

*Catholic Green Initiative
of Santa Clara County*

*Called to Care for God's Creation
Workshop Series*

OVERVIEW FOR FACILITATORS

Purpose

These sessions are designed to accomplish three tasks: 1) make people more aware of what our faith requires of us in terms of the environment, 2) help identify ways to change their attitudes and habits in order to live out that faith, and 3) inspire them to action while they encourage others around them to act.

One of the Principles, or Themes, of Catholic Social Teaching listed by the United States Conference of Catholic Bishops is *Care for God's Creation*. It is our call to stewardship of the planet God has entrusted to us. As our own Bishop McGrath has pointed out time and time again, being good stewards of our earthly home and all its life is a mandate, not an option, for Catholics. Therefore, all materials used in these workshops should focus on cultivating good stewards of God's creation.

Organization

The first meeting will be an overview. It will call participants' attention to the call to *Care for God's Creation* and our role as Catholics, asking them to take stock of their lives in relation to that call. Each of the four following sessions will focus on an element of nature:

- Earth (consumption)
- Air (air quality/pollution)
- Water (quality, privatization, access, etc.)
- Fire (energy usage and alternative energy forms)

The sixth gathering will be a summary of what has been discussed, including time for discussion of behavior modifications people have tried and what they have experienced in the process. It will encourage people to consider seriously the question, *Where to now?*

Every session will follow the format of the St. Francis Pledge. (The Pledge is provided below, under RESOURCES.) Each one will be divided up into these areas:

- Pray
- Learn
- Assess
- Act
- Advocate

The prayers are designed to help participants focus on the particular element being discussed that session (earth, air, water, or fire) and are organized into this format: 1) Call to Prayer, which is the same for all prayers, 2) Scripture Reading, and 3) Response. Suggestions for activities for each of these areas are included in this packet, as well as speakers who can be called on to discuss a particular topic with the group. So are sample prayers. You are invited to use any, all, of none of

these. You are encouraged to devise materials that fit your particular group of parishioners or include activities which you intend to engage in as a parish in the near future. All we ask is that you follow the St. Francis Pledge format, zeroing in on one specific topic (Earth, Air, Water, Fire) per session.

As you go through *Introduction* you will see how the format works.

REMEMBER: This packet is only a guide. You know your parishioners, so you are best suited to devise activities and discussion questions for the people who will attend the workshop sessions. Use these materials not as a set of required lesson plans but as a framework, something to get you started. Let your own knowledge, creativity, and passion for caring for God's creation help you construct interesting, meaningful sessions.

SESSION 1: INTRODUCTION

Pray

Call to prayer: Psalm 50: 1-2

Scripture: John 1:1-5

Response:

Creator God, we acknowledge with awe that you are the creator of everything that exists. We understand with great humility that you have appointed us stewards of that creation. We thank you with grateful hearts for being the Light that guides our steps as we seek to preserve and protect what you have placed in our care. Amen.

Learn

- A. If we are to live out our Catholic faith, we must answer the call to Care for God's Creation. In making this one of the Themes of Catholic Social Teaching, the U.S. Bishops explained its importance in clear, direct terms:

“We show our respect for the Creator by our stewardship of creation. Care for the earth is not just an Earth Day slogan, it is a requirement of our faith. We are called to protect people and the planet, living our faith in relationship with all of God's creation. This environmental challenge has fundamental moral and ethical dimensions that cannot be ignored.”

- B. Pope Benedict XVI titled his 2010 World Day of Peace message “If You Want to Celebrate Peace, Protect Creation.” He pointed out the interrelatedness of the environment with our relationship with God as well as with each other.
1. “The environment must be seen as God's gift to all people, and the use we make of it entails a shared responsibility for all humanity....”
 2. “Seeing creation as God's gift to humanity helps us understand our vocation and worth as human beings.”
 3. “Can we remain indifferent before the problems associated with such realities as climate change, desertification, the deterioration and loss of productivity in vast agricultural areas, the pollution of rivers and aquifers, the loss of biodiversity, the increase of natural catastrophes and the deforestation of equatorial and tropical regions? Can we disregard the growing phenomenon of “environmental refugees”, people who are forced by the degradation of their natural habitat to forsake it--and often their possessions as well--in order to face the dangers and uncertainties of forced displacement? Can we remain impassive in the face of actual and potential conflicts involving access to natural

- resources? All these are issues with a profound impact on the exercise of human rights, such as the right to life, food, health and development.”
4. For the full text of this message, search the Web for “Benedict Day of Peace 2010 message” or go to www.catholicnewsagency.com/document.php?n=116.
- C. Show a short, engaging film presenting environmental concerns in general. (For suggestions, refer to the attached list in RESOURCES.) Allow time for discussion afterwards.

Assess

- A. Begin by thinking about your individual attitudes and actions. Reflect on these questions:
1. What do you “feel” about the natural world (animals, sunsets, ocean, etc.)? Is it admiration or a neutral attitude? Joy or sorrow? Kinship or simple co-existence? Source of beauty or usefulness? A combination of these or something else?
 2. Think about a time you could call your most significant experience of nature. Why was it memorable?
 3. How has your relationship with the earth been affected by your family history, including your parents and grandparents? For example, how did they come to use nature—in their work-life, in their recreation (hunters, fishers, campers), in eating preferences (meat-eaters or vegetarians)? In what ways did your family teach its younger members to care for the earth?
 4. Have you ever been affected by an environmental crisis? Describe what it was, how you were affected, and how you think the experience may have contributed to your view of the earth and people’s responsibility toward it.
 5. Is there a book, song, poem, movie, or course that has affected deeply how you think about the earth?
- B. How has religion played a role, positively or negatively, in how you experience your relationship with the earth?
- C. How much do you know about the environment? Take a short quiz from the National Environmental Education and Training Foundation University of Maryland (see “Quiz” below, in RESOURCES).
1. Have participants take the quiz, then go over the answers with them.
 2. Explain that during the following weeks they will take a look at four elements—Earth, Air, Water, and Fire—so they can gain a better understanding of what is happening to our environment and what we, as Creation’s stewards, can do about it.

Act

- A. An important action step is coming to this series of workshops. Participants need to be willing to
 - 1. Keep an open mind. Leave behind political views and concentrate on our obligation as stewards.
 - 2. Avoid getting wrapped up in terminology or hot-button words, like “global warming” or “climate change” or “greenhouse gasses.” If such terms are used, ignore any negative emotion they may cause in you. Instead, consider what can be done now to make sure that they are not conditions our grandchildren need to deal with later.
 - 3. Engage in self-examination: attitudes, habits, actions, example to others.
 - 4. Put what they learn into action in their own lives, within their families, and with others they associate with at home, at work, and in the community.
- B. Pass out copies of the St. Francis Pledge. Discuss all aspects, asking participants what they think is the meaning and importance of each one. Then ask them to sign the pledge and bring it with them to all remaining sessions.
- C. Send them home with a copy of instructions for calculating their carbon footprint (see “Your Carbon Footprint” in RESOURCES, below). They are to complete that calculation exercise before the next session, take notes of their results in each section, plus their overall results, and bring those notes back with them for each remaining session. They will use their notes during discussions.

Advocate

- A. Educate your spouse or family by explaining why you are doing the Carbon Footprint assessment. Talk about the meaning of our obligation as Catholic Christians to fulfill the principle of Care for God’s Creation.
- B. Have your spouse or family help you complete the Carbon Footprint assessment.
- C. Tell others about what you are doing—participating in these workshops, evaluating your own environment-related habits, making plans to become a better steward of the Earth. And tell them why you are doing this—as part of your faith, to be a better example to those around you, and whatever other reasons you have.

RESOURCES

Short Films

“Concerto for the Planet Earth” (16 minutes), from Bullfrog Films. Details at <http://www.bullfrogfilms.com/catalog/cfe.html>. \$59.00 buy/\$20.00 rent. VHS but can ask for DVD.

Description: A celebration of nature, this non-narrative program uses a classic concerto format to illustrate the devastating effect people have had on the ecology of our planet. Filmed in spectacular 70mm Showscan for The Pavilion of the Environment at the 1992 World's Fair in Seville, Spain, with an original score performed by the London Symphony Orchestra, this is an excellent introduction to any environmental program.

“Partnership--Exploring Human Ecology with J. Stan Rowe (26 minutes), from Bullfrog Films). Details at <http://bullfrogfilms.com/catalog/home3.html> and free down-loadable study guide at <http://bullfrogfilms.com/guides/home3guide.pdf>. \$59.00 buy/\$35.00 rent. VHD or DVD.

Description: This third program in the "Home Place" series explores the challenges faced by industrial societies as they shift from the present damaging, exploitative relationship with earth ecosystems towards a more sustainable partnership. The program shows how ancient cultures vanished because they lived beyond their ecological means and shows clearly that present agricultural, forestry, and fishing practices have us on the same course. Modern developments in ecologically-based forestry illustrate the kind of partnership which is possible, if ecosystem needs are respected.

“The Man Who Planted Trees,” directed by Frederik Back (30 minutes). Available at Netflix and for sale on-line. Details at <http://www.imdb.com/title/tt0093488>.

Description: The story of Elzeard Bouffier, who over 35 years quietly cultivated a magnificent forest in a desolate area of France. The tale is told by a young traveler who happens upon the old gentleman one day and finds himself returning to rediscover the landscape several times over the following decades.



Quiz

1. There are many different types of animals and plants, and they live in many different types of environments. What word is used to describe this idea?
- a.) multiplicity
 - b.) biodiversity
 - c.) socio-economics
 - d.) evolution

2. Which of the following is a renewable resource?
- a.) oil
 - b.) iron ore
 - c.) trees
 - d.) coal

3. Which of the following household materials is considered hazardous waste?
- a.) plastic packaging
 - b.) glass
 - c.) batteries
 - d.) spoiled food

4. The most common major cause of pollution of streams, rivers and oceans is what?

5. Most electricity in the U.S. is generated from what source of power?

6. What is the primary environmental benefit of wetland areas?

7. Having ozone in the earth's upper atmosphere protects us from what?

8. The current solution to the disposal of most nuclear waste in the U.S. is

9. What is the largest source of carbon monoxide in the U.S.?

10. What is the most common reason that animal species become extinct?

11. What is the name of the primary federal agency that works to protect the environment?

12. Where does most household garbage eventually end up once it leaves the home?

Answers to Quiz

1. c) Biodiversity

2. c) Trees.

3. c) Batteries.

4. Surface water running off yards, streets, paved lots and farm fields.

5. By burning coal, oil and wood.

6. To help purify water before it enters lakes, streams, rivers and oceans.

7. Harmful, cancer-causing sunlight.

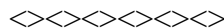
8. Store and monitor the waste at the plant.

9. Motor Vehicles.

10. Loss of habitat

11. Environmental Protection Agency.

12. Landfills.

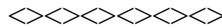


The St. Francis Pledge

I/We Pledge to:

- **PRAY** and reflect on the duty to care for God’s Creation and protect the poor and vulnerable.
- **LEARN** about and educate others on the causes and moral dimensions of climate change.
- **ASSESS** how we--as individuals and in our families, parishes and other affiliations--contribute to climate change by our own energy use, consumption, waste, etc.
- **ACT** to change our choices and behaviors to reduce the ways we contribute to climate change.
- **ADVOCATE** for Catholic principles and priorities in climate change discussions and decisions, especially as they impact those who are poor and vulnerable.

(signed) _____ (date) _____



Your Carbon Footprint

In 2003, humanity’s footprint exceeded the Earth’s biological capacity by over 25%. The ecological footprint of a country or region of the world calculates to what extent humans utilize natural resources. Each individual also has a “carbon footprint,” which is the amount of carbon dioxide (CO₂) emitted as a direct or indirect result of an activity. All organic matter contains carbon, and this is normally released and reabsorbed in a continuous flow. The problem at this time is that CO₂ is being released about three times faster than it can be reabsorbed, causing greenhouse gases that lead to global climate change. Calculations that look at the Earth’s population and the planet’s ability to reabsorb CO₂ suggest that the carbon cycle could be brought back under control if we each had a carbon footprint of about 1.7 tons. The average American’s carbon footprint is approximately 27 tons. This gives us scope to reduce our footprint in almost every aspect of our lives.

Step 1: Go to the Nature Conservancy’s home page (<http://www.nature.org/initiatives/climatechange/calculator/?src=f1>), click on “Calculate for Me Only” or “Calculate for My Household,” and answer the questions. Pay attention to the questions asked—those are important areas to think about. Also, follow the “Total Greenhouse Emissions” box in the lower right of each section. At the end, look at “Your Results” to see where you stand in relation to the U.S. national average and compare your behavior with other Americans (see the pie charts).

Step 2: Get started on reducing your carbon footprint impact. 1) Look for ways to do this. Begin with

the list at the end of the calculation tool you just used (Nature Conservancy). Find that list by clicking on “Read Our Climate-Saving Tips” on the “Your Results” page. 2) Watch for other ways, and ask friends what measures they are taking. 3) Look through the books below, under “Suggested Reading.” 4) Try some of the actions on the following list,

- Plant a tree for every 10 ton of CO₂ emissions you generate.
- Decide to invest in green energy through your local energy company.
- Share your actions with local area ministries and merchants as a way to encourage others to offset their energy consumption and CO₂ emissions.
- Support Clean Development Mechanism (CDM) projects that have generated Carbon Emission Reduction (CER) credits. These projects are fully verified to Kyoto/United Nations standards via an independent Designated Operating Entity. CDM projects support sustainable development in developing countries through projects such as wind energy, hydro power, and biomass.
- Support carbon offsetting projects within North, Central, and South America and/or Africa—including reforestation and renewable energy production. (www.globalcarbonoffset.com).
- Decide which recurring meetings you attend could be done through Skype, MW Messenger, video-conferencing, etc. and which meetings need face-to-face contact, then suggest appropriate alternatives to those in charge of the meetings.

Suggested Readings

- Joelle Novey, “Carbon Offsets Demystified,” Green America Publications, feature article March/April 2007 (www.GreenAmericaToday.org/pubs).
- Judith Purman, *Tracking Your Carbon Footprint: A Step-by-Step Guide to Understanding and Inventorying Greenhouse Gas Emissions*, iUniverse Books, 2008.
- Joanna Yarrow, *How to Reduce Your Carbon Footprint: 365 Simple Ways to Save Energy, Resources, and Money*, Duncan Baird Publishers, London, 2008.

SESSION 2: EARTH

Pray

Call to Prayer: Psalm 50:1-2

Scripture: Proverbs 8: 22-31

Response:

God of all wisdom may we, too, take delight in your creation, reveling in its incomparable beauty. Open our eyes to see your reflection in every creature, tree, flower, and mountain. Open our ears to hear your voice in the roar of the ocean and the song of the wind. Open our minds to the understanding that our delight must be transformed into the care and defense of all we have come to cherish. Amen

Learn

- A. This workshop is designed to ignite your passion for Creation, help you understand the problems the planet is facing, raise awareness of the changes that are needed, and empower you to make those changes. It will show you how to support and develop environmentally sustainable patterns of consumption in your life that honor Creation and deepen your spiritual life.
- B. View *The Story of Stuff* to learn about the stages of the materials economy: extraction, production, distribution, consumption, and disposal of the things we purchase and use up or throw away every day. (Download for free or purchase the 20-minute DVD at www.storyofstuff.org.)

Assess

- A. After the showing of the *Story of Stuff*, open up the floor for discussion. Use a white/chalk board to record answers to such questions as
 1. So what do you think? What are your reactions and feelings to what you saw?
 2. What surprised you the most?
 3. What kind of legislation needs to change?
 4. What are ways we can slow down our consumption rate?
- B. Ask participants to take out their notes from their carbon footprint calculator exercise. Discuss what they discovered about themselves related to consuming the Earth's resources, especially what they found out in the "Recycle/Waste" section of the

calculator.

- C. Have each person take the Waste Quiz (see RESOURCES).
- D. After the quiz you can again open the floor for discussion and share ideas, suggestions for change, and how to participate in making changes.

Act

- A. Think about 10 changes that you are willing to commit to (see suggestions in “25 Green Resolutions,” under RESOURCES).
- B. Fill out the “Commitment Form” (under RESOURCES).
- C. In teams, small groups, or as a whole group, share the changes, actions, and activities you listed, including why you think each is important.
- D. When you get home, make any changes or additions to your list, then get to work!

Advocate

- A. When you get home, share your list with your family and encourage them to participate with you, making some actions a family project.
- B. Remind family members that it’s important to continue to be aware of how we can reuse, recycle, and repurpose our no-longer wanted or needed items with the goal of *de-consumption* (purchasing less) on a daily basis. Agree to act as other’s check point.
- C. Do an event in your church, school, club, or group.
- D. Become active in a local environmentalist group.
- E. Write to your senators, Congressional Representatives, mayor, City Council, etc.
- F. See “Action List” in RESOURCES for more details.

RESOURCES

General

Speakers

Lori Uchiyama Salberg
Associate Director of Cemeteries
Catholic Cemeteries of the Diocese of San Jose
Topic: “Green” Burial
Mobile: 408-210-6519
Office: 650-428-3730 ext. 232
Fax: 650-428-3733
www.ccdsj.org

Tina Blease
Green Home Consultant
Topic: Live Healthy, Live Green, Protect Our Planet
(408)377-8829
tinalease@sbcglobal.net

Books

The Green Book, by Elizabeth Rogers

Food Rule, by Michael Pollan

[365 Ways to Live Green: Your Everyday Guide to Saving the Environment](#), by [Diane Gow McDilda](#)

[Living Green: A Practical Guide to Simple Sustainability](#), by Greg Horn

E-Book (Free)

GREEN RICHES: HELP THE EARTH & YOUR BUDGET, by Jackie O’Donnell (Free download available at www.BarnesandNoble.com, www.kobobooks.com, www.diesel-ebooks.com, www.smashwords.com, and other online bookstores (search “Jackie O’Donnell”).

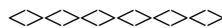


Waste Quiz

1. How much waste do you think you generate each year?
2. What is the most toxic man-made chemical?
3. How many cell phones were thrown out in the US last year?
4. How many pounds of clothing does the average American throw away, and how much of that ends up in the landfill?
5. How big is the largest floating garbage patch (that's a patch of garbage that has accumulated from all the stuff we've thrown into our ocean)?

Answers to Quiz

- 1) 4.6 pounds per day, which is more than 1600 lbs. a year. That's the size of two adult gorillas!
- 2) Dioxin. And we release dioxin every time we burn PVC or plastic #3, which is just one reason why incinerators are such bad news for our health and the health of the planet.
- 3) 130 million. This is especially sobering when you consider the number of toxics in our cell phones and that if we chuck our phones into landfills those toxics leach into our ground water. Or, very often, the phones are incinerated and release, you guessed it, dioxin!
- 4) The average American throws away about 68 pounds of clothing and textiles each year, and about 85 percent of that ends up in landfills.
- 5) The size of Texas, and a second patch in the Atlantic ocean was just discovered!



25 Green Resolutions

General

1. Banish paper and plastic bags from your life. Carry several reusable bags with you and it will soon be as routine as grabbing your keys when you head out. (www.reuseit.com)
2. Switch your monthly bills to e-billing. Even if you print them out at home, you'll eliminate the postage-carbon footprint and reduce paper (no envelopes and annoying "special offer" inserts).
3. Recycle anything and everything you can. Before you throw anything away, ask yourself if you can use it in a new way or if someone else could use it. (www.freecycle.org)

Home

4. Start composting. It's simple and you get free fertilizer. (www.groorganic.com)
5. Instead of using sprays, plug-ins, solid sticks, and scented candles designed to freshen the air in your home, open windows to let in fresh air, and decorate with plants that are known to remove toxins from the air.
6. Paint only with no-VOC formulas.
7. Purchase non-toxic home cleaning supplies. Toxins in these products can cause allergies, respiratory problems, and even cancer. Using "green" cleaning products can create a healthier home environment and help take toxins out of our local water systems and bay. (www.saferchemicals.org and www.melaleuca.com)
8. Buy from local stores, and buy products made locally or in the US. You cut down on the energy and transportation costs of long-distance transportation. (www.madeintheusa.com)
9. Avoid hand sanitizer and instead use soap and water to wash your hands. The triclosan chemical in hand sanitizer is one of the many chemicals that is changing the reproductive cycles of both our fresh water and bay animals.

Transportation

10. Walk more, particularly if your destination is less than 30 minutes on foot. It's good for your health and for the environment.
11. Take public transit. Students often have a transit pass included in their fees, and some cities even have free public transit, so use it!
12. If you can live without a car, do it. In most cities, the cost of a transit pass is still less than you'd shell out for insurance, gas, and maintenance or car payments.

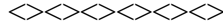
13. If you must take a taxi, call the company that has a fleet of hybrids or electric cars. (www.zipcar.com)
14. In the market for a car? Choose a gently used one with good gas mileage or a green hybrid or electric.
15. Buy a bike, or build one at your local bike shop.

Food

16. Go vegetarian two or three days a week. The livestock industry is a huge greenhouse emitter, and you will be healthier for it. (<http://allrecipes.com/Recipes/everyday-cooking/vegetarian/Main/asp?etarian/Main/asp>)
17. Purchase local organic fruits and veggies. And learn to cook seasonal menus. (www.localharvest.org)
18. Eat grass-fed organic beef, pork, and chicken meat. It may be more expensive but there are no hormones and no ammonia. They are fed a natural, nutritious diet and treated humanely. Watch the film “Food Inc.” (www.foodinc.org)
19. Refuse to buy foods that are unnecessarily packaged, such as fruits and vegetables. Take your own saved plastic bags for your veggies or just put them loose in your cart. (www.reuseit.com)
20. Annoyed by excessive food packaging? Tell your grocer or the manufacturer. Fire off an e-mail or write a formal letter expressing your concern. As a rule, every letter a company receives represents about 50 people of a like mind. (Environmental Working Group—www.ewg.org)
21. Grow your own fruits, veggies, and herbs. Share the extra with neighbors or take it to your local Second Harvest Food Bank. (www.groorganic.com)

Fashion & Beauty

22. Commit to buying green fashions. Think organic cotton, bamboo, hemp, and other sustainable, natural fibers, as well as recycled fabrics. Just Google what you are looking for. (www.gaiam.com)
23. Switch to all-natural cosmetics. Mineral based is good.
24. Switch to a nail polish brand that is made without toluene, DBP, and formaldehyde. (Piggy Paint, London, and American Apparel Nail Lacquer are a few options.)
25. Shop at secondhand and charity shops before hitting the mall or your favorite boutiques. You’ll find some surprising bargains!



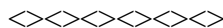
Commitment Form

For the sake of _____ (insert *the part of Creation or future generations or whatever purpose inspires you to serve*), I commit to:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Signature

Date



Action List

Here are some ideas for projects you can carry over from *Let There Be Stuff... ?* into your church as you engage your community to live in a caring relationship with God and Creation:

Swap It! Organize a Church-wide Stuff Swap

Reduce waste, share more, and build community all at once! Pick a weekend date and get started planning and publicizing. Don't know quite where to begin? Oxfam's "Swap It" planning guide (at www.oxfam.org.uk/get_involved/campaign/activists/swapit_partybag.html) can be adapted to fit your needs.

A Night at the Movies: Organize a church-wide Environmental Film Festival Night

Movies are a great way to spread the word and get people excited about taking action to protect creation. Show films like *The Story of Stuff* or *Food Inc.*, allowing time for discussion afterward. Share with your entire church. Have an action plan to hand out after each viewing.

- For additional film titles, go to www.grist.org/article/movies.
- For help planning the screening, read the host guide for *The Story of Stuff* at www.storyofstuff.org/screening.php.

Waste Not, Want Not: Create and Implement a Plan to reduce waste at your church

Want to waste less? Changing the way your congregation uses and throws away stuff can have a huge impact. GreenFaith's website (www.greenfaith.org/stewardship/waste.html) offers some ideas.

Be an E-Steward: Organize an E-Waste Collection at Your Church. Sponsor an e-waste drive at your church and get those computers and cell phones out of people's closets and drawers. You can help increase recycling and make sure it's being dealt with responsibly by coordinating a drop-off with a local E-Steward certified recycler. The E-Steward site (www.e-stewards.org) helps you locate one in your area.

Volunteer for the Planet

Choose an organization that inspires you and make a commitment to give of your time. There are so many organizations out there doing great work. Don't know where to start? Here are some local organizations:

- Cool Cities -- <http://coolcities.us> (click on San Jose)
- Loma Prieta Chapter of Sierra Club -- <http://lomaprieta.sierraclub.org/guadalupe>
- Acterra - www.acterra.org/greenathome

The [WiserEarth.org](http://www.wiserearth.org) has a great selection of organizations making a difference. You can find them at www.wiserearth.org.

More Ideas... Go to websites such as the one for The Environmental Working Group (www.EWG.org).

SESSION 3: AIR

Pray

Begin with a breathing exercise. Relax and concentrate on the importance of breath to our lives.

Call to Prayer: Psalm 50:1-2

Scripture: Matthew 8:23-27

Response:

Lord Jesus, you commanded the winds, and they obeyed you. Help us now to be obedient to our covenant of stewardship with you. Inspire us to be bold in the use and discovery of new, clean ways to provide energy for our planet. Encourage us to shun practices that poison our atmosphere. Let us renew our commitment to clean air, so that every living creature may breathe freely. Amen.

Learn

- A. The Earth's atmosphere is unique in our solar system (and in other solar systems we are aware of), providing the elements to sustain life.
 - 1. The balance of elements within our air is vital to providing all species on our planet with life. This invisible substance is the most basic resource we have and may also be the easiest for us to destroy.
 - 2. We could go days without food and hours without water, but we would last only a few minutes without air. On average, each of us breathes over 3,000 gallons of air each day.
 - 3. We must have air to live. But breathing polluted air can make us sick.

- B. What are the issues?
 - 1. Why is it important to our health and our planet's health to care for this most important resource?
 - 2. Why are we so concerned about ozone and carbon emissions and other contaminants in our air?
 - 3. How is our lack of care for the air contributing to global warming and the general deterioration of the planet we live on?
 - 4. Why pay attention to "spare the air" days?

5. What can we do to help care for this important resource?
- C. One of the earliest actions taken by our government concerning our environment was with regard to our air, the Clean Air Act.
1. The original act (1963) established funding for the study and cleanup of air pollution.
 2. In 1970 Congress created the Environmental Protection Agency (EPA) and passed the Clean Air Act, giving the federal government authority to clean up air pollution in this country.
 3. The Clean Air Act defines EPA responsibilities for protecting and improving our nation's air quality and the stratospheric ozone layer.
 4. It was last amended in 1990.
 5. Clean Air Act programs include these:
 - Acid Rain
 - Climate Change
 - Air Pollutants
 - Health and Ecosystem Protection
 - Ozone Layer Protection
 - Radiation
 - Clean Diesel
 - Air Pollution Data sources
 - Technology Transfer Network (air quality data).
 6. Full text of the Clean Air Act plus amendments and other information is available. (See RESOURCES.)
- D. According to the EPA, here are the results since 1970:
1. The six most commonly found air pollutants have decreased more than 50%.
 2. Air toxins from large industrial sources have been reduced by nearly 70%.
 3. New cars are more than 90% cleaner and will be even cleaner in the future.
 4. Production of most ozone-depleting chemicals has ceased.
 5. However, at the same time, energy consumption has increased by 50% and vehicle use has increased by almost 200%.
- E. California has its own laws and is ahead of other states. (See RESOURCES for website and details about the California Environmental Protection Agency.)

Assess: How does each of us contribute to the problem?

- A. We need to assess our habits that add to pollution of our air, from driving habits, to use of energy, to barbecues and home fires. We need to be aware of individual responsibility for and contribution to polluting or keeping our air clean.
- B. Ask participants to take out their notes about their carbon footprint. Discuss what they discovered about themselves related to AIR (especially look at results in the “Drive/Fly” section of the calculator).
- C. In small groups or as a whole, discuss what we see in our day-to-day life which harms the air. Following are some observations people might make:
 - 1. Cars, trucks, cabs spewing black smoke.
 - 2. Cars with motors running as people wait in line at drive-thrus.
 - 3. Making multiple trips when one well planned one would have worked.
 - 4. Trees and shrubs being torn out to make way for pavement or cement.
 - 5. Gas leaf-blowers replacing brooms.
 - 6. Food being cooked on charcoal BBQs.
 - 7. Smoke coming from wood-burning fireplaces.

Act

- A. Review Clean Air Act list of ways to reduce air pollution.
- B. Review 50 things you can do, from the State of California (see RESOURCES). Use the list to assess current behaviors and possible changes.

Advocate

- A. Become aware of legislation that impacts our air quality (such as Prop 23?)
- B. Become aware of companies in our area that may be contributing to the problem.
- C. Support organizations that are working for clean air and can keep you informed and on top of the issues:
 - 1. Coalition for Clean Air - in California - www.coalitionforcleanair.org

2. Environmental Protection Agency - www.epa.gov

RESOURCES

Websites

Full text of the Clean Air Act plus amendments: http://www.ehso.com/caa_regs.htm

Clean Air Act Summary, issues, guide: <http://www.ehso.com/caa.htm>.

California clean-air laws and regulations: <http://www.calepa.ca.gov/LawsRegs>.

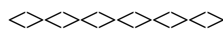
CARB website: <http://www.arb.ca.gov/homepage.htm>

50 Things You can do to Help Reduce Air Pollution from CARB):
<http://www.arb.ca.gov/html/brochure/50things.htm>

Guides and factsheets available at CARB: <http://www.arb.ca.gov/html/cando.htm>

Videos you can download to a PC and show to the workshop group:
<http://www.arb.ca.gov/videos/videos.htm>

(See other websites mentioned above, within the body of the workshop guide for “Air.”)



California Air Resources Board Information (from Wikipedia)

The **California Air Resources Board**, also known as **CARB** or **ARB**, is the "clean air agency" in the government of California. Established in 1967 in the Mulford-Carrell Act, combining the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board, CARB is a department within the cabinet-level California Environmental Protection Agency. California is the only state that is permitted to have such a regulatory agency, since it is the only state that had one before the passage of the federal Clean Air Act. Other states are permitted to follow CARB standards, or use the federal ones, but not set their own. The stated goals of CARB include attaining and maintaining healthy air quality; protecting the public from exposure to toxic air contaminants; and providing innovative approaches for complying with air pollution rules and regulations. The governing board is made up of eleven members appointed by the state's governor. Half of the appointees are experts in professional and science fields such as medicine, chemistry, physics, meteorology, engineering, business, and law. Others represent the pollution control agencies of regional districts within

California – Los Angeles region, San Francisco Bay area, San Diego, the San Joaquin Valley, and other districts. For more specific details, in summary form, go to <http://en.wikipedia.org/wiki/CARB>.

SESSION 4: WATER

Pray

Call to Prayer: Genesis 1: 1-2 and 9-11

Scripture: Psalm 65:9-10

Response:

God of oceans, lakes, rivers, and streams, You provide us with the water of life. Make us ever mindful of the importance of this essential resource. Make us prudent in its use and courageous in defense of its conservation. Most of all, Lord, help us to employ equity and justice as we attempt to share the precious gift of water with the rest of the planet. Amen.

Learn

- A. Water is a precious, limited resource. All of life depends upon water for its survival. Access to water is a basic human right.
- B. Not only is water critical to sustaining life, Christians believe in the sacred transformative power of water through Baptism. Water holds deep symbolism of life and cleansing in every major religion and among indigenous peoples.
- C. Although 75% of the Earth's surface is covered in water, only 0.3% is water that is suitable for drinking.
 - 1. One in six people worldwide do not have adequate access to freshwater. More than 300 million people in Africa live without safe water. According to the UN, the average American uses 158 gallons a day, compared to the average Ethiopian, who uses just 5 gallons a day.
 - 2. Former UN Secretary General Kofi Annan stated in 2001, "In this new century, water, its sanitation and equitable distribution, pose great social challenges for our world. We need to safeguard the global supply of healthy water and to ensure that everyone has access to it."
 - 3. According to the UN, today, 2.5 billion people, including almost 1 billion children, live without even basic sanitation. Every 20 seconds, a child dies as a result of poor sanitation.
 - 3. According to Jeffrey Sachs in *Common Wealth: Economics for a Crowded Planet* (Penguin Press, 2008), pg. 116, worldwide, the use of freshwater is roughly:
 - a. 70% for irrigation
 - b. 20% for industry

- c. 10% for domestic use
- D. Conserving water is critical to the continued abundance of water that is safe to use for ourselves and future generations.
 - 1. Water consumption impacts our environment in the source and distribution of water and the handling of waste-water.
 - 2. Reduced water usage requires less to be diverted from streams or pumped from the ground, and less waste-water is returned to the environment.
- E. Learn about the usefulness and importance of wetlands, which filter water that will go into aquifers and streams, as well as provide habitat for fish and wildlife.
- F. Learn about your area's watershed and your local sources of water, as well as wastewater treatment, uses, and disposal.
 - 1. Water supplies are in danger of pollution from such sources as oil runoff from streets and yards, as well as pesticides and fertilizer from fields.
 - 2. Important resources are found at the Santa Clara Valley Water District, 5750 Almaden Expressway, San Jose CA 95118, (408) 265-2600, www.valleywater.org, and at www.foodandwaterwatch.org. These give detailed information on what we can do in our personal lives and in our parish communities.

Assess

- A. Ask yourself if you could carry 40 pounds of water for several miles each day. Women in Africa and Asia routinely carry 20 liters (over 40 pounds) of water on their heads from wells or streams to their home each day. In comparison, only 0.64% of US households lack complete indoor plumbing, according to the 2000 Census.
- B. Examine how your water usage compares to that of the rest of the world. Calculate your personal water usage at www.h2oconserve.org. This is an important and useful resource for taking future action.
- C. Arrange for a water audit for your home and/or parish plant that will help determine your water usage and what you can do to improve efficiency and conservation efforts. This is available free of charge from the Santa Clara Valley Water District (information above) and also from Santa Clara University student interns.

Act

- A. Determine to reduce your water consumption by taking the steps recommended in your assessments (calculator in B above and/or water audit), such as low-flow plumbing fixtures, low water use washing machines and dish washers, drought-tolerant landscaping, drip

watering systems in the yard, and on-demand hot water systems.

- B. Conserve water personally through such actions as turning off the tap while brushing your teeth, washing clothes in cold water and only in full loads, washing dishes in the dishwasher rather than by hand, taking shorter showers, etc.
- C. Join your parish green team for a presentation of the film, *Blue Gold, World Water Wars*. This DVD is available at no cost from the Diocese (contact Linda Batton at batton@dsj.org.) and also from foodandwaterwatch.org. Invite a speaker, available from the San Francisco office of Food and Water Watch. The latter group also has a library of other films, books, and brochures available.
- D. Avoid use of bottled water. If you are unsure about the safety or quality of your tap water, install a filter in your home. When you need to carry water, use a refillable, non-plastic bottle. The water bottling industry is draining ground water from aquifers worldwide at an alarming rate and is charging 1,000 times the cost of tap water. (Often bottled water is tap water.) The production of plastic bottles uses oil reserves, and their disposal fills landfills or goes to the “garbage patch” in the ocean; only 3% are recycled. (See “Take Back the Tap” campaign at foodandwaterwatch.com.)
- E. Install a gray-water system and/or harvest your rainwater. To learn how, go to www.aussieraintanks.com.

Advocate

- A. Encourage your fellow Catholics to view the movie, *Blue Gold, World Water Wars* or to learn more about the issues. Share your knowledge with family and friends.
- B. Advocate against the use of bottled water at parish and other events. Make available pitchers of fresh tap water. Your example and persistence can make a difference!
- C. Contact your legislators to promote the passage of legislation to upgrade the nation’s water infrastructure.
- D. Advocate for fair water legislation for California. Share information on any water bond issues on upcoming ballots.
- E. Advocate against the privatization of water whenever the subject is proposed for your municipality or area. Water is a human right and should be the responsibility of government oversight to make it available for all and not for the profit of any corporation. Where water has been privatized, rates have risen, quality has decreased, and the poor have had their water turned off when they could not pay. (See www.http://corporateaccountability.com.)
- F. Make known to others that you are acting as a responsible Catholic on the demands of our faith to live in harmony with God’s creation, conserving water for the use of all God’s creatures.

SESSION 5: FIRE (Energy)

Pray

Call to Prayer: Psalm 50:1-2

Scripture: Acts 2:1-4

Response:

Loving God, at Pentecost you sent your Holy Spirit to us in the form of wind and fire. Aware of our failings, we ask you now to send your Spirit to us once again. May it blow away our apathy and ignite our passion in the cause of preserving what you have so gloriously created and so trustingly put under our stewardship. Amen.

Learn

A. PG&E provides power to 40% of California households. PG&E's energy portfolio, as provided to customers in 2009, was

- 20.5% Non-emitting nuclear generation
- 13% Large hydroelectric facilities
- 14.4% Renewable resources, such as wind, geothermal, biomass, and small hydro.
- 34.6% Natural gas
- 1.3% Coal
- 15% Unspecified sources
- 1.2% Other fossil-based resources

B. PG&E was mandated by California law to meet the State's 20% renewable energy sources standard by 2010.

C. There are several types of renewable energy technologies. They are explained here:

1. Biomass Energy (Biofuels): Lumber, wood waste, and row crops used to create heat energy or electricity. Some crops may be converted to other forms of fuel (such as corn used to make ethanol). Researchers are now investigating fast-growing crops which will allow American farmers to produce marketable energy crops and eventually manufacture fuel on a larger commercial basis.
2. Wind Energy: Wind power is affordable, efficient, pollution-free, and flexible because it can function alongside everyday activity on farms. Transmission systems need to be improved to bring wind power to cities, and more research must be done on the effects of turbines on wildlife.

3. **Solar Energy:** Solar power cells convert the sun's energy into a pollution-free source of electricity. The cost of solar panels continues to decrease, making solar energy more commonplace than ever.
4. **Biogas Energy:** Biogas is produced using the manure from animal feedlot operations when bacteria decompose manure anaerobically (without the presence of oxygen) into a methane-gas mixture that can be used to generate heat or electricity. The manure bi-product can be used as a fertilizer or potting soil.
5. **Geothermal Energy:** Energy from the earth's core heat underground reservoirs of steam and water and may be tapped for human energy usage. Geothermal energy usage is among the least explored sources of renewable energy in the United States.
6. **Wave Energy:** Utilizing different collection devices, either submerged or floating, allows for the conversion of wave energy into electricity. Transmission systems must be designed and implemented, along with analysis of the environmental impacts of such a system on the ocean ecosystem.

D. Watch out for these types of dirty fossil fuel energy resources that often claim to be renewable:

- Coal waste from coal mining (clean coal)
- Methane gas from coal mines
- Waste to Energy (WTE) facilities (waste incineration)

E. How energy is used in homes:

- 41% Space Heating
- 26% Lighting and Other Appliances
- 20% Water Heating
- 8% Air Conditioning
- 15% Refrigeration
- 30% of home energy is wasted through lack of insulation and appliances and lights left on without use.

F. How energy is used in transportation:

1. 27% of the entire amount of energy we use in the United States goes towards transporting people and goods from place to place.
2. Energy Use by Type of Vehicle:
 - a. Automobiles (family cars) -- 32%
 - b. Light Trucks -- 28%

- c. Cargo Trucks -- 16%
- d. Aircraft -- 9%
- e. Ships -- 5%
- f. Construction and Agriculture Equipment – 4%
- g. Trains and Buses – 3%
- h. Pipelines – 3%

G. The truth about coal:

1. 25,000 deaths a year result from coal pollution, mostly in rural, impoverished areas.
2. Coal mining companies have demolished hundreds of Appalachian mountaintops in order to access coal deposits underneath.
3. Coal is the leading source of Global Warming pollution.

Assess

- A. Ask participants to take out their carbon footprint notes. Discuss what they discovered about themselves related to their use of FIRE (Energy), especially concerning their results in the “Home Energy Use” section of the calculator.
- B. Contact your energy utility provider to learn what percentage of the energy they provide comes from renewable resources.
- C. Consider how energy consumption varies across household income levels, geographical regions, and educational backgrounds. Who bears the burden of coal pollution, increased fuel costs, and environmental degradation as a result of unsustainable energy policy?
- D. What aspects of our Catholic faith, the church’s teachings, or what has been discussed in this workshop can help guide and motivate your own personal energy usage plan?

Act

- A. Reduce wasted energy.
 1. Turn off lights when you aren’t in the room.
 2. Use power strips so that you can turn off appliances and avoid “phantom energy loss” (energy used by appliances when they are turned off). The biggest culprits are plasma televisions, computers, game consuls, and charging devices.
 3. Insulate your home. Seal cracks around doors, windows, and the clothes dryer outlet.
 4. Keep in mind that the top three areas for home energy consumption are heating, lighting and other appliances, and water heating. These areas allow for the greatest improvement.

5. Adjust your thermostat depending on the needs of your family. Use the clock functions on your thermostat rather than turning the furnace on and off. It takes more energy to reheat a cold home than it does to maintain the temperature.
6. Lower your water heater thermostat to 120 to 130 degrees. Any lower than that and you may not have enough hot water for showers and your dishwasher will need to use electricity to heat the water further.
7. Conserve transportation-related fuel.
8. Consider taking a train vacation rather than flying in an airplane.
9. Bike, carpool, walk, or use public transportation. Pledge to bike or walk if your destination is within two miles of your home.
10. Make gas mileage a priority when purchasing a vehicle.

Advocate

- A. Ask your energy utility provider to include more renewable and less coal and petroleum in their energy portfolio. Encourage your neighbors to do the same.
- B. Utilize social networking sites such as facebook.com and twitter.com to share your interest in and knowledge of these issues. Join the Catholic Climate Covenant on facebook.com for more information on how our faith calls us to act to reduce our consumption of non-renewable energy resources.

RESOURCES

<http://www.pge.com/>
<http://www.nrdc.org/energy/default.asp>
<http://www.cpuc.ca.gov/PUC/energy/>
<http://www.eia.doe.gov/>

SESSION 6: LIVING THE PLEDGE

Learn: Review--What have we learned about

- A. The meaning of “Caring for God’s Creation”?
- B. Earth--Consumption?
- C. Air--Protecting the most basic element for life, Clean Air Act?
- D. Water--Protection and conservation of a precious resource?
- E. Fire/Energy--How we use energy and how the kind of energy we use affects all of the above?

Assess

- A. How have you used what you have learned thus far to make changes in your lifestyle?
- B. How challenging has it been to make those changes?
- C. Re-take the Carbon Footprint test. Has there been any change since the first time?

Act: Where do we go from here?

- A. What further steps can you take?
- B. How can you continue to challenge yourself and those around you to make needed changes in the way you consume, use our energy resources, and care for our air and water?

Advocate: Become advocates for a greener way of life and protection of the planet through:

- A. Personal responsibility (setting an example).
- B. Dialogue with others, sharing information and resources.
- C. Being aware of legislation that impacts our environment and letting our voices be heard on its behalf.
- D. Other?

Conclusion: Commissioning Ritual

Leader provides some form of call to prayer or simple explanation of the Rite.

Leader:

(Making the Sign of the Cross) “In the name of the Father, the Son, and the Holy Spirit.” Amen. St. Francis of Assisi taught us to call the sun our brother, the moon our sister, and the earth our Mother. We are one with creation as we are with family, and, as family, it is our responsibility to protect and defend all that our Father has created.

The six sessions we have recently experienced have increased our knowledge, deepened our understanding, and raised our consciousness concerning various aspects of the conservation of our planet.

Now let us commit ourselves to further prayer, learning, assessment, and action.

Please stand. (If the leader wishes, each of these short quotes can be read with the group facing the cardinal points--North, South, East, West, in any order.)

Reader One:

“I do not see how we could have come to know the greatness of God without that hint furnished by the greatness of the material universe.” (C. S. Lewis)

Reader Two:

“We are called to assist the earth, to heal her wounds and in the process heal our own...indeed, to embrace the whole creation in all its diversity, beauty and wonder.” (Nobel peace prize winner, Wangari Maathi of Kenya)

Reader Three:

“For everything that lives is Holy, life delights in life.” (William Blake)

Reader Four:

“The central point in the story of Noah and the ark ...is the covenant established by God with ‘living things of every kind.’ Here is where God’s covenant promises first begin. And God’s covenant is established not just with people, it is a covenant with all creation.” (Wesley G. Michaelson)

ALL: (This needs to be up on a board for all to read or passed out to each participant)

“I hold sacred the natural order of the earth and vow to do my utmost to help turn the tide of our Earths devastation.” (Anonymous)

Leader: With these words on our lips, and courage in our hearts, we go forth to answer God’s call to protect and reverence all of Creation! AMEN.