

LOCAL GOVERNMENT: TOWN OF OLIVER

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 Oliver. **It should be used in conjunction with the Town of Oliver 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 Oliver offers many unique physical features (silt bluffs, rivers and lakes) and sensitive ecosystems (Antelope brush grasslands, riparian areas, oxbow wetlands and rock outcrops). 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, Oliver 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

- Almost 18% of Oliver's land base contains ecosystems ranked high or very high in importance for conservation.
- 6.1% of highly sensitive ecosystems are within the Environmental Development Permit Area.
- 12% is designated as Open Space or Conservation Area through parks or zoning.

Relative Biodiversity – Areas of Greatest Ecological or Biodiversity Significance

- Almost 13% of Oliver 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 Areas.

Connectivity – linkages between natural areas and corridors for wildlife

- The Okanagan River corridor is the only local wildlife corridor through Oliver.
- East west connectivity is challenging through Oliver.

Current Tools and new Opportunities for Conservation

Official Community Plan Bylaws

Riparian Development Permit Area 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. The area was recently updated in 2011 to include all watercourses that are defined as a stream under the Riparian Areas Regulation.

Environmental Development Permit Area 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 EDPA requires an Environmental Assessment conducted by a registered professional biologist (RPBio) with experience working with local ecosystems, and may include other Qualified Environmental Professionals (QEPs). This area was recently updated in 2011 to include sensitive ecosystem inventory mapping for Oliver.

Zoning Bylaw

Watercourse Setback required of a minimum 7.5 meters from the natural boundary of a lake, swamp or pond; 30 meters from the design water level boundary of the Okanagan River Channel; and, 15 meters from the natural boundary of any nearby watercourse for the construction, alteration, location or use of buildings and structures.

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 Oliver:

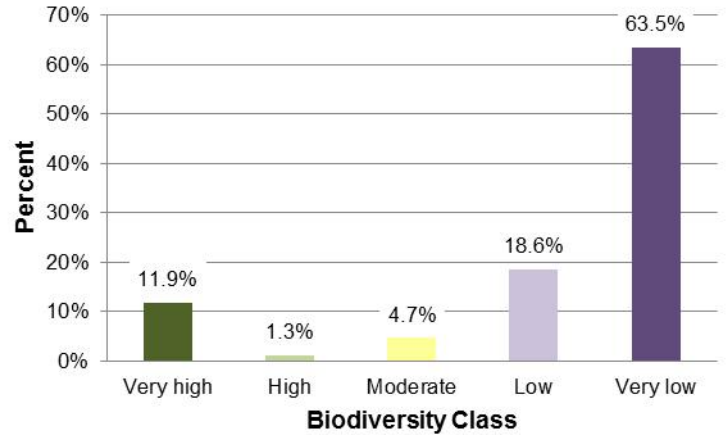
- Use future land use maps in OCP reviews to signal where conservation or less detrimental land uses are more appropriate than the current OCP and zoning designations.
- For areas of Future Development, examine the impacts on biodiversity and servicing under different development scenarios.
- Oliver 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 (e.g. Oliver Mountain).
- Maintain setbacks and vegetation along Okanagan River corridor as it is the only local wildlife corridor through Oliver.
- Partner with and promote Okanagan River Restoration Initiative (ORRI) that will enhance portions of the Okanagan River and enhance biodiversity.

Oliver

Biodiversity Class Summary

Biodiversity class	Area (ha)*	% of Oliver
Very high	70	11.9%
High	7	1.3%
Moderate	28	4.7%
Low	109	18.6%
Very low	373	63.5%
Total	587	

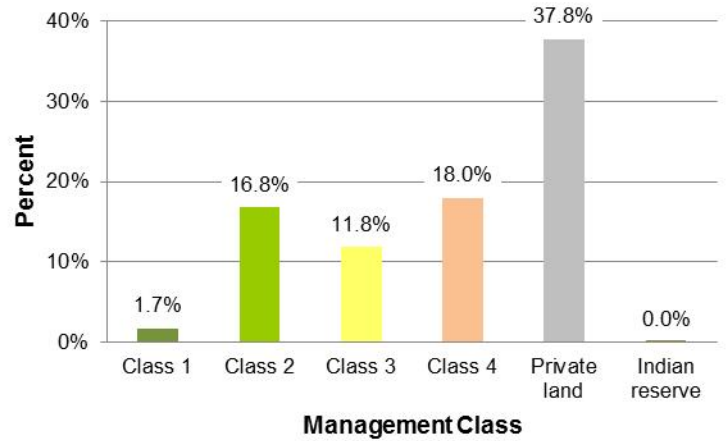
*area statistics exclude large lakes (>50ha)



Management Class Summary

Management class	Area (ha)*	% of Oliver
Class 1 - Conservation Lands	10	1.7%
Class 2 - Dedicated Open Space	99	16.8%
Class 3 - Public Resource Lands	70	11.8%
Class 4 - Agriculture & Crown Leases	106	18.0%
Private land	222	37.8%
Indian reserve	0	0.0%
Undefined	82	13.9%
Total	587	

*area statistics exclude large lakes (>50ha)



Conservation Ranking Summary

Conservation ranking	Area (ha)*	% of Oliver
Very high - Class 1	71	12.2%
High - Class 2	32	5.4%
Moderate - Class 3	132	22.4%
Low - Class 4	352	60.0%
Total	587	

*area statistics exclude large lakes (>50ha)

