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REPORT TO CRD REGIONAL WATER SUPPLY COMMISSION MEETING OF WEDNESDAY, FEBRUARY 6, 2013

SUBJECT ECOSYSTEM OFFSET BUSINESS CASE INVESTIGATION

ISSUE

Development of a carbon offset project associated with the acquisition and management activities in select parcels of land in Weeks Lake and Jordan River areas.

BACKGROUND

In 2011, the Capital Regional District (CRD) Regional Parks Committee and Regional Water Supply Commission endorsed a business case analysis for developing a carbon credit offset project associated with conservation, protection and improved forest management activities in select parcels of land in the Weeks Lake and Jordan River areas of the capital region.

The CRD acquired these lands, formerly owned by Western Forest Products and Timber West, for regional park and watershed protection purposes at various points over the past 5 years. A map showing the land parcels involved is attached as Attachment 1.

The project investigated 2 main options. The first option was to develop a formal carbon credit project generating true offsets that could eventually be sold to agencies like the Pacific Carbon Trust for revenue. True carbon offsets follow stringent design guidelines, documentation and proof of ownership. A project has to prove the concept of "additionality" and project developers must engage qualified offset professionals to establish credits that can be sold on the international carbon market.

The second option was to develop a Community Emissions Reduction Units (CERU) project under the Province of BC's Local Government Greenhouse Gas Emissions Reductions Framework ("the framework"). The province designed the framework for signatories of the BC Climate Action Charter. CERU are not true offsets and do not meet the same rigorous standards of carbon credits. They do not have cash value but can be applied against the local government's annual corporate carbon liability.

The CRD retained Living Carbon Investments Inc. to undertake the project in two phases. The first phase reviewed the CRD's eligibility to develop a project under various carbon protocols. The second phase developed business cases for these protocols.

The business case analysis assessed 7 different options available to the CRD and included estimated costs and revenues, local and global risks, and potential stakeholder issues. Both project phases were reviewed by CRD staff as well as a third-party subject matter expert from Stantec Ltd. The analysis relied on existing data from the CRD and included assumptions for which there are currently varying degrees of certainty (e.g., offset values, development costs, timber quantity and timelines).

Note that a concurrent presentation is being made to the Regional Parks Committee on February 20, 2013.

ALTERNATIVES

That the Regional Water Supply Commission recommend to the Board:

1. that staff proceed with the development of a Corporate Community Emissions Reduction Project for the greenhouse gas reductions associated with the acquisition, protection and management of select land parcels as shown in Attachment 1 of the staff report;
2. that staff proceed with the development of a Carbon Offset project for the greenhouse gas reductions associated with the acquisition and management activities associated with the acquisition, protection and management of select land parcels as shown in Attachment 1;
3. that staff not proceed with either option.

SOCIAL IMPLICATIONS

Carbon offsets are often poorly understood by the public. In addition, a few high profile media stories have given carbon offsets a somewhat negative reputation. However, if done correctly, carbon offset projects have the potential to achieve measurable and credible greenhouse gas (GHG) reductions.

Forest conservation and land management activities are likely to be very attractive to agencies like the Pacific Carbon Trust. There are many local organizations and businesses, including those in the legislated and voluntary sectors, that would like to purchase local carbon offset certificates. Ecosystem-based carbon offsets are often based on 100-year commitments for land protection, usually under covenant with a third party or land trust.

CERU are not real offsets and are only recognized under the provincial Climate Action Charter. The concept is likely to have positive support from the general public but does not have any credibility among players in the formal carbon market. The only benefactors of CERU are local governments in the region and the CRD itself that want to achieve carbon neutral corporate operations under the BC Climate Action Charter.

ENVIRONMENTAL IMPLICATIONS

Since 2007, real greenhouse gas emissions have been reduced or avoided from CRD efforts to acquire and manage the forested lands identified in Appendix A. The task to quantify these reductions is complex. Under the scope of the business case analysis, the CRD used the best available data to determine the measurable environmental benefits.

True carbon offsets, developed under the Forest Carbon Offset Protocol or the Verified Carbon Standard, would offer the CRD 160,000 - 230,000 credits over a 100-year period. Each year, after a project was developed, the CRD would bring in an offset verification professional to quantify the exact number of credits.

In contrast, estimates of measurable GHG benefits under the local government framework are 70,000 and 200,000 CERU over a 20-year period. In this scenario, the CRD would annually calculate and document the number of CERU, starting in 2013. A third-party professional would still be required; however, the standards for accreditation are dramatically reduced under the framework.

ECONOMIC IMPLICATIONS

Under the various options investigated, consultants estimated the number of credits, as well as up-front and annual project costs, to determine the net present value over a 20-year period.

For carbon offset projects, it is estimated that project development costs could be upwards of \$800,000 - \$1.1 million dollars over the next 20 years. These costs do not include the estimated 1.5 additional full-time employee(s) that would be required to monitor, manage, document and communicate this project. Estimated annual revenues from selling carbon offset certificates over the 20-year period range from \$115,000 - \$500,000. This assumes a conservative offset purchase price of \$6.50 per tonne.

One benefit of a carbon offset project is that revenue would be generated annually over an 80-year period. One drawback is the volatility of the carbon market. This could translate into significantly more or significantly less revenue than expected.

CERU have no cash value and cannot be sold; they are simply a mechanism to help reduce the number of offsets purchased by local governments to achieve annual carbon neutral goals under the BC Climate Action Charter. A CERU project could be developed with benefits applied toward the CRD and shared with municipalities in the capital region towards their corporate efforts.

The collective avoided costs are estimated at \$150,000 per year (i.e., CRD and local governments avoid purchasing offsets to achieve their own carbon neutral operations because CERU are available to neutralize corporate emissions).

Developing a CERU project still requires resources but is substantially less expensive than developing a saleable carbon offset project. The estimated cost is \$80,000 over a 20-year period with the majority required up-front to initiate the project together with a minor project management role.

The Local Government Greenhouse Gas Reduction Framework program was introduced in 2012. There is no guarantee that this program will exist in the future, whereas it is likely that the formal carbon market will only mature with time.

CERU project development costs could be shared between Regional Parks and Integrated Water Services through existing budgets, whereas offset project development costs would require new resources.

INTERGOVERNMENTAL IMPLICATIONS

Developing a carbon offset project will require cooperation with local government agencies, external organizations such as The Land Conservancy and, potentially, local First Nations. If a CERU project is created under the provincial framework, the CRD would work with only local governments to develop a CERU-sharing formula.

All activities, regardless of approach, will have to align with the strategic plan goals and objectives set out by CRD Regional Parks and Integrated Water Services.

PROPERTY MANAGEMENT IMPLICATIONS

Both CERU and true carbon credits from this project would be based on the actual land management activities for given parcels of land owned and managed by the CRD. Should the CRD divest lands, change management practices or lose carbon (for example, from a forest fire), the annual totals will shift and resulting benefits will change.

Under a carbon offset project, there are higher levels of management expectations as well as associated risk for a local government regarding maintaining the carbon values on given parcels of land. Under the framework, there are significantly fewer risks as the entire program is based on a voluntary commitment.

CONCLUSION

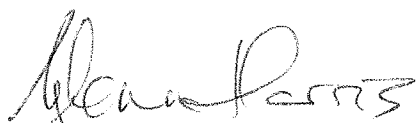
While revenue-generating carbon offset development is an option for the CRD, the complexity, level of risk and up-front costs associated with this type of ecosystem project are high.

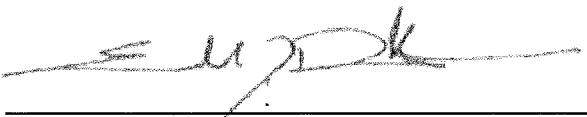
The Local Government GHG Emissions Reductions Framework provides a short-term and more affordable way for the CRD and local government to benefit from the activities associated with acquisition and management of these land parcels.

RECOMMENDATION


That the Regional Water Supply Commission recommend to the Board:

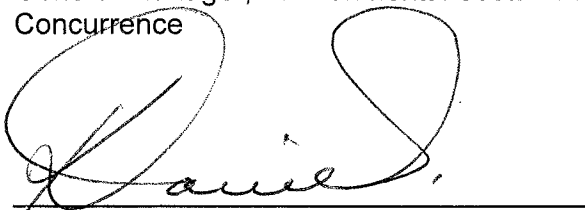
That staff proceed with the development of a Corporate Community Emissions Reduction Project for the greenhouse gas reductions associated with the acquisition, protection and management of select land parcels as shown in Attachment 1 of the staff report.


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SCW:cam
Attachment: 1


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