green Sanctuary Committee forums to be held on Wednesday, May 3 (7:00 pm) and Sunday May 21 (noon) as well as input collected through informal conversations between committee members and congregants.

## Green Sanctuary Certification Requirements

- ◆ Based on the results of the audit, the Green Sanctuary Committee will develop an Action Plan that outlines twelve (12) activities or projects representing the following four Focus Areas:
  1. Worship and Celebration
  2. Religious Education
  3. Environmental Justice
  4. Sustainable Living
- ◆ Some projects will be one-time events, while others will be on-going over a period of months.
- ◆ The Action Plan will reflect the following specific program requirements:
  - Two activities are required in each of the first three Focus Areas: worship and celebration, religious education, and environmental justice.
  - Four activities are required in the area of sustainable living, with at least one of these activities focusing on energy conservation.
  - Two additional activities can be selected from any of the four Focus Areas
  - One environmental justice project must be a major on-going activity in collaboration with another congregation or organization to address an issue of environmental justice in our community, nation or world.

## Environmental Audit Results & Opportunity Areas

### General Overview

#### Results:

- ◆ Although environmental practices and sensitivities exist in various areas of our congregation, there are no specific policies or procedures that address environmental concerns. Consequently, there is no accountability within the congregation to ensure that our policies and practices reflect the adherence to environmental concerns and our 7<sup>th</sup> principle.

#### Opportunity Areas:

- ◆ Policies and procedures in all areas need to be reviewed and, where appropriate, policies should be amended or created to reflect our environmental values.

## Energy Usage & Conservation

The results for this section reflect our own internal audit and the Energy Audit conducted by Landsberg Engineering.

### Results:

- ◆ Electric usage increased while water and gas usage decreased in 2005 compared to 2004. However, due to the increase in gas prices, the total cost of our gas consumption increased in 2005 despite the decrease in usage. None of our energy comes from sustainable energy sources.
- ◆ Energy-efficient fluorescent tubes in ceiling fixtures are used, but only 5% of our lighting is energy efficient.
- ◆ Two of our largest kitchen appliances, the dishwasher and the refrigerator, are energy efficient; our other large and small appliances are not. The coffee brewer and gas ranges are very old (approximately 45 and 60+ years, respectively). Recent computer and copier purchases are not Energy Star compliant.
- ◆ The board has approved the consolidation of two furnaces with one furnace that will improve our energy efficiency. This leaves us with 7 existing furnaces that are 75 to 80% efficient at best, and a gas water heater that is not energy efficient. None of our hot water pipes are insulated. The duct work has never been cleaned and some of the ducts are undersized for the heating system.
- ◆ Insulation R-values range from 2.3 to 14. The energy efficiency of our windows also vary throughout the building with the RE wing, downstairs entrance, kitchen, narthex, bathrooms and rooms behind the sanctuary being of most concern since they are single pane windows.
- ◆ Much energy is being lost through the fireplace in the Parlor.
- ◆ The office secretary routinely keeps the office door closed in winter to conserve heat.

### Opportunity Areas:

- ◆ Explore the cost feasibility of converting at least some of our electric and gas to environmentally friendly sources
- ◆ Per the Landsberg Engineering Audit, the following energy saving steps are recommended. **Please note that detailed specifications for these recommendations are outlined in the full Energy Audit report and should be referred to if any of the recommendations are pursued.**
  - Replace all incandescent bulbs with compact fluorescent bulbs (annual savings = \$297; initial cost = \$1,556 with 5.2 year payback period)
  - Replace existing exit signs with LED exit signs (annual savings = \$42; initial cost = \$490 with 11.7 year payback period; a \$42 incentive exists through the Smart Equipment Choices program [\$6 per fixture])
  - Replace exterior mercury vapor lamps with 250 watt high pressure sodium fixtures (annual savings = \$181; initial cost = \$1,250 with 6.9 year payback period; a \$42 incentive exists through the Smart Equipment Choices program [\$6 per fixture])
  - Install occupancy sensors in all areas (annual savings = \$79; initial cost = \$520 with 6.6 year payback period; an \$80 incentive exists through the Smart Equipment Choices program [\$10 per fixture])
- ◆ Develop policies & procedures to conserve energy including: turning off lights when not in use, location of compact fluorescent light bulbs for replacement, thermostats turned down when rooms not in use, using window blinds to control temperature, purchasing energy star appliances and office machines (e.g. computers), etc.
- ◆ Explore feasible options for Parlor fireplace.

## Recycling

### Results:

- ◆ Onondaga County has an extensive recycling program in place, providing recycling opportunities for many products via our normal trash pick-up including:
  - ✓ #1 & #2 Plastic Bottles
  - ✓ Milk & Juice Cartons
  - ✓ Paper Items (non-metallic)
  - ✓ Grocery & lunch bags
  - ✓ Pizza Boxes
  - ✓ Corrugated Cardboard
  - ✓ Paper Board (including food & toiletry boxes, paper towel/toilet paper rolls, etc)
  - ✓ Glass Containers
  - ✓ Metal containers (of non-hazardous contents)
  - ✓ Newspaper, magazines, mail & catalogs
  - ✓ Telephone books (April & May)
  - ✓ Greeting Cards & Wrapping Paper (non-metallic)
  - ✓ Aluminum foil & Aluminum baking tins

- ◆ Additionally, opportunities exist to recycle other products at various locations in town either on a regular basis or on specially designated days, including:
 

✓ Batteries	✓ Computers	✓ Ferrous Metals
✓ Usable Furniture	✓ Non-Ferrous Metal	✓ Paint & Hazardous Waste
✓ Styrofoam	✓ Print Cartridges	✓ Yard Waste
- ◆ Typically, our blue bins are not used effectively with non-recyclables being discarded in the blue bins and recyclable materials, especially paper, being thrown in the regular trash. At one time, per Onondaga county policy, our hauler stopped recycling our recyclables due to the many errors. Therefore, we can not guarantee that our blue bins are currently being recycled by the hauler.
- ◆ Some efforts are made to recycle at major events, although the efforts are not consistent or organized.

**Opportunity Areas:**

- ◆ Developing a standardized recycling program which includes training of the congregation and others who use the building on our recycling procedures.
- ◆ Developing special collection programs for items that can be recycled elsewhere (e.g. batteries, hazardous waste), either within our congregation or in partnership with other congregations and community organizations.

**Use of Environmentally Friendly Products (Office Supplies, Paper Supplies, Cleaning Products)**

**Results:**

◆ **Office Supplies**

- Although there are no standard procedures in place, we attempt to purchase as much recycled product in the office as possible. Examples include copy paper, post-it notes, padded envelopes and file folders. Those items that did not contain recycled content include regular envelopes, legal pads and some brands of copy paper.
- All markers and glues are non-toxic. Although our brand of neon-colored copy paper is not made with recycled content, it is chlorine free. We do use a copy machine glass cleaner that contains toxic ingredients.
- The office secretary collects used batteries and recycles them at OCCRA. Copy and fax machine toners are sent to a recycling facility.
- Most items are purchased in bulk.
- Our use of copy paper is high. Many multi-paged documents are copied on one side of the paper only when double sided could be used. A box does exist next to the copy machine to place unusable one-sided copies that can be reused for less important materials being copied, especially sample copies of items. It was noted that this practice is rarely used.
- Our newsletter is sent by mail, demanding a high use of paper product and ink. The capability exists to send the newsletter by e-mail.

◆ **Kitchen and Rest Room Paper Products**

- Of the several paper items used in the kitchen and rest rooms, only one brand of kitchen paper napkins contained recycled product. This might not be the primary brand used. The paper towels used in the rest rooms are unbleached, whereas the kitchen paper towels are bleached.
- We make a good effort in our kitchen to use permanent products over paper and plastic products. Examples include using china and silver for potlucks, having ceramic mugs available for coffee hour and using cloth tablecloths or reusing plastic tablecloths.

◆ **Cleaning Supplies**

- We store a vast amount of cleaning products which contain toxic chemicals throughout the downstairs of the office and fellowship hall levels of the building. Some environmentally friendly, nontoxic cleaning products are being used, but the majority of cleaning products do contain at least some toxic components even if they are biodegradable and phosphate free. A few products were found in unlabeled containers. Due to our concerns in this area, a BOCES Safety Officer volunteered to visit our facility on March 2<sup>nd</sup>, at which time he gave us recommendations on how to store any toxic chemicals we use and how to dispose of those we don't use. [See Environmental Safety Inspection section below for his recommendations]

- The office secretary orders the cleaning products requested by the janitor in bulk. In reviewing invoices from the past two years, we noted that many cleaning products being stored are not on the invoices, nor are they products that the janitor brings himself. Consequently, it appears that many of these products are either quite old or are being brought in by congregants.
- The office secretary retains any MSDS sheets that are sent by our vendors. These are currently kept in the invoice folder. We do not have MSDS sheets for all products used.

### Opportunity Areas:

- ◆ Increase efforts to purchase paper products containing recycled products used throughout the building.
- ◆ Meet with the janitor, coffee hour and potluck coordinators, and Building & Grounds Committee to determine the specific cleaning products that are needed in the building. Properly dispose of those we don't use. Do a cost analysis of those products we use to determine the feasibility of replacing them as we run out with nontoxic products. Obtain MSDS sheets on all toxic products used and store them in their own file.
- ◆ Consider sending the newsletters by e-mail to all congregants who have e-mail capability, and determine other ways to reduce copy paper usage.

### Environmental Safety Inspection

The recommendations by Tom Hanley, a safety officer from the OCM BOCES, are as follows:

- ◆ The Boiler Room off the Fellowship Hall is a current fire hazard due to paper boxes, paper supplies and trash containers being stored near the furnaces. These need to be removed promptly. Room exists on top of kitchen cabinets for paper plates, cups, and napkins, but if we do this we need to leave a 24" clearance from ceiling for fire codes. A "BOILER ROOM" sign is needed on the door. The door should be locked since it is in a public access area. Additionally, a wire in the Boiler Room needs to be covered up and ideally be put inside a metal juncture box (the curly one with orange plastic which probably goes into a blower).
- ◆ There are at least 30 one-gallon bottles of bleach, and 50 cans of furniture polish stored in the building. The custodian doesn't use the bleach. Consider discarding most of it.
- ◆ Flammable cleaning items and charcoal lighter need to be stored in a flammables cabinet (at a minimum, a metal cabinet). Both the cleaning closet and boiler room currently contain flammable agents. Flammables could be safely stored in a metal cabinet in the area behind the teen room.
- ◆ Bleach (alkaline) and other cleaners (acid) are stored beside each other in the big boiler room and the custodian's closet. These chemicals can combine to produce toxic, possibly fatal, fumes. Acid and alkaline chemicals should be stored separately.
- ◆ There are books and other papers in the storage room behind the Teen Room, contributing to the mold problem in that room. The dampness also damages the books and paper. Move books and paper to a dry location. Tom can't see any solution to the mold problem in this storage room until we address the spring that flows beneath the building. Tom believes there is a drain under the elevator that may be blocked, or is sometimes blocked.
- ◆ Latex paint – if we have cans with a small amount of paint that we would like to discard, we can remove the lids and set them out in the sun until thoroughly dried. These can then be tossed in the garbage.
- ◆ The kitchen looks good, thanks to the efforts of the group that recently cleaned it out. 😊 The only suggestion was to store solids away from liquids (namely, bleach is currently stored next to CitraSolv dishwasher detergent in boxes – these should be separated in case of spills from either container)
- ◆ The storage closet for outdoor equipment needs to be cleaned (reorganized), but no hazardous conditions were obvious during a very short inspection. The fire rating for this area is better than inside the building and so it is a good place for combustibles such as gasoline and oil.

## Investment Strategies

### Results:

- ◆ The following factors are used by the Trust Committee when selecting investments:
  - Anticipated performance for the immediate future
  - Track record of the fund manager
  - Recent performance history
  - Comparison of the fund within the asset class
- ◆ Our environmental and social values are not necessarily reflected in those factors. Furthermore, environmentally responsible investment vehicles are not specifically considered.
- ◆ In selecting financial institutions with which to do business, we have not considered consistency with our environmental and social values or the impact of the institution on our local community.

### Opportunity Areas:

- ◆ Explore investment options that focus on environmentally sound investments while still providing a comparable return on investment to our current funds.
- ◆ Consider doing our banking and using financial institutions for our investments that reflect our environmental and social values, and that positively impact the local community via community investment programs.

## Youth Religious Education

### Results:

- ◆ YRE has made a substantial effort to provide curriculum that teach our youth about our 7<sup>th</sup> principle. Of the nine (9) curricula that address “Respect the Web of Life,” six (6) have either been taught in the past or are being taught this year.
- ◆ This year’s YRE theme, “Be a Team, Make it Green”, was intentionally chosen to support the Green Sanctuary Program, making this year a particularly rich year for the youth concerning the environment.
- ◆ Five (5) “Louder than Words” projects in calendar 2005 focused on the environment. At least one of these projects, making outdoor tree ornaments that feed birds, is done every year. The Youth Group has also engaged in recycling efforts over the years, and this year plans to coordinate an Earth Day cleanup for the entire congregation to participate in.
- ◆ Despite the above stated activity, YRE indicated an interest to provide the children with more opportunity to discuss and practice environmental values and to foster their spiritual connection to the environment. The YRE hike to Clark Reservation in 2005 was cited as one such example.

### Opportunity Areas:

- ◆ Plan an activity each fall and spring that directly fosters a spiritual connection to the environment, with an opportunity for discussion.

## Adult Religious Education

### Results:

- ◆ In the past three years, ARE has not sponsored a forum that relates specifically to the environment or 7<sup>th</sup> principle. However, the 2005 Soul Food Retreat did offer a workshop on the Green Sanctuary Program that inspired the creation of the task force at First UU.
- ◆ There appears to be only one ARE curricula available from 1993 that helps participants develop a more spiritual relationship with the world around them. This curriculum is Canadian based, focusing specifically on the geography of Canada.
- ◆ The UUA Ministry for Earth does have a resource book entitled “Earth & Spirit: Bringing Ecology into Adult Religious Education” that provides suggestions and resources for environmentally-based adult education. Additionally, the UUA recently developed a 12 session discussion program on the environment.
- ◆ In Fall 2005 the Men’s Group discussed the topic “Should Men Be Green.” In April 2006, the topic “Mother Earth” will be discussed in Chalice Circles. Additionally, several Chalice Circle topics, while not specifically

about the environment per se, have inspired discussion of environmental issues and the spiritual nature of the environment within at least some of the groups. One good example is the 2005 topic "Simplify, Simplify, Simplify." Similarly, although there has not been a "Movie with the Minister" over the last few years directly related to the environment, the movie "What's the Bleep?" did address the concept of the interdependent web of existence.

#### **Opportunity Areas:**

- ♦ Have at least one ARE forum per year devoted to an environmentally related topic.
- ♦ Have each special group devote one or two sessions per year to environmentally related topics.
- ♦ Consider a more extended curriculum or forum offering, perhaps utilizing the UUA discussion program in its entirety or in an abbreviated format.

#### **Worship Services**

##### **Results:**

- ♦ At least four of the Sunday services given by the Worship Services Committee since 2004 have specifically focused on the 7<sup>th</sup> principle, environment or earth-based religions, the most recent being in March 2006.
- ♦ In September 2005, the Green Sanctuary Committee provided a service which addressed the topic, "What Does Green Sanctuary Mean to Me." The essays read reflected the intergenerational nature of our congregation and diverse principles by including speakers representing our youth, the Social Justice committee and the Green Sanctuary committee.
- ♦ Our minister frequently incorporates the 7<sup>th</sup> principle and concern for or sanctity of the earth into sermons and meditations. If he has not done an earth or environmentally related sermon in the few months leading up to Earth Day, he will generally devote a sermon to that topic in April in celebration of Earth Day.

##### **Opportunity Areas:**

- ♦ Inserting a "Green Sanctuary Moment" on a regular basis (once a month?) to share a brief idea or success story to inspire the congregation to adopt more green practices within First UU, at home, at work or in their neighborhoods.

#### **Social Justice Program**

##### **Results:**

- ♦ This past year, Green Sanctuary was chosen as a congregational Task Force for the 2005-2006 year through the Social Justice Task Force model. This has created a heightened involvement of the Social Justice Committee as it relates to environmental concerns:
  - Social Justice paid for the sponsorship of a table at the 2005 Westcott Cultural Street Fair, which highlighted global warming issues and actions.
  - Social Justice contributes environmental justice articles and actions for the Green Sanctuary table which is set up in the Fellowship Hall before Sunday services and during coffee hour.
  - The Chairperson of the Social Justice Committee also participated in the September 25th Green Sanctuary Service, speaking specifically on the relationship between Social and Environmental Justice.
  - The Sierra Club's Southwest Program was the recipient of the Social Justice Special Collection in September 2005. This program provides grassroot support on a number of environmental issues that are threatening several Native American tribes in Arizona.
- ♦ Green Sanctuary Task Force 2005 - 2006: Focuses on educating the congregation on Global Warming issues and providing information on various actions congregants can take to reduce the threat of global warming. Have sponsored petition signing; the 1-2-3 program to encourage energy savings at home via lowering thermostats, using compact fluorescent lights and reducing driving speed; and are promoting congregants to sign up for the Virtual March against Global Warming

## **Transportation**

### **Results:**

- ◆ We do not have a bike rack available to encourage congregants to conserve energy by biking to First UU.
- ◆ We do provide bus schedules at the Green Sanctuary table and in the leaflet racks.
- ◆ The Green Sanctuary Committee encouraged carpooling in September, but needs to follow up to provide a more coordinated effort.

### **Opportunity Areas:**

- ◆ Obtain a bike rack to encourage energy conservation
- ◆ Develop a more coordinated approach to carpooling.

## **Landscaping**

### **Results:**

- ◆ Brush and yard waste is collected by the Town of DeWitt on a monthly basis for recycling. We also compost small amounts of yard waste on-site.
- ◆ Our pest and weed control is a mixture of natural and chemical methods. We use natural mulch, but Roundup has been used in the past to control weeds that have gotten out of control because of neglect. A question has also been raised as to the type of chemicals our lawn service might use since research shows that many companies who claim they are using environmentally friendly products often use synthetic pesticides and fertilizers that are not truly nontoxic or environmentally friendly.
- ◆ We have both native and non-native species on site. Care is taken to plant only non-invasive species when non-native species are planted.
- ◆ Grass around the building is minimized reducing the need for extensive mowing.
- ◆ Salt is used on the parking lot in the winter for safety reasons; the formation of water puddles which can freeze into black ice may indicate some drainage concerns.

### **Opportunity Areas:**

- ◆ Adopt organic methods of weed and pest control to eliminate the need for synthetic or toxic chemicals. Address these issues with our lawn care company.