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April 23, 2019

City Council Meeting April 29, 2019

His Worship Mayor Clark and Members of City Council:

Re: Climate Change Projections and Possible Impacts for Saskatoon – Feedback (File No. CK. 375-5)

On April 1, 2019 the Standing Policy Committee on Environment, Utilities & Corporate Services resolved that the report Climate Change Projections and Possible Impacts for Saskatoon be forwarded to the Saskatoon Environmental Advisory Committee (SEAC) for feedback. On April 11, 2019 SEAC received a presentation from Administration, discussed the report, and resolved to have the SEAC Greenhouse Gas Subcommittee draft feedback ahead of the April 29, 2019 City Council meeting.

Climate change adaptation planning is an obligation to the Global Covenant of Mayors for Climate and Energy. Overall, SEAC is encouraged to see work progressing on this requirement and appreciate the approach taken thus far. The work is comprehensive in its summary of the impacts that climate change could have on Saskatoon, and it follows best practice methodology for assessing the associated risks.

Below are our key findings and we look forward to continuing to engage on this matter as a key part of Saskatoon’s Climate Strategy.

1. Ensure clear segregation of climate mitigation and adaptation

This report clearly defines the difference between climate change **mitigation** (reducing emissions to stabilize global climate) and **adaptation** (addressing the impacts of existing and future local climate change), and while they may be integrated, their purpose is distinctly different. As an example, a mitigation action would be to improve access to public transit and active transportation so people can get where they need using less fuel; whereas an adaptation action would be to improve drainage systems to prevent and control potential flooding caused by wetter, wilder, warmer weather.

Because the words are similar and often discussed together, it is easy for the general public to confuse these two concepts. However, the distinction between the two is critically important for Administration, Council, and the public to understand. Council will not be able to prioritize one area over the other in the “environment” category, and rather, will need to progress both in order to ensure a sustainable Saskatoon. The primary purpose of decisions will need to be clear, while maintaining a lens of the “triple bottom line”. It is very important that in messaging to the public and within the

Administration and Council, the two issues of adaptation and mitigation be communicated separately.

2. Ensure low likelihood, high consequence events are captured

SEAC is concerned that this report does not comprehensively capture potentially high consequence, low likelihood events. These are important to consider as they could plausibly lead to significant, worst-case impacts for Saskatoon. **Figure 1** combines high likelihood and consequence events, and while useful for presentation, will not allow Council to fully understand the events identified. Upon review, SEAC felt that the events captured in **Figure 1** were mostly high likelihood, meaning there may be some higher consequence items that have been missed. As an example, there could be a risk of multi-year drought that leaves the South Saskatchewan River unsustainable as a drinking water source (similar to what occurred in Cape Town, SA in 2018) – a plausible, low likelihood event that would have crippling impacts. It is critical that Administration challenge its thinking to paint a worst-case scenario for Saskatoon to ensure appropriate contingency planning can occur. The intent is not to create anxiety over low likelihood events, but rather to ensure Council and the community is fully informed of the conceivable impacts to Saskatoon.

3. Ensure indirect impacts of climate change are considered

The “**warmer, wetter, wilder**” framework is a valid model to identify the direct impacts of Climate Change to Saskatoon. However, this report does not appear to consider the **indirect impacts of climate change** to civic operations. The Intergovernmental Panel on Climate Change (IPCC) recognizes the socioeconomic impacts of climate change, including mass migration away from low lying areas, risk of food and drinking water insecurity, and loss of rural livelihoods due to changing agriculture.¹ This report does not appear to include the flow-on risks of these potential impacts – for example, what would a fundamental shift in agriculture do to Saskatoon? How would rapid migration from coastal countries/areas to an inland city impact Civic services? The full landscape of change Saskatoon may undergo (both risk and opportunity) is important to consider to ensure that adequate plans and contingencies are in place.

4. Highlights the importance of Green Infrastructure planning

Many of the risks noted in **Figure 1** relate to the impacts to our physical environment and infrastructure, such as heat stress on people and plants and increased pressure on storm management systems. Many of these risks can be reduced or prevented through implementation of the Green Strategy, such as integrating storm water management, natural areas protection, and land use planning. As an example, Saskatoon could require development practices to increase the use of drought-tolerant landscaping and natural water capture systems to prepare for the future and reduce storm drain

1. IPCC, Climate Change 2014 Impacts, Adaptation, and Vulnerability, Summary for Policymakers. https://www.ipcc.ch/site/assets/uploads/2018/02/ar5_wgII_spm_en.pdf

infrastructure costs (nature is much more effective at collecting and storing water than roadways and storm drain systems). The Green Strategy plays a dual role in supporting Saskatoon's adaptation, while increasing mitigation through carbon sinks. SEAC looks forward to reviewing the Green Strategy intended for release in May.

5. Ensure clear link to community-wide adaptation strategy

This report only considers the impact to Civic Operations. While SEAC understands the distinction between the Community and Corporate lens, it is also important to ensure these reports are founded on the same narrative of risk events. For example, the narrative around changes in food security would have both community and corporate implications, and the interconnection between these will be strong. It is important that both are considered when planning for a sustainable Saskatoon in light of climate change impacts. This report should be reviewed once the full Community report is complete to ensure consistency.

6. Ensure impacts are specific and relatable for public education

Various sources have tried different ways to describe what our changing climate may look like in the future. This report uses percent changes in numbers of hot or cold days; however, that will be difficult for the general public to understand. Rather, we suggest using actual numbers instead of comparative change, or drawing parallels to other geographies (e.g. Saskatoon's climate will be similar to Wisconsin) may be more relatable for residents.

The report uses the phrase "status quo" to refer to our current trajectory. This phrase may mask the huge changes we can expect to see over the next years and decades, and the compounding impacts of inaction. The phrase "business as usual" is clearer to demonstrate that it is only our practices that remain unchanged, not the climate.

The Committee respectfully requests the above matter be considered at the April 29, 2019 meeting of City Council and also respectfully requests to speak.

Yours truly,



for **Sara Harrison, Chair**
Saskatoon Environmental Advisory Committee