



Miistakis
Institute

CRP Regional EcoPlan Themes - SUMMARY

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Landscape Health

The Landscape Health theme centres on the conservation and protection of landscape-scale features which likewise support ecological processes at the landscape scale.

Ecological connectivity zones

Ecological connectivity means the degree to which wildlife can move between patches of valuable habitat, and the interconnectedness of surficial and subsurface water systems.

The CRP EcoPlan will guide regional and local efforts to conserve areas that are high-quality zones of connectivity, and to reduce land use practices that impair or hinder connectivity.

Escarpments and ridges

The CRP's ecological infrastructure report identified ridges and escarpments in the Calgary region as particularly important landscape-level features, valuable for wildlife movement and groundwater-surface water connectivity.

The CRP EcoPlan will guide regional and local efforts to conserve the lands and ecological functions associated with ridges and escarpments.

Large patches of natural vegetation

Unfragmented patches of natural vegetation provide the necessities of life for wildlife at individual, population and genetic scales.

The CRP EcoPlan will guide regional and local efforts to conserve larger, unfragmented areas of natural habitat, and to reduce land use practices that promote fragmentation.

Watershed Health

The Watershed Health theme centres on the conservation and protection of the region's natural water system (including its critical uplands, ecological services, and aquatic habitat), as well as our sustainable use of the system.

Wetlands

Wetlands (wet, low lying areas that collect enough water to support water-loving plants) contribute to biodiversity and wildlife habitat, provide natural water filtration, and provide water storage in both wet and dry years.

The CRP EcoPlan will guide regional and local efforts to conserve wetlands and wetland complexes, and to reduce land use practices that impair or hinder their natural function.

Riparian areas

Riparian areas are the zones where water and land come together at the edge of water bodies such as streams, wetlands and lakes, creating a diversity of vegetation, wetness, and habitat.

The CRP EcoPlan will guide regional and local efforts to conserve high-quality riparian areas, and to reduce land use practices that negatively affect these features.

Water quality

Water quality refers to the level of usability of water for humans or other local species.

The CRP Regional EcoPlan guide regional and local efforts reduce land and water use practices that are known to contribute to poor water quality.

Water quantity

Water quantity refers to the amount of water available for use by humans or other species from accumulated water, flowing water, springs, or groundwater.

The CRP EcoPlan will guide regional and local efforts to move individual, industrial, and community use of water to locally-sustainable levels.

Source water

Source water refers to the physical origins of the water that communities use.

The CRP EcoPlan will guide regional and local efforts to protect the ability of springs, groundwater, and headwaters to sustainably provide clean water to local communities.

Natural Spaces

Ecological conservation at a regional scale is a function of both individual, regional-scale actions *and* multiple small-scale actions; collectively, the latter can be just as important. The Natural Spaces theme centres on the conservation and protection of numerous, smaller patches of undeveloped spaces that perform valuable or critical ecological functions.

Natural open space

While 'open space' refers to any land or water area that does not have built development on it, 'natural open space' refers to the subset of municipal open space that has ecological value or potential.

The CRP EcoPlan will guide regional and local efforts to maintain a system of open spaces that provide ecological functions or services.

Urban forest

Urban forests includes trees (and in some cases their associated vegetation) that exist in urbanized parks, natural areas, private properties, roadways and other locations within an urban municipality.

The CRP EcoPlan will guide regional and local efforts to retain or augment trees and forest cover within urban municipalities.

Permeable surfaces

Permeable surfaces are porous ground covers that promote the natural infiltration of precipitation, reducing strain on storm sewers, reducing flood risks, and re-charging aquifers.

The CRP EcoPlan will guide regional and local efforts to protect areas valuable for infiltration, and to reduce land use practices that impair or hinder the permeability of land covers.

Natural flood zones

Although we usually think of flooding in negative terms, maintaining natural flood cycles is important both for maintaining habitat, and for managing risk to human lives and infrastructure.

The CRP EcoPlan will guide regional and local efforts to conserve areas that exhibit a natural flood configuration and are capable of accommodating natural flood cycles, and to promote land use practices that reduce the impact on the natural flood regime of rivers and streams.

Food Production

The Food Production theme centres on the conservation and protection of lands and operations that are capable of producing food in an ecologically-compatible way.

Conserving these functions and opportunities will vary significantly between more urbanized landscapes and more rural landscapes.

Urban agriculture

Smaller-scale parcels/operations capable of growing food in a more concentrated way can have relatively low ecological costs per calorie of food as a result of

reduced water, energy, chemical, space, and transportation requirements, and can also provide urban greenspace values.

The CRP EcoPlan will guide regional and local efforts to conserve such urban agriculture opportunities.

Regional agricultural land base

As well as providing a sustainable source of food, food-producing lands can provide wildlife habitat, pollinator habitat, shelter belts, water storage, soil formation, water filtration, carbon sequestration and other valuable ecological services.

The CRP EcoPlan will guide regional and local efforts to conserve the regional land base that is important for the ecologically-sensitive production of food.

Airshed Health

The Airshed Health theme centres on the reduction of activities that overstretch the airshed's capacity to absorb and cycle emissions, and promotion of activities that do not strain this capacity.

Air quality

Air quality refers to the rate at which pollutants are emitted into the atmosphere, relative to the ability of the atmosphere to disperse these pollutants, and is measured based on the impact to the health of human, plant, water and wildlife systems.

The CRP EcoPlan will guide regional and local efforts to implement practices that promote better air quality, and/or reduce negative effects on air quality.

GHG mitigation

Greenhouse gas (GHG) emissions refers to the gases emitted (primarily carbon dioxide and methane) from our individual and collective transportation, heating, agricultural, industrial and other activities.

The CRP EcoPlan will guide regional and local efforts to implement practices that reduce the emission of greenhouse gases.