#### CLIMATE CHANGE: GLOBAL TURBULENCE (c) 2014 by Michael Riversong

Much agreement exists on the idea that pollution is somehow having effects on weather and long-term climate patterns. Reducing pollution requires extensive changes in how we use resources and technologies. Some of those changes appear to threaten existing organizations and their customary processes. Therefore, political resistance is strong in many countries. It manifests in both public and covert ways. At best, available materials on global warming and climate change have been incomplete. Large amounts of missing data have created enough confusion to allow widespread political resistance to the much needed changes in our technology and cultures.

Some of the current findings about climate change seem contradictory. If global warming is the main driving force, why are so many record low temperatures occurring worldwide? Discussions about increased severity of weather events get stalled out when warming is the main factor being considered. Researchers and advocates face reduced credibility due to these problems, which gives political opponents of technology change a great deal of leverage.

Deeper understanding of mechanisms behind weather patterns should help on many levels. Much of this involves insight gained from engineering disciplines. It is vital to examine whatever observations we find. Many scientists have done useful calculations based on temperature data. Less common are calculations involving wind speeds and patterns. Increases in the most severe storm events including tornadoes, hurricanes, and downbursts are well known. How this type of activity relates to temperature data has rarely been discussed in depth.

One key observation led to the creation of this work. In 1978, the author was living in Thermopolis, Wyoming married to a wastewater plant operator. One afternoon on a downtown street, she opened a manhole cover so we could see flow through the near surface line. As is normal, 98% of the material in the line was only water. Flow was moderate. Then, an amount of oil came down the line, probably from an auto repair shop nearby. All fluid in the line became extremely turbulent. This continued for about two minutes, and then the oil cleared and flow went back to normal.

In Boulder, Colorado, there are many good places for a student to sit and observe air flow patterns over a wide area spread out from Denver to Longmont, an area about 50 miles north to south. Air pollution over Denver can be observed. Sometimes it is possible to see turbulence patterns in local clouds during weather events, and see connections to more concentrated air pollution zones.

When studying Geology, we notice that regions where crude oil was historically at or near the surface are often known for relatively large amounts of earthquake activity. Examples of this pattern include the Caspian Sea, Los Angeles (especially Baldwin Hills), Oklahoma, and Algeria. Think of soil as a very slow moving fluid. The resemblance of many mountain chains to ocean surf is important.

#### High Temperature

Plotting average temperatures is a longstanding, widespread activity within the scope of weather research. Generally it has been found that overall average temperatures are often, but not always, rising. On a worldwide basis, cumulative data suggests that average global temperatures are rising. This alone could have many effects, which have been extensively listed in current literature.

There have been many episodes of average global temperatures going up and down over the past several thousand years. We've made a few correlations between temperatures and sunspot cycles, which still need a lot of evaluation.

## Low temperature

Under turbulent conditions, temperature can rapidly fluctuate in both rising and falling directions. Whipsaw effects can be observed. Research into links between the amount of potential temperature variation and pollution content of air would help a lot. Some of those studies should be relatively inexpensive to set up.

## Excess precipitation

Under turbulent conditions, it is possible for moisture to gather in large quantities. Cells of high moisture can form. Usually air can only hold a certain amount of water, but sometimes a supersaturation can happen. When conditions allow the water to come back out, large quantities can suddenly fall in a small area.

That's what happened in the June 1965 Plum Creek flood south of Denver. During the previous week, it had rained every day throughout the region, roughly 100 miles on each side. This happens occasionally at that time of year along the Rocky Mountain Front Range. That day, a zone of turbulence appears to have formed over the foothills between Colorado Springs and Denver. In the afternoon it was as if a waterfall came straight out of the sky onto a single mountain in Larkspur. Two scars are still visible running down to the creek. The result was a 20-foot high wall of water rushing down a narrow creek and into the South Platte River, devastating a large industrial area in Denver.

# Drought

Whenever turbulence is present, dead zones can form. Fluid can be calm in those areas for periods of time. This means the moisture component of air will gradually be minimized.

Reducing overall air turbulence should help smooth out some of the sharp divisions of temperature and air pressure that form around a drought.

Often it feels like some sort of presence dominates a region afflicted by drought. Comments of this nature can be found throughout history. Subjectively

many have reported feeling related sensations in drought conditions.

#### Linear air movement

Wind Power industry giants are driving more research into near-surface air flow. This is a rapidly advancing frontier. We are becoming familiar with laminar air patterns in many contexts. Atmospheric turbulence can interrupt a stable laminar pattern almost anywhere in the world at any time now. Mixing pollutants among various zones is another driver for overall air turbulence.

### Pressure gradients

Most people who begin study of weather patterns have a difficult time visualizing the way wind actually works. We instinctively think of wind as a push, but it is almost always a pull. Air flows from an area of greater pressure to lower pressure. Keeping this in mind is a very good idea. Normal concepts of storm formation have to be abandoned when this understanding is applied.

### Spiral air movement

It is important to comprehend the role hurricanes and tornadoes play in climate. Since 1972, there has been a fairly steady increase in the number and severity of these storms. They are natural air cleaners. Many processes seem to be involved, with the net effect being the breakdown of various pollutants. Research needs to be done on what those internal processes are, along with how storm tracks get formed. There must be some natural mechanism that draws these storm patterns to particular locations or tracks when most needed.

# Orgone & Scalar Waves

One natural mechanism important to weather modulation is Orgone. This factor is easily misunderstood. It can be dismissed entirely, meaning that many discussions will have to be incomplete. However, even incomplete discussions can contribute to understanding. Those who decide to accept the existence of Orgone will have an additional tool which can increase understanding and engineering ability.

We know that Orgone is a type of scalar wave. That means it acts more like sound than electromagnetic or mechanical energy. Resonance is a primary operating factor.

The discoverer of Orgone, Dr. Wilhelm Reich, conducted many experiments to determine the operational characteristics of this energy. These are usually called "cloudbusting". His experiments included drought relief, mitigation of severe storms, and shaping storm tracks. A few researchers have continued experimentation and have found that Orgone can often be associated with the relief of pollution.

It seems possible that Orgone could be related to the source of droughts. If so, as detection and quantification methods improve, we may find that a direct address to Orgone is the most efficient way to handle droughts.

Reich received an accidental insight relating to interactions between radioactivity and Orgone. Presence of radioactive materials near Orgone generation caused rapid decay of both biological and inorganic matter. This means radioactive pollution can have leveraged effects under some circumstances, including changes in the size, shape, and severity of storms.

#### Immediate Solutions

Current programs to reduce fuel consumption are the best immediate investment we can make. Increased application of HHO technology has the potential to further reduce fuel requirements. A few systems have actually been observed to take pollutants out of air while operating.

Permaculture is a discipline that can be established anywhere, at any time. Some of the best ecological management in history has been connected to the widespread adoption of similar methods. It is often possible to start Permaculture installations with no government intervention. Raising the overall level of expertise in this area would have many immediate benefits. Local Permaculture enthusiasts are often able to create effective and focused responses to local weather events and changes.

#### Long Term Solutions

Reforestation and forest expansion need to become world-wide priorities. Re-establishing the Sahara Forest would, over several centuries, positively modify weather in many areas. On emotional and cultural levels, this would also do a lot to heal deep inner multigenerational wounds related to certain fierce and punitive cultures that emerged from that ever growing desert.

A form of financial currency can be built around trees. Money should ideally have a basis of value. At the moment it seems that youthful enthusiasm can be considered sufficient backing for a world-wide currency. History has shown that foundation has never worked well. Pinning value to underlying forest resources should naturally encourage their proper care. This could be a way to create a dynamic and measurable basis for freely circulating currency that also produces elements of better climate.