You may be familiar with the term “steward” from an economic perspective, as someone who is a good manager of finances. But the words economy and ecology are both derived from the Greek word for steward, oikonomos. Thus a steward not only takes care of finances but also of natural resources. Yes, being a steward implies use, but it implies wise use and good management of God’s blessings.

This chapter will equip congregations with the tools to be good stewards of God-given resources. The first section provides tangible tips for conserving energy and water in the church. The second section deals with waste. It outlines strategies for improving recycling within the church facility and tackling the issue of styrofoam cups at coffee hour. Finally, we offer a section on land stewardship which includes tips for property management, land restoration, and community gardens. We even feature two local projects!
**Section 1 • Energy & Water**

**General**
- Install programmable thermostats that allow you to adjust heating and cooling according to room and time
- Double doors in entryways prevent air exchanged when opening and closing
- Floor mats near exterior doors prevent people from tracking mud and reduce use of cleaning products
- **Challenge:** Consider moving toward renewable energy sources. Look into grants and loans for funding projects

**Sanctuary & Narthex**
- Turn off the lights when not in use!
- Replace lightbulbs with compact fluorescent (CFLs) or LEDs.
- Use reversible ceiling fans to circulate air in sanctuary and make heating/cooling systems more effective. In the winter, change settings to push hot air down
- Use local wine and bread for communion
- Unplug sound systems when not in use
- Replace altar flowers with potted plants or keep flowers for more than 1 week
- Put recycling bins outside of sanctuary for bulletins or have ushers collect bulletins individually
- Insulate stain-glass. See page 70 for more information. If possible, insulate exterior walls
- **Challenge:** Switch to online newsletter to shorten your bulletins. If you are already using a projector during worship, consider replacing bulletins with electronic announcements

**Office & Classrooms**
- Use lamps or natural light when possible. Floor lamps can also create a warmer atmosphere than overhead fluorescents in pastor’s offices.
- Buy paper made from recycled fiber and office supplies in bulk
- Shut down computers nightly and use standby mode during the day when they are not being used
- Use power strips to turn off all electronics with one switch to turn off all appliances
- Put recycling bins in every classroom
- Recycle ink cartridges from printers
- Encourage staff to bring their own reusable mugs instead of styrofoam cups
- Regulate temperature in classrooms by closing and opening blinds to let sunlight in or out

**Kitchen**
- Empty refrigerators require more energy to cool. Keep plastic jugs of water in the fridge regularly and take them out when you need to store food for large events
- Invest in Energy Star Appliances.
- Save energy by unplugging small appliances when not in use (microwaves, coffee pots, etc.)
- To reduce water use when hand-washing dishes, install an on-demand water heater
- Install faucet aerators in kitchen sinks
- Fix links in sinks and dishwashers
- Check the seal on the refrigerator
- Buy fair trade coffee and local foods when possible
- Use re-useable dishes
- Use mason glass jars for storage instead of plastic containers
- Find biodegradable or washable substitutes to plastic utensils.
- Make dishwashing a regular fellowship or service activity! Create intergenerational teams that rotate every few months.
- Turn off lights when not in use!
- Use eco-friendly cleaning products to reduce exposure to toxic chemicals

**Bathroom**
- Install sensor lighting fixtures with timers
- Install faucet aerators to reduce water consumption
- Fix leaks on faucets and toilets regularly
- Use eco-friendly cleaning products
- Use toilet paper and paper towels made from recycled paper
- Place recycling bin in bathroom if you find leftover bulletins, pop cans, and other recyclable materials frequently disposed of in there
- Put up signs to remind people to turn off lights and conserve water.
- Use bathroom stalls to educate people on sustainability with posters!
- **Challenge:** Install dual-flush toilets. These can save 10-20 thousand gallons of water per year/per toilet. Retrofits are available for existing toilets for similar savings.

*These tips were adapted from the ELCA Mission Investment Fund “Energy and Earthcare Checklist”. See the link for more information: [Caring for Creation-Mission Investment Fund Green Resources](#)
This section addresses waste in congregations. We must be responsible and mindful stewards of the waste we produce by recycling as much as we can and disposing of non-recyclable items properly. One of the easiest and most important ways to do this is develop an effective recycling system in your church facility. Establishing a recycling system will allow your congregation to enjoy coffee fellowship, potlucks, picnics without wastefulness. It will model sustainable practices for people in your congregation. Finally, this section addresses one of toughest challenges for churches going green: styrofoam cups.
**Church Recycling System in 5 Steps**

**Step 1: Educate and organize congregational members**

The most perfect recycling system will be ineffective if no one is motivated to use it. Be sure to *educate* and motivate congregation members on why recycling is important. Put up statistics on eye-catching posters throughout the building, write an article in the church newsletter, preach on environmental stewardship, or host an adult education forum to get your congregation talking about caring for God’s creation.

Then, invite congregation members to join a **Recycling Team**. It’s likely that many members are already recycling at home and would be interested. Be sure to emphasize the team-oriented method so that one volunteer is not burdened with all responsibility. Coordinate a schedule for rotating the task of hauling recyclables to the local center or integrate the responsibility into the custodian’s job description.

**Step 2: Know your context**

**Contact or go online** to determine what items your local recycling centers collect. See page 10 for contact information.

**Strategize your locations**

Bins must be visible, accessible, and convenient for all ages. For best use, put recycling bins directly next to garbage cans to provide clear alternatives.

**Strategic locations:**

- **Paper:** Office/Sunday school classrooms/Narthex
- **Plastic:** Kitchen
- **Glass:** Kitchen
- **Aluminum:** Kitchen
- **Cardboard:** Kitchen/Office
- **Ink cartridges:** Office

**Step 3: Set up and prepare your system**

Don’t want to spend money on special recycling bins?

- Ask congregation members to search their basements/garages and donate old trash receptacles or containers
- Involve Sunday school classes or youth groups in decorating and labeling bins. This will increase community investment and visibility for your recycling system. Try including a slogan or your church logo.

**Signage is essential!** Keep signs visible and simple.

**Step 4: Involve the community**

**Church Waste Audit:**

Reuse before Recycle
Encourage people in your congregation to drop off items you no longer need at your local thrift store. The Depot Outlet in Decorah, Iowa is owned by area churches and functions as a ministry. It also has a strong partnership with the Winneshiek County Recycling Center to make sure all goods find a new purpose.

Challenge: Recycling as Outreach
Serve church neighbors by using your church facility as a central gathering place for people in your community to drop-off household items to be recycled. Your church will provide a service that can draw in visitors as well as increase your church’s visibility in your community. You will be facilitating good stewardship of the earth by preventing these harmful, toxic products from ending up in the landfill.

Suggested items:
- Ink cartridges
- Cell phones
- Fluorescent light bulbs

Step 5: Sustain your Recycling System
Make sure your recycling team meets regularly to maintain the system and continues to educate the community about how to use the system.

You may contact Terry Buenzow at recycling@co.winneshiek.ia.us for free consultation about recycling at your church. He often visits congregations to do Sunday School or adult education presentations. The Winneshiek Recycling Center is also in the process of becoming a model for LED lighting efficiency and Terry may be able to help your congregations with other stewardship projects.

Tips for Tackling Styrofoam:
Coffee hour serves as a wonderful ministry for fellowship in many congregations. However, the byproduct of this practice is often a large amount of styrofoam cups being thrown in the trash. Styrofoam cups are especially problematic because they are made of a material that does not decompose. Furthermore it is difficult to find people to wash china dishes and heating water to wash dishes also has negative environmental consequences. There is no perfect solution. However, depending on the congregation’s needs and context, there are ways to minimize the environmental consequences of coffee hour while still maintaining the ministry!

Tips:
- Make dishwashing a fellowship opportunity. Form kitchen teams that rotate on a regular basis and are responsible for bringing refreshments and cleaning up afterwards. This will further enhance the community conversation. Good Shepherd Lutheran in Decorah, Iowa currently has an effective kitchen team system.
- When replacing old appliances, invest in Energy Star dishwashing machines for greater water and energy efficiency.
- Fulfill your church’s commitment to social justice by purchasing fair trade coffee. If you cannot afford this on a regular basis, consider using it for a special event to educate congregation members about why they should use fair trade products at home.
- Encourage congregation members to bring personal mugs to coffee hour while providing china for those who forget. This will decrease the amount of dishes that need to be washed on a given Sunday.
- Don’t have dishes in your church kitchen? Ask congregation members to donate old mugs or cups they no longer use from their basements or attics!
- Consider ordering biodegradable disposable coffee cups online at http://www.ecoproducts.com. To maximize eco-friendliness, compost them instead of throwing them away.
Our call as Christians to be good stewards of our resources applies not only to making the church building as efficient as possible, but also to tending the grounds and fostering a deep connection between congregation members and the earth.

Congregations that own land beyond church grounds have a unique opportunity to remind people of the importance of caring for God’s creation with good land stewardship. This section features property and land stewardship practices as well as a step-by-step guide for how to facilitate a land restoration project and community garden.

Why Restore?

Less than 1/10th of 1% of original prairies remain in Iowa. Iowa also provides rich opportunities for gardening because of its fertile soil.

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The call of the Gospel to love God and our neighbors provides a unique opportunity for congregations. Our neighbors are not just the people in our community but also include animals, plants, and trees that inhabit the surrounding land. This is why it is within the mission of the church to carefully tend the land in gardens, and restore it to native vegetation.
**Tips for Good Property Stewardship:**

- If it is necessary to water the plants and lawn, do so in the early morning or late evening to prevent wasteful water evaporation.
- If the church uses sprinklers to water the lawn and plants, check for leaks in the equipment and repair them to prevent water waste.
- Consider installing rain barrels to capture and store rain water that runs off of the roof and use it to water the church lawn or garden.
- Limit the use of pesticides and fertilizers on church property to protect the congregation from harmful chemicals. If they must be used, follow the package directions carefully and apply conservatively only what is needed. Avoid application during times when children will be outside (i.e. before VBS).
- In the winter, shovel as soon as possible after the snow to prevent ice buildup. Of course, it is necessary to use sidewalk de-icers to protect the safety of your congregation, but use it as wisely and conservatively as possible.

**Possible Property Projects:**
The type of projects depends on the physical features of the church property and the climate but may include:

- landscaping with native plants
- reducing the amount of water and fertilizer used on lawns
- planting trees
- planting a rain garden
- making a more environmentally friendly parking lot
- prairie restoration

**How to Landscape with Native Plants:**

**Step 1: Put out a call within the congregation for volunteers**
In order for a landscaping project to be successful, there must be interest and support within the congregation. See if anyone in your congregation has experience with landscaping and/or native plants. A core group of individuals will be needed to move the project forward. Make sure that the property committee is on board with these changes. This could also be a youth leadership or service learning project.

**Step 2: Research Plants Native to the Area**
Take a trip to the library and do research on the internet to figure out which plants are native to your area. It may be helpful to talk to master gardeners, nursery plant experts, local horticulturists, landscape designers and biology experts.

**Step 3: Possibly consult a landscape designer**
If your church has never created a formal plan for its outside space, it may be helpful to consult a landscape designer or someone within the congregation who is familiar with landscaping to design an inviting, aesthetically pleasing and hospitable space for ministry. Planting native plants will not be a wise use of church resources if they are not planted in the appropriate soil or amount of sunlight.

**Step 4: Create a Budget**
Consult with your congregation to see if people who already have native landscaping in their homes would be willing to divide and share their plants. Estimate the cost of planting native plants and present your findings to the finance committee for approval. Seek out donations from congregation members to cover the costs of the plantings.

**Step 5: Prepare the site**
Clear non-native vegetation if necessary. Add compost or sand if the soil needs to be amended.

**Step 6: Plant!**
Host a planting party to incorporate people from the congregation in fellowship.

**Aspects of an Environmentally Friendly Parking Lot:**

1. **Permeable surfaces for water drainage**
When rainwater hits traditional pavement, it runs off the surface of the parking lot into the sewer drainage system and ultimately ends up in the watershed faster than it would if it were allowed to soak into the ground. Surfaces like dirt and gravel which exist at many rural churches already serve this purpose. Otherwise, consider paving the parking lot with semi permeable material the next time it needs to be repaved.
2. Trees for shade
When people’s cars sit in the shade during summer worship services, they will have to use less energy on air conditioning when they leave.

3. Strips of Grass or Plants
Parking lots that have strips of vegetation allow rain water to run off into the watershed and be absorbed.

4. Bike Rack
People will not even consider biking to church if the infrastructure for locking up their bikes is not in place. However, a bike rack alone will not encourage people to bike to church. Consider holding a “bike to church Sunday” to encourage alternative transportation (carpooling, walking, and biking) to church. See page 54.

5. Signs encouraging people not to idle their cars
When people idle their cars they waste energy and pollute the air.

6. Parking lot lights aimed to the ground and on timer
Street lights that illuminate the entire vertical space of parking lots waste electricity and contribute to light pollution. Consider installing light fixtures that point the light down on to the parking lot itself, and put lights on a timer so that they are not using electricity unnecessarily during sunlight.

How to Begin a Land Restoration Project:

Step 1: Get congregational support
Make sure that your congregation is supportive of a restoration project and would be willing to help plant and maintain the land and fund the project. It is advisable to organize a committee to take charge of this process and to get the approval of the church council and finance and property committees.

Step 2: Identify how project would fit the church’s ministry.
Land restoration projects may offer a gathering space for church functions, a space for quiet reflection and contemplation, fellowship opportunities in the process of planting and maintaining, and educational opportunities for children of the congregation and community to learn about plants, animals and the wonder of God’s creation.

Step 3: Select a location
A land restoration project unfortunately will probably not be possible at most churches. Few churches have adequate space for such an undertaking but rural churches are more likely to have space on their property for native habitat restoration. If possible, the congregation should pick a site that has some native plants remaining so that less money is needed for seed.

Step 4: Evaluate the site
Research the history of the area to figure out what kind of ecosystem existed on the site naturally before human settlement. Also, assess what condition the land is in currently and what plants and animals currently inhabit the area.

Step 5: Consult local experts
Talk to congregation members who have restored land for the Conservation Reserve Program (CRP) or have experience with land restoration. You may also want to read books from the library, research online, look at soil maps, and talk to horticultural experts, extension agents, biology and ecology professors, and seed companies.

Step 6: Write a proposal
Based on the committee’s research and assessment of the land, write a proposal for how to prepare the site, plant native vegetation, and project maintenance. If restoring a prairie or oak savanna, include prescribed fire in the long term management plan.

Step 7: Create a budget
Using the information the committee gathered from research and talking to local experts, calculate a budget for the project. Determine how funds will be raised. Present the proposal and budget to the church council and finance and property committees.

Step 8: Prepare the site and plant!
Recruit volunteers to help remove the non-native vegetation and to plant the native restoration plants. This would be a great opportunity for the congregation to engage in fellowship as they work together.

*See page 16 for a Local Spotlight on Oak Savanna Restoration!
Local Spotlight:
Oak Savanna Project

Washington Prairie Lutheran Church
Decorah, Iowa

When Greening Churches Internship supervisors Ruth Kath and Dale Nimrod initially contacted the Washington Prairie congregation about their needs for environmental stewardship projects in the church, Pastor Mark Kvale mentioned the possibility of restoring land next to the parsonage to native oak savanna.

The congregation historically has had a strong land conservation ethic as part of its ministry. Pastor Oscar Engeretson preached about the importance of soil conservation during the Great Depression years, and there are memorial terraces on the farmland of the church in this spirit of stewardship. A memorial fund for a restoration project at Washington Prairie had been set up by Paul and Sue Bruvold in memory of Paul’s late brother, Harlan, who valued environmental stewardship.

When the interns and supervisors met with Washington Prairie, they discovered the site had originally been an oak savanna, an ecosystem that exists on the border of prairie and woodlands. Oak savannas consist of large, uncrowded bur oak trees surrounded by wildflowers and grasses, with the shade of the oak trees creating distinctive habitats for shade tolerant species. Oak savannas are a nearly extinct ecosystem, since other species have outcompeted the oaks and wildflowers because of a lack of regular fire.

The oak savanna project could not have moved forward without the assistance and support of the community. In addition to Paul and Sue Bruvold’s horticultural knowledge and memorial donation, congregation member Wayne Wangsness offered his experience in restoration and organic farming. Greening Churches Interns Callie Mabry and Kristi Holmberg contacted Luther College Biology professors Kirk Larsen and Molly McNicoll who visited the site and offered their expertise on oak savanna habitats, site preparation and restoration management. Pheasants Forever offered to lend their restoration seeding equipment and donate money for the cost of the seed.

The congregation is now moving forward with the project as they burn brush piles, clear invasive species and educate the congregation about the importance of this project for environmental stewardship and ministry.
Gardening has Biblical roots going back to the Book of Genesis and it is a wonderful way to praise God for giving us a continual source of nourishment for our bodies. Gardens are the setting for many events in the Bible, and Jesus used gardens to illuminate the Gospel in some of his parables.

Gardens are also a good way to spend time in Creation. Today, many children are not familiar with how food is grown and gardens offer a space for education for the youth of the church. The congregation can work together to tend the garden in community. They can also be a contemplative place for prayer or reflection. Finally, church gardens can serve the community by growing food for our hungry brothers and sisters.

We are very blessed in Iowa to have such fertile soil, and we can use it to celebrate God’s creation and to support ministry!

Gen 1:29-30

God said, “I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. And to all the beasts of the earth and all the birds in the sky and all the creatures that move along the ground—everything that has the breath of life in it—I give every green plant for food.”
How to start a Church Garden:

**Step 1: Organize a Garden Growing Team**
In order to make the church garden project an endeavor enjoyed by many people, it is a good idea to organize a group of people who can share the responsibilities of maintaining the garden. Ask people you know who are avid gardeners, and put an announcement in the bulletin. It would be best to start this process in February or March, so that the framework can be set up before planting.

**Step 2: Create a vision and goals**
The garden team will need to decide what kinds of produce will be cultivated and what will be done with it when it is harvested. Do you want to donate the food to a food bank ministry? Or are there needy people in your congregation who could directly benefit?

- **Option 1:** Donate fruits and vegetables to local food pantries
- **Option 2:** Give food to people in congregation who need it
- **Option 3:** Sell produce to congregation to raise money for ministry/Pastor’s discretionary fund
- **Option 4:** Use produce for a congregational event
- **Option 5:** Volunteers earn a portion of the produce with volunteer commitment

**Step 3: Select a site**
When a church garden is located on church property it will be more visible to the congregation and more volunteers are likely to sign up when they see the area. If your church has a location on the grounds that would be suitable for a garden, ask the property committee for permission to cultivate a garden there.

**Things to consider when selecting a site:**
- How many hours of sun will the plot receive per day?
- How is the soil quality of the site? Will it need to be amended?
- What plants are currently on and around the site? Will they cause problems for weeding later?
- Where is the nearest outdoor faucet and how will the garden be watered?
- Will there be any problems with pests (deer, woodchucks, etc?) Will a fence be needed?

If your church property does not have a good location, another option would be to rent out a plot at a community garden or partner with other congregations who have space.

Decorah churches have the opportunity to volunteer at the Greening Churches Interns’ Inter-Church Garden located at the Luther College Community Gardens.

**Step 4: Preparing the Site**
Consult the master gardeners in your congregation and the members of the Garden team to determine what needs to be done to the site. Some possibilities include:
- Amending the soil with compost, sand or peat
- Encircling the space with a small fence to keep pests out
- Removing sod or other plants/weeds
- Tilling the soil
- Installing a trellis for climbing plants
- Putting up a sign

To make the site a spiritually engaging place for reflection, consider putting signs with scripture or words for reflection around the site. To incorporate the children of the congregation, please see the Garden Rock Painting Lesson in the Sunday School Curriculum on page 12.

You will also need tools on hand at the gardening site. Put out a call in the congregation for people to donate old rakes, hoes, shovels, string, garden stakes, gardening gloves, etc. or visit your local thrift store.

**Step 5: Planting**
Deciding what to plant will depend on the purpose your garden team has set forth. If you are growing crops for a food pantry, ask the director which fruits and vegetables are in the greatest demand by food pantry clients. It might be wise to grow root crops like potatoes, onions, beets...
and carrots that will store for longer periods of time.

The type of plants will also depend on the climatic conditions of the site you have selected. Consider contacting local nurseries and congregation members for donations of seeds or starter plants.

Consult with the experienced gardeners of your congregation, the internet and/or the instructions on the back of the seed packets to determine which plant hardiness zone the land is in and when the best time to plant the crops is.

You will also need to know the depth the seeds need to be planted, how far apart from each other the plants should be and whether to plant in straight rows or hills.

Arrange to have several volunteers for planting, especially if the planting is spread out over multiple sessions.

**Step 6: Tending**

The church garden will need volunteers throughout the summer to weed, thin, hoe, and water the plants. Personal invitations are more effective than general announcements when coordinating volunteers. It would be ideal to have sign up sheets in the church office for people who want to volunteer and one person from the gardening committee in charge of coordinating volunteers. There will be some weeks where more volunteers needed than other weeks, depending on the how far along the plants are and the amount of rain the plot has received.

If you have designated times for gardening each week, it would be a great way for people in the congregation to engage in fellowship as they tend the garden. It would be a neat opportunity for children of the congregation to learn more about God’s creation and where their food comes from by having Sunday School classes or youth groups volunteer in the garden. Praying with the garden volunteers is a great way to remind people why we garden and tend to God’s creation.

*Prayer:* Dear God, thank you for the soil on which all things grow. Bless this time of tending and keeping and bear fruit from our labor. In Jesus’ name, Amen.

**Step 7: Harvesting**

Depending on what kinds of food the garden is growing, harvest may take place periodically throughout the summer or all at once in the late summer/fall. If you are donating food to a food pantry, check with the pantry’s guidelines about how and when they would like the food delivered.

You can make the harvest process into a congregation-wide celebration of God’s creation! See the Family Sunday School Lesson on pages 49-50.
This summer for the Greening Churches Internship, Kristi Holmberg and Callie Mabry have helped organize volunteers for an Inter-Church Community Garden for churches in the Decorah.

Professor Ruth Kath came up with the idea of an Inter-Church garden after her experience with Greening the Church workshops, ecumenical environmental stewardship, and the Luther College Sustainability community gardens. Kath said, “My own gardening, seeing the needs of the Food Pantry at First Lutheran, and knowing first hand the power of churches working together in this part of the country inspired my wild "why not?” idea of the Interchurch Garden.” Also, intern Callie Mabry expressed interest in the project with her experience volunteering at the First Lutheran Food Pantry.
In determining what to plant, Kath and fellow volunteer, Connie Barclay, inquired what types of produce was needed at local food pantries. They selected beets, beans and potatoes because they were in demand at the food pantries and have good shelf lives.

Kath, Barclay and volunteer Jon Hart planted the garden in May. Kath and Barclay thinned, weeded and watered the plants until volunteers from local congregations began signing up to help tend the garden.

One of the key goals of the project is for people from different churches to meet each other and build relationships. “We hope they [people from different congregations] will slowly get to know each other and take pride—together—in the food contribution they are making to hungry brothers and sisters in the Decorah area” said Kath. She recommends that “whenever possible, two or three churches work together on such a public service project, either two congregations of one denomination, or two denominations. That way, the project itself gets done, the contribution gets made, and a bond is established between congregations over the hoeing and weeding!”

Good Shepherd Lutheran Church, Decorah, IA:
There is a vegetable garden behind the Good Shepherd building on church property. It is tended by Ed Hover and the food that is harvested from the garden is sold to the Good Shepherd community. Funds raised are donated to the Pastor’s Discretionary Fund which gives money to families in need. For more information, contact Lyle Otte at Good Shepherd Lutheran Church.