

FMC Green Sanctuary Action Plan

Approved by Church Council on January 25, 2009

Purpose:

First Mennonite Church adopted a Green Sanctuary Action Plan to identify, prioritize, and track implementation of environmental stewardship actions in four areas of church life:

1. Worship, spiritual practice, community celebration (*Worship Committee*)
2. Religious education (*Adult & Children's Education Committees*)
3. Environmental justice (*Mission & Service; Peace & Justice Committees*)
4. Sustainable living & conservation (*Buildings & Grounds, Building Committee*)

Background:

The Mennonite Creation Care Network Vision states that: Christ, who created the world in peace and sustains all things, calls us to be stewards of the earth and to bring rest and renewal to the land and everything that lives on it.

Mennonite Creation Care Network encourages the Church to:

- Claim our biblical and theological foundations regarding care of God's Creation.
- Discover the ties that link all created beings to each other and to God.
- Confess the harm humans have caused the natural world.
- Act faithfully to restore the earth

Development of this plan is a means of recording and celebrating the many ways in which First Mennonite Church can contribute to these goals.

Responsibilities:

While the primary responsibility for each action area may lie with the committees named above, each participant as an individual and member of a working group and/or the congregation as a whole may contribute to the goals of wise stewardship of the cultural and recreational resources provided through our natural heritage.

Church Council has requested that committees report back annually in February regarding progress towards these goals. Committees and small groups are invited to review the plan and identify:

1. Items already achieved to be checked off;
2. Feasible immediate goals; and
3. Desirable long-term goals, paying particular attention to sections applicable to your committee or other participation at First Mennonite Church.

This is not a mandate, but a dynamic reminder of the many things we can do to be stewards of the natural resources around us. Peace & Justice Committee will coordinate any ongoing revisions to the document. Return comments to the committee chair (Gwen White at gwen.m.white@sbcglobal.net or 317-281-9445).

Green Sanctuary Action Plan First Mennonite Church

Items checked off have been accomplished or are currently being implemented. Details in italics.

1. **Worship, spiritual practice, community celebration (*Worship Committee*)**

<input type="checkbox"/>	a. Create facilities to host outdoor activities, including playground improvements, fitness and meditation trail, pavilion and amphitheatre (e.g., VBS, youth events, annual ice cream social, weddings, Easter sunrise services) – <i>included in new Landscape Master Plan to be constructed summer 2010</i>
<input type="checkbox"/>	b. Sermons, hymns, images, children’s stories, and sharing on stewardship and care for creation

2. **Religious education (*Adult & Children’s Education Committees*)**

<input checked="" type="checkbox"/>	a. Provide information on community agriculture and sustainable energy
<input checked="" type="checkbox"/>	b. Participate in community-wide efforts to restore native habitat and outdoor education (e.g., Keep Indianapolis Beautiful; City of Indianapolis GreenPrint; Quality of Life Plan for the Neighborhoods of Crooked Creek, Jan 2008-Dec 2011)
<input checked="" type="checkbox"/>	c. Green tips in MennoExpressions or other periodicals
<input checked="" type="checkbox"/>	d. Adult and Children’s Education classes on environmental stewardship
<input type="checkbox"/>	e. Conduct an individual household sustainability and energy audit

3. **Environmental justice (*Mission & Service; Peace & Justice Committees*)**

<input checked="" type="checkbox"/>	a. Support Global Gifts, which specializes in fair trade and sustainable harvested products
<input checked="" type="checkbox"/>	b. Support Heifer Project, which implements appropriate technology and sustainable agriculture.
<input checked="" type="checkbox"/>	c. Support brownfields revitalization and energy efficient housing efforts by participating in projects sponsored by organizations like Habitat for Humanity and Caulk of the Town.
<input checked="" type="checkbox"/>	d. Support regional agriculture by serving locally-produced food products - <i>CSA sign-up and/or drop-off at church, eggs and beef from parishioner’s farms, share extra produce, emphasize local foods at church meals</i>
<input checked="" type="checkbox"/>	e. Provide access to church property as a community service in an area that has limited park facilities - <i>walking paths and benches, basketball goal, playground</i>
<input type="checkbox"/>	f. Support “No Child Left Inside” activities through churchyard habitats and resource agency environmental education programs
<input type="checkbox"/>	g. Community vegetable garden to supply fresh produce for food banks - – <i>included in new Landscape Master Plan to be constructed summer 2010</i>
<input type="checkbox"/>	h. Support development and use of regional public transportation systems
<input checked="" type="checkbox"/>	i. Actively participate in development and pilot testing of a regional and statewide ecumenical effort to foster native habitat restoration on church properties through the “Wildlife-Friendly Places of Worship” project in conjunction with

	the Indiana Wildlife Federation, Keep Indianapolis Beautiful, Backyard Habitat, and other programs – <i>participated in Center for Congregations workshop, Spirit & Place Festival event.</i>
--	---

4. **Sustainable living & conservation (Buildings & Grounds, Building Committee)**
 [from LEED certification for existing buildings and new construction]

a. **Sustainable Sites**

i. Building exterior and hardscape management plan

<input checked="" type="checkbox"/>	1. Maintain building exterior with durable products that require little maintenance, such as more infrequent re-painting (brick; cement board on eaves, fascia and siding) – <i>new building addition</i>
-------------------------------------	---

ii. Integrated Pest Management, Erosion Control, and Landscape Plan

<input checked="" type="checkbox"/>	1. Appropriate use of herbicides and pesticides
<input checked="" type="checkbox"/>	2. Maintain vegetation on steeply sloped areas and in waterways
<input type="checkbox"/>	3. Implement landscape maintenance plan in 2010
<input checked="" type="checkbox"/>	a. Compost all leaves and debris on-site
<input checked="" type="checkbox"/>	b. Reduce lawn mowing by replacing turf with native plants - <i>prairie and native trees planted 2008-09</i>

iii. Transportation

<input checked="" type="checkbox"/>	1. Provide bicycle racks & changing rooms with showers
<input type="checkbox"/>	2. Encourage carpooling to church events and fuel-saving operation (follow speed limit, maintain adequate tire pressure)
<input type="checkbox"/>	3. Reduce air travel to church conferences
<input type="checkbox"/>	4. Use high gas mileage and/or alternative fuel vehicles for church trips (e.g., youth camps)
<input type="checkbox"/>	5. Support local routes and shelters for IndyGo bus service (e.g., participate in the Adopt-A-Shelter program in the immediate neighborhood)

iv. Reduced Site Disturbance, Protect or Restore Open Space

<input checked="" type="checkbox"/>	1. Limit construction footprint by using 2-story construction
<input checked="" type="checkbox"/>	2. Minimize disturbed areas for construction and use
<input checked="" type="checkbox"/>	3. Protect forested areas on east end of property
<input checked="" type="checkbox"/>	4. Reforest with native trees on west end of property
<input checked="" type="checkbox"/>	5. Plant 4 acres prairie grass and wildflower habitat

v. Stormwater Management

<input checked="" type="checkbox"/>	1. Maintain wet detention basin (pond) – <i>remove fence fall 2009 and allow naturalization of vegetation; reshape and</i>
-------------------------------------	--

	<i>expand wetland in 2010 or 2011</i>
<input checked="" type="checkbox"/>	2. Plant native vegetation and on-site roof runoff detention in bioswale behind building – <i>all roof runoff directed to bioswale in 2009; planting will be completed in spring 2010</i>
<input type="checkbox"/>	3. Provide dry detention (rain garden) in parking lot – <i>included in new Landscape Master Plan for future implementation if parking is expanded</i>

vi. Light Pollution Reduction

<input checked="" type="checkbox"/>	1. Minimize exterior night-time lighting; outdoor lighting poles, signs, spotlights are all on timers set for dusk to about 11pm could be set to shut off earlier; playground lighting is set for dusk to dawn for safety reasons; drive-through at front entryways are triggered by motion sensors.
<input checked="" type="checkbox"/>	2. Directional lighting to limit skyward angles; pole lights all have hoods, directing light towards ground.

b. Water Efficiency

i. Minimum indoor plumbing and fitting efficiency

<input checked="" type="checkbox"/>	1. Water performance measurement, whole building metering; new addition will be on city water with meter.
<input checked="" type="checkbox"/>	2. Use low-flow fixtures with aerators on faucets, toilets and showers; all sinks except kitchen deep sinks have aerators.
<input checked="" type="checkbox"/>	3. Regular maintenance of well pump and septic system; main building will be disconnected from well and connected to city water for new addition.
<input checked="" type="checkbox"/>	4. Wash dishes in partitioned sink; don't let water run; new sinks will have automatic on-off sensors.
<input type="checkbox"/>	5. Innovative recycling of wastewater (grey water collection and use)

ii. Water efficient landscaping

<input checked="" type="checkbox"/>	1. Replace 75% of turf grass with native and xeriscape plants – <i>no potable water use or no irrigation (4 acres of prairie plantings)</i>
<input checked="" type="checkbox"/>	2. Gravel drain system around building instead of gutters and downspouts; there are several perforated pipe laterals buried out in to yard to increase infiltration and reduce stormwater runoff.

c. Energy & Atmosphere

i. Optimize Energy Efficiency Performance and Design

1. Building design and use

<input checked="" type="checkbox"/>	a. Double entryway into foyer to limit heating/cooling losses
<input checked="" type="checkbox"/>	b. Inspect and seal cracks in doors and windows
<input checked="" type="checkbox"/>	c. Install and set programmable thermostats; in process of changing all thermostats in existing and new building to programmable.
<input checked="" type="checkbox"/>	d. Motion-sensor lighting in bathrooms
<input checked="" type="checkbox"/>	e. Limit use of powered door openers
<input checked="" type="checkbox"/>	f. Blinds or drapes on windows (can be closed to reduce cooling energy requirements in summer)
<input checked="" type="checkbox"/>	g. Windows with ventilation in offices (can be opened)
<input type="checkbox"/>	h. Reduce heat island effect - <i>plant or maintain shade trees around buildings; landscape plan includes islands in parking lots for future implementation; use reflective or light colored materials for parking lot and roof surfaces (currently blacktop).</i>
<input checked="" type="checkbox"/>	i. Insulated walls, roof and windows - <i>triple-pane, argon-filled windows and cellulous insulation in building addition with better R-value than the fiberglass insulation in the older building.</i>
<input checked="" type="checkbox"/>	j. Install on-demand tankless water heater – <i>included in new Building Addition constructed summer 2009</i>
<input checked="" type="checkbox"/>	k. Rinse in cold water, as indicated
<input checked="" type="checkbox"/>	l. Brownfield redevelopment or add to existing building location rather than using a new development site for building expansion
<input checked="" type="checkbox"/>	m. Maximize use of building and grounds by other groups to the degree practicable

2. Appliances

a. Energy Star Rating 65+

<input checked="" type="checkbox"/>	i. Heating and cooling (air and water) – <i>high efficiency equipment installed in new building 2009; older equipment to be replaced as needed.</i>
<input type="checkbox"/>	ii. Refrigerators & freezers
<input type="checkbox"/>	iii. Stoves, microwaves
<input type="checkbox"/>	iv. Electronics (computers, printers, TVs)

b. Regular service and maintenance of HVAC systems

<input checked="" type="checkbox"/>	i. Heating and cooling (air and water); now have a contract to twice yearly service and maintain HVAC systems.
-------------------------------------	--

3. Lighting

<input checked="" type="checkbox"/>	a. Inventory conducted of all lighting in building in January 2009.
<input checked="" type="checkbox"/>	b. Use high efficiency lighting - <i>the 8 halogen lamps in the Fellowship Hall should be used sparingly as they are not electrically efficient. They use more electric [23 amps] compared to all the ceiling lights combined [22.4 amps]. Usually only half of the ceiling lights [11.2 amps] are needed for Sunday mornings.</i>
<input checked="" type="checkbox"/>	c. Install fluorescent lighting, including Compact Fluorescent Light (CFL) bulbs where practical
<input checked="" type="checkbox"/>	d. Windows provide daylight in 75% of rooms for no-cost solar lighting and heating
<input checked="" type="checkbox"/>	e. Install motion sensors to trigger classroom & hall lighting – <i>included in new Building Addition constructed summer 2009</i>
<input checked="" type="checkbox"/>	f. Use task lighting to limit electricity use; fellowship hall ceiling lighting is divided in to four sections with separate switches. The sanctuary main lights are in zones controlled by 5 switches, four of which control 4 lights each and one controls 3 lights. There are two semi circles of lighting, inner and outer. On bright days, the south side may have enough light to turn off the outer 4 lights on south side by windows. The back and north side would still need additional light.

ii. Refrigerant Management, Ozone Protection

<input type="checkbox"/>	1. New appliances that are CFC-free
<input checked="" type="checkbox"/>	2. Coolant maintenance in air conditioning units

iii. System level metering

<input checked="" type="checkbox"/>	1. Track usage of gas and electricity – <i>audited for solar estimate.</i>
<input checked="" type="checkbox"/>	2. Offsite renewable energy: sign up for 100% IPL Green Energy – <i>approved by Church Council February 2009</i>
<input type="checkbox"/>	3. Onsite renewable energy – consider installation of photovoltaic solar panels on roof – <i>estimate obtained of \$50,000 for installation of panels on one-third of roof to supply baseline electrical needs for future implementation.</i>

d. Sustainable Purchasing

i. Purchase durable goods

<input checked="" type="checkbox"/>	1. Long-life, recycled composite, and use of local or
-------------------------------------	---

	rapidly renewable materials for roofing, siding, and other construction materials for building and playground; new replacement roofing installed; will replace all siding with more durable materials in conjunction with new building construction.
--	--

ii. Purchase products containing recycled materials

<input checked="" type="checkbox"/>	1. Paper and office products
<input type="checkbox"/>	2. Furnishings - <i>furniture, carpet, tile made from recycled synthetic materials where possible.</i>
<input checked="" type="checkbox"/>	3. Reuse waste materials for children's crafts (trash to art)

iii. Purchase of food, considering energy and materials in production

<input type="checkbox"/>	1. Limit transit cost by serving locally-produced food products
<input type="checkbox"/>	2. Use bulk items and raw foods to reduce packaging
<input checked="" type="checkbox"/>	3. Community supported agriculture - <i>CSA drop-off at church, eggs and beef from parishioner's farms, share extra produce and plants among congregants and with neighbors.</i>

e. Solid Waste Management

i. Kitchen

<input checked="" type="checkbox"/>	1. Glass mugs instead of Styrofoam for fellowship hour – <i>implemented 2009 with dishwashing volunteers.</i>
<input checked="" type="checkbox"/>	2. Glass dishes and silverware instead of plastic for meals – <i>consider purchase of additional smaller dishwasher for use during Church Council soup supper and other small events.</i>
<input type="checkbox"/>	3. Purchase products consisting of biodegradable materials for discarded dishes and silverware
<input checked="" type="checkbox"/>	4. Cloth dish towels instead of paper
<input checked="" type="checkbox"/>	5. Indoor recycling bin for cans and bottles during church events is located under the dishwasher sink
<input checked="" type="checkbox"/>	6. Compost vegetable scraps either off-site or on-site in community garden – <i>compost bin installed in kitchen with scraps used off-site; vegetable gardens included in new Landscape Master Plan to be constructed summer 2010</i>

ii. Reduce, reuse, recycle

<input type="checkbox"/>	1. Sign up for junk mail and catalogue reduction
<input checked="" type="checkbox"/>	2. Mostly electronic bill payment rather than surface mail
<input checked="" type="checkbox"/>	3. Provide outdoor Abitibi recycling bin for paper

<input checked="" type="checkbox"/>	4. Remove outdoor recycling bin for cans & bottles, as it duplicates other resources and is not frequently used
<input checked="" type="checkbox"/>	5. Post list of locations for recycling and toxic substance pick-up (Tox-Away-Day)
<input checked="" type="checkbox"/>	6. Share bulletins and/or project worship service information – <i>emailing bulletins for those not in attendance and Menno Expressions monthly church-wide publication to reduce paper copies in 2009.</i>
<input checked="" type="checkbox"/>	7. Email and post announcements on website (reduce number of paper notices)
<input checked="" type="checkbox"/>	8. Collect plastics (1-7) and cardboard for recycling
<input type="checkbox"/>	9. Refill printer cartridges
<input checked="" type="checkbox"/>	10. Participate in programs to reuse materials (e.g., garage sales, clothing exchange, office supplies for teachers)
<input checked="" type="checkbox"/>	11. Construction waste management (divert 50% from disposal) including disposal of used carpet at recycling facility – <i>included in new Building Addition during construction in summer 2009</i>
<input checked="" type="checkbox"/>	12. Rechargeable batteries used for equipment, including microphones and sound system
<input checked="" type="checkbox"/>	13. Collect nonrechargeable batteries
<input type="checkbox"/>	14. Distribute reusable shopping bags (FMC logo & stewardship theme)

f. Indoor environmental quality

i. Outdoor Air Introduction and Exhaust Systems

<input checked="" type="checkbox"/>	1. Windows provide ventilation (can be opened in all rooms except sanctuary and bathrooms)
<input type="checkbox"/>	2. Use low VOC indoor paints
<input checked="" type="checkbox"/>	3. Environmental Tobacco Smoke control (no smoking policy)
<input type="checkbox"/>	4. Live plants in offices to promote indoor air quality

ii. Green cleaning policy

<input type="checkbox"/>	1. Nontoxic cleaning supplies
<input type="checkbox"/>	2. Durable cleaning equipment and use of human-powered equipment, when appropriate
<input type="checkbox"/>	3. Indoor integrated pest management (appropriate use of pesticides)
<input checked="" type="checkbox"/>	4. Entryway systems (limit tracking of dirt into facility)

iii. Occupant controlled lighting (turn off lights in unoccupied rooms)

<input checked="" type="checkbox"/>	1. Windows in rooms provide 75% Daylight / 90% Views
-------------------------------------	--

iv. Occupant controlled thermal comfort

<input checked="" type="checkbox"/>	1. Separate thermostats for offices and sets of rooms
-------------------------------------	---

