

LOCAL GOVERNMENT:

RDOS Electoral Area C

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 Electoral Area C. **It should be used in conjunction with the Area C 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 Electoral Area C offers many unique physical features as such as the Okanagan River, including the last natural meandering sections in Canada, and the last Canadian Columbia Runs of Sockeye and Chinook salmon. Its' sensitive ecosystems include grasslands, antelope brush, riparian areas, forest, wetlands, shallow-soiled rock outcrops and ridges. It is the close proximity of these diverse habitats that contribute to a wide diversity of species, both common and rare, that are found within Electoral Area C. In response to the increasing threats to, and rarity of, native plants, wildlife, and ecosystems, the RDOS has developed Environmentally Sensitive and Watercourse Development Permit Areas. This Strategy identifies where there are still opportunities to improve and protect biodiversity in Electoral Area C.

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

- New areas have received Sensitive Ecosystem Inventory Mapping since the ESDP areas were established in the OCP.
- About 83% of Electoral Area C's land base contains ecosystems ranked of high or very high.
- 31 % of these highly sensitive ecosystems are within the Environmentally Sensitive and Watercourse Development Permit Areas.
- About 17% have been designated as Open Space or protected as Conservation Lands through parks or zoning.

Relative Biodiversity – Areas of Greatest Ecological or Biodiversity Significance

- Almost 32% of Area C is has a very high or high relative biodiversity.
- Compared to the rest of the RDOS, Area C contains 14% of the very high and 6% of the high relative biodiversity area.
- 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

- East west connectivity across the valley bottom is suffering, with the most viable areas at the north and south extremes of the electoral area in the Okanagan Valley bottom
- North south travel corridors on either side of the Okanagan River are in higher elevations due to agricultural and urban development.
- There is still potential for connectivity to the White Lake basin in area D, and to the Similkameen in the West and Kettle in the East, for the species that can use higher elevations.
- The South Okanagan Grasslands Protected Area has large holdings, but there is a lack of protection in the valley bottoms.
- Active planning and restoration is needed to maintain and improve valley bottom connectivity.
- Gallagher Lake is identified as a growth area, but is a valley bottom bottleneck that could have further impacts if the developed area expands. There is currently a concentration of conservation lands surrounding Gallagher Lake.
- More intensively agriculturally developed areas around Oliver are extending the connectivity barrier around the town

Current Tools and new Opportunities for Conservation

Official Community Plan Bylaws

Watercourse Development Permit Areas 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.

- Opportunities exist for improving WDP guidelines and policies based on implementation experience to date.
- The RDOS should continue to support joint lake foreshore inventory and classification initiatives.
- The RDOS should also re-initiate stream mapping to improve base maps and to ensure that only appropriate lands are being flagged for WDPs.

Environmentally Sensitive Development Permit Areas 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, of sensitive ecosystems and rare and endangered plants, plant communities and wildlife. Development within an ESDP area usually requires an Environmental Assessment conducted by qualified environmental professional with experience working with local ecosystems.

- 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

Riparian Assessment Areas, Setbacks for Buildings, Structures and Areas for Farm uses, and Floodplain regulations are all used to regulate land use around water.

Cluster Development is allowed in certain circumstances with the intention 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.

Subdivision Bylaw

Subdivisions in rural areas are ultimately approved by an independent approving officer in the Ministry of Transportation and Infrastructure. There is an obligation for the approving officer to consider the environment and public interest in decision making. The RDOS also has requirements for subdivision services and development permits with some subdivisions. Based on the OCP, the RDOS can also provide information in the public interest as part of their referrals to the subdivision approving officer.

Opportunities for Biodiversity Conservation

In addition to the Strategic Directions made in section 4.1 of *Keeping Nature in our Future*, consider the following opportunities for action for Area C:

- Focus active long range and development planning in valley bottoms and associated areas that are limiting for nature.
- 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.
- Develop opportunities to maintain and restore east west connectivity across the valley bottom at the north and south extremes of the electoral area.

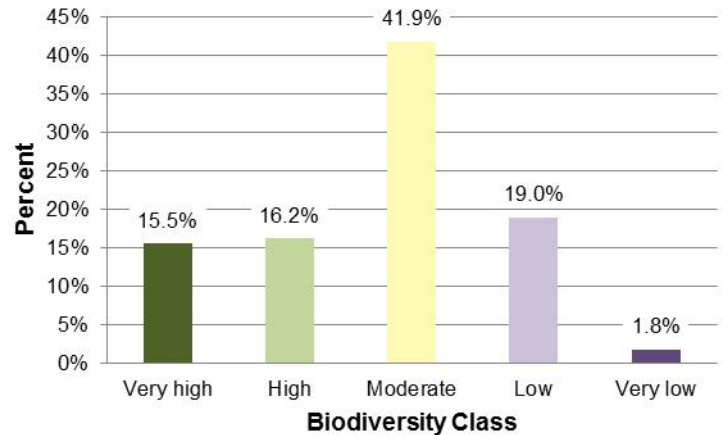
- Increase active support the Okanagan River Restoration Initiative, and similar projects which are maintaining and enhancing the river corridor.
- Actively incorporate connectivity to the White Lake basin in area D, and to the Similkameen in the West and Kettle in the East, within the Official Community Plan.
- Ensure that Gallagher Lake is planned to continue to allow north south connectivity

Electoral Area C

Biodiversity Class Summary

Biodiversity class	Area (ha)*	% of Electoral Area C
Very high	8,525	15.5%
High	8,886	16.2%
Moderate	22,975	41.9%
Low	10,422	19.0%
Very low	978	1.8%
No data	3,053	5.6%
Land Base Total	54,839	

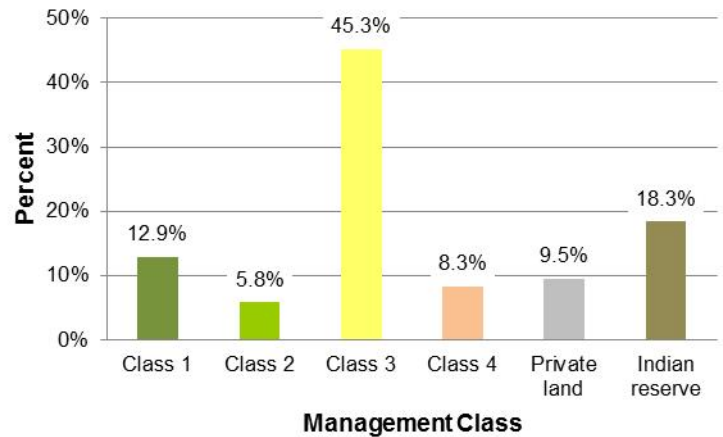
*area statistics exclude large lakes (>50ha)



Management Class Summary

Management class	Area (ha)*	% of Electoral Area C
Class 1 - Conservation Lands	7,048	12.9%
Class 2 - Dedicated Open Space	3,162	5.8%
Class 3 - Public Resource Lands	24,835	45.3%
Class 4 - Agriculture & Crown Leases	4,535	8.3%
Private land	5,189	9.5%
Indian reserve	10,063	18.3%
Undefined	7	0.0%
Land Base Total	54,839	

*area statistics exclude large lakes (>50ha)



Conservation Ranking Summary

Conservation ranking	Area (ha)*	% of Electoral Area C
Very high - Class 1	23,394	42.7%
High - Class 2	19,715	36.0%
Moderate - Class 3	8,389	15.3%
Low - Class 4	298	0.5%
No Data	3,043	5.5%
Land Base Total	54,839	

*area statistics exclude large lakes (>50ha)

