## The Whole of Creation April 16, 2021 Rev. Dr. Judith E. Wright

In the very first verses of the Bible, in the *Book of Genesis*, we find a God that created Heaven and Earth, and was extremely pleased with all that was formed in six days, with the seventh being a day of rest. In this Judeo-Christian creation story, God created the earth and waters from sacred light – with God saying, "Let there be Light." And this God goes on to create the day and the night, the sky and the oceans below, the dry land of earth filled with flowering plants and fruits and grasses. Created also are the seasons, to mark the days and years, and two huge lights, the sun and the moon, to preside over the day and the night.

On the fifth day we read in Genesis:

Then God said, "Let the waters teem with fish and other life, And let the skies be filled with birds of every kind." So, God created great sea creatures, and every kind of fish and every kind of bird. And God looked at them with pleasure and blessed them all.

"Multiply and stock the oceans," he told them, and to the birds he said, "let your numbers increase.

Fill the earth!" That ended the fifth day.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The Living Bible. Genesis 1: 20-23.

And on the sixth day, God created every form of animal life, and then, humans as well. And we are told that "God looked over all that he had made, And it was excellent in every way. " In the words of the King James Version, "*It was very good*."

Contrast in your mind's eye this pristine vision of creation with what is occurring to our environment, to creation as we know it, today. *Scientific America* will now use the term "climate emergency," for the current human caused climate crisis. "An emergency is a serious situation requiring immediate action."

We are now living in a time of climate emergency. Our planet earth is in deep trouble, when we compare its health today with the planet's health many thousands of years ago when our ancient ancestors lived along the Tigris and Euphrates Rivers, telling one another the Genesis creation story.

It is not good, nor is it excellent, what is happening today to our entire biosphere.

As Roger Andrews has told us this morning as well as through his and Inez's passionate and careful on-going leadership as co-chairs of our Green Sanctuary program, environmental degradation and the climate emergency are the greatest over-arching threats facing the world today. We are, as a congregation, quite fortunate to have Roger and Inez lead us forward through their passion for doing whatever we can to turn towards healing our earth, rather than destroy it. We learn weekly from them about steps we can take as a congregation and as individuals to be the change we each can be to lessen this climate emergency.

This morning I want to address one part of this climate emergencythat of the plastic pollution that is killing our oceans and rivers, fish, and animals, and now even polluting us, as humans. I am old enough to remember the scene in the movie "The Graduate" where Dustin Hoffman as the leading man is asked what he plans to invest in in the future. After a few seconds pause, his answer was "plastics." It was a funny line at the time, but today it is no longer as funny.

Plastic pollution is a very complicated issue one that we all need to pay more attention to now. There are some forms of plastic that we use that are very helpful to us and to our lives – plastic used in medicine, in airplane windows, in cars and trains, to help them go faster and use less fuel.

"Solar cells are fabricated as thin polymer films,

that can be painted on rooftops,

or layered onto clear glass windows.

Landfill liners, sewer pipes, flame-resistant electrical boxes and cables,

and many other items have been widely used for safety reasons. ...

Medical plastics are the only material sterile enough to rely

upon precisely because microbes don't like them. And what heart patient would want to have a biodegradable pacemaker in their chest?<sup>2</sup>"

So, some plastics are indispensable to us and our world. The issue here is what do we do with these plastics, Once we are done using them?

The other side of this issue of how we use plastics, is that there are many uses of plastic that are wasteful, and part of our "throwaway society." The plastic we throw way without thought is harming our earth exponentially, as more and more plastic are produced annually. Currently the world produces over 300 million tons of plastic a year. Some are calling our time on earth "The Plastic Age."

Plastics began being produced in the early part of the twentieth century, and many of the plastic products were designed for single use, with little thought then as to how to dispose of such a material. The question for us today is why have plastics been designed as a material, to last forever, when much of plastic has been targeted for single use? One obvious reason is that the plastic industry until quite recently, has been dominated by economic interests, primarily, and not focused on the environmental nor the social costs of production of plastic. And thus, plastics have mostly been designed to last for a very long time.

Because of recent environmentalists' actions,

<sup>&</sup>lt;sup>2</sup> Transforming Plastic: from pollution to evolution.

about 40% of current plastics made today are made from agricultural product and some bacteria are called bioplastics. Unfortunately, such bioplastics can be as much of an environmental problem, as other plastics, especially in terms of disposability. And bioplastics may consume as much fossil fuel, to be produced as do other forms of plastics.

Since the first plastic polymers were created,

about six billion tons of plastics have been made and spread around the world. That's close to one ton per person living today on earth.

There are huge patches of microplastics in the world's ocean. These patches are caused by the grinding down of the larger pieces of plastics through the movement of the oceans' waves and currents (including bags and hard plastics). These larger pieces of discarded plastic, which have been often washed down the rivers of our earth into oceans, eventually deteriorate into tiny micro-pieces which do not disappear but remain in the oceans. Plastic waste today can be found everywhere in our oceans, as plastics have been accumulating in our seas for over fifty years.

Charles Moore discovered in 1997, the first huge microplastic patch in the Pacific ocean. Today this is called the Pacific Ocean Garbage Patch and is over three times the size of France, with most pieces of plastic about one millimeter in size. The Pacific Ocean Garbage Patch is between California and Hawaii, and it is fed by plastic refuse from North America, South America, and Asia. Massive ocean currents bring this debris eventually together into such a patch. It is estimated that 80% of this plastic waste comes from land sources, washed down rivers to the sea, and the other 20% from ships dumping their waste into the oceans or ships losing cargo through storms. It can take decades for such plastic to eventually break down naturally in the environment. Sea creatures eat these microplastic pieces and become sick or die. And alarmingly, we humans may eat the fish that have eaten such microplastic pieces. The quantity of plastic in our seas is expected to nearly double by 2050.<sup>3</sup>

I want to encourage you to read the book *Junk Raft*, written by Marcus Eriksen, published in 2018 by Beacon Press. Marcus and another young scientist, Joel Paschal, sailed across the Pacific on a raft made, incredibly from used materials: from plastic bottles, 30 old sailboat masts for a deck, and a junked Cessna 310 airplane as a cabin, Their raft just floated wherever the currents took them, from the west coast of California, as they studied the path of plastic waste traveling eventually into the Great Pacific Garbage Patch.

They underwent this brave endeavor to bring,

to the world's attention plastic pollution of our oceans.

I am sending a copy of this book, Junk Raft,

to my soon-to-be seventeen year- old grandson, Abe,

<sup>3</sup> Albert Bates, p. 13.

for his birthday this month, as this book is indeed adventure filled, with harrowing moments, for sure. And it is an amazing real- life discovery of how land waste ends up in tiny microplastic pieces in the middle of the Pacific ocean. Since their initial trip, Marcus and Joel have founded the 5 Gyres Institute, which has completed twenty-four expeditions over six years, collecting data by measuring the amount of waste in the ocean gyres, the natural vortexes of wind and marine currents that cause debris, to collect in circular areas in our oceans.

Plastic pollution on land or in the water is dangerous to all of creation: plants, animals, humans, the entire biosphere. If not eaten by wildlife, when we humans dispose of plastics, we may incinerate such plastic waste, or put the plastic into landfills that may not be well run. Toxins are then released into the air, and create more greenhouse gases, thus, leading to more climate change. And floating plastic can give a ride to invasive species, taking them into new territories where they may be harmful.<sup>4</sup>

In January 2018 China banned the import of most recycled plastics, after handling over half of the disposable plastics

for the past quarter century.

Most other countries in Asia, in particular, have followed China's lead on this.

We can no longer ignore how plastic will be disposed of in our country.

We will have to be responsible for dealing with this waste we created,

<sup>&</sup>lt;sup>4</sup>/www.masterclass.com/articles/plastic-polution-facts#3-effects-of-plastic-pollution

both as industries and as individual consumers.

This is a tough topic to look at, but there are signs of hope.

I was recently reminded of the ancient Greek story of Pandora's Box, in which the lid was opened, and a number of harmful things released. I immediately thought of greenhouse gases and plastic pollution being let out into the world. But the lid was put back on by Pandora, in time to save <u>hope</u> from being destroyed. I do have hope that we humans will turn this plastic crisis around.

First, we need to become aware of and attend to this plastic crisis. Here are just a few suggestions of some of the many ways we may act: We can begin by trying to do without whatever plastic we can do without. For example, in terms of clothing, we can purchase clothes that have no polymer fibers. We can buy toys that are not made of plastic. We can use grocery bags that are paper or reusable cloth bags. We can buy biodegradables that are truly biodegradable. We can choose products not wrapped in plastic. We can buy eggs in cardboard boxes and stop using disposable coffee pods. We can use glass, tin or steel containers for food leftovers. We can try to acquire second hand the plastic items which we need.

Today visionaries are creating models for us of a circular economy,

in which plastic never becomes waste.

Such a circular economy would prioritize our use of plastics,

by eliminating unnecessary plastic, and have a good plan for disposal.

We do know that not all plastics are biodegradable nor easily recyclable. This is the reason, for example, for our soft plastic drive. Some plastics cannot be recycled, such as plastic bags, because they would gum up, the machines at recycling plants. We need to recycle what is recyclable, of which there are a lot of items. In thinking about plastics over the past few weeks, I became very aware of just how much plastic is in my home and life. (showed a collection of plastic items from my home, gathered in just a few hours). I am betting that some of you, at least, may be just as unaware as I was, and I encourage you to just look around your home and life

and see what plastics emerge.

In terms of our landfills we need to be sure they are well managed, so that they do not leach or outgas poisons or greenhouse gases. Plastic which is buried well in a landfill will not be turned into greenhouse gases. And scientists have discovered recently as well a "compost tea" that can degrade plastics without releasing greenhouse gases. Remarkably, there have also been newly discovered microorganisms, that actually will eat plastic and they are being put to work in landfills.

We have come a long way from how the earth and biosphere were when the story of creation in Genesis was written. In looking at our human behavior since then, it seems we humans may respond well to fast moving threats, but not to slow moving ones, like the climate emergency or plastic pollution. We need to grasp the big picture of what is happening to our environment. We need to understand that everything has a limitation, is finite. including our earth, its inhabitants and its vast resources. We need to move from being motivated by profit to being motivated by what is good for the earth and all its inhabitants.

The Creation story in Genesis tells us that all is created from holy light. Sacred light. All of the whole of creation is sacred. And we humans are part of that sacredness, but if we destroy other parts of the planet, we are indirectly destroying ourselves and all that we love. By turning away from what is sacred, And turning more towards secular profit, in so doing, we humans are imperiling the whole of life.

As Native American poet Joy Harjo writes in her poem Remember, "Remember the plants, trees, animal life, who have their tribes, their families, their histories, too. Talk to them, listen to them. They are alive poems." ..."Remember, you are all people, and all people are you. Remember you are this universe, and this universe is you. Remember all is in motion, is growing, is you."

This is our UU seventh Principle of the independent web of which we are each a part.

A final word from one of the great naturalist of our age,

Edward O. Wilson, whose beautiful and important book, *Half of Earth*, I read as part of preparing this sermon. I urge all of you to read his book. Dr. Wilson urges us to adopt immediately *a transcendent moral precept concerning the rest of life*. It is simple and easy to say: Do no further harm to the biosphere.

Do no harm. May it be so. Peace and love to you.