## Global Climate Change: A Catholic Response Study Guide

## Movement One Experiencing Life

Movement One: Experiencing Life invites you to recall and reflect on personal experiences or reactions that relate to global climate change. You are asked to express your feelings, actions, knowledge and thoughts concerning the specific experience: what you already know about global climate change, or how you feel about it, or how you understand it, or how your now live it, or what you believe about it. Movement One allows you to reflect on your own lived experience or personal story that relates to global climate change.

You are encouraged to express your experiences in a creative way of your own choosing: a presentation to another person, journaling, dramatic presentation, video, identifying and reading a related story from literature, or an artistic representation.

Movement One will be the reference point against which you will compare what you are about to learn in subsequent movements within this study guide.

## **Activity #1: Climate Change Situations**

The purpose of this first activity, or focusing activity, is to focus your attention on global climate change so that you can begin to recognize these environmental changes in your life and in your community.

The following situations are presented to help you connect with changes that are or will be occurring because of the rapid warming of the earth's atmosphere. Select one or more of the following situations that are suitable to your geographic area or setting. This will become the reference point against which you will compare what you learn and what impact it may have on your life.

After choosing one of the situations, note on a sheet of paper how it makes you feel: What questions come to mind when you think about climate change? Do you think this could really happen? *Just imagine!* 

**Situation #1**: Just imagine traveling to Glacier National Park in Montana and not finding any glaciers there when you arrive! Park scientists predict that all glaciers in the park may disappear by 2030.

Reference: Hall, M.H.P., and Fagre, D.B. 2003. Modeled Climate-Inducted Glacier Change in Glacier National Park, 1850 – 2100. BioScience, Vol. 53, No.2. http://www.nrmsc.usgs.gov/files/norock/products/GCC/Bioscience Hall 03.pdf

**Situation #2:** Just imagine visiting the wetlands at Blackwater National Wildlife Refuge on the Chesapeake Bay in Maryland and finding no vegetation, shore birds, or other wildlife. Scientists of the U.S. Geological Survey and U.S. Fish & Wildlife Service estimate that will be the case by 2050 because of sea level rise.

Reference: Habitat displacement and sea-level change -- the Blackwater model. 2004. <a href="http://geology.usgs.gov/connections/fws/landscapes/blackwater\_model.htm">http://geology.usgs.gov/connections/fws/landscapes/blackwater\_model.htm</a>

**Situation #3:** Just imagine sitting outside your home during the summer with temperatures over 100 degrees Fahrenheit. Global warming is resulting in more <u>frequent, hotter</u> and <u>longer heat waves</u> that already <u>impact poor people</u> <u>disproportionately</u>. Heat waves are expected to increase in their frequency, intensity and duration.

Reference: NCDC, 1998. 1998 Summer Heat and Precipitation Extremes. National Climatic Data Center. <a href="https://www.ncdc.noaa.gov/ol/reports/texas98/texasrecords.html">www.ncdc.noaa.gov/ol/reports/texas98/texasrecords.html</a>; NCDC, 1999. Climate-Watch, July 1999. National Climatic Data Center. <a href="https://www.ncdc.noaa.gov/ol/climate/extremes/1999/july/extremes0799.html">www.ncdc.noaa.gov/ol/climate/extremes/1999/july/extremes0799.html</a> University of Southern California, Program for Environmental and Regional Equity, 2009. The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap. <a href="https://college.usc.edu/geography/ESPE/perepub.html">https://college.usc.edu/geography/ESPE/perepub.html</a>

**Situation #4:** Just imagine receiving more than 1000 inches of snow next winter, setting a <u>world's record for most snowfall</u> in a season. Global warming is resulting in heavier than normal snowfalls.

Reference: NOAA, 1999. Mt. Baker holds snowfall record, NOAA Reports. www.noaanews.noaa.gov/stories/s253.htm

**Situation #5:** Just imagine planting a garden and experiencing the <u>driest growing season</u> on record.

Reference NOAA, 1999. Four States in Northeast Have Driest Growing Season on Record: www.noaanews.noaa.gov/stories/s258.htm

**Situation #6:** Just imagine moving into a new house near a beautiful wooded area and experiencing the one of the <u>worst wildfires in 50 years</u> destroying your home and more than 300 others around you.

Reference: NCDC. 1998. Florida Wildfires and Climate Extremes. National Climatic Data Center. www.ncdc.noaa.gov/ol/climate/research/1998/fla/florida.html

**Situation #7:** Just imagine waking up in the morning to the song of a bird that no one in your area had seen there before. Inuit people, among Canada's First Nations, are experiencing birds, insects and animals never seen before on their island in the Northwest Territories of Canada due to the <u>warming of their environment</u>. Robins began appearing in the early 1990s; the Inuit people do not have a word or name for such a bird. Just imagine.

Reference: BBC World Service, 2001. Climate Change In The Canadian Arctic http://www.bbc.co.uk/worldservice/sci\_tech/highlights/010510\_canadianarctic.shtml

**Situation #8:** Just imagine moving your whole family to another country because waters are rising where you live. The government of the Maldives, one of the lowest-lying island nations, are now investing part of the country's profits from tourism into a "sovereign wealth fund" in order to buy land in South Asia and eventually move their 390,000 people. Rising sea levels are swamping this nation of low islands.

Reference: BBC News, 2008. Plan for New Maldives Homeland, http://news.bbc.co.uk/2/hi/south asia/7719501.stm

**Situation #9:** Just imagine not being able to have a drink of water when you want it or need it. Rising global temperatures are changing the global hydrological system. By 2050, the area of land subject to increasing water stress due to climate change is projected to be more than double that with decreasing water stress. This is expected to lead to decreased freshwater availability especially in the already arid and semi-arid areas of southern Asia and northern Africa.

Reference: Intergovernmental Panel on Climate Change, 2008. Climate Change and Water: IPCC Technical Paper VI http://www.ipcc.ch/pdf/technical-papers/climate-change-water-en.pdf

After noting on a sheet of paper your reactions to these situations, and perhaps recalling any personal experience related one of these situations, proceed to **Movement Two**.