

**Alberta Mackenzie Provincial Council
The Catholic Women's League of Canada**

Education and Health Communiqué #6

Mary H., Chairperson
March, 2018



“Inspired by the Spirit; Women Respond to God’s Call”

Care of Creation continues to be a focus for Pope Francis. The global community is slowly awakening to the need for a world-wide collaboration to address the environmental crisis looming before us. In her recent communique, Community Life Standing Chair, Sister Susan Scott provides practical information from the Earth Day website on what individuals and communities can do in response which includes a plastic pollution footprint calculator which will assist you in learning about your plastic consumption and a personal plastics plan to track your progress.



Earth Day is on April 22nd, 2018

Theme: A World Without Plastic Pollution

We are called to action...What will you do?

Earth Day 2018 will focus on changing our attitudes and behaviors surrounding plastics which in turn will hopefully result in a significant reduction in plastic pollution. *This year's theme is one that each and every one of us can find ways to make a difference and together, we can make an impact.*

Plastic pollution has been an insidious enemy of our planet. It has poisoned and injured marine life, disrupted human hormones, littered our beaches and landscapes and clogged our waste streams and landfills. The staggering growth of plastics is now threatening the survival of our earthly home.

It is hoped that through awareness, citizens throughout the world will mobilize and demand and support the adoption of a world-wide framework to regulate plastic pollution which will compel governments and corporations to control and reduce plastic pollution. Please find following information quoted directly from the Earth Day website:

PLASTICS AND HEALTH Plastic pollution is now recognized as a hazard to public health and the human body. Chemicals leached from some plastics used in food/beverage storage are harmful to human health. Correlations have been shown between levels of some of these chemicals, and an increased risk

of problems such as chromosomal and reproductive system abnormalities, impaired brain and neurological functions, cancer, cardiovascular system damage, adult-onset diabetes, early puberty, obesity and resistance to chemotherapy. Many plastics contain phthalates (DEHP) and the chemical BPA. If food or drink is stored in these plastics, they can be contaminated with these chemicals. If food is heated inside these containers in the microwave or if the plastic is ingested as in the case of a small child, these chemicals make their way into our food and into our bodies. Both chemicals are potentially harmful to human hormones, reproductive systems, and early childhood development.

PLASTICS AND CLIMATE You may have thought that the only problem caused by plastic pollution is the negative effect that litter has on the environment. That is not the whole story. Plastic is a petroleum product. It is created from petroleum just like refined gasoline. The EPA estimates that production of plastic products account for an estimated 8% of global oil production. The drilling of oil and processing into plastic releases harmful gas emissions into the environment including carbon monoxide, hydrogen sulfide, ozone, benzene, and methane (a greenhouse gas that causes a greater warming effect than carbon dioxide) according to the Plastic Pollution Coalition. The EPA estimated that five ounces of carbon dioxide are emitted for every ounce of Polyethylene Terephthalate produced (also known as PET is the plastic most commonly used to make water bottles). It is important to remember the connection between plastics and climate change. Climate change is one of the most pressing issues we face as a planet today. If other reasons to consume less plastic weren't already enough to convince you to act, the fact that consuming plastic products exacerbates climate change should be an important reason to take personal responsibility and make a commitment to help End Plastic Pollution

WHY IS PLASTIC SO HARMFUL TO MARINE LIFE? Do you know why marine life is so disproportionately impacted by plastic pollution? It's because it can cause harm to them in so many different ways. Many marine organisms can't distinguish common plastic items from food. Animals who eat plastic often starve because they can't digest the plastic and it fills their stomachs, preventing them from eating real food. Birds and other larger animals often become trapped or ensnared in plastic bags, fishing line, and other debris. Sea turtles specifically are highly susceptible. They both mistake plastic bags for jellyfish, and frequently are trapped in plastic debris, restricting their growth and movement. Plastic never fully degrades, over time it breaks into smaller and smaller pieces. Eventually it becomes small enough to enter the bloodstream of marine organisms. Since the organisms cannot ever digest or process the plastic, it remains present until the organism is eaten. This passes all the plastic on to its predator, which is usually fish. If that fish is caught, then the plastics will be passed on to whichever human consumes it.



What are Microplastics? When plastics break down due to exposure to water, sun or other elements they can break into tiny pieces -so tiny, most of them cannot be seen with the naked eye. These small plastic fragments are now everywhere. When you drink water, eat fish or other seafood, or when you add salt to your meals, chances are you can also be ingesting tiny pieces of plastic. Those particles - called microplastics- are a contaminant which is now present in the oceans, water ways, soil and even in the food we eat. Once plastic enters the bloodstream of an organism it will never be processed out. The plastic, and the toxins it has absorbed will bioaccumulate as they travel up the food chain to a top predator, often a human. The entire cycle and movement of microplastics in the environment is not yet known, but research is currently underway to investigate this issue further, as reported by NOAA. Some microplastics start out as large plastic pieces, slowly eroded by water or exposure to the sun and the elements; others start off as microplastics specifically produced for certain uses. Some are microbeads, created for use in skin care products. They are very tiny pieces of manufactured polyethylene plastic that are added as exfoliants to health and beauty products, such as some cleansers, toothpaste, facewash, soap and shower cream, says the Royal Society of Chemistry of Great Britain. Others originate from plastic-based fabrics such as polyester and nylon that shed plastic fibers when washed. Several studies have shown synthetic fibers to make up the lion's share of microplastics found in oceans, rivers and lakes, and clothes made from synthetics (polyester, acrylic, nylon, and so on) are widely implicated as the source of that pollution. In addition, some industrial processes can produce microplastics that can contribute to the problem when mishandled. While there is some contention over their size, most agree that to be considered a microplastic a particle should be less than 5 mm in diameter and have been found to evade filtration systems at water treatment plants, allowing them to be discharged directly into rivers, lagoons and the oceans. Governments are paying attention and passing legislation to limit or eliminate pollution related to microbeads and companies are working to replace them or phase them out from their products and processes. In 2015, the US passed the Microbead-Free Waters Act, banning plastic microbeads in cosmetics and personal care products. The law has the support of the Personal Care Products Council, an industry group. Similar legislation has been approved by other countries.



Water Day is held on March 22nd every year

2018 Theme: Nature for Water –exploring nature-based solutions to the water challenges we face in the 21st Century

Located in Calgary, **CAWST (Centre for Affordable Water and Sanitation Technology)** spotlights World Water Day (declared by the UN) and the global efforts to achieve universal access to safe drinking water each year in March with a campaign and event. CAWST is a world leader in water by raising awareness of global water issues and doing something about them. President-Elect Judy Look attended this year's event and agrees that if possible, the provincial officers arrange for a speaker/speakers from CAWST to share more information about their very impressive organization...we will see what can be done.

CAWST has achieved impressive results with 6.6 million people trained in 164 countries resulting in 15.4 million people with better water and/or sanitation. They are definitely a part of the global solution and are Alberta based showing that vision and determination can be an important driving force.

Access to safe drinking water is a global challenge that affects everyone's health. As part of their awareness raising efforts, CAWST managed to "Paint It Blue", coordinating landmarks across Canada to honour World Water Day. CAWST's Paint it Blue campaign is lighting landmarks blue from coast to coast to shine a spotlight on world water issues. In Alberta, the Calgary Tower and the Highlevel Bridge & The Alberta Legislature in Edmonton and Lethbridge City Hall were lit up blue.

" Every drop of water is on an endless journey through the sky, the soil and streams...through our lives...and back into nature. In many places, our environment is damaged, leaving us with polluted water or no water at all.

Nature is green infrastructure. A system supplying us with the water we need to survive and thrive. Healthy forests and fields prevent soil and chemicals being washed into rivers. Lakes, wetlands and floodplains store, purify and control water". Source: CAWST website.

Please remember that the future our earthly home is in *OUR hands...what will you do?*

Quote from the book of Genesis:

In the beginning, when God created the heavens and the earth...

...God saw everything that he had made, and indeed, it was very good.