

## A prayer on light from the United States of America

To the one who surges into the fissures that cannot be accessed,  
To the one who floods into the crevices that cannot be reached,  
To the one whose presence exposes, clarifies, restores, and cultivates,

We bask. We thrive. We harbor no secrets. We hold onto no  
heaviness we fear makes us unloved.

You are the first ingredient for life.

The universe, not to mention our hearts, would wither away  
without you, Light of the world.

Amen.

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## 2

### Let the waters be separated (Genesis 1.6–8)

<sup>6</sup>And God said, "Let there be a vault between the waters to separate water from water."<sup>7</sup> So God made the vault and separated the water under the vault from the water above it. And it was so.  
<sup>8</sup>God called the vault "sky." And there was evening, and there was morning—the second day.

My childhood memories are full of water. I was brought up at the stunningly beautiful All Nations Christian College in England, set in acres of Hertfordshire fields and woodlands. Behind the college, at the bottom of a field, winds the tiny River Ash, which we called Lilo Creek. We had lots of fun times as children splashing about in the water on our lilos and in a little yellow dinghy that my mum romantically called Yellow Dawn. Nearby was a ford where the cattle crossed – another fun place to paddle and play.

The area has lots of former gravel pits, by then turned into lakes, and my parents bought canoes. Many weekends were spent out on the lake. I could canoe before I could swim (probably not the safest thing looking back, especially as we never wore lifejackets!) I can remember adventures with my brother, canoeing through reedbeds into hidden areas and once discovering an abandoned rusty boat on its side, which we clambered onto and explored.

That childhood love of water has stayed with me into adulthood and near (or in) fresh water is one of my favourite places to be. My sister's house backs right onto a lake and we spend many hours there as an extended family. One of our best times recently was a scorching hot summer's day when we were all there, including my brother and his crew. We went out onto the lake in wooden rowing boats and spent the day jumping into the water. My sister and I swam

together for a long time through the clear water, talking and sharing deeply (and putting out of our minds the 1.5 meter-long pike lurking beneath us!)

In this chapter we are celebrating water (focusing particularly on fresh water as we will look at the seas and oceans in Chapter Five). We will consider water in the Bible, see the role it plays for the people of God both physically and metaphorically, and then look further at the refrain, 'And God said . . .', considering what we can learn about why God made the heavens and the earth. We will then think about water today, be inspired to notice it and not take it for granted, and become more aware of the problems it faces and the part we can play in looking after it.

## Separating the waters

In Genesis 1:6–8, God speaks and calls into being 'a vault between the waters to separate the water from water.' This vault, also translated as 'firmament' or 'expanse', is the creation of the sky and sees God bringing control and order to the swirling, chaotic mass of deep waters mentioned in verse 2.

The verb underlying the Hebrew for 'vault' (*rāqī'a*) means to beat or stamp, as in beating out a sheet of metal.<sup>1</sup> It is the same word used by Elihu when he asks Job, 'can you join [Yahweh] in spreading out the skies, hard as a mirror of cast bronze?' (Job 37.18) and reflects an ancient view of the world, different from our own understanding. The process of separating out, outlined in the previous chapter, continues as the watery chaos that overflows the earth is tamed and divided to create space between the waters of the ground and the water that comes from the sky. Now there is space to inhabit and air to breathe. Alongside light, water is an essential element for life.

## Streams of living water

Water is a powerful symbol throughout the Bible. This reflects the fact that the Bible was written by people who were intensely aware of how precious water was and of the ever-present threat of it running out –

far more so than some of us reading this. Thus they lived with a very close day-to-day connection with water.

This awareness in turn made them more appreciative of water as a gift from God, his provision for his creation. In fact, Jewish thinking says that God specifically put his people in a land with no major rivers precisely to help them remember that God was the ultimate provider of water and of all their needs. In this way, Rabbi Yonatan Neril says, 'The Biblical experiences with water in the desert can be understood as a spiritual training to cultivate appreciation for God's goodness.'<sup>2</sup>

Water is a key theme in Psalm 65, which is a wonderful song of praise to the God who forgives and answers prayer and fills his people with good things. The whole earth praises God, lost in awe at the amazing things he does, and the earth is filled with songs of joy. The joy comes because of God's bounteous provision, and central to that is the role of rain:

You care for the land and water it,  
you enrich it abundantly.  
The streams of God are filled with water  
to provide the people with corn,  
for so you have ordained it.  
You drench its furrows and level its ridges,  
you soften it with showers and bless its crops,  
you crown the year with your bounty,  
and your carts overflow with abundance.  
The grasslands of the wilderness overflow,  
the hills are clothed with gladness,  
the meadows are covered with flocks  
and the valleys are mantled with corn,  
they shout for joy and sing. (vv. 9–13)

Have we lost that sense of rain as a provision from God? It is dry in the south east of England where I live and we have had very little rain recently. In fact the Environment Agency is warning that England could run out of water within 25 years because of rising population

and climate breakdown – something that readers from other places might find inconceivable given the stereotype of England as a rain-soaked land of black umbrellas!<sup>3</sup> And of course, many other parts of the world are facing much more extreme conditions, which we will reflect on later in this chapter. I found myself musing on the lack of rain as I walked around my area recently, confronting the reality of my absolute lack of control over whether or not it rains (though of course I can control what happens to the water when we do have showers, and whether I use it wisely or not).

Yet the Scriptures are clear that water is part of God's provision for his creation, including his people. In Genesis 21, God compassionately provides for Hagar in her situation of deepest need. In this story of water injustice, we see Hagar thrown out into the desert by Abraham and Sarah. The one skin of water she was given has run out, and she now sits down some distance away from her son, Ishmael, to wait for him to die. She is in tears, alone and abandoned. But God comes to her, opens her eyes and shows her a well of water. God is with mother and son and Ishmael grows up to become the founder of a nation of his own (Gen. 21.8–20).

Jesus tells us that God can send rain on whom he likes, both righteous and unrighteous (Matthew 5.45) – but he can also withhold rain too. In the time of King Ahab, in judgment against him, Elijah announces that 'there will be neither dew nor rain in the next few years except at my word' (1 Kings 17.1), and so the rain stops and a terrible drought occurs. This sets the scene for the mighty showdown with the prophets of Baal on Mount Carmel. Elijah's use of water, pouring large jar-fulls over the offering, must have felt outrageously wasteful when the land was suffering such a famine because of the drought, but he is confident in God's promise that he would send rain again. And sure enough, as a sign of Elijah's victory over the false prophets – and more importantly of God's victory over Baal – the skies grew black, the wind rose and a heavy rainstorm broke (1 Kings 18.45).

The composer Mendelssohn's depiction of this scene in his oratorio *Elijah* is tremendous, with Elijah sending out the servant to look towards the sea, searching for signs of rain. The tension builds up as, time after time he returns, reporting in his high treble voice, 'No, there is nothing,

until finally, on his seventh return, he sings tremulously, 'Behold, a little cloud ariseth now, out of the water . . . It is like a man's hand'. And, as the orchestra picks up pace, you know the rains are coming!

Water has a shadow side to it. It can bring life but it can also bring death and suffering, whether through engulfing people (as in the flood of Genesis 7 or the Red Sea flowing back over the Egyptian army in Exodus 14); or through the earth drying up and provoking famine, due to lack of rain or a tactic of warfare (2 Kings 3.25); or through being unclean and undrinkable. The bitter water of Marah was changed into drinkable water by Moses throwing a piece of wood into it as God showed him to do (Exodus 15.22–26).

This shadow side is used in a metaphorical way too and the Psalms speak vividly of being in 'deep waters' while 'the torrents of destruction overwhelmed me' (Psalm 18.16 and 4). Whatever situation the writer of Psalm 69 is in, he describes it as feeling like 'the waters have come up to my neck; and he goes on to say:

I sink in the miry depths,  
where there is no foothold.  
I have come into the deep waters,  
the floods engulf me.  
I am worn out calling for help,  
my throat is parched (vv. 2–3).

I have no doubt that all of us reading this can think back to times when those words have been our own, and maybe even now they have resonance for some of us in situations we are currently facing.

I recollect sitting down to pray in the midst of a dark and painful time. I closed my eyes and immediately and vividly saw a picture of myself sinking down into deep waters, way over my head. It matched exactly how I was feeling, as my circumstances seemed totally overwhelming and it appeared I was powerless to do anything to change them. I felt like I was drowning and would never resurface.

But, while recognizing this shadow side, the Bible affirms that God is in control of the waters and we will be safe. When the writer of Psalm 69 cries out to God, 'Do not let the floodwaters engulf me or

the depths swallow me up,' his experience is of rescue and salvation and he can declare, 'The Lord hears the needy and does not despise his captive people' (vv. 15 and 33).

## Come to the Living Water

In the Gospels we see that Jesus is Lord over the wind and the waves, which obey him when he and the disciples are caught out on Lake Gallee in a storm (Mark 4.35-41). Of course they obey him: he is the one who created them, whose Spirit was brooding over the waters of chaos! He is the Lord of all creation. And even when we feel like we too are drowning in the depths, God is with us in his love. Father, Son and Holy Spirit are weaving together and weaving our struggles into the life at the heart of the Godhead, turning our grappling around to bring hope.

Returning to the picture of me sinking down, as I sat with God in prayer, he broadened the image out a step or two and I realized that my arm was held up and coming out of the water and there, standing on the bank, was Jesus, reaching down to hold my hand. I was still in the water – he hadn't pulled me out – but I knew he was stopping me sinking down any further and clasping me securely.

Jesus is at the centre when we consider how the theme of water flows through the Bible. We first encounter him and water in the story of his baptism by John in the River Jordan (Matt. 3.13-17; Mark 1.9-11; Luke 3.21-22; John 1.29-34). The Jordan is of course key to the story of the people of God: it is the river the Israelites crossed to leave behind the Exodus and enter into the promises of God to be his people and to have their own land. As with the Red Sea when they left Egypt, so here too God stops the water so all the Israelites could walk across on dry ground (Joshua 3, 4). The River Jordan therefore is the symbol of freedom: the sign that God's promises are being fulfilled.<sup>4</sup> And it is in this river that Jesus is baptized: *Yeshua*, Joshua, the anointed chosen one, the Messiah.

Through his baptism, Jesus is identified as God's beloved son and the one for whom John has been preparing the way. But Jesus will baptize with something far more powerful than water: the Holy Spirit. It is in

Jesus that the hopes of the Old Testament find their fulfillment; in Jesus the future promised by the Hebrew prophets comes together – a new creation characterized by God's full presence and the restoration of all things to his shalom. In the glimpses we are given of this transformed creation (for example in Isaiah 11 and Revelation 21 and 22), we see a picture of reconciliation with people being reconciled to God, to one another and with the natural world. We will explore this further in Chapter 4, but for now, as Jesus is baptized in the river Jordan, we see him confirmed as the one who brings that freedom and peace and restoration of relationships.

In our own baptism, we publicly step into that identity in Jesus as people of the new creation. Paul affirms, 'If anyone is in the Messiah, there is a new creation! Old things have gone, and look – everything has become new!' (2 Cor. 5.17, using Tom Wright's translation in *The New Testament for Everyone*). We become Jesus-people: signed up to his agenda of the Kingdom of God, committed to living out the values of justice, peace and righteousness in our everyday lives.

Baptism of course hinges on the literal and metaphorical role of water in cleansing and purification. Ritual washing was and is a key part of the faith of the Jewish people: priests had to bathe themselves before putting on the sacred garments on the Day of Atonement and before dressing in their ordinary clothes again. Aaron and his sons had to be washed before they were consecrated. Anyone who touched something or someone considered ritually unclean had to wash themselves in order to become clean.

Hundreds of years before Jesus' baptism in the Jordan, Naaman, the commander of the army of the king of Aram, was told by Elisha to wash seven times in the Jordan in order to have his leprosy healed (2 Kings 5). Of course, this was not because there was some magical property in the water that could bring healing, or because it was thought that leprosy could simply be washed away. It was not even because there was anything particularly mighty about the river Jordan itself: as Naaman says, 'Are not Abana and Pharpar, the rivers of Damascus, better than all the waters of Israel? Couldn't I wash in them and be cleansed?' No, this was about Naaman submitting to 'not just the tribal god of Israel, but the God of all the earth, the healing, liberating God, the God of

creation and covenant, of Exodus, wilderness and Jordan, the God of steadfast redeeming love.<sup>5</sup>

Baptism, then, is about going down into the waters in order to be purified from our wrong-doings; from all the things in our lives that go against the way God has created us to live – in shalom with his whole creation, both human and wider – and prevent us entering into the triune presence of God. It involves too that shadow side of water we saw earlier, as it is a type of drowning. Our old self is made dead, so that our new self might be made alive, resurrected with Christ.

I'm writing this on a Sunday afternoon, having been to my local cathedral service this morning. The Old Testament reading for today sums up wonderfully God's promise of what happens to us when we are baptized and brought into new life:

I will sprinkle clean water on you, and you will be clean; I will cleanse you from all your impurities and from all your idols. I will give you a new heart and put a new spirit in you: I will remove from you your heart of stone and give you a heart of flesh. And I will put my Spirit in you and move you to follow my decrees and be careful to keep my laws. (Ezekiel 36.25–27)

It is through Jesus that the words of Ezekiel are brought to life in our lives as we submit to him and go under the waters of baptism. As Jesus tells the Samaritan woman he meets at the well – she who has had to collect her water in the heat of the day because she has been rejected by her village – he is the one who gives living water: 'whoever drinks the water I give them will never thirst. Indeed, the water I give them will become in them a spring of water welling up to eternal life' (John 4.14). The water that flows from Jesus continues into the vision that John has of the renewed heaven and earth: flowing from the throne of God and of the Lamb is 'the river of the water of life, as clear as crystal', and it pours down the great street of the holy city (Rev. 22.1–2).

Water is life and blessing, and the living water that Jesus offers brings blessing and refreshment right to the core of our being. Some of us reading this are in the privileged position of having rarely if ever

experienced what it is like to be truly thirsty. Psalm 63 gives us an insight through the psalmist's longing after God: 'You God are my God, earnestly I seek you; I thirst for you, my whole being longs for you, in a dry and parched land where there is no water' (v. 1). Can we imagine what it is like to thirst so desperately, and can we ask God to create in us that same longing for his living water?

Some years ago, the church I am part of experienced an amazing time of heightened experience of God's power, with lives touched deeply and miraculously healings occurring more frequently than normal. One afternoon some friends were at our house for coffee, and as we were chatting, it started to rain. I felt an urge to go and stand outside and, as it rained harder and harder, puddles developed along the path in my back garden. I felt another urge to lie down . . . so I did, feeling somewhat embarrassed ('excuse me, just ignore me, but I feel I need to lie in a puddle for a while') and I lay there getting absolutely saturated, asking God to soak me with his presence and drench me with his love. I was saying yes to his life!

In Isaiah, God calls out an invitation to all of us who are thirsty: 'come to the waters . . . and you will delight in the richest of fare' (55.1–2). I wonder how thirsty for God we are this Lent? Are we simply going through the motions of what we do at this time every year? Could we come with a new expectation that God would refresh us? The Jesus who turned water into wine is with us now and delights in pouring his living water into our ordinariness for his glory.

## And God said

In Chapter One we looked at the Babylonian creation story and became aware of the difference between the *Enuma Elish* warring gods and the supreme creator God of the Bible. Returning now to Genesis 1.6–8, we see the same here too. In some creation stories, it is a struggle for the gods to separate the waters into the upper and lower spaces, but not so for Yahweh: as with the creation of light, God speaks and it is so.<sup>6</sup> The repetition here and throughout this opening chapter of the Bible of the assertion, 'And God said, "Let there be . . ." reinforces the power of this statement.

In *Enuma Elish*, the heavens and the earth were created out of the vanquished goddess Tiamat almost out of necessity because Marduk needed to do something with her body. By contrast, the poetic assertion that God spoke the world into being makes a very different statement. For one, this world is not simply the after-thought of a capricious god. Most importantly though, it leaves no room for chance or for life being a random occurrence: this world and the whole universe with all its billions of galaxies is something that God has willed into being, directly and purposefully.

The Genesis texts give no reason why God created the world, but we can affirm that it did not come out of some necessity within him: God is complete in and of Godself, in the fullness of the Trinity. There is nothing in the Genesis texts to indicate that God had to bring the world into being; it is simply a fact that he does, and that he does so out of his own choice.

It is worth taking some time here to explore why, theologically, the universe exists, as that will help us appreciate the different aspects of the natural world that we are considering throughout *Saying Yes to Life* and therefore our motivation to look after them.

The Mennonite theologian, Thomas Finger, talks about the redemptive activity that lies within the Trinity. He calls this 'the divine agape love' and says it is an energy that is 'always going out of itself, giving itself for another': God is love, and love finds expression in creative generosity. From this perspective, Finger says 'it is appropriate to think of the cosmos originating from an overflow of this perichoretic *agape*. God desired that others should share in the adoration, cooperation, and joy occurring in God's own life' (we will explain what perichoretic means shortly).<sup>7</sup> The Franciscan writer Richard Rohr expresses the same thought when he says, 'Through the act of creation, God manifested the eternally outflowing Divine Presence into the physical and material world.'<sup>8</sup>

Thomas Finger goes on to connect God's overflowing, redemptive *agape* with another notion linked with redemption: that of *kenosis*. This is a Greek word that means 'emptying' or 'limiting' and is used by Paul in the beautiful hymn of Philippians 2 where he states that Jesus 'emptied himself' or 'made himself nothing' (v. 7). For Finger, drawing

on a long tradition of theological thought, God's act in creation of outpouring love must also have involved an act of self-limitation. Unless we view the cosmos as something that always existed alongside God, then before the act of creation, 'God was the only reality there was'. Creation could only happen, therefore, 'if God opened up a space within herself, as it were, where this could occur. But in so doing, God would limit, and humble, Godself, allowing creatures to exist in a free space within her'.<sup>9</sup>

This act of redemptive limitation, seen in the incarnation, is not therefore an uncharacteristic one-off act on the part of the Godhead, but an essential part of the character of God and another way by which creation and redemption are closely intertwined. Self-limiting is also, therefore, embedded in the heart of how we conduct our own relationships.

The concept of creation existing within a space that God has allowed to open up within Godself is profoundly moving, and blows away the idea we so easily hold in our minds that we are here and God is there, somewhere else, distant to us. This is not to suggest that creation and God are one-and-the-same, and our Genesis creation narratives allow no room for any form of pantheism (literally 'all-god') that says that all things are one with God/the divine. But it also speaks clearly of the closeness between creator and created, the latter coming from the very Word of God, being sustained and held by him, and enveloped by his ceaseless love. As Bénézet Bujo, theologian from the Democratic Republic of Congo, expresses it, 'God penetrates all his creatures with his presence'.<sup>10</sup> This closeness allows us to speak not of pantheism but of panentheism (literally 'all-in-God'). God is in all, suffusing his whole creation with his being, and all is in God. God is in everything but not everything is God. Thus the natural world is not divine, but it is sacred, 'dedicated to or associated with the divine'.<sup>11</sup>

One of the implications of this is that the created order is thus a reflection of who God is. The Patriarch of Romania, Patriarch Daniel, describes creation as God's fingerprints<sup>12</sup> and, because creation reflects God, Andrew Kyromo can look at the deforestation in his homeland of Tanzania and declare, 'by not protecting forests . . . we will be destroying the face of God whom we claim to love'.<sup>13</sup>

When we think of God, fundamental to Christian theology is the idea of one God in three persons, the Trinity: Father, Son and Holy Spirit. There is a word, mentioned earlier, that theologians have used since the seventh century to describe the relationship of the Godhead: *perichoresis*. This Greek term literally means 'interpenetration' and speaks of the continual movement of mutuality, reciprocity and communion that flows between Father, Son and Holy Spirit. The Celts captured this dynamism in their images of the Trinity as an interweaving triangle or circle, and the early Church Fathers imagined it as a round dance. Richard Rohr picks up on this in his language of the divine dance (and many of us will have sung Sydney Carter's 1967 song, 'Lord of the Dance'),<sup>14</sup>

Is it any surprise, therefore, that we find relationship embedded throughout the natural world? We call those relationships ecosystems, and we know that nothing in nature exists by-itself: everything exists in relationship to that which is around it and within the whole web of life. If one species is pulled out of the web, it will have knock-on consequences that can be far-reaching.

And so we affirm that the existence of this world and the universe which it inhabits has not come about by chance but through God who chose to create it out of the overflowing of the love between Father, Son and Holy Spirit. All creation therefore exists in him – lives and moves and has its being in him – in the space created within the Godhead to allow us to come to being.

Such a thing is stunningly beautiful to contemplate and can only lead to a sense of deep awe and wonder, perhaps best encapsulated in this paraphrase of Psalm 8:

O God, how full of wonder and splendor You are!  
I see the reflections of Your beauty  
and hear the sounds of Your majesty  
wherever I turn.  
Even the babbling of babes  
and the laughter of children  
spell out Your name in indefinable syllables.  
When I gaze into star-studded skies

and attempt to comprehend the vast distances,  
I contemplate in utter amazement  
my Creator's concern for me.  
I am dumbfounded that You  
should care personally about me.  
And yet You have made me in Your image.  
You have called me Your child  
and chosen me to be Your servant.  
You have assigned to me  
the fantastic responsibility of carrying on Your creative activity.  
O God, how full of wonder and splendor You are!<sup>15</sup>

## Naming the river

We have looked in this chapter at God's creation of the vault between the waters, separating the waters below the sky from the waters above. Let us now start to think about water today.

In his book, *Slowly Down the Ganges*, Eric Newby describes the 1,200 mile journey he made with his wife in 1963–4, from Haridwar to the Bay of Bengal, where the Ganges-Hooghly finally enters the sea. It is a wonderful (if inevitably now out-dated) description of their journey through India, telling of the adventures they had and the colourful characters they met. It is too an exploration of the political and social currents shaping the river and the land it flows through.<sup>16</sup> To Hindus, the Ganges is the most sacred and venerated river on the earth. It represents the goddess Ganga and was created by the god Shiva gently lowering Ganga onto the earth (to prevent her waters descending too quickly and flooding the land) in order for her to wash over the ashes of 60,000 ancestors of an ancient king called King Sagara. The people had all been burned to death by the terrible stare of the sage Kapila who they disturbed as he meditated. If Ganga washed over them they would go to heaven. The Ganges is thus seen as a crossing point between heaven and earth: a place where heaven's blessings can most readily reach earth, and prayers and offerings are most likely to reach the gods.<sup>17</sup>

Newby starts his book with the 108 names by which the river Ganges is known. Some of those relate clearly to the Hindu belief in the

divine origin of the Ganges, such as *Bhargya-murtha-kratalaya*, 'having Bhargas (Sivas) head as an abode', and *Sangataghauha-samani*, 'destroying the mass of sins of Sangata'. But others relate more to the physical properties of the river and the important role it plays in the lives of the people. There are names such as *Bindu-saras*, 'river made of water-drops'; *Hansa-svarupini*, 'embodied in the forms of swans'; *Ajmana-timna-bhamu*, 'a light amid the darkness of ignorance'; *Nata-bhiti-hrt*, 'carrying away fear'; *Samkha-dandubhi-misvana*, 'making a noise like a conch-shell and drum'; and *Lila-langhita-parvata*, 'leaping over the mountains in sport'.<sup>18</sup>

I find reading these and the many other names humbling and chastizing. It hardly need be said that I hold a very different understanding as to how the river Ganges came into existence, and yet I can see that giving it names has led to the river being noticed and acknowledged in a way that challenges me (though it has *not* led to the river being looked after and protected. The Ganges suffers from immense problems caused by pollution and the environmental impacts of the many hydroelectric dams that have been built.) The 108 names of the Ganges prompt me to think about the lakes and rivers in my neighbourhood and to ask myself how much I notice and pay attention to them. If I took the time to stop and reflect, what names would I give to the lake we play in so often? Or the local canal that I walk along regularly when I need a break from writing this book?

In the second creation account of Genesis 2, the human is tasked with naming the animals. We see a reflection of this in Maori culture where every aspect of the landscape inhabited is identified by name. According to Maori theologian Rob Cooper, this is not merely an act of power, it is 'the placing of such natural features within the hearts and lives of our very existence'.<sup>19</sup> Think about the water spaces in your area: what names might you give them and how might that help you notice and appreciate them more?

## Mai ni Mwoyo

Water is a truly amazing part of our world and of what enables life to exist. Although freshwater covers less than one per cent of the earth's surface, we are utterly dependent on it for our survival and it provides

the habitat for about ten per cent of the world's known species.<sup>20</sup> We are part of a huge hydrological cycle that uses the energy of the sun to create a constant exchange of water between the oceans, the land and the atmosphere, as water moves from the earth to the atmosphere and back to the ground and oceans, particularly through evaporation, transpiration, condensation, precipitation and runoff.<sup>21</sup> Water is extremely precious and the Kikuyu in Kenya say *Mai ni Mwoyo*, 'water is life', a phrase we would all do well to adopt. In traditional Kikuyu society, proverbs and taboos were developed in order to make sure people did not pollute water, and access routes and fords were always left open so no traveller could be deprived of water they needed.<sup>22</sup>

One striking example of the role of water in a particular ecosystem is given by German forester, Peter Wohlleben, in his fascinating book, *The Secret Network of Nature: The Delicate Balance of All Living Things*.<sup>23</sup> Peter talks about the rivers running inland from the northwest coast of North America. If there is one thing that these are known for, it is salmon. When they are born, far upriver, young salmon swim down into the ocean where they remain for up to four years, feeding and fattening up in preparation for their epic journey back up to the place they originated, which then becomes their spawning ground. As they swim upstream, battling the currents and the waterfalls, they have to avoid the bears that line the rivers, waiting for a good meal. For the bears it's feast-time and they gorge on the wonderful, nutrient-rich fish. As they begin to have their fill, the bears get more picky and eat less of the fish they catch, leaving the leftovers for other creatures. These are often less bold than bears and so carry the remains into the forest. The bones and head of the salmon often get left and they gradually break down and sink into the soil and fertilize it, along with the faeces from the animals enjoying their dinner.

All of this means that the forests along the river banks are extraordinarily high in nutrients, particularly nitrogen. In fact, it has been found that up to 70 per cent of the nitrogen in vegetation growing in these areas comes from the salmon – and in some trees the figure reaches 80 per cent. Insects living along the rivers can have up to 50 per cent of their nitrogen from the salmon and levels of overall biodiversity of insects, birds, plants and animals there is increased. The



relationship is so close that growth rings of trees can show scientists the salmon levels in any given year, due to the presence of a particular isotope, nitrogen-15, which is found in fish and therefore also shows up in the rings. The higher the amount of nitrogen-15, the higher the levels of fish there will have been that year. Without the river and the salmon it carries, the ecosystem would be significantly poorer. Water is fundamental to its flourishing.

## The hub of life

The Hungarian biochemist and Nobel Peace Prize winner, Albert Szent-Györgyi, famously described water as 'the Hub of Life. Water is its mater and matrix, mother and medium. Water is the most extraordinary substance! Practically all its properties are anomalous, which enabled life to use it as building material for its machinery. Life is water dancing to the tune of solids.'

But, today, water is both in trouble and is causing trouble. We have already mentioned the terrible degradation of the Ganges, which is the most populated river basin in the world and is suffering from industrial pollution, the impact of dams and too much water being taken out, predominantly for agriculture. This has serious consequences for the health of the 650 million people who dwell in its regions, and also for the wildlife living in and depending on it. More than 140 species of fish, otters, gharial crocodiles, turtles and many other wonderful creatures are being threatened by the degradation of the river. One of those creatures is the Ganges River dolphin which is seriously at risk: there used to be tens of thousands in the Ganges and now there are only about 15,000 left.<sup>24</sup>

The Ganges is not the only freshwater ecosystem in trouble. Around the world, our lakes, rivers and wetlands are among the most threatened habitats, and this has a serious impact on biodiversity. In Madagascar, 43 per cent of its freshwater species are threatened with extinction.<sup>25</sup> Even in the UK, over-extraction is leaving water levels too low to maintain wildlife populations. Figures for England from the Joint Nature Conservation Committee have shown that 68 per cent of rivers that are designated as Sites of Special Scientific Interest (SSIs)

are in a bad condition, leading to a dramatic decline in wildlife.<sup>26</sup> In the twentieth century, freshwater fish have had the highest extinction rate worldwide among vertebrates and, overall, freshwater species numbers have seen an 83 per cent decline since 1970.

An 83 per cent decline means that, in the last fifty years, eight out of every ten freshwater species has been wiped out! Could you stop for a moment to allow that figure to sink in and consider how this relates to our faith in a God who made this world to be teeming with life?

Alongside the impact on biodiversity, lack of access to clean water is one of the biggest issues facing the human population today. Managing without proper access to clean water is incredibly tough. Ungwa Sangani lives with her three children, aged 18, 14 and 10, in Lulindais, a village in South Kivu in the east of the Democratic Republic of Congo (DRC). In the past, the nearest water source was a river some distance away, to which the women of the village would make a two-hour round-trip first thing in the morning, and again in the afternoon. 'I would have to leave home at four or five in the morning to fetch water to drink,' says Ungwa. 'I left so early so that I didn't meet anyone else there. We thought that if there was no one there washing clothes, the water would be okay to drink, so that is why I went so early. But we had a serious problem with sicknesses like diarrhoea, typhoid, and fevers.' Ungwa is a single parent who earns money from the produce from her fields, but the water problems gave her little time for her business. 'I would have to stop work early and leave my field to go and collect water, because it would take two hours to go to the river, collect water and take it home.'

The contaminated water Ungwa collected had to meet all her family's needs: drinking, cooking, washing, scrubbing plates and any other cleaning Ungwa could manage. But it often wasn't enough. 'Washing clothes was a problem,' she says, and 'the children were often sick.' Defecation in Lulinda took place mostly in the bush surrounding the village; the few latrines were dirty and poorly maintained; rubbish was left to rot around the village; and hand-washing with soap or ash wasn't practised. Diarrhoea and other water-borne diseases were rife, with children suffering in particular.<sup>27</sup> Such illnesses exacerbate the problems poor communities are facing.

Sickness affects adults' ability to work, reducing household incomes, and means that children are sometimes too unwell to attend school. Moreover, buying medicines to treat these diseases is an additional cost, and while providing a short-term solution to health problems, fails to address the cause, so people will inevitably become sick again. These conditions perpetuate the poverty that communities like Ungwa's are living in.

It is the combination of poor quality water supplies and inadequate sanitation facilities that can wreak such havoc. This is why Tearfund takes a holistic approach to water programming, considering the other crucial linked issues of sanitation and hygiene, so as to ensure that supplying clean water is not tackled in isolation and undermined by other issues.

Currently 60 per cent of the world's population (4.5 billion people) live in areas of water stress,<sup>28</sup> where the amount of water available cannot meet the demand in a sustainable way, and this looks set to worsen as demand for water around the world is predicted to rise by up to 50 per cent by 2050. By then, it is thought that 6.3 billion people will live in water-stressed areas, and 80 per cent of them will be living in developing countries. The demand for water is increasing more quickly than the growth in population alone, due to rising consumption, urbanization and energy needs. By far the largest share of water usage (nearly 70 per cent) is taken up by agriculture.<sup>29</sup>

This matters because a lack of clean water and inadequate education around hygiene leads to a range of problems. Many tropical diseases and half of all malnutrition cases are linked to these, with children not developing properly both physically and mentally. On a social level, women and children are most impacted by not having clean water or a decent toilet. It is costly in terms of time, education and income-potential to have to walk so many miles to get water for everyday household needs. And then there is the issue of safety and the risk of being sexually harassed while walking. Sometimes women might be watched by men when they have to toilet in public and, if they have – uncomfortably – held their needs in all day, they risk being attacked at night. Not having what so many of us take for granted 'can result in lost potential and dignity, ill health and even death.'<sup>30</sup>

## Up to my knees in water

Shortages, however, are not the only water issues that poor communities around the world are facing. One of the most vivid memories relayed to me by my friend and colleague, Paul, is of a visit he made to a poor coastal community in Bangladesh. The people were living in basic shacks on a very narrow strip of land between the sea and commercial shrimping farms behind them. Their homes were largely constructed on mud and the community were continually building dykes to keep the sea at bay. Paul chatted to one woman who pointed far out and told him that was where her first home was, and that she had had six homes before the one they were now in, each moving back as the sea had risen and the coast crumbled. She was incredibly empowered and kept telling Paul, 'We don't need any help from outsiders, we can solve our own problems. The only thing we need is solid ground beneath our feet. Just give us that and we will do the rest'

While they spoke in her home, the water was already around their knees. The community had nowhere else to go because of the shrimp farms behind them. They had retreated as far as they could and once they lost that last strip of land, they would have no choice but to leave, probably moving to slums in the cities to look for work. This was almost ten years ago. Presumably, the land has now gone and the community has dispersed.

We cannot talk about water today without looking at the impact the current climate crisis is having, and will continue to have: 'Earth's changing climate will affect the world's water supply in many far-reaching ways. It will influence water temperatures, weather systems and the amount of water in streams, rivers and aquifers. Changes in the world's water – how much, where and when it is available – are a matter of universal concern.'<sup>31</sup> A 2016 World Bank report predicted that as well as exacerbating already perilous situations, such as in the Middle East and the Sahel, climate change could cause water crises where there are currently none (for example in Central Africa and East Asia), impacting economic growth and pushing people back into poverty.<sup>32</sup>

Flooding due to rising sea levels and extreme weather events such as increased rainfall, typhoons and cyclones is worsening and, overall,

floods have affected more people than any other type of disaster so far this century.<sup>33</sup> Floods cause many problems, not only the immediate issues of potential loss of life and the devastation of homes and businesses, but also longer-term plights, as crops and livestock are destroyed. Food becomes scarce and diseases start to spread; poor households exhaust their savings, becoming more vulnerable to the next disaster. Infrastructure such as roads, bridges, powerplants, schools and health centres are often badly damaged and livelihoods ruined, taking years to build up again. And the psychological impact of losing so much, including loved ones, and being so vulnerable can last a lifetime. In Australia, floods are the most expensive of all the natural disasters.<sup>34</sup>

In 2019, Cyclone Idai hit Mozambique. Graca Machel, the former first lady, declared its capital, Beira, the first city to be completely devastated by climate change. Increasingly warm air (which holds more water than cold meaning more rain falls in a shorter space of time); a drought which had left the land dry and so unable to absorb the rainfall (leading to increased run-off), and a rise in sea levels made the city extremely vulnerable. In addition, deforestation (an issue we will look at in our next chapter) meant that the floods rushed through the denuded soil and formed an inland sea.<sup>35</sup>

Alongside floods, drought is becoming an increasing reality for people the world over, from Australia to China to North America to Africa. At the beginning of 2018, officials announced that Cape Town, a city of four million people, would run out of water in three months. Suddenly the population had to reduce their water usage to fifty litres a day (the average person in the UK uses about three times that amount). A friend of mine, who lives in Cape Town, told me about the changes he and his family made: 'We stopped using tap water for watering the garden, no washing of cars, and having cold showers using the water that first comes out. Loads of us used large buckets to shower in and then used the collected water either to flush the loo or water the garden, and we had a grey water system installed using shower and bathroom sink water and washing machine water. "When it's yellow let it mellow, when it's brown flush it down" became Cape Town's mantra.'

How did the churches respond? The city met with church leaders and started to plan how they could help deliver water to the elderly and disabled who would not be able to walk to collection points or carry a 25 litre bucket. Church leaders also put together a peace plan to mitigate against large scale unrest at water distribution points. The Revd Rachel Mash, Canon for the Environment at the Anglican Church of Southern Africa, told me:

We realized there are 722 verses in the Bible that talk of water. We prepared Lenten materials about water and the young people wrote daily reflections on social media. We had to learn again that water is sacred. It may come from the municipality, but they merely clean it and deliver it. Water is a free gift from God.

In Cape Town, the situation spurred people into positive action and disaster was averted, though one year's bad rain could take them back to crisis again. And along with crisis comes the recognition that Cape Town is still a city of huge inequality and many Capetonians have always lived, and continue to live, at day zero every day. They are housed in shacks, collect water from a communal tap, and have to expose themselves to robbery, rape and/or murder when they use communal toilets at night in unsafe areas. As a Tearfund colleague who lives in Cape Town said to me,

The reality of inequality and poverty in Africa is that whilst many people are worried about losing precious environmental services, there are hundreds of millions of others who have still never experienced them. We need to worry about environmental crisis, but we also need to engage with the poverty and inequality that already denies water to many citizens, meaning they live in a permanent state of crisis.<sup>36</sup>

As I write this, India is in the grip of a terrible drought and globally, millions of people suffered drought in 2018: three million in Kenya; 2.2 million in Afghanistan; 2.5 million in Central America . . . the list goes on.<sup>37</sup> These are overwhelming numbers, but behind them are

individuals struggling to survive; struggling to grow their crops to feed their families and make a living; struggling to feed their animals; struggling to keep clean.

One such person is Jumana who lives in Chad. Chad has been suffering the impacts of a changing climate, which has meant that the rains have become unpredictable and there have been devastating food crises on and off for years. Jumana has five children and has already lost one child and her father to hunger. There have been times when Jumana has resorted to digging through ants' nests in 50 degrees of heat to collect seeds buried there, taking them home for her children to eat. Every mum in her village has done that at some point.<sup>38</sup>

## Saving water

It does not have to be this way, and we can make a difference through the actions we take in our lives and in our churches.

**First, we can pray.** Water is something we use often throughout the day. Why not say a prayer every time you use water in the coming week: when you turn on a tap, flush the toilet, have a shower, put on the washing machine or dishwasher? If you have easy-to-reach, clean water and don't bat an eyelid at putting it down the toilet, ask God to help you remember those who are in a different situation.

**Second, we can give.** On my bathroom wall, next to the loo, I have a picture of a toilet in Bihar, India. It's very basic, but it is clean and decent. I asked to have the bathroom toilet twinned for Christmas one year, and it is nice to know that the money spent on my Christmas present has gone to provide a community with a proper toilet, plus the hygiene education process that accompanies it.<sup>39</sup>

Many organizations are involved in helping provide proper access to water and sanitation facilities, and training around how to use them well. In development speak, that is called WASH – water, sanitation and hygiene – and is encapsulated in Sustainable Development Goal 6, 'To ensure availability and sustainable management of water and sanitation for all [by 2030]'.<sup>40</sup>

Let's return to Ungwa in the DRC. She is now in a very different situation because of work being done by the partnership (already

mentioned) between the ODI (Overseas Development Institute), Oxfam and Tearfund. The community now has access to clean, safe water in the heart of the village. Many families have constructed latrines with 'tippy-taps' where they can wash their hands, and pits where they can get rid of their rubbish. Hygiene has improved considerably and there is now a 'healthy village' committee with a water sub-committee. Ungwa has seen a significant improvement in the health of her children: 'I've noticed that my children are less sick and we don't have to go to the clinic like we did before,' she says, and the health benefits of the process have been felt across the whole community, saving people money and giving them more time for their families and livelihoods.<sup>40</sup>

**Third, we can take practical action.** Think about the water in your area. Maybe there are local initiatives you could get involved with that look after your rivers or canals. Could you or your church join in or initiate a clean-up? A Rocha UK was started because Dave and Ann Bookless saw a large area of abandoned open space near them known as 'the Minnet tip', which included a small river, clogged up with rubbish. Over five years, with the involvement of the community and local churches, they transformed it into the Minnet Country Park. One of the highlights has been the clearing of the river itself, which now attracts all sorts of wildlife including kingfishers, newts and dragonflies.<sup>41</sup>

The Church can also be present in standing up for the protection of waterways and the people and ecosystems that depend on them. US Episcopalian, Bishop Michael Curry, in his Letter for Creation to Justin Welby, talked of the role of the Church in the fight to stop the Dakota pipeline which would have split the Missouri river and thus put at risk that vital source of water for the Standing Rock Sioux's reservation:

I saw people of every nation, faith, age and race move to stand with the Standing Rock Sioux as they struggled to turn back a pipeline that threatened their sacred lands and their water supply. And I saw the Episcopal Church flag at the front of that procession. When crowds chanted 'Mini Wiconi' (water is life),

Episcopalians chanted with full voice because we have been given new life in Jesus Christ through the waters of baptism. Yes, water is life. Yes, we should honor it.<sup>42</sup>

In our own lives, there is practical action we can take to reduce our water usage, whether we live in places where doing so really matters, or whether we choose to participate as an act of solidarity. We can take short showers; turn off the tap when brushing our teeth; only run the dishwasher or washing machine when it is full; install water butts in the garden and use those for watering; and allow our car to get dirty! One thing to bear in mind is that our biggest water usage actually lies in the things we consume, our 'virtual water.' For example, a pair of cotton jeans uses 9,500 litres of water to produce, and a beef burger uses about 1,000 litres (in comparison to a soy burger which uses just 160 litres). So, the key way to use less water is to consume fewer things.<sup>43</sup>

We can help reduce water pollution by becoming more aware of what we are flushing down our toilets and sinks and changing that. There are vast amounts of chemicals in cleaning and personal care products, so take a look in your kitchen and bathroom cupboards: is there one product in each that you could switch for an environmentally-friendly version?<sup>44</sup> Also, intensive agriculture is responsible for a lot of the pollution in our waterways as the chemical inputs that are used then soak into the ground and run-off into rivers, etc. So, take steps to support farming practices that are reducing chemical usage or are fully organic. Buying from local farm schemes enables you to talk to the producers and find out more about their practices. You could always try growing your own fruit and veg, which can be a cheaper option.

We have seen that climate breakdown lies behind many of the problems that are facing water today, so let me reinforce the message of the previous chapter. If we do not act boldly towards getting our CO<sub>2</sub> emissions to net zero and keeping within 1.5° of warming, floods and droughts will get worse and suffering will increase. Have you taken any of the steps talked about at the end of Chapter One? How has it been? What else could you do?

## Unending life

The nineteenth-century hymn by George Cooper has us singing, 'The Spirit is a fountain clear, forever leaping to the sky; whose waters give unending life, whose timeless source is never dry.'

In this chapter we have looked at the theme of water in the Scriptures and then at water today, seeing both its beauty and its problems. I hope you have been inspired to marvel afresh at water, to notice where and how it features in our lives; to appreciate its wonder, and commit yourselves to taking care of this precious resource that is so vital if life on earth is to flourish.

May we commit ourselves again to Jesus, the Water of Life. May we ask him to fill us with the clear fountain of his Spirit, and as he gives us unending life, may we live and speak in ways that pass that life on to all that is around us.

## For discussion

- 1 Look back at the names given to the River Ganges. Think about a favourite stretch of water and consider what names might help you to acknowledge and pay attention to it.
- 2 In this chapter we have seen that, 'the existence of this world and the universe which it inhabits is not by chance, but comes from God who chose to create it out of the overflowing of the love between Father, Son and Holy Spirit. All creation therefore exists in him – lives and moves and has its being in him – in the space created within the Godhead to allow us to come to being.' How does this expand your understanding of this world and its relationship to God?
- 3 We know that Jesus was baptized in the River Jordan, but do you know where the water that is used for baptism in your own home church comes from, or what processes it has gone through to get there? How might you protect your own River Jordan?
- 4 What personal action will you take to look after the world's precious resource of water and those that depend on it?
- 5 In this chapter's interview, the Archbishop of Cape Town, Thabo Makgoba, reflects spiritually and practically on water. Watch at

<[www.spckpublishing.co.uk/saying-yes-resources](http://www.spckpublishing.co.uk/saying-yes-resources)> and use the interview in your thoughts and discussions.

## **A prayer on water from Nigeria**

Dear Lord, it is exciting to know that you are the very source of life including water. We praise and adore you for the gift of water that sustains all life and constantly reminds us that You are the fountain of living water.

Teach us to use it thankfully, to consume it consciously, and to protect its purity.

Father, forgive us for the times we took it for granted. We confess our attitudes of greed, dominance, and insensitivity towards your beautiful creation, and particularly towards water. Lord, forgive us for the times we have used water selfishly, unwisely, and without regard for how it affects others. Forgive us for the actions we have taken to harm the different sources of water around us.

Help us to see the effects of our actions not only on our immediate surroundings but also on people living in places plagued by drought. Help us to be conscious of our daily use of water; help us to be more willing to reflect on its symbolic nature and the lessons it teaches about you and your sustaining power.

Please guide us on how to protect the water bodies you made for your glory. Amen.

*Prayer by Fwangman Oscar Danladi. Oscar is a youth pastor at the ECWA Good News Church, Jos, and social activist at the Jos Green Centre, a centre for eco-entrepreneurship for young people.*