God gives rain on the earth and sends waters on the fields

Water is the cradle of life, expression of God’s grace. “Just as water is the essence of all life, water is also the primary element in the life of a Christian, where the sacrament of Baptism marks the sacred source of the spiritual life” noted the Ecumenical Patriarch Batholomew, also known as the Green Patriarch, in his letter on water. Yet almost one billion people today do not have access to clean drinking water. Our water resources are being depleted and degraded as a consequence of our agricultural and industrial use of water, deforestation and climate change, over-consumption, waste, and pollution. And while the challenges are great, the opportunities to conserve and preserve this precious gift of water are even greater.
Water is all around us

From outer space, we can see clearly that God’s earth is a water planet—a blue planet. Throughout the Bible, water plays a significant role in helping us understand the nature of God, God’s purposes in the world, and our relationship with God. One need only think of the crossing of the Red Sea, Jesus’ baptism in the Jordan River, the woman at the well, and Jesus describing himself as living water to gain an understanding of the importance of water in our faith. The Bible includes more than 500 references to the word water and countless more on water related subject like rivers, rain, seas, floods, and storms.

From the beginning, the creation stories reveal the role of water. God first separates the waters into those from above and those from below by forming a solid dome called the sky; next God creates earth out of the waters. Genesis 1:20 teaches that creation literally comes out of the waters as “… the waters bring forth swarms of living creatures…” All of creation is dependent on the gift of water.

Water is always on the move traveling in different forms and serves as the ultimate networker. Water flows down from rivulets high in the mountains, joins with other small channels to become streams which join with other streams to become rivers. Streams and rivers seep into vast underground aquifers which eventually flow into oceans. Yet with all this water, freshwater is actually quite rare, making up about one percent of all the Earth's available water resources. All of God’s creation depends on this one percent.

Historically, rain determined settlement patterns and communities constructed elaborate systems including wells and tunnels to ensure access to clean water. Our bodies are seventy percent water with many other creatures in this great creation comprised of more than ninety percent water. For all of God’s creation, the availability of fresh water means the difference between life and death. This is particularly true in the developing world and in places that receive little fresh water but depend on every drop such as the desert.

Give us this day our daily… water

Most of us are blessed to live in places where we have access to clean, fresh water. But in many parts of the United States and around the world, fresh water is scarce and becoming more scarce every year. As our use of water for personal and industrial activities increases and as the impacts of climate change become severe, freshwater availability is decreasing rapidly.

How we use water … where does it all go?

Many people living in the United States are blessed with the ability simply to turn on a tap or stand at a water fountain and enjoy fresh, clean water. It is easy to forget that freshwater is vital to our existence. A typical shower will result in approximately five gallons of water down the drain for every two minutes spent washing up. Yet even in some parts of the United States, freshwater is scarce. In communities where there is overdevelopment or high industrial or agricultural use, groundwater is extracted at a faster rate than it can be renewed. Home water use in the United States, which includes bathing, washing, cooking, and lawn care, increases every year. And nearly every region in the country has experienced water shortages in the last five years.

According to the Environmental Protection Agency (EPA), “at least 36 states are anticipating local, regional, or statewide water shortages by 2013, even under non-drought conditions.”

Industrial Agriculture

Global agriculture uses nearly two quadrillion gallons of rainwater and irrigation water annually—enough to cover the entire United States with 2 feet of water and accounting for 70 percent of global water use. Obviously we need to eat and drink, but we can choose producers that use water and other aspects of God’s creation wisely. Studies have shown that simple changes in watering systems and more up-to-date...
irrigation technology could save a minimum of 15 percent of the water used in the agriculture sector. Unfortunately, most farmers use wasteful irrigation systems that use 2-3 times more water than is required by the crops.

While most of us have little control over large scale irrigation systems, we can be aware of the foods that require more water. Some of the products that demand the most water are coffee and rice. Coffee requires 2500 gallons of water to produce a pound of coffee and rice requires 650 gallons of water per pound of rice. We can also be aware of local crops and their water demands. The next time you are at the farmers market, ask your local farmer which crops require the least water and what they are doing to conserve water.

Energy Development

In the last decade, energy use and development have received more attention as we seek to address climate change. But what we have also come to learn is that energy development uses a huge amount of water. Hydraulic fracturing, also known as fracking, is a process that uses a pressurized mixture of water, sand, and chemicals to extract natural gas from the earth. A 2009 report noted that each natural gas well requires approximately 2-4 million gallons of water. As of 2011, Pennsylvania had 54,347 active wells. These would have required more than 108 billion gallons of water to fracture the first time and far more to keep them active and producing natural gas for an extended period of time. That is enough water to fill the New Orleans Superdome more than 122 times (the Superdome holds more than 76,000 people!).

And these are just the numbers for Pennsylvania. According to the U.S. Department of Energy, as of 2013 there were more than two million wells in twenty states throughout the country that had been fracked. At a minimum that is 4 trillion gallons of water that have been used to frack these wells.

Water Use in our Homes

It is also important to note that households in the United States are large water users. The average family uses approximately 300 gallons of water a day. While household water use accounts for less than ten percent of all freshwater used in the United States each year, there are many small changes we can make to reduce our water use. Taking shorter showers, only running the clothes and dish washers when they are full, and stopping leaky faucets are just a few simple things we can do to reduce our water use and our water bills.

Dealing with the Gulf Oil Spill: 4 years later

The Coastal Community Collaborative is a group of five native American and historically African American communities in coastal Louisiana that has come together to protect their homes and ways of life that are dependent on the unique systems found in the bayou. Over the years, oil drilling, oil infrastructure, hurricanes and oil spills have seriously damaged the integrity of the ecosystem that these communities depend on. The historical fresh water and salt water regions have changed and the health of the water that supports one of the largest fisheries in the world is no longer providing for the subsistence lifestyles these communities have practiced for thousands of years.
Bristol Bay, AK—Where Blessing of the Waters and Salmon are Sacred

In Bristol Bay, AK every year like clockwork millions of salmon run from the sea up the Kvichak and Nushagak rivers to spawn and bring about the next generation of salmon. More than 8,000 Alaskan Natives and 14,000 commercial fishermen depend on these salmon for their livelihoods and survival. Central to their culture and livelihoods—the health of the bay and rivers support these salmon. A hard rock mine has been proposed for the head waters of Bristol Bay and would inevitably destroy the home and birthplace of the sockeye salmon that have defined this community for thousands of years. Every winter, the Alaskan Native community which is largely Orthodox Christian, cuts a hole in the ice to bless these sacred waters that provide year after year.

WATER POLLUTION

In addition to using too much water, our food systems and energy production also contribute to water contamination. Dirty water is the biggest threat to human health both in the United States and around the world. Runoff from our streets, homes, and other industrial facilities contaminate rain water which then flows into larger water bodies threatening the health of the whole of creation.

Energy

While energy production uses a lot of water to make energy available, it also results in contaminated fresh water. Chemicals and sand are added to the water used in hydraulic fracturing contaminating both the fracking water as well as the groundwater around the fracking sites.

Mountaintop removal coal mining has polluted thousands of streams and tributaries throughout Appalachia. To date, mountaintop removal coal mining has destroyed or damaged more than 2,000 miles of streams. These waterways are ruined when debris and toxics from the mines themselves are dumped off the mountains into the valleys, water, and communities below.

Stormwater Runoff—Agriculture and Roads

Most of our large scale agriculture production uses fertilizers and pesticides to protect the crops from harm and ensure high yields for the farmers. In addition, our cars and vehicles leave oil and other products on the roads. Both of these contaminants are washed into streams and rivers by rain resulting in what is known as stormwater. This threatens the health of the fish and other aquatic life by degrading the water quality.

Stormwater is a leading source of water pollution nationally. The Great Lakes, the largest group of freshwater lakes on earth, suffer from stormwater runoff, and in many places stormwater is the primary source of water pollution. Using less fertilizer, building rain barrels and rain gardens, and being aware of products around your home that would add to stormwater pollution (such as pet waste) are key to addressing the United States' stormwater problem.
OTHER WATER FACTORS

Climate change
We all know the climate is changing around us as a result of our historical and continuing greenhouse gas emissions. What we are just beginning to understand is how these climactic changes are affecting water quality and availability throughout the US and the world. As the world warms, more groundwater evaporates into the atmosphere. In addition, we are seeing stronger storms but less frequent and consistent rain that is critical for recharging our water supply. This is putting added stress on our communities, farmers, and the whole of God’s creation who rely on water for survival. A recent report by the National Oceanic and Atmospheric Association indicated that one in ten U.S. watersheds is stressed and other studies have indicated that at least eleven major cities could be threatened by a water shortage as a result of climate change in the next ten years including Cleveland, OH; Miami, FL; San Francisco, CA; Dallas, TX; and Washington DC just to name a few.

Oceans
The oceans and seas around the world are also being impacted by the changes in our planet and the choices we make. Runoff, transportation, and ocean acidification as a result of climate change are threatening the health of our marine ecosystems. Fish health and ocean biodiversity is largely threatened by declining water quality, algal blooms that result from changing temperatures, expanded use of aquaculture, and increased levels of toxins in the water system.

Declining water quality is threatening marine biodiversity which can lead to the collapse of entire marine ecosystems. Reports have indicated that if we fail to address declining water quality, seafood may disappear by 2048. Ocean health provides a scary example of the impact we are having on water systems around the world while highlighting the interdependence of the whole of God’s creation.

Water as a Human Right
Despite these various threats many of us in the United States still have access to fresh drinking water. It is easy to forget about the fact that many people around the world do not have access to clean water for drinking, cooking, and bathing. Our faith traditions teach that access to clean

Fracking, Fracking Everywhere—But What about the Water?
About ten years ago, someone realized that all the natural gas underneath Pennsylvania and many other states throughout the U.S. was accessible with the help of hydraulic fracturing. The one thing they needed to get it was water—lots of water. But that was easy in Pennsylvania with the Delaware River and many others running through the state and providing water for New York City and other population centers. In 2009, it was discovered that 18 residential water wells throughout Dimock, PA and Dimock’s aquifer had been contaminated by methane and potentially other hazardous chemicals as a result of energy development. Water had to be brought in for residents to drink, cook, and use on daily basis.

But Pennsylvania isn’t the only state struggling with water contamination. Residents in Ohio, Texas, and West Virginia all reported water contamination in 2013. Religious leaders in other states are also worried about the increase in fracking and have started blessing the waters of their states and communities to protect them from potential dangers.
The summer of 2013 in Magdalena, New Mexico was the summer the water stopped. With extreme drought and wildfires plaguing the state, one day the citizens of Magdalena woke up to no running water. The local Laundromat wasn’t open for business, the local restaurant had to use paper plates and plastic utensils, and all the residents shared porta potties made available to the community. Even more challenging was the situation at the local health clinic where doctors and nurses were unable to wash their hands with water between patients. Though they had hand sanitizer available to them the lack of water was a reminder of how important fresh water is for health and healing. What would your community look like without water?

“IA don’t know what tallies as sacred for you but if water doesn’t qualify, you should check your pulse to see whether you are among the quick or the dead” Larry Rasmussen, Reinhold Niebuhr Professor Emeritus of Social Ethics at Union Theological Seminary

Droughts and Farming Don’t Mix
January 2011 brought the beginning of one of the worst droughts in history for Texas farmers. Cattle farmers were forced to sell about 15 percent of their herd, and rice farmers were denied the necessary water to flood their crops in order to ensure water for cities and municipalities upstream.

Three years later, Texas is still struggling to replenish their water supply leaving farmers with little access to the water they need for their crops. Though rice is a water heavy crop, Texas is one of the largest rice producers in the United States. Prolonged droughts linked to a changing climate and increasing water demand in cities like Austin and its suburbs will likely threaten the livelihoods of many rice farmers in southern Texas.
Isaiah 43:16-21  This is what the Lord says—he who made a way through the sea, a path through the mighty waters, who drew out the chariots and horses, the army and reinforcements together, and they lay there, never to rise again, extinguished, snuffed out like a wick: “Forget the former things; do not dwell on the past. See, I am doing a new thing! Now it springs up; do you not perceive it? I am making a way in the wilderness and streams in the wasteland. The wild animals honor me, the jackals and the owls, because I provide water in the wilderness and streams in the wasteland, to give drink to my people, my chosen, the people I formed for myself that they may proclaim my praise.

In Isaiah we read of the importance of water throughout biblical stories and teachings. Water is central to Jesus, Moses, and the disciples but not necessarily for environmental reasons. More for everyday reasons—though the parting of the sea is unlikely to happen every day.

In verses 16 and 17 we see that God’s work, as creator is continuous and ever unfolding in the creation that is around us. The seas, the wilderness, the creation are constantly changing and impact our lives as humans. As we move through the scripture, we see that God is in fact doing a new thing in creation.

God is promising a path through the wilderness and waters in the desert and the people return to Israel. God provides on this long and hard journey with the things that are most needed and most appreciated—food and water. In addition, the scripture speaks of a more bountiful environment with wild animals that will also thrive in this new creation. This closing verse serves as a simple reminder that water is central to the whole of creation and with water comes a bountiful and rich earth where all of God’s creatures can survive.

Ezekiel 34:18  “Is it not enough for you to feed on the good pasture? Must you also trample the rest of your pasture with your feet? Is it not enough for you to drink clear water? Must you also muddy the rest with your feet?”

Taken literally, this scripture is a wonderful reminder of the importance of using only that which you need—the concept of sufficiency and “enough” which are often forgotten our the daily hustle and bustle. We have been blessed with gifts of clean and running water, showers, dish washers, and access to clean water even when we leave our homes. Yet we take this for granted and despite the innumerable gifts that the Lord has provided, we take clean water for granted in almost every aspect of our lives.

From energy production, to agriculture, to the impact of climate change on our water resources, almost everything that we do is impacting and degrading both fresh and marine water supplies throughout the world. And yet we read with great frequency throughout the bible that water is central to our faith.

Water or water related situations are mentioned 722 times throughout the Bible. That is more than faith, prayer, or worship so it is certainly worth us reflecting upon. In addition, water brings with it a variety of topics including God’s creating, saving, and blessing work. Within the bible, water speaks to physical birth (Genesis 1:20), God’s purification and cleansing (Hebrews 10:22), and of blessings from God (Exodus 17). And this is just the beginning.

We have been blessed with the gift of water and can reflect on the various ways that God uses water in our spiritual and faith-filled lives. Rather than taking this gift for granted, we must use it with care and love – the same love that was shown to us when this water was given to us as a part of creation.
Creation Justice Ministries develops Earth Day Sunday materials each year to help congregations celebrate and care for God’s Creation. For more information about the Program, to make a donation, or for additional Earth Day resources, visit www.creationjustice.org or email info@creationjustice.org. For more information on how your congregation can practice stewardship of God’s Earth or for fact sheets on the topics covered in this water resource visit www.creationjustice.org or contact info@creationjustice.org.

The United Church of Christ has stated its concerns for a healthy environment from the beginning. We are called to be good stewards of God’s creation, including our rivers, lakes, oceans, glaciers, and polar ice caps. With the exception of the flood in Genesis, water in the desert setting of the Bible is seen as life-giving and often serves as a metaphor for God’s spirit, refreshing us and giving us new life in God. In the 1980s, the UCC fought the siting of toxic waste dumps that contaminated well water. After Hurricane Katrina and flooding in 2005, UCC communities traveled to New Orleans and Biloxi to help rebuild communities. In many other times and places, we have joined faith and action to work for a clean and healthy environment for all. As we read in the UCC Core Purpose, “We serve God in the co-creation of a just and sustainable world as made manifest in the Gospel of Jesus Christ.” May that always include abundant, clean water for all.

For more information about UCC Environmental Ministries, visit ucc.org/environmental-ministries.
We know that water is central to our existence and our health. It is also central to our spiritual lives and helps us to connect with God. From bathtubs to rivers, drinking glasses to waterfalls, and baptismal fonts to expansive seas, water is a gift from God. John writes, “Jesus said to her, ‘Everyone who drinks of this water will be thirsty again, but those who drink of the water that I will give will become in them a spring of water gushing up to eternal life.’” To have a resource so sacred requires acknowledgement of its importance and of our responsibility to ensure those long after us can access and experience this life-giving element.

Opening Prayer
Creator God,
We give you thanks for your creation and everything in it. Teach us to love and care for our communities and neighbors, near and far. Please help us to remember you and your gift of water now and always. May we recognize the holiness in all the earth’s water and strive for care and protection.
In your name we pray, Amen

Call to Worship
Congregation responds with the bolded selections (from: “A desert faith in a desert time”, Ghost Ranch, 2013) —PEC Ferncliff Conference

We gather to worship God, the Lord and Giver of Life
God, give us the waters of new life
In the deserts of our lives, in the wilderness within,
God, give us the waters of life
To give us hope when our lives run dry, to give us strength when our world seems barren
God, gives us waters of new life
To let peace flow like a river and love spring forth like a fountain,
God, give us the waters of new life
To make justice roll down like waters and righteousness like a living stream,
God, give us the waters of new life.
To give us- and our world- a second chance and a new beginning,
God, give us the waters of new life
Come, people of God, open your lives to receive God’s new life. Open your hearts to sing God’s praise.
Prayer for the Blessing of the Waters
(to be used for blessing water from a local stream, river, or lake)—Adapted from the rite of the Great Blessing of the Water as celebrated in the Orthodox tradition

You are great, O Lord, and Your works are wondrous, and there are no words capable of hymning Your wonders… For of Your own will You brought all things in to being from nothing, by Your power You uphold the whole of creation, and by Your providence You order the world… The sun sings to You, the moon glorifies You, the stars meet together before Your face, the light obeys You, the deeps shudder before You, the water springs serve You… We confess Your grace, we proclaim Your mercy, we conceal not Your gracious acts: You have set free our mortal nature. All creation sings praises to You Who have revealed Yourself. For You, our God, have appeared upon earth and have dwelled among men. Therefore, be present here now by the descent of the Holy Spirit, and sanctify this water. Give it the blessing of Jordan. Make it a fountain of incorrup-
tion, a gift of sanctification, a remission of sins, a protection against disease, a destruction of demons… and may it be for those who will partake of it, to the cleansing of their souls and bodies, to the healing of their passions, to the sanctification of their homes, to every expedient purpose...

Prayer of Confession
Gracious God,
Forgive our neglect of what you have entrusted to us as stewards. We confess that we take your gift of water for granted and acknowledge the need for repentance and action. We are reminded of your power and love with every nourishing drink and cleansing bath. Empower us to speak for those without, and work to ensure justice and peace for all. Amen

Sending Forth
May we forever exalt God and creation. Go in peace, enjoy God’s gift of water, and work to preserve this sacred resource for the future.