



## **1. WELCOME AND INTRODUCTIONS.**

## **2. LITURGY, Psalm 104: God the Creator and Provider**

Bless the Lord, O my soul. O Lord my God, you are very great. You are clothed with honour and majesty,

Wrapped in light as with a garment. You stretch out the heavens like a tent,

You set the beams of your chambers on the waters, you make the clouds your chariot, you ride on the wings of the wind,

You make the winds your messengers, fire and flame your ministers.

You set the earth on its foundations, so that it shall never be shaken.

You cover it with the deep as with a garment; the waters stood above the mountains.

At your rebuke they flee; at the sound of your thunder they take to flight.

They rose up to the mountains, ran down to the valleys to the place that you appointed for them.

You set a boundary that they may not pass, so that they might not again cover the earth.

You make springs gush forth in the valleys; they flow between the hills,

Giving drink to every wild animal; the wild asses quench their thirst.

By the streams the birds of the air have their habitation; they sing among the branches.

From your lofty abode you water the mountains; the earth is satisfied with the fruit of your work.

You cause the grass to grow for the cattle, and plants for people to use, to bring forth food from the earth,

and wine to gladden the human heart, oil to make the face shine, and bread to strengthen the human heart.

The trees of the Lord are watered abundantly, the cedars of Lebanon that he planted.

In them the birds build their nests; the stork has its home in the fir trees.

The high mountains are for the wild goats; the rocks are a refuge for the conies.

You have made the moon to mark the seasons; the sun knows its time for setting.

You make darkness, and it is night, when all the animals of the forest come creeping out.

The young lions roar for their prey, seeking their food from God.

When the sun rises, they withdraw and lie down in their dens.

People go out to their work and to their labor until the evening.

O Lord, how manifold are your works! In wisdom you have made them all; the earth is full of your creatures.

Yonder is the sea, great and wide, creeping things innumerable are there, living things both small and great.

There go the ships, and Leviathan that you formed to sport in it.

These all look to you to give them their food in due season;

when you give to them, they gather it up; when you open your hand, they are filled with good things.

When you hide your face, they are dismayed; when you take away their breath, they die and return to their dust.

When you send forth your spirit, they are created; and you renew the face of the ground.

May the glory of the Lord endure forever; may the Lord rejoice in his works—who looks on the earth and it trembles, who touches the mountains and they smoke.

I will sing to the Lord as long as I live; I will sing praise to my God while I have being.

May my meditation be pleasing to him, for I rejoice in the Lord.

Let sinners be consumed from the earth, and let the wicked be no more.

Bless the Lord, O my soul. Praise the Lord!

**3. BIBLE STUDY: Hope in God:** Psalm 104, see Liturgy, page 2

**4. STUDYING Climate Justice: UN sustainable development goals 6 (water) and 7 (energy).**

'The impacts from climate change operate in large measure through water, or its absence, in some shape or form: storms, floods, inundations, droughts, desertification, ocean acidification, and/or sea level rise. *Stern (2016) Why are we waiting: the logic, urgency and promise of tackling climate change, p7.* "Water is the primary medium through which we will feel the effects of climate change. Water availability is becoming less predictable in many places, and increased incidences of flooding threaten to destroy water points and sanitation facilities and contaminate water sources. In some regions, droughts are exacerbating water scarcity and thereby negatively impacting people's health and productivity. Ensuring that everyone has access to

sustainable water and sanitation services is a critical climate change mitigation strategy for the years ahead. (*UN water*)

### **UN sustainable development goal 6: clean water and sanitation: facts and figures**

1. 2.6 billion people have gained access to improved drinking water sources since 1990, but 663 million people are still without.
2. At least 1.8 billion people globally use a source of drinking water that is faecally contaminated.
3. Between 1990 and 2015, the proportion of the global population using an improved drinking water source has increased from 76 per cent to 91 per cent.
4. But water scarcity affects more than 40 per cent of the global population and is projected to rise. Over 1.7 billion people are currently living in river basins where water use exceeds recharge.
5. 2.4 billion people lack access to basic sanitation services, such as toilets or latrines.
6. More than 80 per cent of wastewater resulting from human activities is discharged into rivers or sea without any pollution removal.
7. Each day, nearly 1,000 children die due to preventable water and sanitation-related diarrhoeal diseases.
8. Hydropower is the most important and widely-used renewable source of energy and as of 2011, represented 16 per cent of total electricity production worldwide.
9. Approximately 70 per cent of all water abstracted from rivers, lakes and aquifers is used for irrigation.
10. Floods and other water-related disasters account for 70 per cent of all deaths related to natural disasters.

### **Four climate related changes affecting water in our world**

**1. Arctic sea ice:** Since satellite observations began in the late 1970s, Arctic sea ice has declined precipitously. About 1 million square miles of ice have disappeared. Melting ice plays an important feedback role with global warming. As rising temperatures reduce the area of sea ice, more solar energy is absorbed and temperatures rise even further. (wxshift)

#### **2. Ocean acidification**

The current rate in acidity change is about 50 times faster than any known historical change, making adaptation difficult for marine life, plankton, which form the base of the oceanic food web and for corals to maintain their reefs. In a cascading effect, this will alter ecosystems in a way that could threaten seafood staples around the world. More than 1 billion people rely on oceans for food, as well as their livelihood. (wxshift)

**3. Sea level rise:** Rising temperatures are causing global sea levels to rise through two primary mechanisms. Water expands as it warms and this thermal expansion causes water levels to rise. Hotter temperatures are also

melting land ice, like glaciers and polar ice caps, which adds more water to the ocean. Low-lying land is vulnerable to consequences of varying severity, from permanent inundation to saltwater intrusion into freshwater sources. (wxshift)

**4. Land Ice:** Land ice in the form of glaciers and ice sheets contains the majority of the world's fresh water and covers about 10 percent of the world's land area ... According to NASA satellite images, both Antarctica and Greenland are losing ice ... The melting of land ice contributes to sea level rise by adding water to the oceans. Additionally, nearly one-sixth of the world's population – including in South America and Central Asia – rely on glacial runoff for fresh water, and a loss of glaciers leads to a decrease in runoff. Greenland and Antarctica alone contain 75 percent of the world's fresh water, and if they melted entirely, sea levels would rise by 75 meters. Like sea ice, land ice is also highly reflective, so that its melting increases absorption of solar energy and thus enhances global warming in a feedback loop. (wxshift)

**Sources:**

<http://www.unwater.org/water-facts/climate-change/>

<http://www.un.org/sustainabledevelopment/water-and-sanitation/>

<http://wxshift.com/>

**ii. Energy**

Energy is central to nearly every major challenge and opportunity the world faces today. Be it for jobs, security, climate change, food production or increasing incomes, access to energy for all is essential. Sustainable energy is opportunity – it transforms lives, economies and the planet. (*UN sustainable development goals*)

Access to affordable, reliable, sustainable and modern energy (SDG7) is essential to end poverty, reach other UN Sustainable Development Goals and critical for many countries to meet their climate change mitigation targets.

<http://www.worldbank.org/en/topic/energy/overview>

**Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all**

1. One in five people still lacks access to modern electricity.
2. 3 billion people rely on wood, coal, charcoal or animal waste for cooking and heating.
3. Energy is the dominant contributor to climate change, accounting for around 60 per cent of total global greenhouse gas emissions.
4. Reducing the carbon intensity of energy is a key objective in long-term climate goals.

**TABLE** on types of energy used by country, related to wealth.

Definitions:

Fossil fuels comprise any combustible organic material, as oil, coal, or natural gas, derived from the remains of former life.

Combustible renewables and waste comprise solid biomass (wood, crops, manure, garbage), liquid biomass, biogas, industrial waste, and municipal waste.

## 5. SILENT PRAYER AND REFLECTION

### Prayers

Be praised my Lord, for Sister Water, So useful, humble, precious and pure.

*St Francis, Canticle*

Creator God, breathing your own life into being, you gave us the gift of life: you placed us on this earth with its minerals and waters, flowers and fruits, living creatures of grace and beauty. You gave us the care of the earth.

Teach us, Creator God of Love, that the earth and all its fullness is yours, the world and all who dwell in it. Call us yet again to safeguard the gift of life.

*Christian Conference of Asia*

God of all energy and life, give us such a love for all your Creation that we may delight in it with our eyes, nurture it with our hands and enrich it with our love. For our world is not our world, but yours. God of the seas, the land and skies, forgive our selfishness and greed, where we see this world as a commodity to use. Renew our love for the earth, deepen our respect for the soil, and help us to change our ways in order to save this planet. *USPG*

### Reflections

The role of religion... is to hold up a vision of human life lived constructively, peacefully, joyfully, in optimal relation with creation and creator, so as to point up the tragedy of the shrunken and harried humanity we have shaped for ourselves by our obsession with growth and consumption. *Rowan Williams 2012 Faith in the public Square p 204*

Polluting earth, sky and seas, depleting habitats, over-farming land and ocean, eradicating species – such practices tell the rest of creation it's disposable, tell the rest of humanity that its survival is secondary to our comfort, and tell God that we're bent on obscuring eternal grace with temporal consumption. This is sin, in its simplest definition: being so short sighted that we wilfully shut ourselves out of God's abundance and imprison ourselves in our own scarcity. And we're all a part of it .... (*Sam Wells (2016) How then shall we live? P.35*)

So, for example, while poorer parts of the world are flooded through the changing climate, we here in London are kept safe by Thames Barrier. Significantly it was raised four times in the 1980s, 35 times in the 1990s and

since the year 2000 has been raised 139 times. I cannot help thinking that if the City of London and the Palace of Westminster had been flooded as many times as the Barrier has been raised there might have been more action on climate change ... 70% of the world's surface is covered by water but only 1% of it is drinkable. And there is no fair or even access to that 1%. In some parts of the earth women and children must travel miles to find it and will risk their lives to drink it for fear of the toxins that have poisoned it ... Our desire for God must be bound up with a longing to see a renewed world become like a watered garden where all the children of the earth play and delight justly in the fruits of his Creation. Such a vision should make us live differently, as we pray and work together for the earthing of heaven. *Bishop James Jones, Sermon on Water at St Paul's Cathedral, 2016.*

The choice is between moral indifference and recognising that love is alive and well, doing a lot to change conditions so that it can have more room and calling for a bit of help. *N Ward, The following plough. P.93.*

## **6. DISCUSSION ON ACTION**

1. Carbon Fast
2. Eco Church
3. Junior Church link

## **7. TALKS IN KEW– dates for your diary**

**Tuesday 6 March**, 7.45pm – 9.15pm. The Barn Church, Atwood Avenue. TW9 4HF **Bishop David Atkinson and Father Nicholas King SJ.**

“Climate and Gospel” – the science of climate change and Pope Francis’ encyclical, *Laudato Si: on care for our common home* – collection in aid of *Operation Noah* – please see handout

**Saturday 10 March**, 10.30-11.30. In the Hall. **Libby Insall**, volunteer at Kew Gardens, will talk about the Kew reports on State of the World's Plants.

**Saturday 12 May**, 10:30 for 11.00am. St Anne's Church. *The Importance of the Kew Collections – Kill or Cure.* Professor Monique Simmonds, Deputy Director of Science at the Royal Botanic Gardens, Kew. (Postponed from December).

**Tuesday 15 May**, 7.45pm. The Barn Church, Atwood Avenue. **Ian Christie**, University of Surrey and **David Nussbaum**, CEO of The Elders Foundation. “Climate change and human development – sustainable life-styles and global action.”

**7. CLOSING PRAYER:** the Lord's Prayer together (slowly!).

## **8. OTHER DATES**

**22 MARCH, UN World Water Day.** This year's focus is Nature for Water,

exploring nature-based solutions to the water challenges we face in the 21<sup>st</sup> century. In 2020, the focus will be on Water and Climate Change.

**22 April, Earth Day** – Climate Change is threatening our planet

**13-19 May.** Christian Aid Week.

## **WEB SITES**

ANGLICAN CHURCH: <http://www.churchcare.co.uk/shrinking-the-footprint>

ANGLICAN MISSION ABROAD: <http://www.uspg.org.uk/>

EARTH DAY: <https://www.earthday.org>

MARY ROBINSON FOUNDATION FOR CLIMATE JUSTICE:

<https://www.mrfcj.org>

SUSTAINABLE DEVELOPMENT GOALS:

<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

WATER AID: <https://www.wateraid.org/uk/>