

Corridor Country: Habitat Corridors to Improve the Lives of all Lake Country Residents; Wildlife and Humans



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Global Environmental Issues



Climate change, a growing population, and globalization are leading to severe environmental issues.

These environmental issues are wicked, and there is no easy solution to one, let alone all of them simultaneously.

We are moving towards a future that is **increasingly grey**.

The greatest impact can be made when we focus our efforts is on a singular issue.

What action can we take here in Lake Country to combat these issues?

Biodiversity

One such global issue, relevant to us locally is the reduction of biodiversity in our ecosystems.

As early as 2005, the Okanagan saw amounts of land conversion as high as 20-28% percent.

The resulting loss in biodiversity, gains significance in the Okanagan, which has the highest concentration of endangered and threatened species in BC.



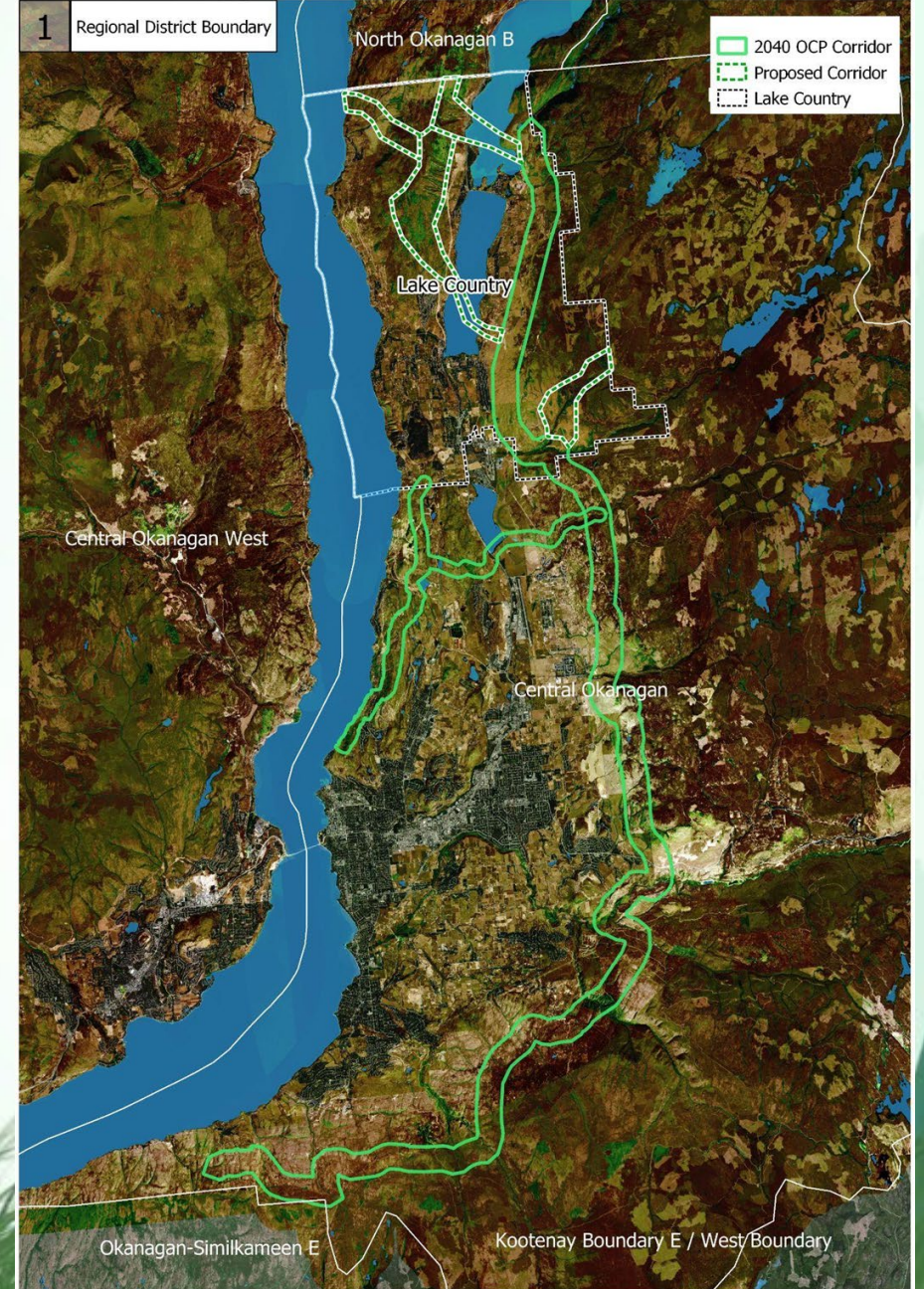
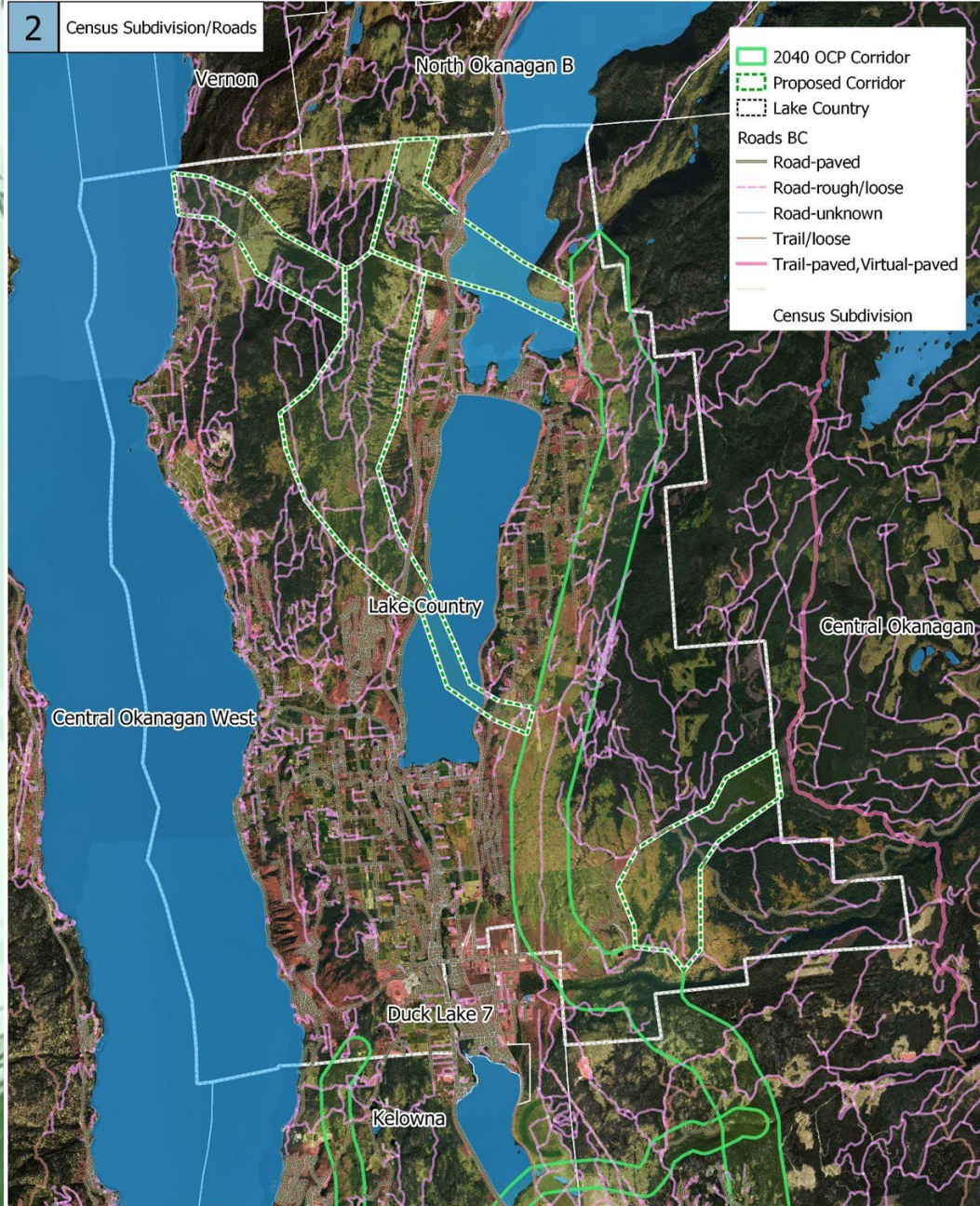
Our Solution



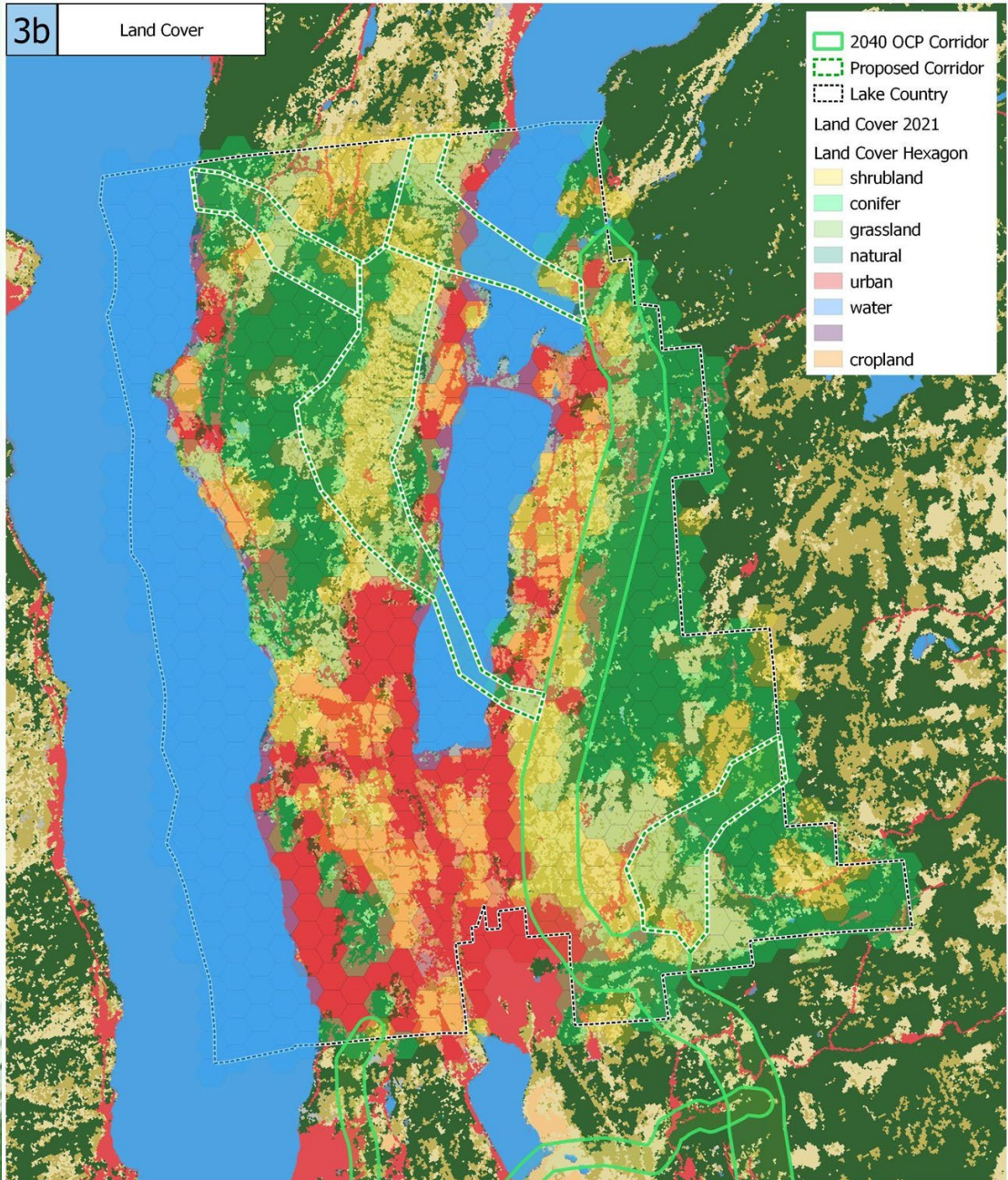
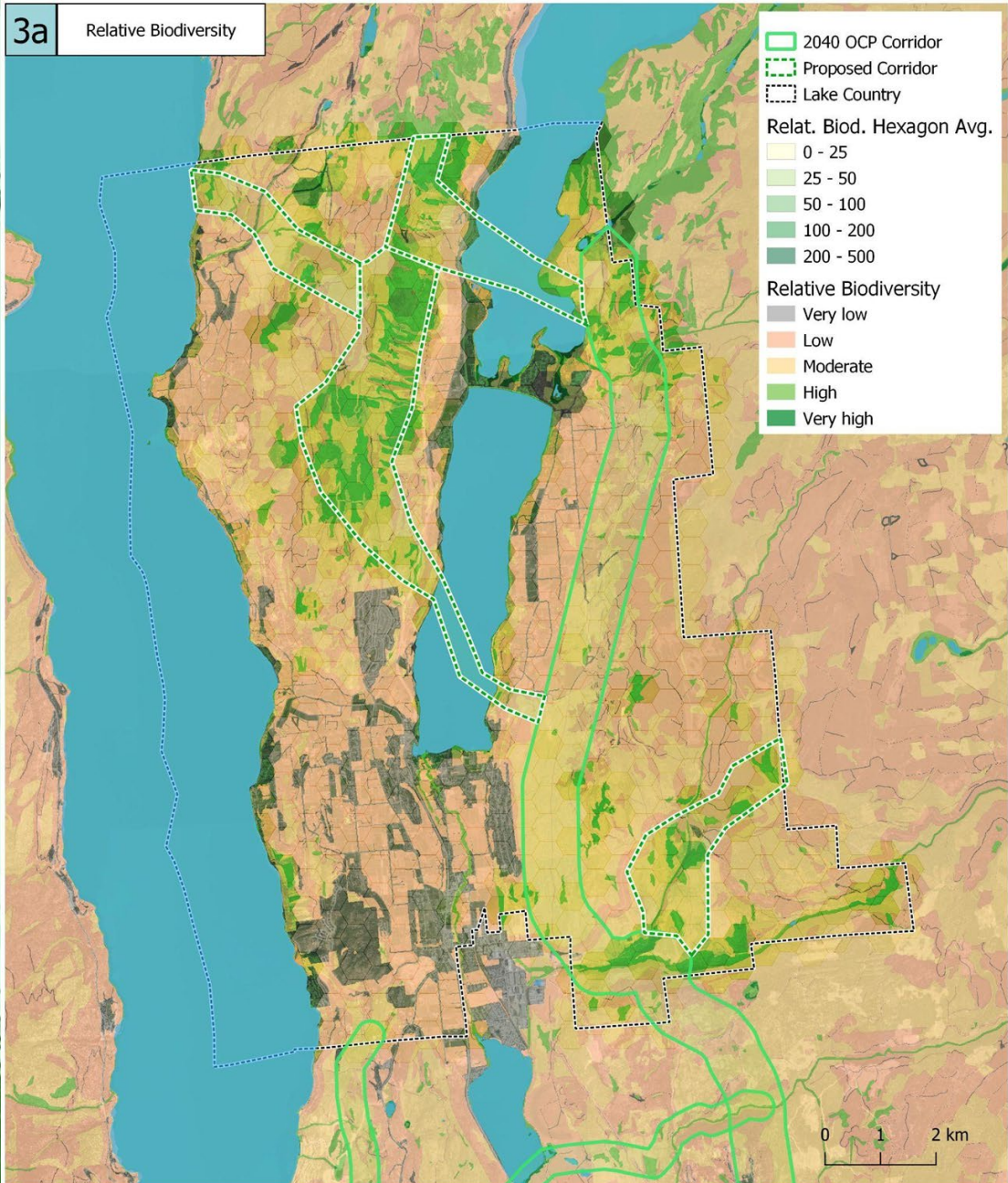
We are proposing significant integration of wildlife corridors into the District of Lake Country community planning.

Using GIS mapping techniques, we have identified several candidate areas for habitat connectivity. These maps tell a story.

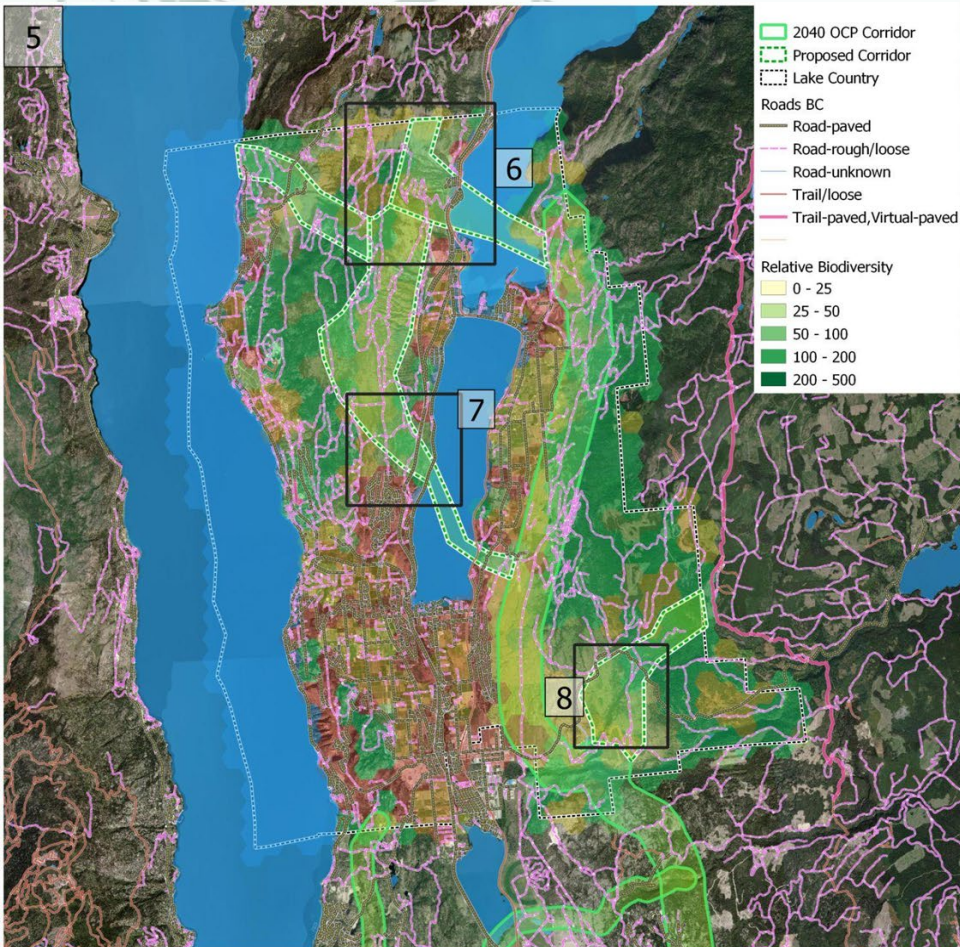
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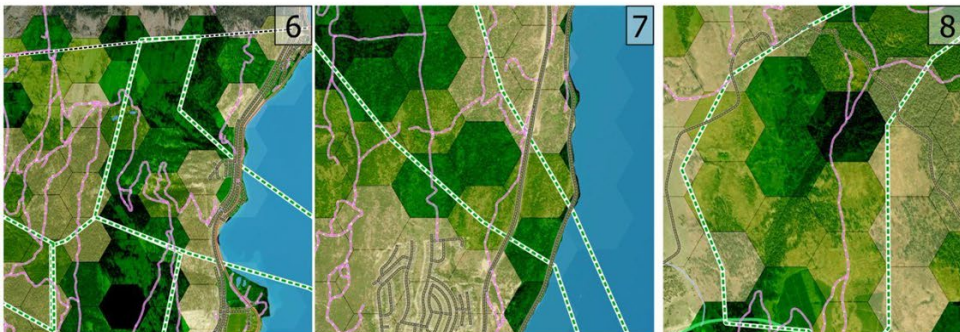


Areas of Concern



We have identified several areas of concern, where our proposed corridor interacts with roadways.

At these sites, as implementation occurs, certain mitigation strategies will need to be considered, such as wildlife crossings, and fencing.



Action Plan



To Begin we will advocate for the inclusion of this proposed corridor in existing Lake Country Policies. Which include:

- I. Establishing a Natural Environment Development Permit Area (NEDPA)
- I. Discouraging development or land uses that will hurt the Okanagan wildlife connectivity corridor.

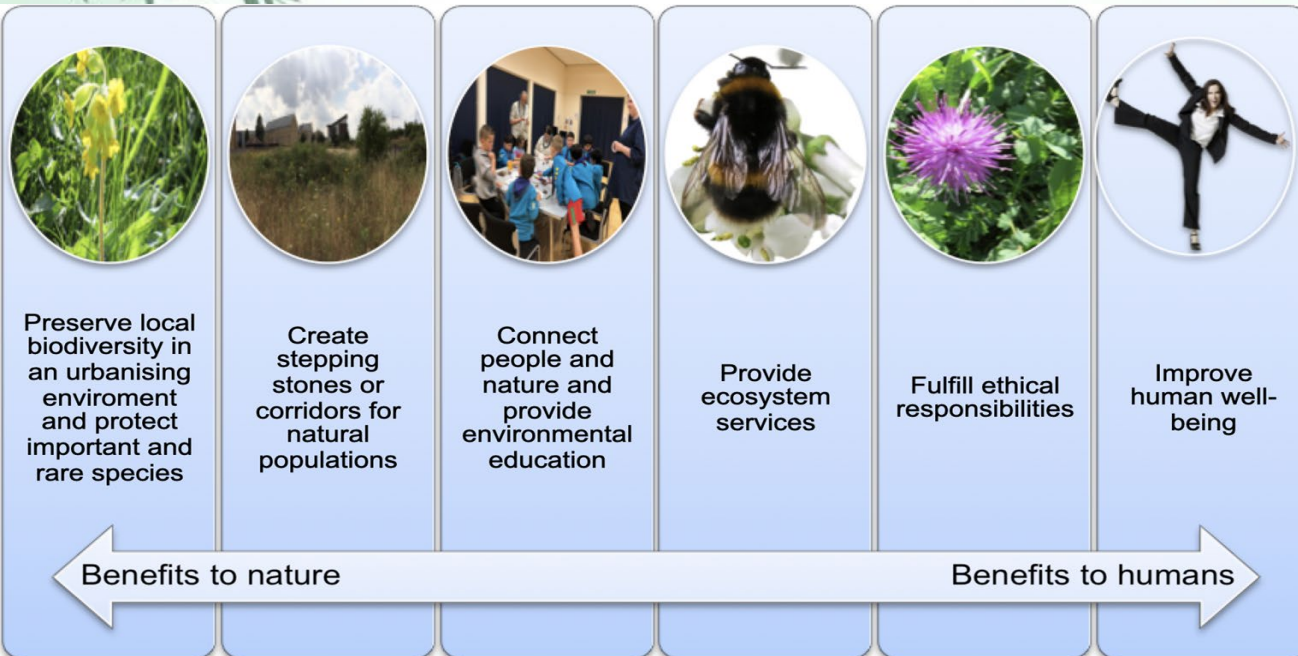


Our actions will go further to support the corridor by:

- I. Further petitioning for District of Lake Country City Council for the allocation of funds for the purpose of land acquisition, in partnership with local land trusts.
- I. The Development of an Okanagan wildlife connectivity corridor stewardship initiative.
- I. When possible, facilitate the development of trails, recreation opportunities, and community spaces within the wildlife corridor areas.

Benefits

You can see where our intervention fits on this scale, and how it leads to benefits for humans. But due to the holistic nature of our planning, it goes further.



- By increasing recreational opportunities and active transportation.
- Offering potential for community hubs, such as gardens, and gathering areas.
- And preserving the proximity to nature and stunning views that Lake Country is known for.

All of these things ultimately increase the appeal, and livability of Lake Country, positively affecting property prices, attracting new residents and developing tourism!

Funding and Resources Acquisition Timeline:

- 7- 15 months for each funding cycle

Cost:

- CAD \$5,500 - \$23,000 per funding cycle

Ensure Legal Protection and Acquisition of Corridor Areas

Timeline:

- NEDPA Inclusion: 12-24 months
- Land Acquisition: 15+ years

Cost:

- NEDPA Inclusion: CAD \$30,000- \$60,000
- Land Acquisition: CAD \$500,000 - \$2,000,000+ (initial acquisitions)

Launch a Stewardship Program

Timeline:

- Initial setup and launch: 6-12 months
- Ongoing thereafter

Cost:

- Initial: CAD \$20,000 - \$40,000
- Ongoing: Dependent on event scale and material distribution.

Final Implementation

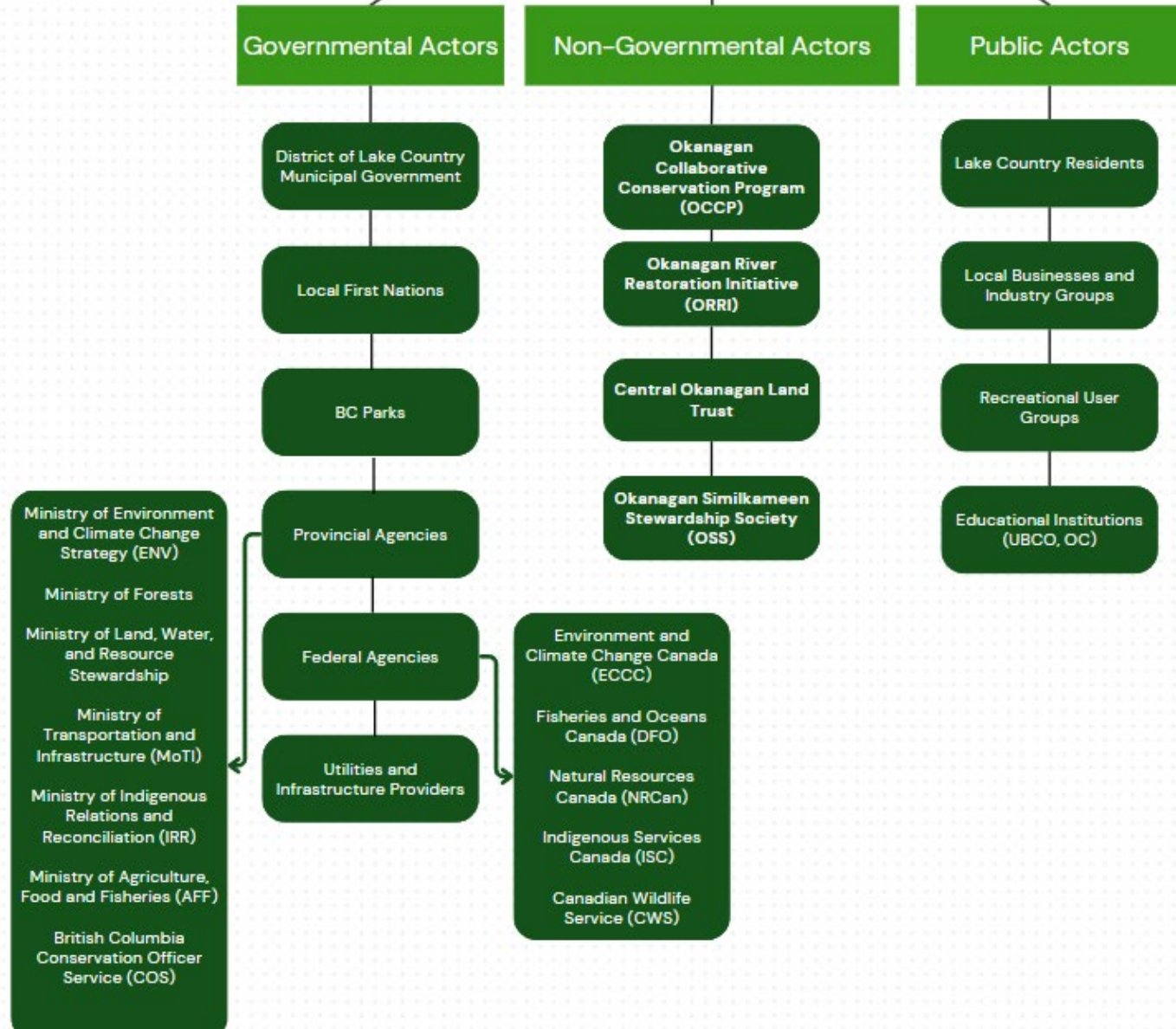
Timeline:

- Continuous, 10+ years

Cost:

- Preparation and Permits: CAD \$10,000- \$50,000
- Physical Implementation: Variable, potentially ranging from CAD \$100,000 to several million dollars
- Monitoring and Adaptation: CAD \$20,000- \$100,000 annually
- Long-term Management and Maintenance: Varies greatly, estimated at CAD \$10,000- \$50,000 annually

Key Actors



Conclusion

Examples from across the globe show us that projects like this can be successful!

- Urban sustainability planning in Curitiba, Brazil
- Los Angeles Wildlife Corridors

This corridor will foster a deeper connection to nature, enriching our community, and enhancing recreational opportunities

It leads to a more resilient, vibrant, and inclusive environment where both humans and wildlife thrive together.

This path will lead us to a brighter, more sustainable future for Lake Country, where the benefits of our collective efforts are communal, enduring, and shared by all.



Questions?

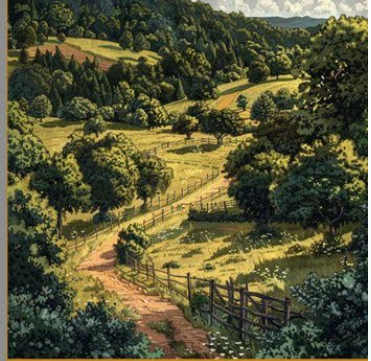


Animal Friendly LAKE COUNTRY

A city for harmony between humans and nature

Habitat Corridors to Improve the Lives of All Lake Country Residents, Wildlife and Humans.

The Okanagan valley has the highest concentration of threatened and endangered species of wildlife in BC



In the planning of this corridor, various **landscaping concepts**, **legal reforms**, and **social incentives** are suggested to conserve **biodiversity** and enhance **wildlife mobility**. This is achieved by fortifying **connection points** and minimizing **human disturbances**

We applied 19 design tactics within the framework of 5 landscape design strategies to enhance landscape diversity

- Topography Dips
- Topography Mounds
- Varied Planting Patterns



we must take steps to protect and save these animals and ecosystems against this growth!

we can do this by preserving or restoring corridors of natural habitat, while at the same time building trails in these areas!



it is also one of the fastest growing regions in the province. Lake country expects at least a 87% increase in population by 2046

Facilitating animal movement through the strategy of improving connection points and reducing human impacts in the environment involves incorporating various tactics



- Increase Species Range
- Increase Movement Opportunities Along Land Systems
- Increase Vegetation Along Linear Features
- Increase Movement Opportunities Along Water Systems
- Increase Effectiveness of Corridors.
- Reduce water system barriers
- Reduce land system barriers

Research proposal alternative

As an option, to further elucidate our methods, approach, and areas of consideration, we could alternatively propose the "Corridor Country" research project, with a 12-month execution schedule. This can better define the strategies, locations and interventions, considering local surveys and city resources by providing interaction of government managers and UBC researchers.

Considering the research structure of other projects, this is a preliminary expenditure for 12 months :

- Project management - \$36000
- Ph. D. students - \$50000
- Master's students - \$38000
- Travel - \$15000
- Software/web development - \$42000
- Communications - \$8000
- Materials and supplies - \$4000
- Workshop with city council and contractors - \$10000
- UBC partner staff time - \$70000

Total funding needed - \$273000



Wildlife-friendly fences can facilitate the movement of animals and reduce their casualties, requiring legal support and farmer education



Using boardwalks and walkways helps to significantly reduce human impact on the environment and provides a less obstructive surface for animal movement



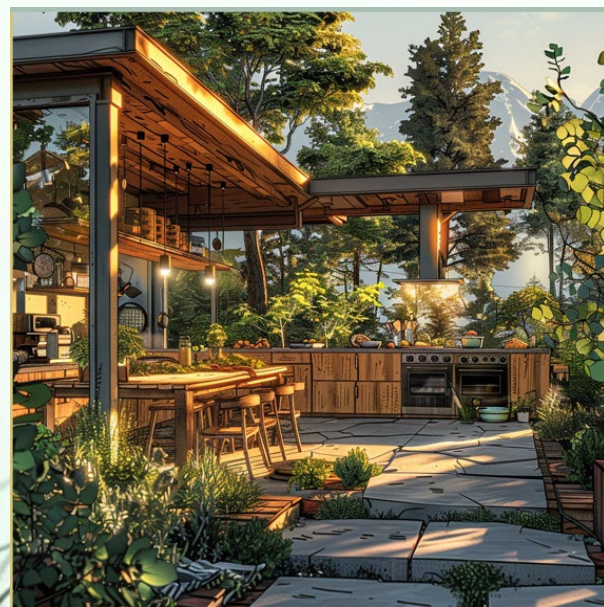
Avoiding monoculture plantings and creating connections between agricultural lands and ecological patches through hedge growth plantings that produce fruits or wildlife feed in different seasons and facilitate the movement of animals from agricultural lands to natural patches.



Using plant species found in corridors and ecological patches in WUIs (Wild Urban Interfaces) to create connections between parks, street landscapes and ecological patches.



Designing rain gardens and Xeriscaping landscapes to protect water resources and manage urban runoff entering corridors, natural patches and the lake.



Considering the tourist nature of Lake Country, structures should be designed to manage tourist visits with minimal environmental impact. Establishing public outdoor kitchens at tourist activity hubs can significantly reduce the need for individual fires for cooking and provide tourists with necessary environmental education in various ways. Creating a community garden near the kitchen enhances its potential for sustainable living education and strengthens civic engagement.