



Resolutions To Action

LCWR Global Concerns Committee

Volume 24, Number 1

Winter 2015

Oceans in Peril: Acidification

Jo Ann Showalter, SP

"...the evidence of an advanced illness in the global ocean seems ineluctable. It is as though a cancer whose primary site is the atmosphere has metastasized to the ocean, making the disease far harder to treat. After checking the vital signs, I've begun to think that the ocean is in palliative care and I a mute witness to its death rattle."
-- Science journalist Alanna Mitchell, *Seasick*

The Pacific Northwest and Alaska are areas of great natural beauty that include vistas of the Pacific Ocean that are unequaled anywhere. Recreational areas and ocean breezes present opportunities to rest and relax. Seen but not always noticed are the fleets of fisher folk who buoy the economy and support the nutritional health of those who enjoy eating seafood. Many indigenous peoples of the Northwest and Alaska are dependent on healthy fisheries for their main source of protein and economic well-being. Also, major components of Northwest aqua-business are many family owned businesses such as oyster farms.

EXPERIENCE

One family, the Nisbets, has farmed oysters in Willapa Bay in Washington State for two generations, since 1975. They employ about 70 workers and process more than 2,000,000 pounds of shellfish annually at Goose Point Oysters.

With the rapidly increasing acidification of the sea water at Willapa Bay, baby oysters were dying by the billions. In order to maintain their business and with no other alternatives, the family opened a hatchery in Hawaii. The procedure now for this family business is to bring the juvenile oysters back to Willapa Bay from Hawaii when the shells are strong enough to withstand the acidic conditions.

It is not just oysters which are under attack. A July article in the Seattle Times stated that "Salmon...are at risk because of possible effects on their food. Tiny creatures called pteropods, which are eaten by a wide range of fish, are already being harmed by water corrosive to their shells along the West Coast and elsewhere." This is laying the foundation of an even larger disaster as the impact

of decreasing pH alters the food chain for sea life. It is human beings who are resting at the top of that particular food chain as consumers of a major portion of seafood harvested from the oceans.

After checking the vital signs,

I've begun to think that

the ocean is in palliative care and

I a mute witness to

its death rattle.

-- Alanna Mitchell

Resolutions to Action is an occasional publication of the Global Concerns Committee of the Leadership Conference of Women Religious (LCWR). Members of the committee are: Anne Curtis, RSM; Eileen Gannon, OP; Marilyn Geiger, OSF; Patricia McCluskey, IHM; Kathleen Phelan, OP; Jo Ann Showalter, SP; and Ann Scholz, SSND, staff. Please address correspondence to:

LCWR
www.lcwr.org
8808 Cameron Street
Silver Spring, MD 20910
301-588-4955
fax: 301-587-4575
ascholz@lcwr.org

SOCIAL ANALYSIS

Oceans are a vital segment of the planetary oxygen/carbon dioxide exchange, functioning almost as a global “lung”: carbon dioxide is absorbed by seawater and through a complex procedure, oxygen is produced and given off into the atmosphere. The process has helped keep our climate balanced for untold eons. The problem arises with the additional carbon in the atmosphere. The oceans continue to absorb carbon dioxide, although the process is slowing down and the amount of carbon in seawater is growing out of proportion. Increased carbon in sea water changes the pH levels and the water becomes increasingly acidic. This phenomenon is now being seen in parts of the Pacific Ocean, the Bering Sea, and other areas. According to United Nations Educational, Scientific, and Cultural Organization (UNESCO) media services, the oceans are currently “in the midst of a silent crisis” instigated by multiple factors including climate change.

*“How much carbon
are we putting into the ocean?
We’re dumping the equivalent of a hopper
car of coal – about 100 US tons --
into the ocean every second.”
-- Craig Welch, “SeaChange”*

As the pH is lowered and the sea becomes increasingly acidic, sea life is being impacted almost to the point of no return. Scientists and fisher folk are seeing this phenomenon in shell fish of all types: clams, oysters, crab, mussels, and more. The acidic conditions prevent the juvenile shell from developing and the shell fish die.

**Sea life is being impacted
almost to the point of no return**

REFLECTION

Ocean acidification is considered by many to be the twin of climate change. There is no magic wand, no quick fix for what has been damaged, but there are efforts to begin the process of repair and healing.

Earlier this year, UNESCO launched their Ocean and Climate Platform 2015 jointly with several research bodies and non-governmental organizations to inform the international debates on carbon dioxide emissions as the international community moves toward the December climate treaty talks in Paris. The recent agreement in Lima, Peru was an important first step. One hundred and ninety-two countries agreed to set a deadline of March 2015 for nations to develop a plan to reduce their greenhouse emissions. There are multiple components to be considered but this is an important step and a sign of hope for planet Earth.

Efforts to reduce global carbon emissions will ultimately help to reduce the amount of acidification of the ocean. Ideas and programs to accomplish this are beginning to be taken seriously on many fronts. This is the ideal, but it will not be easy. In reality, dealing with ocean acidification will require that nations address a myriad of issues including changing food sources, job loss, and education to help human communities adapt to the shift in environment. With careful planning and broad participation, it can be done.

California and states from Maine to Maryland, have taken it upon themselves to develop some sort of carbon restriction programs. Oregon and Washington are also considering additional carbon restrictions. Washington already has a law requiring a percentage of electricity generation to come from alternative energy sources. Every effort,

whether local, regional, statewide, or national, to reduce carbon in the atmosphere will have an impact at the global level. No reduction of carbon is too small to matter to the planet as a whole or to our oceans in particular. People of faith are called to safeguard all of God’s creation and in doing so, to help craft a healthy future for all.

ACTION

- Obtain more information by reading the Pulitzer Prize winning report written by Craig Welch of the *Seattle Times*. www.seattletimes.com/seachange
- Call your members of Congress and urge climate action in our country. The UN delegates can only negotiate what nation-states will support.
- Read *Seasick* by Alanna Mitchell. It is relatively easy to read and details major shifts within the ocean waters and the ability of the ocean to continue to support life as we know it.
- Encourage your state legislators to evaluate and put into place a state level program to limit carbon emissions.
- The Global Catholic Climate Movement is a newly formed international coalition of religious congregations and Catholic organizations, including LCWR. Become a part of its growing influence. catholicclimatemovement.global
- Take the St. Francis Pledge. All across our country, Catholics are taking the pledge to Care for Creation and the Poor and joining the Catholic Climate Covenant. catholicclimatecovenant.org/the-st-francis-pledge/