

# LOCAL GOVERNMENT: *TOWN OF OSOYOOS*

*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 Osoyoos. **It should be used in conjunction with the Town of Osoyoos 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 Osoyoos offers many unique physical features (West Benchlands, Kruger Mountain and Osoyoos Lake) and sensitive ecosystems (Antelope brush grasslands, wetlands and riparian areas). It is the juxtaposition 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, Osoyoos has undertaken a series of planning initiatives to protect and restore vital habitat.

## **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.

## **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.

## **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***

- 31% of the Osoyoos land base contains ecosystems ranked high or very high in importance for conservation.
- Most of these highly sensitive ecosystems have been designated as Open Space or protected as Conservation Lands through parks or zoning or are in Development Permit areas.

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

- 26% of Osoyoos 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.
- All of the streams, including lakes that are fish bearing or support fish habitat have been designated as Riparian Development Permit Area.

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

- Osoyoos 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.
- A subregional movement corridor runs along the West Bench of Osoyoos and is critical for large mammals to access their vast range and habitat needs.
- Osoyoos is a barrier to the east west migration of wildlife.

## ***Current Tools and new Opportunities for Conservation***

### ***Official Community Plan Bylaws***

**Riparian Development Permit Area (RDPA)** 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, under the provincial Fish Protection Act.

**Environmentally Sensitive Development Permit Area (ESDPA)** requires landowners to apply for a permit before subdividing, construction, or altering the land within an environmentally sensitive area. 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 ESDPA requires an Ecological Assessment conducted by a registered professional biologist (RPBio) with experience working with local ecosystems, and may include other Qualified Environmental Professionals (QEPs).

### ***Zoning Bylaw***

**Floodplain Setback** within 7.5 metres of the natural boundary of Osoyoos Lake, a swamp or pond is designated as a Floodplain Setback Area.

**Amenity Density Bonus** is an option through Amenity Zoning or Comprehensive Development Zones. When amenity density bonusing is pursued, staff conduct a detailed assessment including proposed alternative land uses and densities, serviceability, economic and environmental assessment values and proposed public benefit.

See *Keeping Nature in our Future* for ideas on effective clustering.

### ***Opportunities for Biodiversity Conservation***

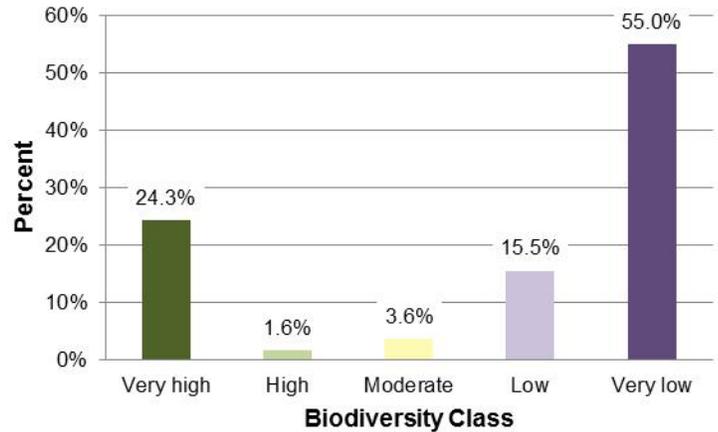
- For areas of Future Development, examine the impacts on biodiversity and servicing under different development scenarios.
- Development applications that do not incorporate mitigation against blockages to the West Bench corridor should be discouraged.
- Use future land use maps in OCP reviews to signal where conservation or less detrimental land uses are more appropriate than the current OCP and zoning designations.

## Osoyoos

### Biodiversity Class Summary

Biodiversity class	Area (ha)*	% of Osoyoos
Very high	214	24.3%
High	14	1.6%
Moderate	32	3.6%
Low	136	15.5%
Very low	483	55.0%
<b>Total</b>	<b>879</b>	

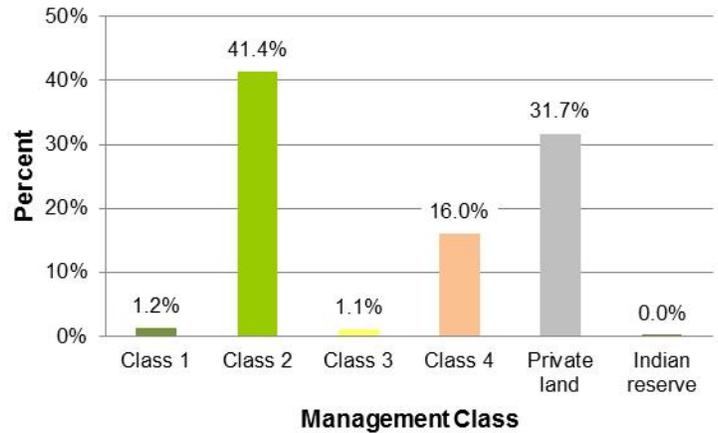
\*area statistics exclude large lakes (>50ha)



### Management Class Summary

Management class	Area (ha)*	% of Osoyoos
Class 1 - Conservation Lands	10	1.2%
Class 2 - Dedicated Open Space	363	41.4%
Class 3 - Public Resource Lands	9	1.1%
Class 4 - Agriculture & Crown Leases	141	16.0%
Private land	278	31.7%
Indian reserve	0	0.0%
Undefined	77	8.7%
<b>Total</b>	<b>879</b>	

\*area statistics exclude large lakes (>50ha)



### Conservation Ranking Summary

Conservation ranking	Area (ha)*	% of Osoyoos
Very high - Class 1	177	20.2%
High - Class 2	96	11.0%
Moderate - Class 3	218	24.8%
Low - Class 4	387	44.0%
<b>Total</b>	<b>879</b>	

\*area statistics exclude large lakes (>50ha)

