



**PLANET FACTS**  
**AND WAYS YOU CAN HELP**  
**TO SAVE OUR PLANET**

STEERING COMMITTEE OF THE NCNC EARTH STEWARDS

## PROTECT FORESTS

### FACTS:

- Over some 8000 years we have destroyed some 50% of the Earth's forests
- In the last 20 years we have converted some 10 million acres of forests to suburbs in the US
- Worldwide some 40 million acres of forests disappear each year
- Some 12 billion magazines are printed annually in the US – which requires > 35 million trees  
only 5% of magazine paper has any post-consumer recycled content
- Each year 27 million acres of tropical rainforest are destroyed: or 74,000 acres per day.
- Rainforests make up 2% on the Earth's surface but > 50% of the world's plant, animal, insects live there.
- 80% of the Amazonian deforestation has taken place since 1980.
- 25% of pharmaceutical products contain essential ingredients from the rainforests.
- 70% of the plants identified as useful in cancer treatment are found in the rainforests.
- the amount of wood and paper we throw away each year is enough to heat 50 million homes for 20 years
- Americans throw away enough office and writing paper to build a wall 12 feet high from LA to New York.
- Since 1950, over half of the world's tropical forests have been lost – an area equal to the size of a football field is destroyed every second of every day.
- It takes one 15 – 20 year old tree to make enough paper for 700 grocery bags.
- In 1995 US grocery stores used 10 billion paper bags.

### WHAT CAN YOU DO:

- re-use the paper we have
- recycle the paper you cannot re-use
- buy recycled paper products
- avoid using rare tropical woods or wood from old growth trees.
- use recycled wood where possible
- use composite materials in stead of wood
- buy wood products certified by the Forest Stewardship Council (FSC)
- volunteer for tree planting projects
- bring your own (cloth) shopping bag
- clean with cloth instead of paper towels
- buy fair trade products (to provide an economic alternative to people living in or near rainforests)

## **SAVE WATER**

### **FACTS:**

- Even though water covers two-thirds of the surface of our planet, the freshwater in rivers, streams and lakes represents only 0.1% of the planet's total water.
- 97% of the Earth's water supply is contained in our oceans, 2 % is frozen.
- Our drinking water – 1% of the total – comes from rivers, streams, lakes (10%) or ground water (90%).
- Groundwater is polluted: chemical run-offs; leaking storage tanks; poorly constructed landfills etc
- If four people shower each day for five minutes, they would use 700 gallons of water in one week. This is enough for one person to live off of for three years.
- A four-person family taking five-minute showers with a low flow showerhead could save at least 14,000 gallons of water a year.
- Low-flow toilets and showerheads can save the average household about 30 gallons of water each day.
- If you leave the tap running while brushing your teeth: use > 5 gallons of water; while washing dishes: 30 gallons; while shaving 10-20 gallons.
- Santa Rosa spent \$6.7 million on a 10 year Water Saving Program which reduced indoor water use by 630 million gallons by replacing toilets, showerheads, restrictive flow devices in 19000 homes.

### **WHAT YOU CAN DO:**

- See attached list of 100 water saving tips
- Get a grip on your faucets!
- Check out the availability of incentives or ways to make them available

## STOP GLOBAL WARMING

### FACTS:

- World's leading scientists project that global warming will raise temperatures 3 - 11° F in the next 40 – 70 years or so.
- The UN sponsored Intergovernmental Panel on Climate Change (IPCC) projects:
  - melting glaciers and disappearing snow cover;
  - sea levels are projected to rise from 6 – 36 inches in the next 100 years ;  
(sea levels have risen 4 – 10 inches over the past 100 year);
  - increased threat of infectious diseases (e.g. malaria);
  - drastic habitat shifts for plants and animals;
  - more common and severe winter floods, storms and summer droughts;
- 60% of the world's population lives in coastal areas
- On average 50 – 100 feet of beach are lost for every 12 inches of sea-level rise.
- We have increased levels of CO<sub>2</sub> by 30% in the last 100 years.
- It took 200 million years to form all the oil. It has taken 200 years to consume 50%.
- At current levels of consumption, the world's remaining oil resources will be used up in 40 years.
- Each gallon of gas used by a car contributes almost 20 pounds of carbon dioxide to the atmosphere. A single car driving 1000 miles a month adds up to 120 tons of CO<sub>2</sub> each year.
- Cars and light trucks in the US emit 20% of CO<sub>2</sub>.
- Lighting accounts for 20% of the total electricity consumed in the US
- On average, American food travels about 1200 miles from farmer to consumer
- In one day the sun provides more energy than our current population would use in 30 years

### WHAT YOU CAN DO:

- next time, buy a car that gets at least 30 miles/gallon (Toyota Prius, Honda Insight, Honda Civic get >50 miles/gallon)
- Help raise MPG standards for cars to 45 MPG and SUV's to 34 MPG
- when possible: walk, bike, carpool or use public transportation
- Reduce, Reuse, Recycle! (paper, glass and metal products made from recycled materials in stead of new materials saves 70 – 90% of the energy and pollution)
- use fluorescent light bulbs (they last an estimated 13 times longer than incandescent bulbs)
- use energy-efficient appliances
- wrap water heater in an insulating jacket; turn down the temperature
- give your house an energy audit
- use best energy-saving models when you replace windows; insulate your ceilings and walls
- choose electric utility that does not use fossil fuels or nuclear fission to produce power
- consider alternative energy sources: solar panels, wind power.
- plant trees! They absorb CO<sub>2</sub>
- Buy food and products that are made in or near your community to reduce pollution caused by shipping

## **REDUCE TOXIC CHEMICALS**

### **FACTS:**

- Roughly 75,000 man-made chemicals are now in use. Virtually none (less than 10%) has been adequately tested for the threats they pose to humans and wildlife.
- The Center for Disease Control (CDC) describes (in the Second National Report on Human Exposure to Environmental Chemicals) the amounts of 116 chemicals and metals in the bodies of Americans.
- According to the EPA, at least 74 pesticides have been found in the groundwater of 38 states.
- Over 100 active pesticide ingredients are suspected to cause birth defects, cancer and gene mutation.
- Home pesticides are just as lethal as agricultural ones. Just 5 tiny granules of diazinon are enough to kill a house sparrow or redwing blackbird.
- Home gardeners use up to 10 times more toxic chemicals than farmers
- One quart of motor oil can contaminate up to 2 million gallons of water

### **WHAT YOU CAN DO:**

- buy organically grown (pesticide free) fruits, vegetables, cotton clothing and other products
- stop using chemical pesticides, herbicides and fertilizers
- use traps, parasites and predators (such as ladybugs)
- use disease and pest-resistant plants
- use compost and mulch to improve soil health and reduce fertilizers
- include in your garden insect-repelling plants (basil, chives, mint, marigolds, chrysanthemums etc)
- don't buy or use chlorine bleach
- buy household cleaning products that are green: "go green when you clean"
- look for the words: "Biodegradable" or "non-toxic"
- buy rechargeable batteries
- dispose of all your hazardous waste at designated sites only – check with your local Government

## **SAVE OCEANS AND FISHERIES**

### **FACTS:**

- 70% of the air we breathe comes from oxygen produced by ocean algae
- There are over 1 million commercial fishing vessels, twice as many as in 1970.
- With new boats, nets and tracking devices they are taking fish at twice the rate the ocean can produce.
- Some 70 percent of the most valuable marine fisheries are either over fished or fished to the limit.
- Over 100 million sharks are killed each year. Most have their fins cut off and are thrown back in the sea to die.
- \$10 billion in annual government subsidies keep worldwide fishing capacity at this level.
- Twenty-seven million metric tons of bycatch (unintentionally caught fish) die every year.
- Each year an estimated 1 million seabirds and 100,000 marine mammals are killed as the result of eating or being strangled by plastic.

### **WHAT YOU CAN DO:**

- be an informed consumer of fish and other seafood. Ask where the fish comes from and the status of the fishery.
- avoid buying over-exploited stocks: Atlantic swordfish, wild-caught Atlantic salmon and sharks.
- check out information sources: Marine Stewardship Council; Monterey Bay Aquarium.
- join an ocean conservation group.

### **OTHER THINGS YOU CAN DO**

- check out conservation focused websites and books (see resource list)
- check out environmental magazines
- stay informed
- form a group
- join one or more local, regional and/or national conservation organization(s)  
(check names on the list of websites)
- become involved:
  - attend meetings
  - write letters to your representatives
  - write letters to the editor
  - volunteer for specific projects or events