



Appendix I – Ecological Offsetting Calculations – 150 Cemetary Road

According to the LSRCA Ecological Offsetting Strategy, this amount is determined based on the appropriate replacement dollar value (Feature Creation Cost) plus the Ecosystem Services Value plus the Land Acquisition Fund plus and Administration Fee.

Feature Removal Proposed	Area (square meters)
Woodland	558.6
Vegetation Protection Zone: Woodland (10 m)/(30 m)	2808
Total Feature Loss	3925.2

Option 1. Ecological Offsetting – Natural Heritage Feature Replacement (replace on site only) plus cost of plantings/labour

Applicable replacement ratio (2:1) for woodland feature + VPZ (1:1) of woodland + Ecosystem Services Value

Total Compensation Ratio (0.05586 ha x2) and (0.0936 x1) +ESV

= 0.1117 ha of woodland replacement AND 0.0936 ha VPZ + ESV woodland

Ecosystem Service Value Payment

Woodland ESV = \$6046/ha

= (woodland area + VPZ area) x woodland ESV

= 0.20532 x \$6046

= \$3048.63

Total Requirement Option 1: Replacement of 2053.2 sq m (.020532 ha) of woodland

Option 2. Cash-in-Lieu only with no tree plantings

Calculation of four required values

A	Feature Creation Cost	\$ 19,037.22
B	Ecosystem Services Value	\$ 2,373.18
C	Land Securement Cost	\$ 3,211.56
D	Administration Fee	\$ 3,693.29
Total		\$ 28,315.25

a) Feature Creation Cost

The current cash-in-lieu feature creation cost per hectare of woodland was identified as being \$48,500 in 2019 (Table 2 of the Ecological Offsetting Plan – LSRCA 2019). The Feature Creation Cost (compensation area) of 1117.2m² of woodland and 2808 m² woodland buffer removed on the subject property would be \$

$$\begin{aligned}
 & 2:1 \text{ for woodland and } 1:1 \text{ for woodland VPZ} \\
 & = [0.11175 + .2808] \times \$48,500 \\
 & = [0.0.3160] \times \$48500 \\
 & = \mathbf{\$19,037.22}
 \end{aligned}$$

Total \$19,037.22

b) Ecosystem Services Value

The Ecosystem Services Value (ESV) per hectare of woodland was identified as being \$6046 in 2019 (Table 1 of the Ecological Offsetting Plan – LSRCA 2019). The Ecosystem Services Value (ESV) for the 0.11172 of woodland and 0.2808 ha VPZ woodland that are being removed is **\$2373.18**
 $(6046 \times 0.11172) + (\$6046 \times 0.2808) = 675 + 1697.71$

c) Land Securement Cost

The amount for the Land Securement Cost is 15% of (Feature Creation Cost plus the Ecosystems Services Value), or \$3211.49 ($\$19037.22 + \2372.71) $\times 15\% = \$21409.93 \times 15\% =$

\$3211.56

d) Administration Fee

The Administration Fee is 15% of all three costs

(Feature Creation Cos+Ecosystem Services Value+Land Securement Cost $\times 15\% =$
 $32676.62 \times .15 =$

, or **\$3693.29**

Total Requirement Option 2: \$28,315.25

Option 3. Partial Feature Replacement (eg. 1200m²) and the remainder Cash-in-Lieu (2925.2 m²)

-any area that is on site and can be planted and protected permanently is deducted from the calculations.