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Council Council
Author David Lee, Strategic Planner

Registration of carbon credits

1. Purpose

The purpose of this paper is to seek approval to submit an application to the Ministry for Primary Industries (MPI) to register carbon credits on Greater Wellington land for the first Kyoto Commitment Period (2008-12).

The application is for a total of 442.41ha, and would be registered through the Permanent Forest Sink Initiative (PFSI) scheme.

2. The decision-making process and significance

Officers recognise that the matters referenced in this report may have a high degree of importance to affected or interested parties.

The matters requiring decision in this report have been considered by officers against the requirements of Part 6 of the Local Government Act 2002 (the Act). Part 6 sets out the obligations of local authorities in relation to the making of decisions.

2.1 Significance of the decision

Part 6 requires Greater Wellington to consider the significance of the decision. The term 'significance' has a statutory definition set out in the Act.

Officers have considered the significance of the matter, taking the Council's significance policy and decision-making guidelines into account. Officers recommend that the matter be considered to have low significance.

Officers do not consider that a formal record outlining consideration of the decision-making process is required in this instance.

3. Background

Applications to be a participant in the New Zealand Emission Trading Scheme (ETS) have been lodged for Greater Wellington's forest areas (both pre-1990 and post-1989 forest).

On 28 March 2011, MPI (then MAF) sent a notice of preliminary determination that Greater Wellington been allocated 255,660 New Zealand Units (NZUs) of pre-1990 forest (based on and entitlement forest area of 4,261ha, and allocation of 60 NZUs/ha).

Work began in March 2012 to investigate the possibility of registering carbon credits on Greater Wellington park land, for the 2008-12 period. The areas that we believe may qualify are within Belmont Regional Park (Stratton St and Cannons Creek), East Harbour Regional Park (Parangarahu Lakes), and Battle Hill Farm Forest Park.

4. Comment

4.1 The PSFI scheme

The PSFI scheme is part of a package of government climate change initiatives. It is similar to the ETS scheme in that it provides landowners and investors an opportunity to earn carbon units from the carbon stored in forests. However, the PSFI encourages the establishment of permanent forests through a covenant between the Crown and the landowner.

It offers landowners of permanent forests established after 1 January 1990 the opportunity to earn Kyoto Protocol compliant emission units (Assigned Amount Units) for the carbon sequestered by their forests since 1 January 2008.

To be eligible, the forest must be "*direct human induced... through planting, seeding and/or the human-induced promotion of natural seed sources*".

4.2 Eligibility and Process for PSFI application

Forest land 'established' from 1990 is eligible for the PSFI scheme.

When a forest is 'established' is open to interpretation - it may be the date the forest was planted, or could be the date a management plan was implemented. For example, if a block of land with some established forest that was used for stock grazing pre 1989 was fenced and managed as a forest post-1990 (through the implementation of a management plan), then it is eligible.

Forest land is defined as:

“A minimum area of one hectare of land with tree crown cover (or equivalent stocking level) of more than 30 percent, with trees with the potential to reach a minimum height of five metres at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 30 percent or tree height of five metres are included under this definition. So, too, are areas normally forming part of forest that are temporarily unstocked as a result of human interventions, such as harvesting or natural causes, but which are expected to revert to forest.”

Much of Greater Wellington’s park land is unforested, but is under a management plan to establish forest. For example, much of the land on the Pencarrow lakes site (East Harbour Regional Park) is in tussock and gorse, to be established as forest. In this situation the land has been mapped the land into categories, based on age and type of forest.

Greater Wellington also intends to submit land for the PFSI that is in early stages of succession (e.g. gorse). Indigenous species meet the definition of 'forest' - so gorse that has natives amongst it is included in the definition of 'established forest'.

Only areas that 30% of the canopy per hectare have the potential to reach >5m are included, so some coastal areas have been excluded.

4.3 How much land, where, and value?

The sites on Greater Wellington land that may qualify for carbon credits for first Commitment Period (2008-12) are:

Qualifying sites	
Stratton St Site, Belmont Regional Park	157.53ha
Parangarahu Lakes Site (previously known as Pencarrow), East Harbour Regional Park	215.03 ha
Battle Hill Farm Forest Park Site	4.25 ha
Cannons Creek Site, Belmont Regional Park	65.60 ha
Total	442.41 ha

See **Attachment 1**, PFSI application for topographic and cadastral maps of the areas.

Estimate of carbon value

Sequestration rate¹ (SR) = of 4 tonnes CO₂e²/ha/year

Time period = 5 years (2008-12)

Land area = 442.41ha

Market price for carbon per tonne = High (~2007) = US\$25
low (currently) = \$US3

Estimated carbon credit value (2008-12) = SR x area x time x price

Indicative figures showing fluctuating market value of carbon

(based on the 442.41ha of GW land)

Est. carbon value @ ~2007 price (US\$25) = US\$221,205

Est. carbon value @ current price (US\$3) = US\$26,544

Est. carbon value @ lowest³ anticipated sell price (US\$20) = US\$176,964

4.4 Landowner obligations under PFSI

Forest Sink Covenant: Once the application is approved, the landowner is required to enter into a covenant (for at least 50 years) with the Crown (acting through the Minister for Primary Industries) which the landowner must then register on the land title.

The covenant (**Attachment 2**) is a contract between the landowner and the Crown. It sets out the rights and obligations of both parties.

The landowner is responsible for establishing and maintaining the forest, and limited harvesting is allowed on a *continuous cover forestry* basis. Continuous cover forestry is the management of forests using ecological principles which mimic natural processes, to maintain the forest canopy at one or more levels, and to ensure that the forest will, as far as possible, be self regenerating. Because harvest removals are by single tree or small coupe fellings, other forest values are maintained and often enhanced.

¹ An **estimated sequestration rate of 4-5 tonnes CO₂e/ha/yr** was provided by Permanent Forests International, consultancy services and carbon trader, based on age and type of forest to be registered by GW in this application.

² CO₂e, or **carbon dioxide equivalent**, is a standard unit for measuring carbon footprint. The idea is to express the impact of each different greenhouse gas in terms of the amount of CO₂ that would create the same amount of warming. That way, a carbon footprint consisting of lots of different greenhouse gases can be expressed as a single number.

³ Trading of carbon units should only be considered once the market price reaches above US\$20, In the interim it is best to hold onto the units – the advice provided by Permanent Forests International. The market price is anticipated to increase once others sectors enter the market place.

The registration of the covenants will incur an estimated cost of \$3,000. Legal advice will need to be sought and for the covenants to be registered against the titles with Land Information New Zealand.

Random sample plots: As Greater Wellington intends to submit more than 100ha (i.e. 442.41ha in total), there is an ongoing requirement to establish random sample plots to verify carbon capture every five years. This can be either managed by Greater Wellington or contracted-out.

If the work is contracted out it will cost approximately \$9,000 (~\$1,800 annually) to provide approximate 22 plots random sample plots i.e. based on a sample ratio of one per 20ha.

5. Recommendations

That the Council:

1. *Receives the report.*
2. *Approves the concept of an application to the Ministry for Primary Industry to register a total of 442.41ha of Parks land through the Permanent Forest Sink Initiative (PFSI) scheme;*
3. *Agrees that as a Parks asset, costs associated with the application and the management of the asset will come from the Parks' budget. Accordingly, any benefits from the sale of carbon credits should be returned to the Parks Department; and*
4. *Delegate to the General Manager Environmental Management all the authority necessary to finalise agreement with the Ministry of Primary Industries for registering the land in **Attachment 1** into the PFSI.*

Report prepared by:

Report approved by:

Report approved by:

David Lee
Strategic Planner

Nigel Corry
General Manager,
Environment Management
Group

Bruce Simpson
Chief Financial Officer

Attachments

Attachments 1 Application form for Permanent Forest Sink Initiative

Attachments 2. MPI Forest Sink Covenant