



Green Sanctuary
Unitarian Universalist Association of Congregations
Congregational Stewardship Services
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Application for Green Sanctuary Candidacy

Congregation Information

Date

May 20, 2013

Congregation

First Parish Bedford (FPB)

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Minister or Congregation Leader

John Gibbons

Congregation Profile

(Special thanks to the FPB web site authors, we borrowed information and prose to complete this section.)

First Parish in Bedford, Massachusetts has the honor and responsibility of being housed in the historic Meeting House on the Town Common. The Town of Bedford was created in 1729 because the residents of this area felt the journey to church in Concord or Billerica was long and arduous. Included in their petition was this lament, "In the extreme difficult seasons of heat and cold we were ready to say of the Sabbath, 'Behold, what a weariness is it.'" Thus to waylay the weariness, the First Parish in Bedford (FPB) was established. The original meetinghouse built as a spiritual home for the original parishioners suffered significant damage in the "great gale" of Sept. 1815. Our current meetinghouse replaced the original in 1817, using many timbers from the destroyed predecessor.

In 1830, theological differences between the Trinitarians and the Unitarians in the Parish led to a split into two separate churches. The Trinitarians moved a short distance away to establish a new congregation. Unitarians retained the meetinghouse, the communion silver and the name.

The resulting congregation continued the traditions of seeking new answers to old questions – social, theological, justice and the human condition. There were waves of relative prosperity and strong membership alternating with times of scarceness on both accounts. The parish was served by a long era of ministers with limited tenure, with a core of members to carry on the name and mission of the congregation. In a time of very low membership in the fifties, the congregation faced the possibility of disbandment. Notwithstanding our situation First Parish survived. And in the early sixties voted to join the new organizational body known as the Unitarian Universalist Association. Ultimately, the Parish began to recover and grow after calling a series of committed and inspired ministers: David Weisbard, Jack Mendelsohn and now Senior Minister, John Gibbons

First Parish has maintained the Unitarian Universalist heritage of creativity and innovation. We have continually worked towards UUA goals such as Fair Share and Fair Compensation. Several of our parishioners have worked for UUA headquarters in such fields as Religious Education, Ministerial Development, Fair Compensation, Partner Church, UUA history and many other. Most recently the First Parish was awarded the UUA honor of being a “Breakthrough Congregation” accompanied by a cover story in the UUA World. Although not without some growing pains, we have transitioned from a fellowship congregation to a 370 member parish offering two Sunday services and are currently staffed by a Senior Minister, a Parish Minister, Director of Religious Education and Administrative Assistant on a full time basis.

Lay leadership is a strong and vital tradition in the life of the church. We pledge to be a good neighbor and an active participant in public life within and beyond Bedford. Due to opportunities of our comparative privilege and homogeneity, we seek to learn from others in face-to-face encounter. We create opportunities for service, we initiate compassionate actions for social justice, and we join with others who are already engaged. Inspired by our vision of community, local and global, we aspire to shape our culture and enlarge common ground.

FPB age distribution of Members and Active Friends

Re: Enrollment	131
20's-30's	22
40's	66
50's	126
60's	101
70's	63
80+'s	52
Total Adult: Member's and Active Friends	430

Green Sanctuary Committee

(Special thanks to Dianna Archibald and Marge Heckman, our original GS leaders and crafters of our mission.)

Mission: In recognition of our seventh principle to “affirm and promote ... respect for the interdependent web of all existence of which we are a part,” the Green Sanctuary Committee helps facilitate and coordinate action in personal, congregational, and civic spheres to:

- Build awareness of the significance and complexity of environmental issues.
- Promote sustainable living, especially reducing our energy imprint.
- Engage in community action on environmental issues.
- Strengthen the connection between spiritual practice and Earth consciousness.
- Work to heal environmental injustices.

The Committee is also responsible for:

- Pursuing recognition as a UUA-certified Green Sanctuary Congregation.
- Overseeing re-accreditation procedures as required.
- Informing the congregation on the status of First Parish's efforts to achieve and maintain Green Sanctuary accreditation and on our efforts to honor the seventh principle.

Membership on this committee is open to anyone in the congregation and includes representation from (or liaisons to) the following other committees: Physical Plant, Religious Education, Religious Services (Ministerial staff), Peace and Justice and Hospitality. Our current active members include:

Bob Dorer, a civil engineer by training, has a long professional background in a broad range of transportation engineering programs. In addition, his community involvement has included serving on Bedford's Planning Board and Conservation Commission, always with the focus on working towards more livable and environmentally sustainable communities. He currently is serving on the town's Transportation Advisory Committee, as the pedestrian advocate. He brings to the Green Sanctuary a demonstrated commitment to working towards a better environment across a broad range of topics and practical project management experience as well.

Sandra Ferreira, a retired grade school teacher for 38 years, has long supported the Sierra Club, the National Wildlife Association and NRDC. For the last ten years she has maintained the relationship between the Lowell Transitional Living Center and FPB: recruiting Parishioners to serve dinner and contribute to the Christmas to the Wish-List Tree Project (providing new undergarments, t-shirts, warm hats and gloves, personal care items, etc.). She has been on the Social Responsibility Council, the Parish Board, and helped with the raffle of the quilt made by the Parishioners to raise money for the local Habitat for Humanity project.

Ron Green, semi-retired human resource professional, is a long-term member of First Parish. He has served in many capacities – including Chair of the Parish Committee, Religious Services Committee, Personnel Committee and ad hoc Ministerial Compensation task force. He has been active in FP projects for over 30 years.

Janet Powers is a full time mom committed to living sustainably and volunteering at FPB and within her community. Her MA and previous work experience in Ecological Landscape Design and as a Planning Board Member in Bedford, informs and guides her projects and labors with Physical Plant, RE (Earth Circles Curriculum development and JYG veggie garden) and the design and maintenance of the Memorial Garden. Janet is currently the chair of the GS committee and liaison to RE and Religious Services.

Carol Benoit Reynolds, a retired teacher (BS in Special Ed.) and former member of the Peace and Justice Committee at FPB, focuses her environmental activism on sustainability, education and land conservation: Carol faithfully attends Transition Town Bedford, is a member of several land trusts, is a former board member of Saco Bay Trails and Watertown Citizens for Environmental Safety, and is currently on the Planning Committee for Friends of Fresh Pond Reservation.

Karl Winkler, currently a VP of Engineering and Product Design at WikiCell Design (a disruptive technology company), designs production processes for food and beverage products with all-natural and edible envelopes/skins. Karl has also headed design teams at MooBelle and Keurig and was awarded the 2013 Edison Innovation of the Year for his Keurig: Vue beverage system (using a recycled portion pack that can be transitioned to a fully biodegradable delivery system). Karl has multiple patents and is known as a sustainability champion using life cycle analysis to trail blaze innovation. An active member of FPB for many years, Karl has sat on committees, taught RE and OWL and was a leader in our "Bility Campaign"—a successful renovation improving accessibility and sustainability. Among his FPB innovations was the infamous Haunted House, drawing 100's of visitors from the area.

Environmental Assessment

Our explorations into Green Sanctuary began several years ago driven by a few enthusiastic members. One of our first activities was to complete a comprehensive energy audit. More recently we conducted a survey of the parishioners to understand their environmental values and practices at home. (*See results in Appendix A*) These two activities, along with coffee hour solicitations and meetings with committees directly connected with GS, guided the following Assessment and subsequent Action Plans.

SUSTAINABLE LIVING

Although we did not continue with our application early on, we did engage in and complete several projects inspired by our commitment to being a “Green Sanctuary”:

- Composting kitchen waste.
- Placed recycling bins throughout Meeting House.
- Re-glazed windows, replaced broken glass, repaired and replaced some of the large storm windows upstairs.
- Installed low flow toilets in 2nd floor renovations.
- Added Airlock to Elm Street entrance (primary entrance).
- Installed most energy efficient elevator we could find (KONE).
- Replacement of lights upstairs with fixtures to enable a conversion to LED lighting.
- Installed spray foam insulation and thermal reflective shield from the sanctuary.
- Added day lighting with renovations.
- And, we are in the final planning stages of installing bike racks.

The Hickory Consortium (referred to as Hickory) was invited to assess the 195 year old Meeting House. Our goal for this study was to outline and prioritize the most important and cost effective measures that should be included in the alteration to the building. The following sections were informed by the audit and our own research of current practices.

Please note: the audit was focused on the historic portion of the building (The Meeting House), the offices/common room/kitchen/classroom space was renovated and expanded in 2000 and was found to be well insulated with updated electrical systems and compact florescent bulbs (the heating system for the entire building however is addressed below).

Hickory presented their findings broken out in priorities as follows:

- A. Higher priority should be given to essential (Safety and health) measures.
- B. Next in priority will be the immediately cost-effective energy measures (low hanging fruit).
- C. Next longer life and longer payback (generally more expensive changes).
- D. Then shorter life measures with good payback.
- E. Finally environmental issues that may not have a payback but are desirable for other reasons (Such as green power purchase, recycling systems, etc.)

Note: some of their recommendations have been address since this assessment has been done.

Heating

Hickory noted several areas of concern, particularly the inefficiencies of the current furnace. At the moment we have multiple heating zones. We support a boiler with an assessed efficiency rate of a 69%. This compares poorly with the 93 – 95% of today. They go on to recommend that thermostatic controls be updated to allow for more customizing heating to specific areas, according to scheduled use.

Possible Area for Improvement: The church will need to soon replace our furnace; members of the Buildings Committee are researching the purchase of a more fuel-efficient unit.

Site

The position of First Parish, particularly the south-facing roof of the 2000 addition, is a potential opportunity for Solar Hot Water and Electricity. The site appears to drain well allowing for greater possibilities for insulation in the crawl space under the Sanctuary.

Possible Area for Improvement: We are looking into solar options as a long-term goal of the GSC.

Envelope (Old Meeting house portion—Sanctuary, Page, Blinn and Bacon)

Much of the Old Meeting House lacks insulation. There are storm windows on the east and west side of second floor (Page and Blinn rooms) and none in the Sanctuary or on the north side of the first (the sanctuary closets) or second floors (Bacon Room). Many of the windows without storms have poor or missing glazing, which is a significant source of air leakage in the building. None of the walls have insulation and limited amounts are present in the attic spaces above the Sanctuary, Page and Blinn Rooms; we are not certain if any is above the Bacon Room.

The report also mentions un-insulated ductwork in the basement and the un-insulated ceiling under the sanctuary. *The basement ceiling since this report has been fully insulated and the worst of the ducts have been replaced with sealed insulated ducts.*

Possible Area for Improvement: Hickory recommends air sealing the building as the most cost effective way of reducing energy (See Figure 1).

Summary of Audit:

Hickory provides great detail about how to insulate the space; during future major renovations these recommendations can be looked at. Next is dealing with drafts and air leakage. This will be address by the Physical Plant Committee with each project moving forward. If an area of the building is under reconstruction, sealing leaks and air gaps will be address during that renovation.

Hickory made in-depth recommendations regarding the windows and the need for storms. We have received other opinions that the cost effective nature of storms vs. the amount of time the space is heated may not allow for a return on investment close to what they propose in figure 2. *Although it is unclear what the pay back will be, we have seriously considered comfort and the desire to minimize leaks in our proposal.*

Possible Area for Improvement: Adding storms and glazing windows in the Sanctuary.

Cost Effectiveness Table based on Hickory Consortium Report (Figure 2)

Below are the recommended measures and are shown with estimated cost, simple payback and life cycle savings over 30 years. Some of these paybacks are long, but immediate comfort in the use of the space is valued as well. The last column shows the estimated minimum life cycle savings of each measure over 30 years.

Note: these calculations do not take into account energy cost escalations. Caution should be taken, these are estimates from 2009 actual costs may vary widely, particularly in the current building climate.

Energy Efficiency measures	Initial cost Estimate	Annual Savings	Replacement		Simple Payback	Present value LCC for 30 years
			Life	Cost		
Replace Boilers	15,000.00	2,500.00	15	15000	6	55,696.00
Air Sealing the Building	5,000.00	2,174.00	50	n/a	2.3	47,600.00

Additional Attic insulation R-38	5,250.00	864.00	50	n/a	6.1	22,185.00
Duct insulation	4,500.00	694.00	30	n/a	6.5	18,182.00
Efficient-lighting	5,000.00	479.00	10	n/a	10.4	13,404.00
Add storm windows to the sanctuary \$10/sf	6,600.00	139.00	20	n/a	47.5	9,324.00
	41,350.00	6,850.00	40	n/a	5.7	166,391.00

Completed by the 'Billity' campaign

Insulation under the sanctuary COMPLETE	6,000.00	1520	50	n/a	3.9	35,792.00
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Interior

The Hickory Consortium noted that zones of use should be established and heating and lighting set to match the occupancy of the building. Heating and lighting controls would prevent lights or heat being left on after a space is empty.

Although lighting is low in the ranking of energy efficiency strategies in figure 1., lighting uses electricity while our heating today uses natural gas. Because electricity is expensive, its return on small savings can be a large dollar savings. This is what was noted in the assessment:

- 1) While some of the lighting is higher efficiency, not all of the lighting is. Noted are the spotlights in the sanctuary. *We are planning to transition to LED lighting in the near future as one of our projects.*
- 2) Exit signs should be replaced using high efficiency LED type. *This has been done to one of the exit signs on the first floor.*
- 3) The Hickory Consortium recommends use of T-5 florescent lamps offering brighter light more efficiently than our T-8 lamps in the classrooms.
- 4) They recommend NSTAR to provide services and lighting rebates.

Water

We use Town of Bedford water (predominately from Massachusetts Water Resources Authority), and it is considered safe and high quality. We promote drinking tap water as opposed to bottled water within the church and the congregation as a whole. Our water consumption is relatively modest, being limited to kitchen and restrooms.

In our most recent renovation we replaced our two oldest toilets with low-flow models; the toilets placed in 2000 addition are still functioning well. When the time comes to replace them, they will also be low-flow units.

Although most of our gardens do not require watering, we do use town water to maintain the JYG vegetable garden (see Grounds below).

Possible Areas for Improvement: Install Rain barrels for the vegetable gardens at the rear of the building.

Facilities Management

As with many institutions, this is a complex process. The Physical Plant Committee determines what needs to be done, sets goals and attempts to reach these goals with money allocated to them in the annual budget. They are ultimately responsible for two budgetary items: Physical Plant Expense and a Small Cap & Major Maintenance Fund. The Physical Plant Committee will also often oversee other projects afforded through fundraising.

- The Maintenance Expense covers day-to-day expenses of building up keep and minor fixes.

- The Small Cap & Major Maintenance Fund is contributed to yearly and then is used for larger deferred projects (painting, adding a back up generator, etc.).
- For some larger onetime expenses we conduct special fundraising (such as we are currently doing to install a more earth friendly air conditioning system).
- We also hold Capital Campaigns for very large projects. Most recently we held a 'Bility' Campaign to fund renovations to make the church more accessible with a new elevator, safe path and larger entry.

On a day-to-day basis, the church administrator manages the to-do list, expenses and informs the sexton, ministers and the Physical Plant Committee of any emergencies that need to be addressed.

Cleaning the Building

Our sexton uses primarily organic and biodegradable cleaning and disinfecting products in the bathrooms and other areas. Washing mops, dusting cloths, a Swiffer Wet-Jet and a vacuum cleaner are also used. In the kitchens, volunteers clean the appliances, counter tops and cabinets, etc. especially during and after Sunday Coffee Hour, Memorial Services, Potluck Suppers, etc. Entities that rent space in the church are responsible for leaving it clean. From time to time the Hospitality Committee organizes a day to do deeper cleaning.

Policies Governing Purchasing

Although we do not have a formal policy, our church administrator and property manager are on the frontline and exercise sound judgment with regard to purchasing office and other supplies of minimal environmental impact (i.e., recycled paper, toilet papers/paper towels of recycled content, nontoxic cleaning supplies). We have used mostly environmentally friendly cleaning supplies for several years. Reducing resources, waste, and costs is a prime concern in the office administration: for instance, electronic distribution of our biweekly newsletter has reduced costs by one-third. We do not use recycled copy paper. We have tried and it jams the copier.

Possible Areas for Improvement: Board mandated purchasing guidelines, developing a practical way to switch to recycled copy paper and reducing paper use on Sunday mornings.

Compliance with Local Recycling Procedures

We are in full compliance with weekly recycling pickup in our town. Paper recycling baskets are located in our sanctuary, halls, classrooms and offices; bins for glass, aluminum, plastics and cardboard are located in the kitchen. We also compost in our kitchen.

Possible Areas for Improvement: improve signage, efficiency, special event recycling and educating parishioners and renters on the use of these receptacles.

Policies for Use of Non Disposable Materials

We use non-disposable mugs, china, etc., for coffee hour and some church events. Dishwasher-safe drinking cups are used for cold drinks in all RE programs.

Possible Areas for Improvement: Limiting the use of paper products for potlucks, rentals, and special events; reducing/replacing paper towels in the bathrooms.

Grounds

First Parish of Bedford is located on the Town Common. In front of the Meeting House is an open lawn with a mix of predominately mature trees, which is owned and maintained by the Town. FPB property begins just before the front steps and cuts back at an angle to include the sides and back of the Common.

The town mows and maintains FPB's lawn and has planted trees on our property. FPB volunteers have created and maintain several gardens. To the east is our Memorial Garden where ashes are laid and memorial bricks line the paths. Scattered around the property are shrub borders that create a sense of space without blocking out the neighborhood. Directly south of the building are beds that were recently filled with shrubs that were succumbing to a leaf beetle. Rather than trying to battle the critters we decided to turn those sunny beds into vegetable plots for the RE program (see RE section for details on project). Since the last large addition in 2000, the newly planted species are predominately native and have been maintained organically.

Trees: White Ash**, 3 Princeton Elms, Sycamore Maple, Ornamental Cherry, Shadblow*

Shrubs: Highbush Cranberry*, Highbush Blueberry*, Oakleaf Hydrangea*, Chokeberry*, Buckeye*, Yew, Prostrate Juniper*, Inkberry Holley*, Rose of Sharon.

** Native and large specimen (approximately 3' diameter) recently pruned and cabled after determined healthy.

*Native

Possible Area for Improvement: one concern is the methods of lawn maintenance the town employs, we do not have control over the fertilization and pest control. Although the town has reassured us they do not use pesticides, we do not know what they are using.

Transportation

The majority of churchgoers drive to First Parish. There is no public transportation alternative on Sundays. There is a concerted effort to give rides to those who are unable to drive. A limited number of parishioners walk, bike, or carpool to church.

Possible Areas for Improvement: add bike rack (currently planning) and promote carpooling.

Policies Governing Investments

First Parish has no formal policy pertaining to its investments. Our endowment fund is invested in four mutual funds, with some screening for environmental or other concerns, in the UUA Community Equity Fund, and the Hanscom Credit Union. The Endowment Committee is researching and currently exploring socially and environmentally responsible investments.

This is a Possible Areas for Improvement.

ENVIRONMENTAL JUSTICE

The Peace and Justice Group (P&J) evolved from The Globalization Task Force (GTF) which was established in 2003 as one of the first programs to be funded by the Social Responsibility Council. The Peace & Justice Group's mission is to study, educate, and take action upon social justice and peace issues pertinent to our Unitarian Universalist values. Additionally, the P & J Group works to promote the social justice campaigns of both the UUSC and the UUA's Congregational Study Action Issues and Statements of Conscience. The Peace and Justice's Group has embarked on several environmentally focused project in the recent past:

- UUSC Coffee Project, coffee hour coffee and sales.
- Former Film Series including *Gasland* co-sponsored with First Church Congregational of Bedford.
- Middle-East Study-Action Group: including activist Iyad Burnat from the West Bank who spoke about returning farmers to their land.
- Ethical Eating - focused on world hunger/sustainable food supply.
- New Entry CSA (World PEAS Cooperative sustainable farming project)—FPB is a distribution center.
- Peacekeeping.
- Habitat for Humanity: energy efficient homes for low-income families in Bedford.
- Outreach to Iraq Families (including donation of reused household furniture and goods).

Possible Areas for Improvement: An environmental justice Common Read, Carpooling (with an emphasis on people who cannot drive at night), re-engage the film series, and explore new ways to help our low income neighbors connect with nature and have access to healthy locally grown food.

WORSHIP AND CELEBRATION

First Parish in Bedford has a long history of addressing environmental issues in many aspects of Parish life. Past worship services include a variety of earth/environmental related topics (several of the services also had follow up projects and presentations given beyond the walls of FPB): Suburban Theology/Design including town wide forum with Francis Moore Lappe, Water Rights/drink tap campaign, “Unintelligent Design”(evolution vs. creationism), Understanding the Cosmos, Primates, Michael Dowd and “The Great Story”, “Born with a Bang” (written by Jennifer Morgan), Eating Locally and Conscious Consumers.

Although we have hosted several Pagan rituals and have had a service about Wiccan practices, we have found it hard to maintain and attract enough participants to make earth centered practices more of a regular offering. However, a small group of Parishioners partake in a yearly ritual of “Singing up the Sun” on the Winter Solstice, and JourneyDance™ to celebrate the Solstices, Equinoxes, and Quarter Marks.

Finally, in our survey, many parishioners identified connecting with nature as something they would like to do more. We do have some outdoor services: “Singing up the Sun”, “Ingathering” (yearly outdoor opening service) and town wide interdenominational gatherings for Easter and Earth Day Celebrations.

Possible Areas for Improvement: provide more connection with nature, commit to more environmental sermons, promote earth-centered practices, and perhaps develop more ways to show our connection to nature within the Meeting House walls—such as our Andromeda Tapestry.

RELIGIOUS EDUCATION

Religious Education at First Parish in Bedford has taken a proactive stance on the environment and UU’s seventh principle. Over the past several years the children’s program has embarked on several projects that range from changes in everyday practices to writing and implementing an ambitious new curriculum.

Current regular practices: reusing cups/snack containers, recycling paper/plastic in classrooms, reusing potential waste for art projects, shifting away from markers to crayons and reducing paper by employing Google Docs and on-line curriculum.

Curriculum/Activities:

- Earth Circles—is a new curriculum written by one of our parishioners. The program, for 4-6th grade students, teaches them about the environment (food, habitat, air, water, soil...), takes the students outside regularly and incorporates many hands on environmental justice projects. Each week they also discuss “Practicing our Principles” and generate ideas of how they can integrate what they have learned into the 7 UU principles.
- This past year the preK-1st graders are used the UU curriculum World of Wonder in which they focus on their connection to the earth.
- RE Garden—was started as part of the Earth Circles curriculum and is now in the process of becoming part of the Jr. Youth program where the children plant food items to either be donated to a food pantry or sold to fund social justice projects.
- Connection Sundays we have all the children together to do special projects, these have included: Reduce, Reuse, Recycle program (lasting 3 Sundays) and yearly Earthday clean-ups and/or projects and stories,

Areas for Improvement: consistency of recycling, use more online curriculum, use more natural materials, integrate more intergenerational activities and employ earth rituals in the program and worship.

Action Plan

Future project ideas are listed in Appendix C

SUSTAINABLE LIVING (4 required, 1 that addresses energy conservation)

SL-1: Promote Home Energy Audits along with several churches in Bedford

Project Description: We will team-up with Next Step Living (NSL), a leading Massachusetts-based residential energy efficiency company. Working collaboratively with NSL we'll promote energy audits during coffee hour on Sunday mornings, as well as through articles in the parishioner and messages on the "Anno" list.

As an added incentive, we'll encourage other churches in Bedford (First Church Congregational, St. Michael's Parish and St Paul's Episcopal Church) to also engage in the NSL Energy Audits. We will then compete with those churches to see which church can enlist the most residents for energy audits within a year. At the end of the year we'll publish the results in the local newspaper (The Minuteman).

Our goal is to reduce residential energy bills and greenhouse gas emissions by reaching as many parishioners and fellow residents in Bedford as possible.

Timeline for Completion: September 2013 to September 2014

Lead: Carol Benoit Reynolds and Sandy Ferreira

SL-2: "Increase Recycling"

Project Description: This project will have three aspects:

1. Invite Gretchen Carey, Bedford's Recycling Coordinator, to give a presentation on best practices at a Sunday morning Lyceum.
2. Develop recycling procedures for special events, including The Annual Auction, The Plant Fair, and Annual Dinner.
3. Establish a clearer, prominent system for daily recycling within FPB, which will include consistent, easily identifiable containers, and improved signage.

Timeline for Completion:

The 1st aspect (The Lyceum) will occur in the fall of 2013. The 2nd and 3rd aspects will be ongoing.

Lead: Carol Benoit Reynolds and Sandy Ferreira

SL-3: FPB On-Site Paper Consumption Reduction

Project Description: This project will concentrate on reducing the overall usage of paper at the church building for church operations, including services, committee operations, etc. Although FPB has worked hard over the last 10 to 15 years to reduce paper consumption and to utilize recycled content where possible it is felt we could make additional progress in this area. This project will focus on making new inroads into paper consumption reduction by focusing on both new opportunities as well as better information on both why reducing paper consumption is important and how to accomplish making real reductions in consumption, in other words work to get better buy-in from the parish on this topic. Building on the work already underway to reduce the volume of junk mail received by FPB, we will consider how to help our parishioners reduce paper. Also investigating the feasibility of incorporating additional focus and increased effectiveness on existing recycling efforts will be undertaken (see project SL-2).

Task Plan:

- Gather more information on existing paper consumption from FPB staff and interested committees (RE, Music, Hospitality, etc.)
- Develop pilot projects such as “paper free” Sundays with all stakeholders
- Analyze effectiveness of paper consumption reduction actions and stakeholder reactions
- Ensure real reductions are fully incorporated into the day to day standard operations of the church
- Incorporate “better” recycling at FPB in the various paper categories.

Timeline for Completion:

Summer of 2013 – Education campaign / context setting for use reductions

Fall of 2013 – Pilot projects / assessment of effectiveness / community reactions

Spring of 2014 – Full implementation (add items for increased and more effective recycling at FPB)

Lead: Bob Dorer (with full cooperation of FPB staff and parishioners)

SL-4: “LED replacement of Sanctuary lighting.”

Project Description: One recommendation by Hickory was to replace all incandescent lighting in the sanctuary with LED bulbs. We propose replacing the recessed lighting in the sanctuary with Dimmable LED lights as stated in the assessment, which would save about \$479.00 a year. We are looking at replacing the lighting in two phases:

Phase 1

Replacing the 16 recessed lighting in the high ceiling of the sanctuary with Philips light bulbs with a 20 year* life expectancy.

Philips 19.5-Watt (120W) PAR38 Daylight (5000K) Dimmable LED Flood Light Bulb at \$45.00 each.

The cost of phase 1 would pay for itself in less than 2 years.

Phase 2

Proposes to replace the other 22 incandescent lights in the sanctuary and hallways with appropriate LED lights bulbs—dimmable for the sanctuary and non-dimmable for halls and classrooms. (The report states a 10 Year life on the LED bulbs.)

Timeline for Completion:

Fall 2013—Phase 1

Spring 2014 – Phase 2

Lead: Karl Winkler

SL-5: Reduce Carbon Foot Print of Going to Church**Project Description**

- Tire Inflator Sundays—minimum 4 times per year. A few parishioners will bring their electric air compressors to Sunday services and they will be available to inflate car tires (thus improve efficiency) of those who drive to church.
- Bring a Neighbor to Church minimum 2 times per year. Actively promote car pooling on Sunday mornings a couple of times a year which will hopefully inspire some to carpool on a more regular basis.
- We will sponsor at least 2 ride your bike/walk to Church Sundays per year.

By promoting these activities with a festive flare, we hope to promote a positive community feel as well as reduce our carbon footprint.

Timeline:

Institute regular actions Fall 2013
Continue indefinitely

Lead: Ron Green

SL-6: Storm Windows

Project Description: Add storm windows to the Old Meeting House. *Note: all Sanctuary windows except the one over the soundboard and the one closest to the door on the kitchen side will be operable (the two exceptions will be dead lights).*

The cost is: \$800 for Dead lights and \$1400 for operational storms.

- 5 operational storms on the west, Elm Street side.
- 2 dead lights and 4 operational storms for east, South Road side.

9 operational storms	12600.00
2 dead lights	1600.00
Plus 2000.00 for labor	<u>2000.00</u>
	\$14,200.00

A separate project would be storms for the front of the Meeting House: the Bacon room and two closets these would be panels mounted on the INSIDE of the windows and removed in the spring added back in the fall. The ones in the Bacon room were damaged long ago.

Timeline: there is a couple of options we might pursue depending on the budget and how the physical plant committee wants to execute the project.

Summer 2013: three quotes for Sanctuary windows over the summer and start the work in the fall.

Option 1: East and west side of Sanctuary completed in 2013.

Quote and install Front/north face 2014

Option 2: East side of Sanctuary in 2014

West side of Sanctuary in 2015 (with new quotes)

Quote and install Front/ north face of the church for 2016

Lead: Karl Winkler

SL-7: Rain Barrels

Project Description: We are placing a large, 200 gallon rain catchment system beneath on of our downspouts to collect water for irrigation for our Junior Youth Group vegetable garden which is part of our Environmental Justice Action Plan, project #1. This has been designed and is currently being installed by an Eagle Scout who attends FPB.

Timeline:

Completion, Spring 2013

Evaluation, Fall 2013

Consider adding more based on evaluation, Spring 2014-Spring 2016

Lead: Janet Powers

ENVIRONMENTAL JUSTICE (2 required, 1 long-term that ***actively*** promotes justice for those affected by environmental injustices and creates relationships)

EJ-1: Fresh Food for All

Project Description: Eating fresh, local and organic is only feasible for those who have the financial means or the ability/know-how to produce their own. We want to make these foods available to a larger cross section of residents in and around Bedford. There are several projects under this umbrella:

- FPB Junior Youth Group vegetable garden will donate summer produce to the local pantry and will use fall produce to fund raise for food projects (pantries, heifer...).
- FPB Gardeners Unite—will coordinate parishioners who garden to bring their extra produce to the local pantry. (We will also be exploring the idea of having other religious institutions/social action groups join us in this effort.)
- Waste no More—research the possibility of collecting produce and bread from local grocery stores that normally would be thrown out for minor defects and distributing it to the local pantry.
- Veggies Here, Veggies there, Veggies everywhere—develop a team of gardeners who install raised beds and container gardens for local low-income residents.

Timeline for Completion:

2013 Growing Season—indefinitely: spring plant JYG veggie garden, summer harvest for pantry, fall harvest fundraiser.

2013 Growing Season—indefinitely: reach out to FPB gardeners to contribute to local pantry.

Present—indefinitely: currently researching the possibility of collecting produce and bakery products.

2013-2014: develop and coordinate a gardening group to install raised beds/containers, research potential sites

Spring 2014: Begin installation of raise beds/containers.

Lead: Janet Powers

EJ-2: Earth Justice Film and Book Series

Project Description: We will show four films that focus on Environmental Justice on an annual basis. The films being considered for our first year are: *Renewal*, *Economics of Happiness*, *Switch* and *A Place at the Table*. This series will be co-sponsored by the Peace and Justice Committee. Additionally, Transition Town Bedford will co-sponsor the film, *Economics of Happiness*.

We will also provide a ‘common read’ annually. Books being considered for our first ‘common read’ include: *A Place at the Table*, *Animal, Vegetable, Miracle* and *Eco Mind*. A decision will be made with further input from the Peace and Justice Committee and The Women’s Book Group.

These films and books will be used to promote understanding, discussion and ultimately action.

Timeline: The series will start in the fall of 2013 and will be held on an annual basis.

Lead: Carol Benoit Reynolds

WORSHIP AND CELEBRATION (2 required)

WC-1: Environmental Sermons

Project Description: The ministerial staff has committed to preach (or to bring in a speaker) at least 4 sermons/year with an environmental theme/focus. As mentioned in the assessment, we have had many environmentally based sermons; this project is to ensure we continue to do so and on a more frequent basis.

Timeline for Completion:

Begin tracking year 2013-2014 and continue indefinitely.

Lead: John Gibbons, Sr. Minister

WC-2: Connecting with Nature

Project Description: The survey of our congregation indicated that people wanted to develop a deeper connection with nature. This was further confirmed when we asked parishioners to give us ideas for projects. We commit to taking the church outdoors at least 6 times/year for worship, hikes and spiritual practices.

Timeline for Completion: Begin tracking year 2013-2014 and continue indefinitely.

Lead: Janet Powers

RELIGIOUS EDUCATION (2 required, 1 for children and 1 for adults)

RE-1: Hungry for Change – Eat Your Values

Project Description: Using the Northwest Earth Institute's course, **Hungry for Change**, "we will explore the impact of our food choices... on our earth, our health, and consider the ethical and political implications of our... choices." Eight to twelve adults will participate in a six-session discussion course. It begins with your food heritage and includes several readings (average 16 pages/chapter), discussion questions and a list of inquiries to pursue before the next session. Each person will have the opportunity to answer and discuss all questions. At the end of the program the participants are asked to work on a group project related to one of the topics covered.

In concert with **Hungry for Change**, a youth curriculum, **Eat Your Values**, will be an adaptation of the adult course offered during "Connection Sundays". These are Sundays sprinkled throughout the years where all of the grades work on a special project together.

Timeline for Completion: Adults

Fall 2013 – Order materials from Northwest Earth Institute
January 2014 – Begin the workshops
March 2014 – Participants plan hands-on-project
Fall 2014 – Project completed or ongoing

Timeline for Completion: Youth

Summer 2013 – Adapt curriculum from Hungry for Change
Fall-Spring 2014 – Eat Your Values Connection Sundays
Spring 2014 – Follow-up project completed or ongoing

Lead Adult: Sandy Ferreira (Adult)

Lead Youth: Lisa Rubin, DRE and the RE committee (Youth)

RE-2: Earth Circles RE Curriculum Published

Project Description: Earth Circles is an environmentally based 4-6th grade curriculum that was written primarily by FPB Member Maureen Oates with the assistance of Janet Powers and several friends typing and editing.

The curriculum explores our relationship with the Earth/Soil, Food Web/Natural Habitats, Water, Shelter, and Energy. Each lesson includes a Practicing our Principles where we consider how the topic we have been covering relates to our UU Principles. There are also several projects that specifically link the curriculum to a Social/Environmental action project.

First Parish Bedford test-drove the curriculum during the 2010-2012. The current project entails grant writing to cover expense of experienced copy-editing/graphics, pilot testing with other congregations, and ultimately publishing the curriculum.

Timeline for Completion:

Summer 2012-Winter 2013—obtain grant, final copy with graphic of water section
Spring 2013-Fall 2014—pilot testing, complete final copy of other sections
Winter 2014—final publishing

Lead: Maureen Oates

Communications Plan

The Green Sanctuary Committee has already been actively communicating with our congregation and we are looking forward to reaching out into the local community. Below is a list of communication techniques we will be employing (*those italicized we have been doing over the past year*). *Photos included in Appendix B*

- *Monthly Parishioner Articles: these may include eco-tips, up coming events, call for help and action and reporting on our activities.*
- *Anno-List: This is an email announcement list that many of our active congregants use to stay in touch. We use this to announce up and coming activities and call for help.*
- *Committee Liaisons (Physical Plant, RE, Religious Services and Peace and Justice).*
- *Host Sunday Lyceums on various topics included in our Action Plans (we have thus far presented twice on our application process).*
- Develop Film Series and annual Common Read.
- Facebook/Web Page: we are currently exploring the options for connecting through our parish web site and face book page to post activities.
- *Coffee Hour: we will continue to periodically use coffee hour as a time to network, have information available and recruit participants.*
- *Attend Parish Council meetings to maintain connection with activities of our community.*
- Establish a presence at annual special events such as Plant Fair, Auction, Annual Meeting, etc.
- *Submit annual report.*
- Interfaith Community: there is a strong interfaith connection in our community and we intend to reach out via our existing connections, phone, email, meeting attendance to establish joint projects.
- *Broadcast weekly Sermons.*
- Work with other local organizations: Boy/Girl Scouts, Carlton Willard (local assisted living) and Bedford Pantry.

Appendix A—Survey Results

First Parish Bedford Green Sanctuary Results

A survey to gauge First Parish Bedford Unitarian Universalist attendees' green practices was sent out in October of 2012. The purpose of the survey was to learn more about the green habits parishioners currently perform as well as to better understand attitudes about sustainable living in general. In addition, the survey included a section that requested responders to indicate green practices they considered important to help identify areas to focus on as a community. The complete list of survey questions and the responses are listed at the end of this document.

Most Important Green Practices

A total of 66 survey responses were returned although not everyone answered every question. Survey respondents rated the following 5 items the most important green practices:

1. Drive a fuel-efficient car (56 responses)
2. Recycle plastic and paper (54 responses)
3. Insulate and weatherize home (54 responses)
4. Use reusable shopping bags (53 responses)
5. Keep tire properly inflated (53 responses)

Least Important Green Practices

Survey respondents rated the following 5 items the least important green practices:

1. Become a vegetarian (15 responses)
2. Buy used goods (34 responses)
3. Grow houseplants (35 responses)
4. Collect rainwater for garden use (36 responses)
5. Insulate your hot water heater (37 responses)

Most Commonly Performed Green Practices

The following items were the 5 most commonly performed green practices by survey participants:

1. Recycle plastic and paper (59)
2. Use the library (56)
3. Use reusable shopping bags (53)
4. Compost kitchen scraps (46)
5. Keep tires properly inflated (45)
Buy locally grown food (45)
Install low-flow showerheads and toilets (45)

Least Commonly Performed Green Practices

The following items were the 5 least commonly performed green practices by survey participants:

1. Become a vegetarian (7)
2. Use solar energy (8)
3. Collect rainwater for garden use (8)
4. Insulate your hot water heater (26)
5. Drive a fuel efficient car (26)

Conclusions

The survey indicated that respondents rated driving a fuel-efficient car, recycling plastic and paper, insulating and weatherizing their home, using reusable shopping bags and keeping their tires properly inflated as the top 5 most important green practices. In several instances, such as recycling plastic and paper, using reusable shopping bags and keeping tires properly inflated the green values were carried out into actual practices. One focus for the Green Sanctuary might be to direct efforts toward finding ways to help people achieve other values such as driving a fuel-efficient car and insulating and weatherizing their home. Interestingly, the most highly rated green value in the survey, driving a fuel-efficient car, was one of the least likely to be practiced. This may in part be due to the fact that the average car on the road in the US is now almost 11 years old. People may intend to buy a fuel-efficient car for their next vehicle but may have put off the purchase due to the current economy.

Green values in the survey with the lowest rating were: becoming a vegetarian, buying used goods, growing houseplants, collecting rainwater for garden use and insulating your hot water heater. These items can be viewed as items that people are uninterested in adopting, that are too expensive or that might be changed through education or advocacy.

In terms of air travel about half of respondents flew approximately once a year for both business and pleasure. Another half flew 2 to 3 times a year for pleasure with fewer people traveling that amount or more for business.

Nearly half of the respondents have joined a CSA and nearly as many others grow their own vegetables. From this survey the support for locally grown food seems fairly strong.

One area that caught my attention was the response to the questions “Do you take time to appreciate nature?” and “How often do you spend time outdoors in natural places?” There were many heartfelt responses such as “Not as often as I would like”, and “Very rarely – wish I did so more!” There was also some confusion about the local trail system as evidenced by comments such as “I sometimes take the commuter rail” and “I’m not around a rail system”. Other respondents voiced the infrequency they used the trail system with comments such as “When I can” and “On occasion, but rarely”. A possible response to these two questions might be to inform and encourage participants to use the trail system to appreciate nature. This might encourage more walking or biking in town and also reduce car transportation which was listed as the primary means of transportation in town (54).

Finally, focusing on green sanctuary efforts that are also enjoyable such as using the town trail system, riding bikes, walking and enjoying nature can only benefit our committee goals. Our endeavors don’t always have to cost money, require sacrifices or otherwise limit our activities. It might be worthwhile to focus at least in part on approaches that engage participants rather than exclusively focusing on the problems that can seem insurmountable.

Green Sanctuary Survey Data

The following table lists the Green Sanctuary survey questions and resulting data.

Survey Question				
1. Please check all the following options that apply:	Check if you think this is important	Check if you do this	Response #	
Use full spectrum LED light bulbs	40	35	49	
Recycle plastic and paper	54	59	61	
Use reusable shopping bags	53	53	60	
Drive a fuel efficient car (35 mpg or better)	56	26	58	
Buy locally made goods	46	36	52	
Insulate and weatherize your home	54	44	59	
Install a programmable thermostat	45	42	51	
Disconnect electronic devices	42	21	44	

when not in use				
Buy recycled paper for home use	44	32	48	
Purchase fair trade coffee and chocolate	43	41	50	
Install low-flow shower heads and toilets	48	45	53	
Think about your landscape in an ecological way	45	33	48	
Compost kitchen scraps	44	46	48	
Use cloth napkins	43	38	46	
Buy used goods	34	39	43	
Insulate your hot water heater	37	26	42	
Take short showers instead of baths	42	44	45	
Use solar energy	39	8	44	
Collect rainwater for garden use	36	8	23	
Buy locally grown food	47	45	50	
Use the library	53	50	56	
Keep tires properly inflated	53	45	58	
Grow houseplants	35	44	48	
Become a vegetarian	15	7	15	
2. Are you or have you ever been a member of a Community Supported Agriculture (CSA) farm?	Yes - 29	No - 33	Other – See below	
- I have been tempted but I don't think we could handle the volume; I guess composting what is unused would be fine, but it still feels too wasteful to me				
- Seafood CSA for 1 year				
- I grow my own veggies in the summer				
- I am a member of a community Supported Fishery org				
- I was a vegetarian for 8 years but was told I needed meat by many doctors and eat some now. It didn't work for me.				
3. Do you grow your own food?	Yes - 23	No - 33	Other – See below	
- I don't always get much produce				
- Have had a large garden plot for many years				
- Vegetables and herb - lots				
- Just herbs: basil, chives, horseradish (the critters have eaten everything else in the past)				
- Sporadically				
- Did in the past – before the ticks got so bad				
- Tomatoes, herbs				

- Only a little, too much shade, but hope to grow more in the future				
4. How often do you fly for personal reasons?	Once a year - 24	2 to 3 times a year - 21	Other – See below	
- Last flight was 6 years ago				
- Varies – some years in a row not at all, then maybe twice in one year				
- Less than once a year, every 3-5 years				
- Less than once a year				
- About 6 times a year				
Have not flown anywhere in 5+ years				
- Every few years				
- Less than once a year				
- A very rare event				
- About every other year				
- Once every 2 or 3 years				
- Approx. once every 4 years				
- Every 2 to 4 years				
5. How often do you fly for business reasons?	Once a year - 10	2 to 3 times a year - 7	Once a month - 23	Once a week - 1
- See # 4				
- Never				
- Never				
- Less than once a year				
- 0				
- 0				
- Very, very occasionally				
- Never				
- None				
- Never				
6. What is your primary means of transportation?	Car - 54	Walk - 1	Commuter rail - 2	Electric scooter - 1
- Bike and car				
- Commuter rail for commuting to work. Otherwise car or walking				
7. Do you use your local trail system?	Yes - 33	No - 24	Other – 4 (see below)	
- When I can				
- On occasion but rarely				
- Rarely, though				
- Sometimes take the commuter rail				
- N/A				
- Not around a trail system				
8. Do you take time to appreciate nature?	Yes - 59	No - 2	Other – See below	

- Not as often as I would like				
- Very rarely – wish I did so more!				
- Sit in yard and watch the animals				
- In my garden and yard, walking in neighborhood				
9. How often do you spend time outdoors?	Once a year - 4	2 to 3 times a year - 22	Once a month - 14	Once a week - 14
- I really wish I could work more nature into my life – I feel so much better when I do				
- Past years it has been much more – busy year				
- As many days as possible				
- Daily when I walk my dog				
- As often as possible but sometimes not even once a month				
- Not enough				
- I'm counting my backyard bird watching. ;)				
Not as often as I would like				
- Often daily according to the weather				
- Visit conservation land in Bedford daily with the dog				
- Most days 4-5 times/week				
- Every day since I live in a forest				
- Every day				

Appendix B—Communication Photos

Sunday Morning Coffee Hour Call for ideas and action



Sunday Morning Lyceum Presentation



Appendix C—Future Project Ideas

Many parishioners contributed ideas for projects throughout this past year. Although we are not prepared to commit to these projects today, there are many that warrant a closer look and we hope to address them in the not to distant future.

Worship and Celebration

- Environmental Story Plays
- Earth Inspired Sanctuary Décor
- Promote Earth Centered Traditions

Religious Education

- Green Murials

Sustainability

- Solar—PV/Hot Water
- Geothermal—currently under consideration (PP)
- Airlock for South Road Entrance
- Sustainable Practices Brochure