

## Mayor's Minute - February 27, 2020

The recent release of *Climate Projections for the Okanagan Region (2020)* has been reported in Valley media over the last couple of weeks. The published work is a collaboration between the three Okanagan Regional Districts and Pinna Sustainability, in partnership with Natural Resources Canada and the Okanagan Basin Water Board, and with participation from almost 90 stakeholders in the region.

The report examines a number of possible future scenarios based on historic and projected greenhouse gas (GHG) emissions to predict climate change in the 2050s and 2080s. In short, we can expect warmer temperatures year-round, with summers getting considerably hotter. We can also expect increased precipitation throughout the year, except in summer, and rain events will be more severe.

Further, the growing season will increase from about 5.5 months to almost 7 months by the 2050s, and almost 8 months by the 2080s. This longer growing season is likely to bring some challenges, particularly in terms of water over the drier summer months.

It is important to note that, as always, **weather** will vary annually and seasonally: Some years will have more days above 30°C than others—some years will record much more rainfall. The report provides **climate** projections, meaning trends over a 30-year period. There will continue to be variability in weather aspects (temperature, precipitation, wind, cloud cover, for example), that will bring “unusual weather and more extreme weather events” (p. 7).

Climate **action** can be defined as actively reducing GHG emissions and strengthening resilience and adaptive capacity to the impacts of a changing climate. In other words, reducing the level of carbon dioxide (roughly 75% of GHGs) in our atmosphere, and making our community better able to withstand and adapt to events resulting from a changing climate.

What we do now in the way of climate action has long-term effects.

In terms of temperature rise (in BC), this is illustrated in the *Climate Projections* report in Figure 1: Future Temperatures by Emissions Scenario for BC. The Figure includes three scenarios over the next two decades: 1) minor reductions in GHG emissions (that is, the status quo); 2) reducing emissions by approximately one-half; and 3) reducing emissions substantially and sustaining those reductions (p. 6).

The graphed scenarios show that until 2050, the resulting change in temperature and precipitation regardless of the GHG concentrations in the atmosphere are relatively similar - moderate; however, and this cannot be stressed enough, by the 2080s the change is very dramatic with temperatures rising to near 6°C above pre-industrial levels by the end of this century, which would have extremely negative consequences for human health and wellbeing. In other words, we need to up our game.

As noted in *Climate Projections*, the overall intent of the project is “to support a local understanding of how climate across the Okanagan is projected to change, and inform regional planning on how to prepare for future climate events. This work is critical to maintaining wellbeing, including robust ecosystems, a thriving community, and a vibrant economy” (p.3).

Planners here (and elsewhere) must design not just to historic climate parameters, but to future climate scenarios. The Canadian engineering industry and the bodies that regulate them are working on establishing new standards to ensure that their approach is proactive and adaptive, rather than reactive. It is much more cost effective to design and construct to long-term scenarios than to merely react to climate shocks and stresses over time.

The District of Summerland’s infrastructure asset management strategy includes considerations regarding the changing climate, as do numerous Master Plans and, of course, the updated Summerland Community Energy and Emissions Reduction Plan, adopted by Council on February 24, 2020. Staff across

departments—recreation, development services, finance, works and utilities, corporate services—have been directed by Council to consider climate impacts in their annual workplans and long-range planning, and Council must continue to adopt policies and priorities that reflect climate considerations.

In my opinion, climate action is more than a problem for levels of government. Action must include a significant improvement in raising the awareness of everyone through education. After all, climate change is affecting us all (those in marginalized communities disproportionately) and will affect today's youth and future generations even more radically: health-wise, financially and environmentally.

Each of us needs to play a role. As Wangari Maathai said in *dirt!: The Movie* we can all be hummingbirds. (If you don't know what that means, search "Wangari Maathai: I will be a hummingbird".)

*Climate Projections for the Okanagan Region* can be accessed on the Regional District Okanagan Similkameen (RDOS) website ([rdos.bc.ca](http://rdos.bc.ca)).