

## **SECTION 15: NATURAL ENVIRONMENT AND ENVIRONMENTAL MATTERS**

The MD recognizes that its landscape is defined by diverse natural features, including river valleys, coulees, floodplains, open prairie, foothills, wetlands, and other environmentally significant areas that contribute to the municipality's identity, ecological health, and quality of life. These lands provide important environmental, cultural, and recreational value and the MD must balance environmental stewardship and responsible development through sound land use planning. Sensitive natural features and hazard lands shall be protected from inappropriate development, while opportunities for recreation, tourism, cultural heritage, and resource extraction may be supported where impacts can be properly managed.

### **15.1 ENVIRONMENTALLY SIGNIFICANT AREAS (ESA)**

#### **Objectives:**

- To protect environmentally significant areas from inappropriate development.
- To support the responsible development of recreational, historical, and cultural resources.
- To preserve water quality and watershed health, particularly in areas surrounding major water bodies and reservoirs.
- To reduce risks to public safety and property associated with flooding, erosion, unstable slopes, and other natural hazards.
- To encourage cooperation with provincial agencies, neighbouring municipalities, industry, and other stakeholders in the management of natural resources and environmental systems.

#### **Policies**

- 15.1.1 The MD of Willow Creek shall recognize the following environmentally significant areas documents:
- (a) Environmentally Significant Areas in the Oldman River Region: Municipal District of Willow Creek, (*Cottonwood Consultants, 1989*);
  - (b) Environmentally Significant Areas in Alberta (<https://open.alberta.ca/publications/environmentally-significant-areas-in-alberta-2014-update-final-report>); and
  - (c) any subsequent documents adopted by the MD of Willow Creek or the Government of Alberta.
- 15.1.2 The MD of Willow Creek shall seek to protect wetlands, watercourses, wildlife corridors, habitat patches, other significant natural features in land use planning and decision-making.
- 15.1.3 The MD of Willow Creek may collaborate with provincial agencies, neighbouring municipalities, and other stakeholders to prepare management plans or strategies that integrate land use, environmental protection, resource development, and recreation planning.
- 15.1.4 The MD of Willow Creek shall encourage the use of best management practices for the control of noxious weeds, prohibited noxious weeds, and invasive species.

13.1.8 The dedication or establishment of Conservation Easements shall be carried out in accordance with the Municipal Government Act and other applicable legislation and should be planned and located to support larger ecological networks, improve habitat connectivity, and maintain ecosystem health.

## **15.2 WATER**

The MD recognizes that clean and reliable water, healthy ecosystems, and resilient landscapes are essential to the long-term well-being of residents, agricultural viability, economic development, biodiversity, and overall quality of life. Land use decisions shall consider watershed health, ecological function, hazard mitigation, cumulative effects, and the long-term sustainability of natural resources. The MD supports responsible growth and resource development that respects water limits and incorporates appropriate stewardship measures. Development shall be planned in a manner that protects water quality and quantity, reduces flood and erosion risks, and minimizes impacts on natural systems. Through these policies, the MD seeks to maintain healthy watersheds and ensure that water resources continue to support present and future generations.

### **Objectives:**

- To preserve water quality and watershed health, particularly in areas surrounding major water bodies and reservoirs.
- To reduce risks to public safety and property associated with flooding, erosion, unstable slopes, and other natural hazards.
- To maintain and enhance natural riparian areas, wetlands, and drainage corridors that support water storage, filtration, and habitat functions.
- To ensure development near lakes, reservoirs, rivers, creeks, and other water bodies incorporates appropriate setbacks, buffers, and environmental protection measures.

### **Policies:**

15.2.1 The MD of Willow Creek shall seek to preserve water quality and watershed health, particularly in areas surrounding major water bodies, reservoirs, rivers, creeks, wetlands, and groundwater recharge areas.

15.2.2 Land use planning decisions shall consider watershed health, ecological function, hazard mitigation, cumulative effects, and the long-term sustainability of water resources. Future development shall be planned and managed in a manner that protects water quality and quantity, reduces flood and erosion risks, and minimizes impacts on natural systems.

15.2.3 Proposed subdivision, development, redesignation, and land use activities that may negatively affect water quality or water supply may be required to provide studies, mitigation measures, or conditions of approval to the satisfaction of the MD and applicable agencies.

- 15.2.4 The MD of Willow Creek shall endeavour to protect groundwater resources and seek to ensure groundwater use does not exceed the carrying capacity of the land by supporting long-term groundwater research and monitoring programs, mitigating potential adverse impacts of development on groundwater recharge areas, requiring compliance with applicable provincial groundwater testing requirements as part of the development approval process
- 15.2.5 New subdivision and development should be directed away from floodways, erosion-prone lands, unstable slopes, and other high-risk hazard areas where feasible. Where development is proposed in or near hazard lands, the MD of Willow Creek may require hydrological, geotechnical, drainage, environmental, or other technical studies prepared by qualified professionals.
- 58.2.6 The MD shall support the protection, maintenance, and enhancement of riparian areas, wetlands, drainage corridors, and other natural features that provide water storage, filtration, erosion control, and habitat functions.
- 15.2.7 New development proposed near lakes, reservoirs, rivers, creeks, wetlands, and other water bodies shall incorporate appropriate setbacks, buffers, and environmental protection measures and those setbacks and buffers may be determined through municipal policy, provincial guidelines, watershed plans, technical studies, or site-specific assessments, as applicable.
- 15.2.8 The MD may require environmental reserve, environmental reserve easements, conservation measures, or other tools available under applicable legislation to protect sensitive lands and water features.
- 15.2.9 The MD shall work cooperatively with provincial agencies, neighbouring municipalities, landowners, industry, watershed groups, and other stakeholders to advance shared water management objectives.

### **15.3 HAZARD AREAS**

The MD recognizes that hazard areas are an important consideration in land use planning and changing land use patterns may increase the frequency or severity of hazards over time. Responsible planning can reduce risk, improve safety, and minimize long-term costs associated with emergency response, damage, and recovery for both natural and human-caused hazard areas, including flood-prone lands, wildfire interface areas, and other areas where development may place people, property, or the environment at risk. It is the intent of the MD to direct growth and development away from high-risk areas where possible and to ensure that any development proposed in or near hazard lands is carefully evaluated, appropriately designed, and supported by qualified technical studies where required.

#### **Objectives:**

- To direct subdivision and development away from high-risk hazard lands where feasible.

- To ensure development in or near hazard areas is supported by appropriate technical studies and mitigation measures.
- To protect natural systems such as floodplains, wetlands, riparian areas, and native vegetation that help reduce hazard impacts.
- To promote wildfire resilience through vegetation management, FireSmart principles, and compatible site design.

**Policies:**

- 15.3.1 Development within or adjacent to river valleys, coulees, and other hazard lands shall consider slope stability, erosion potential, drainage patterns, and soil conditions in order to minimize environmental impacts and risks to public safety.
- 15.3.2 Development within identified floodplains shall be carefully regulated or restricted to protect natural functions, reduce flood risk, and minimize damage to property and infrastructure.
- 15.3.4 The MD of Willow Creek may prepare or update the Land Use Bylaw, statutory plans, or other policy documents to guide development and environmental management in along rivers, creeks, reservoir shorelines, and other sensitive locations.
- 15.3.5 Development within a floodway identified by the Government of Alberta shall not be supported, with the exception of uses with no permanent structures in accordance with the Land Use Bylaw.
- 15.3.6 Development proposed within the floodway or flood fringe areas may be required to provide a flood hazard risk study prepared by a qualified professional
- 15.3.7 Development in hazard areas with slopes greater than 15% shall require technical evaluations conducted by qualified professionals to the MD's satisfaction, regulatory compliance, including alignment with the Land Use Bylaw regulations and risk mitigation, including measures to address and reduce risks.
- 15.3.8 Development in wildfire-prone areas shall consider vegetation, topography, access, water supply, building siting, and emergency response requirements.
- 15.3.9 Public education and cooperation with residents and landowners regarding wildfire preparedness is encouraged. The MD may require FireSmart or equivalent mitigation measures as part of subdivision or development approval.