

LOCAL GOVERNMENT:

RDOS Electoral Area A

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 A. **It should be used in conjunction with the Area A 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 A, Rural Osoyoos, offers many unique physical features, including BC's pocket desert, Kruger Mountain, Osoyoos Lake, the oxbows and wetlands of Okanagan River, Richter Pass with the natural ridgeline views between highway 3 and Osoyoos Lake, and sensitive ecosystems such as 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 variety of species, both common and rare, that are found in this Electoral Area. 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.

Conservation Ranking

Conservation Ranking looks at the relative sensitivity and rarity of plant based ecosystem. The maps highlight where sensitive ecosystems have been identified in development permit areas, or designated as parks or protected areas. It is recommended that the high and very high conservation ranked areas be used to update Environmentally Sensitive Development Permit areas.

Relative Biodiversity

Project area scaled maps have been produced to show the areas of greatest ecological and biodiversity significance. This mapping considers additional information to conservation ranking including: special features, some species of importance, size of habitats and distance to roads. These maps can be used for parks, neighborhood 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

- About 76% of Area A's land base contains ecosystems ranked high or very high in importance for conservation.
- About 48% of these highly sensitive ecosystems are within the Environmentally Sensitive and Watercourse Development Permit areas.
- 21% of the very high and high conservation ranking areas 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 35% of Area A is has a very high or high relative biodiversity.
- Compared to the rest of the RDOS, Area A contains 7.4% of the very high and 3.6% of the 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

- North south wildlife corridors on either side of the valley are at higher elevations due to lakeside urban and adjacent agricultural development. Only some species can use higher elevations.
- East west connectivity across the valley bottom is suffering. Some connectivity remains at Haynes Point but agriculture and development restricts movement at each end. Some connectivity also remains at the Willow Beach area and north at the valley bottom, but it is marginalized by cultivated fields, the highway 97 corridor and has been zoned for some further development.
- The South Okanagan Grasslands Protected Area has large holdings, but there is a lack of protection in the valley bottoms.
- Some connectivity remains to the Similkameen in the West and Kettle in the East.
- Regional Growth Strategy rural growth areas in Regal Ridge and Willow Beach include high conservation ranked, relative biodiversity, and important connectivity lands that will need to be considered
- The core conservation covenant and zoned areas of Regal Ridge do not protect the highest relative biodiversity or conservation ranked property in the development, further build out may impact connectivity.

*Much of the conservation lands and parks are at higher elevations, whereas the majority of biodiversity values and development pressures occur in the valley bottom

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 a 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 A:

- 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.

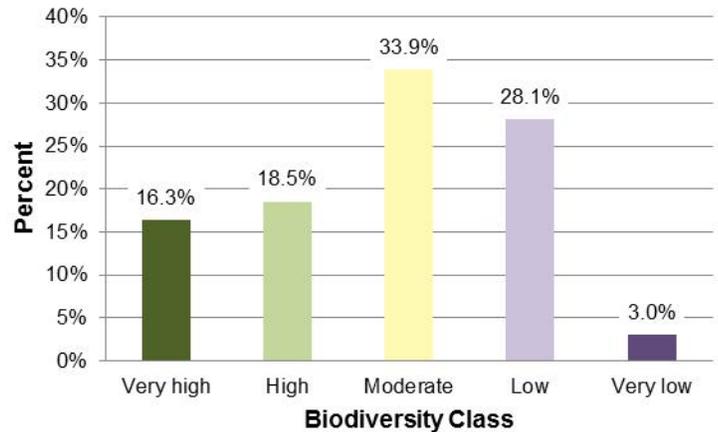
- Enhance east west connectivity across the valley bottom around Haynes Point.
- Enhance existing, but degraded east west connectivity in the Willow Beach area.
- The Regional Growth Strategy rural growth area designation at Willow Beach was based on historic zoning permitting further development. Reconsider designation and zoning based on the current scientific knowledge of the importance of this area for biodiversity and restoration.
- Enhance and maintain north south wildlife corridors at lower elevations (valley bottoms) connecting the existing Okanagan River, the Okanagan River Restoration Initiative, South Okanagan Wildlife Management Areas and other existing conservation areas.
- Maintain connectivity to the Similkameen in the west and Kettle in the east particularly at lower elevations through active planning.
- The Regional Growth Strategy rural growth area of Regal Ridge requires careful consideration of development design to reduce biodiversity and connectivity impact.

Electoral Area A

Biodiversity Class Summary

Biodiversity class	Area (ha)*	% of Electoral Area A
Very high	4,688	16.3%
High	5,303	18.5%
Moderate	9,718	33.9%
Low	8,056	28.1%
Very low	860	3.0%
No Data	80	0.3%
Total	28,706	

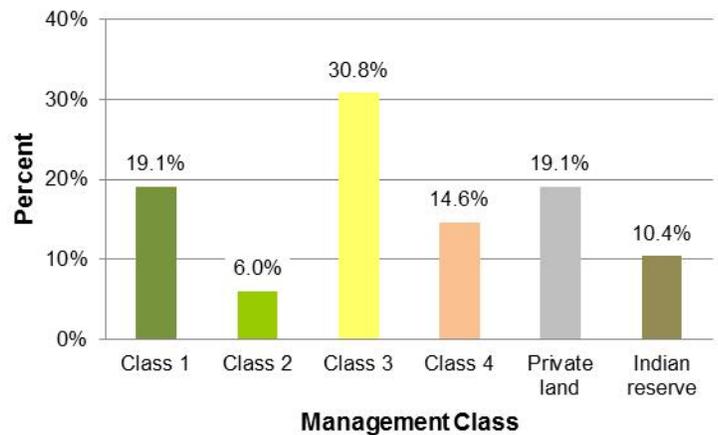
*area statistics exclude large lakes (>50ha)



Management Class Summary

Management class	Area (ha)*	% of Electoral Area A
Class 1 - Conservation Lands	5,472	19.1%
Class 2 - Dedicated Open Space	1,723	6.0%
Class 3 - Public Resource Lands	8,845	30.8%
Class 4 - Agriculture & Crown Leases	4,197	14.6%
Private land	5,484	19.1%
Indian reserve	2,985	10.4%
Undefined	0	0.0%
Total	28,706	

*area statistics exclude large lakes (>50ha)



Conservation Ranking Summary

Conservation ranking	Area (ha)*	% of Electoral Area A
Very high - Class 1	12,168	42.4%
High - Class 2	9,512	33.1%
Moderate - Class 3	6,640	23.1%
Low - Class 4	305	1.1%
No Data	81	0.3%
Total	28,706	

*area statistics exclude large lakes (>50ha)

