

GLACIERS

Introduction

In trying to alarm us about catastrophic sea level rises, the Green leadership, their scientists and public relations (PR) machine progressively told us where the water was coming from that would cause catastrophic sea level rises. When we eventually realised that there was no threat, they would move on to a different source of water – and then another and another.

First, we were told melting Arctic ice would cause sea level rises. When we found that this defied the scientific buoyancy laws, they pointed to the land locked ice in the major mountain ranges around the World.

When we found there wasn't enough ice in these mountains to cause significant sea level rises, they pointed to the land locked ice in Antarctica and Greenland which held 99% of all landlocked ice on the planet.

When we realised that this ice would not be "available" because of the very low temperatures in both locations, they finally arrived at the last stop – glaciers 'calving' into the oceans from Antarctica and Greenland.

When we look carefully at this source we find, once again, there is no threat of catastrophic sea level rises.

SOME BASIC KNOWLEDGE

At school we were taught the basic water cycle. Water evaporates off the oceans and forms clouds. When enough water accumulates in the clouds it falls as rain onto the land. The water then flows downhill into the rivers. The rivers then transport the water back into the oceans.

Glaciers are ice rivers.

Like 'water' rivers, the speed and amount of ice delivered to the oceans can vary for a variety of reasons. Recently we have been using satellites to track the movement of glaciers. Given enough time we will be able to establish what is "normal" for each glacier.

Many scientists believe we have not reached that point yet, and far too many scientists are declaring 'abnormal' movement when 'normal' has not been established.

FACTORS AFFECTING GLACIER MOVEMENTS

The Green Machine (i.e. leadership, scientists and PR people) want us to believe;

- There is increasing movement in Antarctic and Greenland glaciers in the past fifty years,

- This is 'abnormal', and has been caused by rising global temperatures,
- Which in turn, has been caused by man-made global warming.

This seems unlikely for several reasons.

First, we assume that any temperature rises causes ice to melt. With the average temperature of ice in Antarctica and Greenland being minus 33°C and minus 15°C respectively, this won't happen. Rather than focussing on all the failed rising temperature predictions, the average global temperatures have only risen 0.3°C in the past fifty years. There has been no melting.

So how has such a small rise in air temperature measured 1.3 metre above the surface of glacier caused it to flow faster? There are other factors that have far greater effect on glacier speeds.

Slope of the "Riverbed". The steeper the land is under the glacier the faster the glacier will 'flow'.

Surface of the "Riverbed". The smoother the land is under the glacier the faster the glacier will flow. The less friction between the land and the bottom of the glacier, the faster the flow.

Weight of the Ice. As the weight of the ice increases over time, the faster the glacier will flow.

Obstructions Along the Way. Any obstructions along the way will slow the flow of glacier until the weight of the ice building up behind the obstruction either moves the obstruction away or flows over the top of the obstruction.

THE EFFECTS OF CALVING

"Calving" occurs when the glacier reaches the ocean and large blocks of ice break off and drop into the ocean. This can be spectacular which allows the Green PR machine to use visual deceit, large number deceit, and other deception tools that encourages our imagination to run wild and believe this could cause catastrophic sea level rises.

The ice dropping into the ocean will cause sea levels to rise. However, the important question is; "How much of a sea level rise?" When we answer that question, we know that it will not cause catastrophic sea level rises.

Contrary to what the Greens tell us, as soon as the ice drops into the ocean the sea levels will rise

DECEITFUL TALES

When we are shown a film taken on a beautiful sunny day showing a hundred metre high 'cliff face' of ice that cracks and falls into the ocean, it is spectacular. However, the accompanying audio on the film is generally deceptive.

We are told how high the cliff face was, how many tonnes of ice fell into the ocean and how many swimming pools of water this block of ice contains. We are then told that if the ice floats away into warmer waters it will melt and cause catastrophic sea level rises. There are two major problems with this description and one major omission.

The major omission concerns the sea level rise. The whole conversation is about the sea level rise that will be caused by this large block of ice – yet we are never told how much the sea level will rise.

The sea level rise caused by this ice will happen instantaneously. However, it is so small no one notices it at the time. To hide this very small effect the Green spokesmen, ignoring the buoyancy laws once again, will incorrectly claim that the sea levels will only rise significantly (when you cannot see it) after the ice floats far enough away to melt.

Meanwhile, by using ‘visual’, ‘large number’, and the ‘other side of the coin’ deceit tools, you are left with a conviction that the sea level rise will be large.

The George Schultz Example

At a US Senate hearing about alternate energy George Schultz, a former Secretary of State, made the following claims;

- *He told the Inquiry that for twenty years scientists had been measuring the amount of Greenland’s glacier ice going into the ocean every year. On average, each year 140 billion tonnes of ice were going into the oceans and melting. If this continued, there would be catastrophic sea level rises.*
- *He added, the same was happening in the Antarctic compounding the problem.*
- *He finished by stating that by embracing alternate energy sources much of the rising sea levels would be stopped.*

Let us look at each claim.

First Claim

Two general comments. Using the “definition deceit” and the “big number” deceit” tools, George doesn’t define his word “catastrophic” nor tell us the sea level rise caused by 140 billion tonnes of ice arriving in the ocean. We need to calculate that for ourselves and decide if we consider it catastrophic.

However, that won’t happen most of the time and the Greens do not want it to happen. If there were a hundred people listening to George, each person would define his own idea of catastrophic and by being influenced by the large number 140 billion will guess a sea level rise that will fit into his catastrophic definition.

Each person could have a different definition of catastrophic and a different guess at the sea level rise but that doesn’t matter. Because each person has decided himself, he will believe both the definition and not question his guess of the sea level rise. The hundred people have just conned themselves. A more rational approach is to calculate the actual – not guessed – sea level rise, and then decide if it could be considered “catastrophic”.

One cubic metre of water weighs one tonne. So now we have 140 billion cubic metres of water going into the oceans. One square kilometre could be covered with a million cubic metres of water to a height of one metre. So now we have 140,000 square kilometres of water up to one metre high going into the oceans.

If the surface area of all the oceans was 140,000 square kilometres, we would know that the sea level rise would be one metre. If the surface area was twice that – 280,000 square kilometres, then the sea level rise would be half a metre. If the surface area was a thousand times larger then the sea level would be one millimetre.

Google ^[1] tells us that the surface area of all the oceans is 361 million square kilometres which is considerably larger than 140,000 square kilometres. So, we now know the sea level rise will be a fraction of one millimetre – 0.387mm. After twenty years, the cumulative sea level rise would be just under 8mm. No wonder George cannot see such a small sea level rise.

Would anyone call either the yearly or twenty year figure a catastrophic sea level rise? But we are not finished yet and should look at the “other side of the coin” – something the Greens rarely do.

The ice in the glaciers has come from annual snowfalls which in turn have come from the oceans. To more accurately measure the sea level rises, we need to look at the net loss of water going into the oceans (i.e. ice off – ice on).

Google tells us the surface area of Greenland is 2.166 million square kilometres ^[2], and the average annual precipitation for Greenland is 1,132mm ^[3]. With these two figures we can calculate how many tonnes of water is arriving on Greenland each year to compare with the 140 billion tonnes of glacier water leaving each year.

Each year, Greenland receives 2,452 billion tons of water/snow/ice every year. This is more than 17 times the 140 billion tonnes of glacier ice leaving each year. This is a **negative** net flow of ice off Greenland.

By being rational and calculating sea level rises we don't even have to subjectively define catastrophic. By being irrational and guessing, we become a “Henny Penny” and think the sky is falling in.

Note that these calculations assume that; the Green scientists' figure of 140 billion tonnes accurately reflects the amount of water leaving Greenland – I doubt it. It also assumes the Google figures are correct and the maths, involving a lot of zeroes, has been done correctly.

Second Claim

George is correct to state that Antarctic glaciers are calving into the oceans, but incorrect to assume that it is compounding the Greenland problem that we have just found is not a problem. Similar calculations, to those made above, need to establish the situation in Antarctica.

Third Claim

It is troubling to see the number of rubbery assumptions that are used in this claim.

For instance, will small temperature rises cause increased glacier movement? Will that increased movement cause significant/catastrophic sea level rises? Does CO₂ drive temperatures. What percentage of CO₂ is caused by Man? What percentage of that last percentage figure is caused by conventional power stations?

Is the quadrupling of power prices that come from using 100% alternate energy sources too higher price to pay for reducing such an insignificant problem?

CONCLUSION

To find enough water to cause catastrophic sea level rises, the Green Movement has progressively suggested four sources of water. The first three sources have proved to be inadequate.

This reading examined the fourth source of water – Antarctic and Greenland glaciers calving into the oceans. Once again there is inadequate water to significantly raise sea levels.

Consequently, Man cannot cause catastrophic sea level rises with his CO₂.

Notes.

1. Surface area of oceans. <https://www.google.com/search?client=firefox-b-d&q=surface+area+of+oceans>
2. Surface area of Greenland. <https://www.google.com/search?client=firefox-bd&q=surface+area+of+greenland>
3. Greenland's average annual rainfall https://www.google.com/search?client=firefox-b-d&sxsrf=ALeKk03XVJTamiKYjGaSVL4SHNhaYiy4A%3A1585273921524&ei=QVx9Xr3kH4WN4EPmdGiwAk&q=average+rainfall+in+greenland&oq=average+rainfall+Greenland&gs_l=psy-ab.1.0.0i7i30j0i7i5i30.41820.80201..84559...0.2..0.256.4172.0j22j3.....0....1..gws-wiz.....0i71j0j0i70i251j0i22i30.hpMCM5wprzw