



**JOINT REPORT TO
REGIONAL PARKS COMMITTEE AND REGIONAL WATER SUPPLY COMMISSION MEETINGS
OF WEDNESDAY 16 MARCH 2011**

SUBJECT **OFFSET DEVELOPMENT FROM PURCHASE OF WESTERN FOREST PRODUCTS
LAND AND MANAGEMENT OF LEECH RIVER WATERSHED**

ISSUE

To seek endorsement for proceeding on developing a business case for establishing a carbon credit (offset) project from the conservation, protection, restoration and improved forest management of the Western Forest Products and Leech River watershed lands.

BACKGROUND

The Capital Regional District (CRD) has an opportunity to develop an ecosystem-based carbon offset project from the acquisition of the Western Forest Products (WFP) lands and the management of the Leech River watershed in order to subsequently sell carbon credits under the BC Emissions Offset Regulation or the newly-released Local Government Green House Gas (GHG) Reduction Framework.

In March 2010, the CRD Board approved *that the CRD and partners intend that those portions of the lands to be retained for regional park and watershed purposes be considered for carbon offset development purposes.*

The carbon offset market is rapidly growing in BC and there are a number of organizations, like the Pacific Carbon Trust, looking to purchase credible offsets to sell to organizations, businesses and institutions wanting to achieve "carbon neutral" status.

In November 2010, the provincial government released a draft Forest Carbon Offset Protocol (FCOP) for ecosystem-based projects in BC. The FCOP guides the design, development, quantification and verification of BC forest carbon offsets from a broad range of forest activities on private and public lands.

In the same month, the Joint Provincial-UBCM Green Communities Committee announced a framework to enable local governments who have signed the Climate Action Charter to reduce their corporate carbon liability through the development of community wide projects. This concept allows credible GHG reduction projects to be implemented in the community to counterbalance a local government's corporate carbon emissions. Details for this new framework will be released in spring 2011.

There are several steps involved in developing a carbon offset project, but preliminary investigation indicates that the CRD properties would be an excellent candidate for generating future revenues.

ALTERNATIVES

1. That the Regional Parks Committee and Regional Water Supply Commission recommend to the Board that staff proceed with the business case for developing a carbon credit (offset) project from the conservation, protection, restoration and improved forest management of the Western Forest Products and Leech River watershed lands.

2. That the Regional Parks Committee and Regional Water Supply Commission not recommend to the Board that staff proceed with the business case for developing a carbon credit (offset) project from the conservation, protection, restoration and improved forest management of the Western Forest Products and Leech River watershed lands.

ENVIRONMENTAL IMPLICATIONS

The atmospheric benefits of any offset project must be measured using rigorous scientific, verifiable methodologies.

The carbon benefit for the properties in the WFP lands can be calculated by measuring the tonnes of greenhouse gas emissions that were avoided by the CRD purchasing the Sooke Potholes, Jordan River and Weeks Lake properties for parks and watershed purposes.

In the Leech River watershed, the carbon benefits would be measured by calculating the sequestration benefit from restoration and tree planting since its acquisition.

Initial estimates for the WFP properties range from 200,000-400,000 saleable tonnes of carbon dioxide equivalents in the first 20 years with up to 1.4 million tonnes over 100 years. This estimate is based on the existing Climate Action Reserve Protocol. The atmospheric benefits associated with current practices and management in the Leech still have to be investigated.

SOCIAL IMPLICATIONS

Ecosystem-based offsets are usually 80 to 100 years in length. By protecting select parcels and managing them for their carbon values, the CRD would be able to protect the carbon stock on the landscape and sell the carbon benefits to purchasers. The implication is that the current Board will be committing future Boards to manage the carbon stock for several generations.

FINANCIAL IMPLICATIONS

The CRD will need to seek external support to develop the project either in the carbon market or within the new Local Government framework. There are many businesses that specialize in developing credible, saleable offsets. However, only a few firms have worked in ecosystem-based projects, as is being proposed here. Both the provincial draft Forest Carbon Offset Protocol and the Local Government GHG Reduction Framework will require significant work to prepare the project documentation and meet their strict standards.

Based on initial estimates of saleable tonnes and current demand for credible offsets, this project offers estimated revenues of \$2-4 million in the first 20 years on the formal carbon market. With growing demand from the regulated and voluntary markets in the short term, there may also be additional financial incentives from buyers like the Pacific Carbon Trust (PCT) for timely delivery of credits over the next five years.

Offset projects that are developed to a high standard and have real climactic benefits have both one-time and annual costs. The initial estimates to develop a project of this nature and size could be as high as \$300,000, with annual costs in the \$50,000 range for in-house monitoring and independent third party verification, or about \$1.3 million over 20 years.

In the case of the Local Government framework, the saleable tonnes could be applied annually to the CRD and each member municipality's corporate carbon liability. This would not result in revenues, rather

it would result in avoided future costs for each organization in meeting its corporate carbon neutral commitments starting in 2012.

As the carbon market matures and projects like this become more predominant, the annual costs may be reduced. If the project formally developed and credits were sold to an organization like the PCT, it is possible that some or all of the project development costs could be recovered through initial revenues. It is also possible that annual costs would be less expensive if the project developed and applied under the Local Government GHG Reduction Framework. Both of these will be evaluated in the business case.

A detailed business case for the project would help to clarify the quantity of saleable credits, magnitude of project development costs, required staff resources, organizational and municipal benefits, potential revenues and the best approach to undertake this type of project.

The cost to develop the business case is \$20,000, with \$15,000 funded by Regional Parks and \$5,000 by Integrated Water Services. The funds are currently available in the respective 2011 budgets.

Like any new endeavour, there are risks associated with undertaking this project. By entering markets in which the CRD is selling the value of the carbon, the CRD and its partners will need to ensure that the value of the carbon remains. This means managing both human-influenced and natural risks, like forest fires, and retaining a healthy buffer pool (i.e., not selling 100% of the carbon value) to ensure carbon credits are available for sale each year in the project. Management plans will be required as part of the project design and development but will build on the CRD's operating practices.

CONCLUSION

The CRD has an opportunity to pursue the development of a carbon credit (offset) project in order to take advantage of the emerging carbon market by selling carbon credits or by developing projects under the new framework to use towards corporate carbon neutral commitments.

Approach	Benefits
Develop the project as an offset and sell to purchasers such as the Pacific Carbon Trust.	Annual revenues from sale of carbon credits.
Develop the project as Credible Community Reduction Project in the Local Government GHG Reduction Framework.	Application of project benefits towards the CRD and municipalities' annual corporate carbon liabilities.

Both avenues will require an initial investment to develop the project into high quality offsets, annual costs to verify the project, and a long-term commitment to protecting and managing the carbon values of these lands.

A detailed business case considering the environmental, social and financial benefits for developing this project either as a formal carbon offset or as a project under the Local Government GHG Reduction Framework is required to proceed.