Climate Considerations for Nose Creek ASP

Climate considerations are one of several inputs informing the Nose Creek Area Structure Plan. Understanding which climate-related risks and opportunities are relevant to the Plan Area helps guide future community design, infrastructure planning, and policy direction.

What climate risks exist in Calgary?

Calgary's summers are getting hotter, drier and longer. Hazards like wildfire smoke, extreme heat, hail, and flooding are becoming more common and severe.

- More intense rainfall events increase the importance of stormwater management and resilient community design.
- Severe weather events reinforce the need to consider resilient infrastructure, landscaping, and community design.
- Increasing temperatures highlight opportunities to incorporate tree canopy, shade, climate-adaptive landscaping, and energy-efficient development.

Considerations for the Nose Creek ASP

An ASP can consider climate resilience while planning for land use, mobility, infrastructure and open spaces. These decisions can help communities better respond to a changing climate over the long term. This ASP can encourage and support:

- Climate-resilient materials and plant species in buildings and landscape design.
- Opportunities to retain existing trees where appropriate and increase the community tree canopy to help reduce heat and improve air quality.
- Energy-efficient community design, buildings and development practices.
- Opportunities for renewable energy generation, like solar energy.
- Opportunities for food-growing spaces that support access to local food.
- Transit and active modes of transportation, including walking and wheeling.



Understanding climate risk and opportunities in the Nose Creek ASP

The following studies identify opportunities and help inform future planning and policy direction for the Nose Creek ASP.

Food Growing Land Inventory (FGLI)

The Food Growing Land Inventory assesses what land may be suitable for food production after environmental features, infrastructure requirements and anticipated land-use needs are considered. Its findings will help identify opportunities for food-growing areas and inform future land use and policy decisions.



Energy in Nose Creek Study

The Energy in Nose Creek Study examines how community design can influence energy use, affordability and greenhouse gas emissions. Areas being explored include:

- Opportunities for renewable and low-carbon energy systems, including solar generation, heat pumps and district energy.
- Opportunities for higher efficiency buildings with improved building envelopes that require less energy, and cost less to heat and stay warm.
- Compact development patterns and their potential to lower GHG emissions.

How these studies inform the ASP

These studies, together with other technical studies and reports, will help determine opportunities and constraints within the Plan Area. The findings may inform maps/figures, policies, and community design considerations in the Nose Creek ASP.