

SUSTAINABLE
SEPTEMBER



BIBLE STUDIES
2012

Introduction

Bishop Tom Wilmot (Chair, Anglican EcoCare Commission)

My personal thanks to those who provided these thoughtful Bible Studies for our use.

The “four elements” remind us we live in a sacramental universe. This means, “God is either everywhere or nowhere at all” as Archbishop William Temple once said. The life, death and resurrection of Jesus is about calling the entire created order into the redeeming love of God who made it all.

Ever since we saw NASA’s pictures of Earth from space we entered a new era in cultural history. We now share a vision of Earth as one interconnected planetary community. This “God’s eye view” of the Earth as an organic unity comprising earth, sea, air and everything that lives tells us in the words of Denis Edwards: [Creation is an absolutely free gift. In the life of the trinity there is an endless generativity of the WORD and a breathing forth of the Spirit in an eternal dynamic communion of love that involves radical equality and total mutuality.

Creation occurs because God freely chooses to give God’s self to a community of creatures. Creation springs forth from within the divine life ... the universe and all its creatures exist out of nothing, as God holds all things in being through the Word and in the Spirit enabling them to exist, interact and evolve into what is new. Every creature is a (logos) word that reflects the eternal word (LOGOS) and Wisdom of God (incarnate in

Christ). Each has its own integrity before God. It is in this Triune God that we, and all other creatures with us “live and move and have our being” (Acts 17:28).]¹

A Theology for a Planet in Peril

The theologian Sallie McFague makes a strong argument for the development of an ecological anthropology as a correction for the narrowing focus of theology on the individual in the enlightenment. In particular she laments Protestantism’s concern with individuals only, which has meshed unhelpfully with the way we do economics and government. These pillars of society: Protestant Christianity, economics and government spread a sacred canopy over “individualism” and I would add the ascendancy of the individual over the well being of the community not just of persons but the global community of all living creatures.

It is my prayer that these fine studies based on the four elements will remind us of God’s deep concern for the world revealed in Christ.

It is my prayer these studies will inspire the church to create a theology for a Planet in Peril together with a prophetic voice to speak boldly on behalf of this little blue planet; the home we share with all God’s beloved creatures.

¹ An Essay: “*Planetary Spirituality: Exploring a Christian Ecological Approach*”, Denis Edwards page 7, 22.3.2011

WIND

Wind power

Wind power involves converting wind energy into electricity by using wind turbines. Wind comes from atmospheric changes; changes in temperature and pressure makes the air move around the surface of the earth. A wind turbine captures the wind to produce energy.

Wind power is a clean energy source that can be relied on for the long-term future. A wind turbine creates reliable, cost-effective, pollution free energy. It is affordable, clean and sustainable. One wind turbine can be sufficient to generate enough electrical energy for a household.

Because it is a renewable resource which is non-polluting and renewable, wind turbines create power without using fossil fuels, without producing greenhouse gases or radioactive or toxic waste. Wind power is one of the best ways to combat global warming.

Wind Bible Study

The Reverend Tony Trethowan

Wind {Wind Power} {'the Breath of God'}

OT Hebrew: *ruach* רוּחַ, literally "breath" or "wind" - *ruach hakodesh* = Holy Spirit.

NT Greek: *pneuma* πνεύμα "air in motion, breath, wind," or in a religious context "spirit".

Science: *wind* is the flow of gases on a large scale. On Earth, wind consists of the bulk movement of air. Wind can be a gentle breeze or a destructive cyclone it depends on the difference in pressure between two systems of air and the energy level involved.

Both Ruach in the OT and Pneuma in the NT talk about living beings as well as states of nature. It is both breath and spirit that are the cornerstones of life. No breath no life, no life no spirit, true or not true?

They raise the question of a universe in a living relationship with God, or a universe that is totally self contained and materialistic. This is very much a question for our time. What do you think?

Reflection: *Take time and space in silence to reflect on the following images*

Genesis 1:1-2 NRSV In the beginning when God created the heavens and the earth, the earth was a formless void and darkness covered the face of the deep, while a wind from God swept over the face of the waters.

Psalms 104:29-30 NRSV When you hide your face, they {all living creatures} 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.

John 3:5-8 NRSV Jesus answered, "Very truly, I tell you, no one can enter the kingdom of God without being born of water and Spirit. What is born of the flesh is flesh, and what is born of the Spirit is spirit. Do not be astonished that I said to you, 'You must be born from above.' The wind blows where it chooses, and you hear the sound of it, but you do not know where it comes from or where it goes. So it is with everyone who is born of the Spirit." {Pneuma is the word for both wind & spirit}

Romans 8:26-27 NRSV Likewise the Spirit helps us in our weakness; for we do not know how to pray as we ought, but that very Spirit intercedes with sighs too deep for words. And God, who searches the heart, knows what is the mind of the Spirit, because the Spirit intercedes for the saints according to the will of God.

The wind is the energy of moving air. The Spirit is the energy of God flowing into us and our environment. Wind power is about harnessing the energy of moving air. Harnessing the power of the Spirit is about seeking the will of God in our lives and allowing his presence to flow through us and guide our lives.

Questions:

- How closely do you identify wind, breath, and spirit?
Can you remember feeling the wind on your cheek? Can you remember feeling the touch of the Spirit in your life? When did this happen, how did you feel, and what was the result?
- How creative can we be in using the power of the wind? What ways have people used wind energy in the past?
- What do you think might be the relationship between the energy of the Spirit of God, and the energy of prayer, and the nature of our own spirit?

Prayer: Lord, guide and strengthen us by your Spirit that we may help you renew the face of the earth.

WATER

Tidal Power

Tidal power is extracted from the Earth's oceanic tides; tidal forces are periodic variations in gravitational attraction exerted by celestial bodies. These forces create corresponding motions or currents in the world's oceans. Due to the strong attraction to the oceans, a bulge in the water level is created, causing a temporary increase in sea level. When the sea level is raised, water from the middle of the ocean is forced to move toward the shorelines, creating a tide. This occurrence takes place in an unending manner, due to the consistent pattern of the moon's orbit around the earth.

A tidal generator converts the energy of tidal flows into electricity. Greater tidal variation and higher tidal current velocities can dramatically increase the potential of a site for tidal electricity generation.

Because the Earth's tides are ultimately due to gravitational interaction with the Moon and Sun and the Earth's rotation, tidal power is practically inexhaustible and classified as a renewable energy resource.

Water Bible Study

Lesley Wilson and Helen Manley

God's Creation

Earth is commonly called the "Blue Planet" for good reason since 66% of the surface is covered by water. We are also people of the water since our bodies are made up of 66% water. Without this precious liquid we simply would not survive. There is a diminishing amount of drinking water on the planet due to climate change caused by mankind's ignorance, greed and bad management. Millions of people around the world have to resort to drinking dirty water that brings disease and death. The pollution of rivers ,waterways and oceans caused by man's excesses and short-sightedness means that we have failed to fulfil the original commission given to us by God. (Genesis 1: 28 and 2:15)

In this study we aim to show how God through his Word entreats us to engage with bringing the Kingdom to earth for the large percentage of people who have no clean water. We will also demonstrate the significance of Jesus as the living water or the water of life. (John 7: 37-38 and Isaiah 55:1-2)

Background

Read the following Old Testament scriptures and discuss how they relate to Jesus.

- Genesis 1:1-10 and 20-23

The four elements: air, water, earth and fire (light) are God's building blocks in his creation. Discuss with reference to "...the spirit of God was hovering over the waters."

- Exodus 15: 22-27

What relationship can be seen between this event and Christ's work on the cross to take away our sins? What is the symbolism represented by the piece of wood thrown into the water?

- Jeremiah 2:13

How do mankind's sins of turning away from Christ and ignoring our stewardship relate to this passage? Why have we come to this situation where we haven't taken care of God's creation?

- Genesis 6: 9- 13 and 17- 18

In the story of Noah, God uses water to cleanse the world of corruption. How does this relate to the symbolism of baptism where we follow Jesus through the waters to rise with him in the spirit?

Consider the following statements:

- Baptism is an outward sign of an inner grace.
- Baptism of the Holy Spirit is where rivers of living waters are released within us.

Jesus, The Living Water

Jesus demonstrates his ultimate power as the son of God by the many miracles he performs. Several of these involve water e.g. the Water into Wine at the Wedding, Calming the Waves and the Storm and Walking on the Water. Being God incarnate, Jesus demonstrates his control of the four elements. Not only that, Christ also is master of the spirit world. He can command demons and resurrect the dead. He also told the woman at the well that he was the living water and whoever drinks from him will never go thirsty (John 4: 9 – 14). What does this mean to us as Christians today?

When we look at the last book of the bible we also find many references to the water of life. How do these final passages shed light on your understanding of Christ being the "living water"? (Revelation 22:1- 2 and 16-17).

So we can see that the bible begins talking about water and concludes with the promise of living water. Each time we pray The Lord's Prayer we say, "Your Kingdom come, Your will be done on earth as it is in heaven." To bring his Kingdom to earth we need to engage in actions that will mean equality for all people. We have all we need to do this but we fail in simple things like supplying clean drinking water to millions around the world.

What Can We Do?

- Support groups that are building wells or dams in third world countries e.g. Open Doors "Walk to Water" on September 15th to build wells for Christian villages in northern Nigeria where the Muslim authorities refuse to help.
- Put in a rain water tank or grey water treatment system.
- Reduce water consumption on a personal level by having shorter showers and installing water saving shower heads.
- Plant a native or cactus garden that requires little water.
- Install trickle systems where possible and stick to garden watering restrictions.
- Research information on Tidal and Wave Power in W.A.
- For further information see "Sustainability Guidelines for the Diocese of Perth" Appendix C: Water - pages 15 to 17
- Watch the DVD "Bag It" that deals with the impact of plastics in our lives and in our oceans. (Available from Earth Carers - Cottesloe)
- Tell someone about Jesus, The Living Water.

EARTH

Geothermal Energy

Geothermal energy is the heat from the Earth. It's clean and sustainable. Resources of geothermal energy range from the shallow ground to hot water and hot rock found a few miles beneath the Earth's surface, and down even deeper to the extremely high temperatures of molten rock called magma.

Almost everywhere, the shallow ground or upper 10 feet of the Earth's surface maintains a nearly constant temperature between 10° and 16°C. Geothermal heat pumps can tap into this resource to heat and cool buildings. A geothermal heat pump system consists of a heat pump, an air delivery system (ductwork), and a heat exchanger—a system of pipes buried in the shallow ground near the building. In the winter, the heat pump removes heat from the heat exchanger and pumps it into the indoor air delivery system. In the summer, the process is reversed, and the heat pump moves heat from the indoor air into the heat exchanger. The heat removed from the indoor air during the summer can also be used to provide a free source of hot water.

Earth Bible Study

Dr Sue Taylor

- In what ways can you think of the Earth as a source of energy?
- What propelled you to work or study today?
- Did you drive a car? Take a bus? Ride a bicycle? Walk? Where did the energy come from?

Isaiah 61

⁸ “For I, the Lord, love justice;

I hate robbery and wrongdoing.

In my faithfulness I will reward my people

and make an everlasting covenant with them.

⁹ Their descendants will be known among the nations

and their offspring among the peoples.

All who see them will acknowledge

that they are a people the Lord has blessed.”

¹⁰ I delight greatly in the Lord;

my soul rejoices in my God.

For he has clothed me with garments of salvation

and arrayed me in a robe of his righteousness,

as a bridegroom adorns his head like a priest,

and as a bride adorns herself with her jewels.

*¹¹ For as the soil makes the sprout come up
and a garden causes seeds to grow,
so the Sovereign Lord will make righteousness
and praise spring up before all nations.*

If your vehicle was powered by petrol, how did it get to you?

Who created it, extracted it, refined it, transported it, stored it, served it?
How can we know that all the people involved in these processes were
employed fairly, and paid properly for their goods and services? Or is
there a chance that our purchase of this product involves some element of
enslavement?

Are there other concerns about the way we “harvest” and use fossil fuels?
What do we do with the by-products? Can we be confident that the supply
of fossil fuels is inexhaustible and reliable? How would it change our lives
if fossil fuels became more scarce/expensive than we could afford?

If your vehicle was powered by human power, where did your energy
come from? Directly from fruits and vegetables? Or indirectly, via meat or
perhaps processed food-products?

Who created it, nourished it, harvested it, processed it, transported it,
stored it, served it? How can we know that all the people involved in these
processes were employed fairly, and paid properly for their goods and
services? Or is there a chance that our purchase of this product involves
some element of enslavement?

Do you have any concerns about the journey your nourishment has taken? Can you think of alternative sources? Can we be confident that the supply of our food is inexhaustible and reliable? How would it change our lives if supermarket food became suddenly unavailable?

- Why would God care about where we get our energy?
- How might idolatry be an issue? Pride?
- How can we demonstrate good management of the Earth's resources?
- What changes is God challenging you to make to the way you live and work?

Solar Power

Solar power is clean green electricity that is created from sunlight, or heat from the sun. Having solar power in a home, generally means setting up a solar photovoltaic or a solar thermal system on the roof.

Definition of photovoltaic: *Photo* = “light” and *photons* = energy particles coming from sunlight; *voltaic* = producing a voltage or volts. Abbreviation = PV

Solar energy is a renewable free source of energy that is sustainable and totally inexhaustible, unlike fossil fuels which are finite. It is also a non-polluting source of energy and it does not emit any greenhouse gases when producing electricity.

Solar electricity can supplement your entire or partial energy consumption. Using solar power means reducing your energy bills and saving money. Low maintenance and unobtrusive, installing solar panels adds value to your home.

Fire Bible Study

Gerard Siero

Metaphors

- God is light because light has the extremely delicate, subtle, pure, brilliant quality
- Of truth and its knowledge, together with the spiritual purity associated with it
- That which is exposed to the view of all, openly, publicly
- Reason, mind - the power of understanding esp. moral and spiritual truth

Scientific Definitions

Light is the part of the electromagnetic radiation spectrum that is visible to the eye. It consists of photons, which display characteristics of particles or waves (of light). Light is what living things perceive through the sense of sight.

Sun or *Sol* is the star at the centre of our solar system. It is the primary source of the energy on the surface earth.

Fire is the rapid oxidation of a material in the exothermic chemical process of combustion, releasing heat, light, and various reaction products. The flame is the visible portion of the fire.

Read

- God led the Hebrews out of Egypt by a pillar of fire by night: Ex 14:19. God's word is a light or lamp. Ps 119:105
- The light of the sun warms the earth and us and enables us see physically. A daily gift of fire is the sun. Gen 1: 14-18
- It also symbolises lights of wisdom and truth that can fill our hearts: 2 Cor 4:6
- The good news of which Jesus spoke was burned into the hearts of his disciples at Pentecost with the symbol of tongues of fire, which lit up their spirits with joy.
- A city can be lit by the glory of God, Rev 21:23, much as we light our cities using electricity that we harvest from daily or ancient sunlight or from the heat in the inner earth.
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Reflect: *Energy, Light, Sun/Son, Fire ... Spirit:*

The Holy Spirit is the animating aspect of God. The animation of the created universe is expressed through energy. *Let there be light!* Energy condensed becomes matter. Clouds, fluid, condensing to stars, exploding, creating elements, reforming. Galaxies by the billions.

Energy, (which could be seen as the divine spark), animates everything from subatomic particles to stars, from which, in the form of our sun, life on earth draws its sustenance. We are made of stardust and animated and fed by starlight. All the energy in our foods comes from the sun. Life passes this life-giving energy around within the ecosystems of our biosphere.

The Holy Spirit is the source not only of our life and spirit, but can be seen as the origin of all power and energy in the universe. Through life, entropy – the inevitable movement of energy to lower states of order, as in corrosion - is harnessed and, in part, reversed. Life weaves a syntropic order out of the chaos of entropic decay as the earth fulfils the command to bring forth life. Life creates the conditions for life. Life nurtures life and the earth brings forth a myriad of creatures that all reflect the divine spark and contribute to the biosphere in their own unique way. And it is very good.

Humans are free to choose to disengage from the universal power of God in Creation, to choose to act on our own power. We mostly do so. Richard Rohr describes this as our necessary leaving the 'garden' of our youth – our own genesis experience – after all being able to discern between good and evil is useful and necessary. Yet even when we do separate ourselves, all we do is still within the biosphere of Earth that God created to be our home, and within the created order of the material universe. We do not recognise this order. And our quest for individuality can go too far ... we go too far. In our thirst for power, we seize the energy of coal, oil and gas. We burn them to create steam to spin turbines to create electrical power, releasing long trapped carbon and other pollutants that are changing the

composition of earth's atmosphere. We process radioactive materials to do much the same thing, creating toxic wastes that have to be securely stored for tens of thousands of years ... longer than our species has walked the earth. Not really clever.

We make structures to shelter us from weather. With fire we warm them when the weather is cold, we cook our foods and make our artefacts. We learnt to tame crops and animals, to extract minerals from the earth and refine them with fire. We gathered into cities where, sheltering in our buildings, we have become so separate that we have lost contact with and sight of the natural order of things. We have placed our trust in powers we control through technology. Yet, even in our greatest cities, our primitive buildings can only function when machines provide light and comfort. We power them with ancient sunlight stored in fuels secreted in rare pockets in the earth. The same minerals provide plastics, fertilisers, chemicals... Once burnt, they are gone forever. Not so clever.

We would like to be in charge, indeed, we think we are, but we cannot control the Spirit, and nature's laws stand. Storms rage and earth quakes without our agreement. Nature's fires burn and the winds blow where they will. Creation remains the domain of the Spirit.

In God's realm there is abundance. Scarcity is a human fiction born of desire for power to control others, our environs. As a tool, scarcity has become destructive and dangerous. One hour of sunlight falling on Australia has more energy than all the energy all humans can extract and use in a year.

We are beginning to learn from nature. Biomimicry is an approach to technological invention that observes, imitates and adapts natural solutions to human problems. Plants can harvest light directly, and pass the energy on to all in the web of life. So can photovoltaics that produce electricity directly from abundant light. Turbines can harvest energy direct from abundant wind and wave. Likewise, we are beginning to design climate responsive buildings that are naturally warmed and cooled, with solar design harvesting the sun's warmth to heat houses, workplaces and community buildings, and shade and wind for cooling. Working with nature. More clever.

We are called to live with the Spirit that is in everything, that is the source of the fire of the sun, the energy of life. Indeed, we cannot live apart from the spark of life, the divine fire that energises everything.

With sustainable *Cradle to Cradle* manufacturing, powered by the use of renewable energies, with equitable resource use and distributions systems, in human habitats realised through ecological planning and design, we can provide ourselves with all that humanity needs to sustain thriving societies everywhere, in peace and justice, while conserving and enriching Creation. Then we would be fulfilling our Genesis calling as co-creators.

Like so much of spirituality, connecting with the natural powers of sun, light, fire and energy that flow through the life of the earth and sustain us, requires our awakening to what is real. From a culture of exploitation, we can choose to reconnect and be in relationship with the Creation, to respecting our environments and the creatures with which we inhabit the

world to which we have been gifted. To do so, we need to keep learning, constantly seeking ways to live and sustain life. Relating that way to life and our place in the world, could bring us full circle, back to the garden, where we can dwell in the shade of the tree of life and drink from springs of living water.

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