# LOCAL GOVERNMENT:
## *CITY OF PENTICTON*

*Keeping Nature in Our Future – A Biodiversity Strategy* identifies where there are opportunities to conserve biodiversity throughout the South Okanagan and Similkameen.

As part of the Strategy, this primer provides specific findings and opportunities for Penticton. **It should be used in conjunction with the City of Penticton Conservation Opportunities Maps**, and the Regional **Relative Biodiversity** map which identify:
- Sensitive ecosystems ranked in importance for conservation ('Conservation Ranking'),
- Sensitive ecosystems already included in Environmentally Sensitive or Watercourse Development Permit Areas, Conservation Lands or Dedicated Open Spaces;
- Linkages among natural areas for wildlife ("Habitat Connectivity"); and,
- Areas of greatest ecological and biodiversity significance ("Relative Biodiversity").

The natural environment of Penticton offers many unique physical features, including silt bluffs, gullies and ravines, the esplanade, and the Skaha cliffs and sensitive ecosystems such as grasslands, riparian areas, mature and old growth forest, wetlands, shallow-soiled rock outcrops, and ridges. It is the combination of these diverse habitats that contribute to a wide diversity of species, both common and rare, that are found within the municipal boundaries. In response to the increasing threats to, and rarity of, native plants, wildlife, and ecosystems, Penticton has undertaken a series of planning initiatives to protect and restore vital habitat.

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### Conservation Ranking

Maps show the ecosystems that are of more importance to conserve. The maps highlight where important, rare and sensitive ecosystems have already been identified in development permit areas, or designated as dedicated conservation lands, open spaces, parks and protected areas. It is recommended that the areas ranked high and very high for conservation be used to update the Environmentally Sensitive Development Permit areas.

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### Relative Biodiversity

Maps show the areas of greatest ecological and biodiversity significance, essentially "hotspots". This mapping provides a more comprehensive picture of important areas for nature - starting with important ecosystems (conservation ranking) and adding information such as special features (eg. wetlands), selected important species habitat and known locations, habitat size, and distance to roads. These maps will be useful for parks, neighbourhood and site planning.

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### Habitat Connectivity

Habitat connectivity describes the degree to which ecosystems and habitat for wildlife are linked to one another to form an interconnected network across the land. This network provides opportunities for wildlife movement through habitat corridors. Breaking these linkages results in habitat fragmentation thereby reducing biodiversity, ecosystem functions and the ability for species to fulfill their needs for food, shelter, and reproduction.

## *Highlights for Biodiversity Conservation*

### *Conservation Ranking- Areas of Important Sensitive Ecosystems*

- 42% of Penticton's land base contains ecosystems ranked high or very high in importance for conservation.
- 6% of these highly sensitive ecosystems have been designated as open space or protected as conservation lands through parks or zoning.
- 6% of these lands are in Environmental Protection or Riparian Assessment development permit areas.

### *Relative Biodiversity – Areas of Greatest Ecological or Biodiversity Significance*

- 13% of Penticton is has a very high or high relative biodiversity.
- Almost 50% of very high relative biodiversity areas are found in the valley bottoms, which are only about a quarter of the RDOS land base.

### *Connectivity – linkages between natural areas and corridors for wildlife*

- Penticton's entire eastern hillside is part of a larger subregional movement corridor for large mammals such as the California Bighorn Sheep.
- Ellis and Penticton Creeks are important east west local corridors through the City.
- Urban development near the steep canyon slopes of Penticton and Ellis Creeks create a pinch-point for wildlife movement (see map).

## *Current Tools and new Opportunities for Conservation*

### *Official Community Plan Bylaws*

**Riparian Assessment Area Development Permit Area (RAADPA)** requires landowners to apply for a permit before subdividing, construction, or altering the land within a riparian area (e.g. 30m from stream top of bank). This development permit area is specifically designed to comply with the provincial Riparian Areas Regulation (RAR), under the provincial *Fish Protection Act*. This development permit area was created in 2006 and is based on the RAR methodology.

- Opportunities exist for improving WDP guidelines and policies based on implementation experience to date.
- The City of Penticton should implement findings from the joint Okanagan Lake foreshore inventory and classification initiatives.  It should find funding to complete the Penticton specific analysis of Skaha Lake foreshore inventory mapping and implement the results from the Skaha Lake study
- The City of Penticton should conduct stream mapping to improve base maps and to ensure that only appropriate lands are being flagged for WDPs.  There may also be opportunities to refine and set standard setbacks reducing the processing of WDPs.

**Environmental Protection Development Permit Area (EPDPA)** requires landowners to apply for a permit before subdividing, construction, or altering the land that contains sensitive ecosystems. The purpose of this development permit is for protection, where possible, of sensitive ecosystems and rare and endangered plants, plant communities and wildlife. Development within an EPDPA may

require an Environmental Assessment conducted by a registered professional biologist (RPBio) with experience working with local ecosystems, and may include other Qualified Environmental Professionals (QEPs).

- Conservation rank high and very high lands should be used to update ESDP areas. Where there are gaps in the connectivity of these areas, medium rank lands should also be added to ESDP areas as opportunities for restoration and enhancements.
- Opportunities exist for improving ESDP guidelines and policies based on implementation experience to date.

## *Zoning Bylaw*

**Watercourse Setback** required for buildings and structures within a minimum of 7.5 metres of the natural boundary of Okanagan Lake or Skaha Lake; within 30 metres of the design water level boundary of Okanagan River channel; and within 15 metres of the natural boundary of any other nearby watercourse.

**Cluster Development** is allowed in certain zones so that new development can "cluster" on a portion of the new properties away from sensitive ecosystems. See *Keeping Nature in our Future* for more ideas on effective clustering.

## *Earthworks Control Bylaw*

Applies to Earthworks within the City having a depth of less than one metre to a maximum volume of 50 m³, without first having applied for and obtained a permit. A permit is subject to standards including:

- that no Earthworks shall occur on environmental protection areas or riparian areas as denoted in Schedule H of Penticton's Official Community Plan;
- that no natural watercourse shall be altered or diverted, except with approval under the provincial *Water Act*; and
- that any damage that is caused to a natural watercourse due to earthworks must be repaired.

## *Subdivision Bylaw*

Requires all subdivision developments to have a Lot Grading and Drainage Management Plan that will be used during the subdivision or development of the parcel to mitigate the potential impacts onsite and downstream.

- Update bylaws to include green infrastructure and rainwater management methods and improvements.
- Ensure that the approving officer has information on environmental and related public interest issues when reviewing proposed subdivisions.

## Opportunities for Biodiversity Conservation

In addition to what is listed under Strategic Directions 1.1 and 1.2 of *Keeping Nature in our Future,* consider the following opportunities for action for Penticton:

- Penticton has a distinct urban-rural delineation, so it is important to maintain those attractive urban areas along with protection of the rural open space through zoning and naturalized park creation.

- Use future land use maps in OCP reviews to signal where conservation or less detrimental land uses are more appropriate than the current OCP and zoning designations.
- Development applications that do not incorporate mitigation against blockages to the eastern hillside corridor which is used by California Bighorn Sheep, should be discouraged.
- Ellis and Penticton Creeks ecological maintenance and enhancement should be a priority, particularly where funding is already available for Penticton Creek and infrastructure is failing.
- Proposed developments must allow adequate wildlife corridors in these critical areas around steep canyon slopes.
- Include a cost benefit analysis requirement for developments of a certain size or in newly proposed growth areas, looking at the long term infrastructure and taxes.

# Penticton

## Biodiversity Class Summary

| Biodiversity class | Area (ha)* | % of Penticton |
|---|---|---|
| Very high | 298 | 7.1% |
| High | 245 | 5.8% |
| Moderate | 831 | 19.7% |
| Low | 977 | 23.2% |
| Very low | 1,862 | 44.2% |
| **Total** | **4,212** | |

*area statistics exclude large lakes (>50ha)
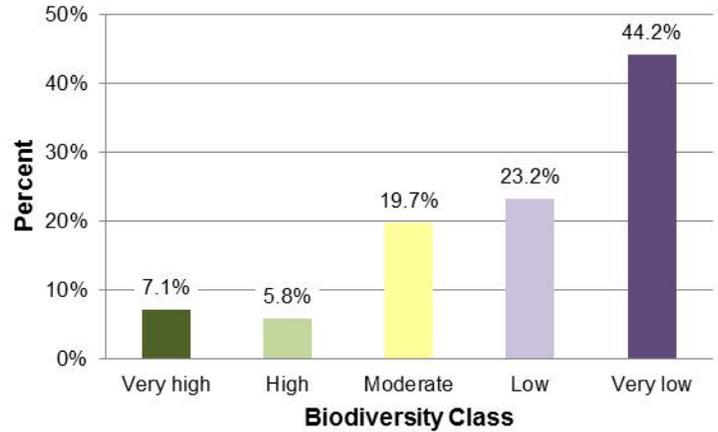


## Management Class Summary

| Management class | Area (ha)* | % of Penticton |
|---|---|---|
| Class 1 - Conservation Lands | 0 | 0.0% |
| Class 2 - Dedicated Open Space | 394 | 9.3% |
| Class 3 - Public Resource Lands | 786 | 18.7% |
| Class 4 - Agriculture & Crown Leases | 1,379 | 32.7% |
| Private land | 1,280 | 30.4% |
| Indian reserve | 28 | 0.7% |
| Undefined | 346 | 8.2% |
| **Total** | **4,212** | |

*area statistics exclude large lakes (>50ha)
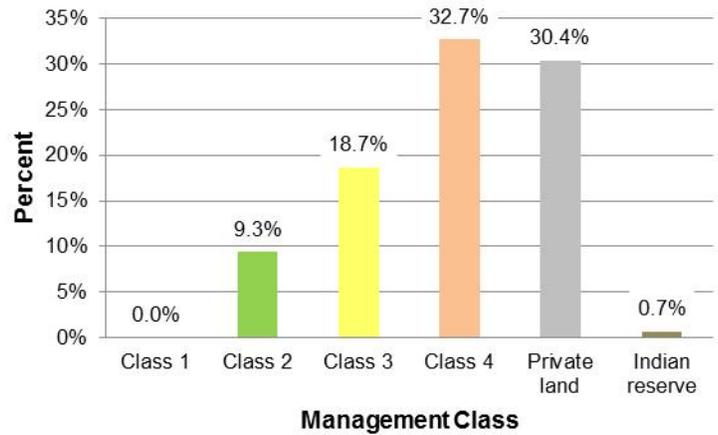


## Conservation Ranking Summary

| Conservation ranking | Area (ha)* | % of Penticton |
|---|---|---|
| Very high - Class 1 | 1,082 | 25.7% |
| High - Class 2 | 670 | 15.9% |
| Moderate - Class 3 | 906 | 21.5% |
| Low - Class 4 | 1,554 | 36.9% |
| **Total** | **4,212** | |

*area statistics exclude large lakes (>50ha)