



Climate Change and What You Can Do

“The average American generates about 15,000 pounds of carbon dioxide every year from personal transportation, home energy use and from the energy used to produce all of the products and services we consume.” www.climatecrisis.net

- **Reduce your footprint.**
 - To calculate your personal impact and ideas for reducing it at <http://www.coolcalifornia.org/>
 - Do an energy audit of your home, workplace, place of worship and mode of transportation; identify where you can save energy: www.eere.energy.gov/consumer/your_home/energy_audits/ or www.pge.com/res/energy_tools_resources/english_survey/index.html
 - Replace all light bulbs with compact fluorescents- 3 bulbs save 300 lbs. of carbon dioxide and \$60 per year (for recycling see www.epa.gov/bulbrecycling/). Caulk & weather-strip doorways & windows. Save 1,700 lbs. of CO₂ & \$274/yr. Switch to low-e, double pane windows and save 10,000 lbs. of carbon dioxide and \$436 per year. Replace old appliances with energy efficient ones; only use dishwashers and washing machines when full.
 - Compost garden waste (www.composters.com/docs/tips.html). Plant natives. Avoid rapidly spreading invasive plants. Plant to retain water and support ecological and hydrological function (see www.oaec.org/water-institute). Landscape for birds and other wildlife (<http://www.prbo.org/cms/183>). Connect neighborhood yards and gardens. Use hand equipment (not gas or electric powered). Set up roof water catchments (www.oaec.org/water-institute) and greywater landscape recycling (www.greywateralliance.org, www.watersprout.org).
 - Support eco-friendly renewable power.
 - See 12 Simple Ways to Live A Greener Lifestyle. ScienceDaily. January, 2008. www.sciencedaily.com/releases/2008/01/080109111927.htm
 - For a sampling of numerous other on line resources, see www.fightglobalwarming.org, www.stopglobalwarming.org/sgw_actionitems.asp, www.theclimateproject.org/solutions.php and www.wecansolveit.org.
- **Volunteer and support PRBO (www.prbo.org) as well as other conservation science organizations** for assessing climate change, habitat loss and other environmental change impacts to: (1) sustain birds, fish, plants and other biodiversity as well as ecosystem services we all rely on including clean air, clean water, timber, flood control, pollination, carbon sequestration, and outdoor recreation; and, (2) inform land owners, fisheries managers, policymakers, students, and the public about science-based, sustainable conservation solutions.
- **Keep informed, take action and stay involved. Our future depends on it.**
 - See PRBO preliminary projections about how climate change could affect various birds and habitats in California at the CA Avian Data Center: <http://data.prbo.org/cadc2/>
 - Sign up at www.sciencedaily.com/ for free summaries of the latest science news and www.climatecrisiscoalition.org for global warming news email updates.
 - See the UN’s Millennium Ecosystem Assessment reports on environmental change and sustainable conservation: <http://www.millenniumassessment.org/en/index.aspx>
 - See www.realclimate.org, an excellent web site - “climate science by real scientists.”
 - Visit www.climate-science.gov for the excellent US Climate Change Science Program reports, including:

- **Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources** www.climate-science.gov/Library/sap/sap4-4/final-report/
- **Abrupt Climate Change, Final Report, Synthesis and Assessment** <http://www.climate-science.gov/Library/sap/sap3-4/final-report/default.htm>
- **Thresholds of Climate Change, Final Report, Synthesis and Assessment** <http://www.climate-science.gov/Library/sap/sap4-2/final-report/>
- See the regional guidebook: The Sierra Nevada Climate Took Kit www.sierranevadaalliance.org/publications/publication.shtml?type=pgm02
- See the white paper *Wetland Restoration and Projected Impacts from Climate Change*, San Francisco Bay Joint Venture, Nov. 2008. http://www.sfbayjv.org/global_warming/JV%20climate%20change%20paper%20October%202008.pdf
- For in-depth reports from the UN Intergovernmental Panel on Climate Change on all aspects of climate change, visit www.ipcc.ch/. See *Impacts, Adaptation and Vulnerability*. April 2007. www.ipcc-wg2.org
- See <http://www.climatechange.ca.gov/> for projected climate change impacts on California- *Our Changing Climate: Assessing the Risks to California (2006)*.
- For adaptive natural resource management strategies to address rapid environmental change, see:
 - *Adaptive Conservation Strategies*, PRBO Conservation Science, 2003, www.prbo.org/cms/279
 - *Adaptive Management Technical Guide*, US Dept. of Interior, 2007 www.doi.gov/initiatives/AdaptiveManagement/documents.html

Other Recommended Resources (most free online; type title, author into search engine)

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- Black, Richard. *New evidence on Antarctic warming*. January 21, 2009. BBC News.
- Bowen, Mark. *Thin Ice: Unlocking the Secrets of Climate in the World's Highest Mountains*. 2005. Henry Holt.
- Climate Institute, University of Melbourne. *Evidence of Accelerated Climate Change*. November, 2007. Download report at www.climateinstitute.org.au/images/stories/CI056_EACC_Report_v1.pdf.
- Feely, Richard. *Ocean acidification: The other CO₂ problem*. www.pmel.noaa.gov/co2/personnel/feely.html ("publications") Pacific Marine Environmental Laboratory, NOAA., Jan 2009
- Flannery, Tim. *The Weather Makers, How Man is Changing the Climate and What it Means for Life on Earth*. 2005. Atlantic Monthly Press, NY.
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- Grinsted, Aslak. *Sea level rise of roughly a meter over the next century*. Jan. 28, 2009. www.glaciology.net
- Harris, Susan. *Climate Change in the Garden*. http://www.sustainable-gardening.com/climate_change/index.php and www.gardenrant.com/my_weblog/2009/01/gardening-in-th.html

- Hotter and Drier: The West's Changed Climate, March 2008, www.rockymountainclimate.org
- *Jet Streams are Shifting and May Alter Paths of Storms and Hurricanes*. April 17, 2008. Science Daily.
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- Leggett, Hadley. *Global warming may be killing trees in West twice as fast as usual*. SJ Mercury News. Jan. 22, 2009.
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- Malcolm, Jay, et. al. *Global Warming and Extinctions of Endemic Species* Conservation Biology, April 2006.\
- Macmynowski, et al. (with PRBO) *Changes in spring arrival of Nearctic-Neotropical migrants attributed to multiscalar climate*. Global Change Biology. <http://www3.interscience.wiley.com/journal/117991492/abstract>
- McCully, Patrick. *Before the Deluge: Coping with Floods in a Changing Climate*. May, 2007.
- *Ocean Growing More Acidic Faster; Increasing Acidity Threatens Sea Life*, Nov. 26, 2008, ScienceDaily <http://www.sciencedaily.com/releases/2008/11/081124141053.htm>
- Polar research reveals new evidence of global environmental change, International Polar Year (IPY), February 25, 2009. http://www.ipy.org/index.php?/ipy/detail/state_of_polar_research/
- Parmesan, Camille. *Ecological & Evolutionary Responses to Recent Climate Change*. Ecology, Evol. & Systematics. Oct.17, 2006.
- Roth, Jennifer. *Salmon, Seabirds & the State of the Ocean*. Press Democrat. Mar 23, 2008. www.prbo.org/cms/52
- Science Daily, *Ocean Growing More Acidic Faster; Increasing Acidity Threatens Sea Life*, Nov. 26, 2008, <http://www.sciencedaily.com/releases/2008/11/081124141053.htm>
- Stix, Gary. *A Climate Repair Manual*. Scientific American. September, 2006. (intro free online) See this special issue, *Energy's Future: Beyond Carbon, How to Power the Economy & Still Fight Global Warming*,
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