

Appendix 1: Fur to Forest Detailed Budget, Project Performance, Literature Cited

Detailed Budget Table: 1636.17

Forecast Expenditure Type		Fiscal Year										
		Previous Years	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-26	Total Estimated Cost
<b>Salaries</b>												
	Project Manager (PM04)			82,533.00 \$	199,091.00 \$	252,504.00 \$	309,600.08 \$	359,163.00 \$	273,297.00 \$	507,562.00 \$	380,941.00 \$	2,334,691.08 \$
	Resource Management Officer II (EG04)			61,551.00 \$	67,739.00 \$	41,715.13 \$	75,149.00 \$	73,134.00 \$	77,346.00 \$	82,273.00 \$	86,987.00 \$	565,294.13 \$
	Site Manager/Logistics coordinator (GT-04)			24,489.00 \$	24,489.00 \$	57,284.87 \$	60,095.00 \$	64,823.00 \$	60,095.00 \$	68,918.00 \$	71,678.00 \$	347,285.87 \$
	Safety Officer (GT-04)				41,415.00 \$	68,217.02 \$	67,894.57 \$	66,837.00 \$	66,582.00 \$	73,038.00 \$	76,000.00 \$	459,983.59 \$
	Partnering and Engagement Officer (PM03)											101,756.00 \$
	Resource Management Officer I (EG03)			18,550.00 \$	9,231.00 \$	65,906.27 \$	68,454.51 \$	70,874.00 \$	67,886.00 \$	76,327.00 \$	79,227.00 \$	456,455.78 \$
	Restoration Technician (EG01 0.3 FTE)				21,839.00 \$	10,289.95 \$	16,972.00 \$	65,185.00 \$	60,243.00 \$	60,243.00 \$	62,651.00 \$	237,179.95 \$
	Admin Assistant (CR04 0.25 FTE)					7,969.29 \$	8,035.00 \$	-	-	-	-	16,004.29 \$
	Communications Officer (PM-04)						8,000.00 \$	13,310.00 \$	13,608.00 \$	13,757.00 \$	-	48,675.00 \$
	Supportive Project manager (PM03)									34,125.00 \$	-	34,125.00 \$
	Other: Casual, Overtime			2,432.00 \$	4,378.00 \$	1,121.47 \$	5,000.00 \$	5,000.00 \$	15,000.00 \$	30,000.00 \$	5,000.00 \$	67,931.47 \$
	Contingency											-
<b>Employee Benefits Plan (EBP)</b>				16,506.60 \$	45,654.57 \$	80,541.00 \$	83,592.02 \$	96,974.01 \$	73,790.19 \$	137,041.74 \$	102,854.07 \$	534,100.13 \$
<b>Analyses, and Studies</b>				164,424.00 \$	66,018.00 \$	111,349.50 \$	258,499.00 \$	159,600.00 \$	301,866.00 \$	280,000.00 \$	-	1,491,756.50 \$
<b>Studies</b>				164,424.00 \$	63,103.00 \$	78,649.50 \$	69,320.00 \$	46,500.00 \$	-	-	-	421,996.50 \$
	Trials Design, Expert Site Visit						62,559.00 \$	50,000.00 \$	-	-	-	112,559.00 \$
	Coastal Erad Ops Planning incl TAC and SC updates						45,000.00 \$	48,000.00 \$	301,866.00 \$	280,000.00 \$	-	674,866.00 \$
	Fallow Deer DNA Dispersal						-	10,100.00 \$	-	-	-	10,100.00 \$
	Chair Technical working groups (deer, veg)					16,500.00 \$	53,500.00 \$	-	-	-	-	70,000.00 \$
	Black-tailed deer management planning					16,200.00 \$	10,800.00 \$	-	-	-	-	27,000.00 \$
	Forest restoration planning/monitoring				2,915.00 \$	-	7,320.00 \$	5,000.00 \$	-	-	-	15,235.00 \$
	Broom management planning						10,000.00 \$	-	-	-	-	10,000.00 \$
	Contingency											150,000.00 \$
<b>Indigenous Participation</b>				7,115.00 \$	109,895.00 \$	45,391.95 \$	67,167.00 \$	60,000.00 \$	104,320.00 \$	206,110.00 \$	129,585.00 \$	799,589.95 \$
	Pauquachin FN Contribution					9,570.00 \$	10,005.00 \$	10,000.00 \$	8,000.00 \$	8,000.00 \$	8,000.00 \$	63,575.00 \$
	Hul'q'umi'num FN participation Contribution			4,368.00 \$	42,527.00 \$	24,895.50 \$	25,000.00 \$	25,000.00 \$	10,360.00 \$	10,360.00 \$	10,360.00 \$	152,870.50 \$
	WSANEC FNs participation (planning, harvest) (contribution)			2,747.00 \$	36,465.00 \$	10,491.45 \$	25,000.00 \$	25,000.00 \$	32,760.00 \$	40,750.00 \$	23,105.00 \$	196,318.45 \$
	Meat Harvesters leads @\$350/d; Crew @\$250/d								40,800.00 \$	51,000.00 \$	17,000.00 \$	108,800.00 \$
	Cultural Worker (12 days @\$350/d) to train crews								4,200.00 \$	10,500.00 \$	550.00 \$	15,250.00 \$
	Spiritual Worker (12 days @\$350/d) to train crews								4,200.00 \$	10,500.00 \$	550.00 \$	15,250.00 \$
	Additional FN engagement (camps, hospitality etc...)				21,333.00 \$		7,167.00 \$					28,500.00 \$
	Opening Ceremony to do work in a good way								4,000.00 \$			4,000.00 \$
	Net Crew									75,000.00 \$	70,000.00 \$	145,000.00 \$
	Contingency								5,000.00 \$	39,000.00 \$	26,020.00 \$	70,020.00 \$
<b>Impact assessment</b>						25,034.65 \$	13,964.00 \$					38,998.65 \$
<b>Design / Tender specifications</b>												-
<b>PWGSC Fees and Disbursements SSAs</b>												-
<b>Hardware / Software Acquisitions</b>			2,836.26 \$	8,506.00 \$	4,502.45 \$	4,845.03 \$	2,400.00 \$	28,500.00 \$	-	-	-	51,589.74 \$
	Software fees				55.45 \$	2,446.61 \$	1,000.00 \$	1,500.00 \$				5,002.06 \$
	Computer equipment/office supplies			8,506.00 \$	4,447.00 \$	2,031.85 \$	1,400.00 \$	2,000.00 \$				18,384.85 \$
	Other: Camera Array/Deer monitoring		2,836.26 \$			366.57 \$		25,000.00 \$				28,202.83 \$
<b>Fallow Deer Eradication Services</b>						31,585.82 \$	27,000.00 \$	12,000.00 \$	581,029.00 \$	3,278,524.00 \$	208,240.00 \$	4,118,378.82 \$
	Equipment and supplies (incl. of markup)								121,350.00 \$	423,570.00 \$	102,240.00 \$	647,160.00 \$
	Operational Travel								70,830.00 \$	48,952.00 \$		119,782.00 \$
	Helicopter (Phase 1)								67,680.00 \$			67,680.00 \$
	Operational Personnel								184,825.00 \$	2,295,117.00 \$		2,459,942.00 \$
	Operational Canids									329,760.00 \$		329,760.00 \$
	Work Permits								14,000.00 \$	21,000.00 \$		35,000.00 \$
	Firearms Certification for international workers								80,344.00 \$	57,063.00 \$		137,407.00 \$
	Netting Methods Guidance (travel and personnel for intl expert)									61,062.00 \$		61,062.00 \$
	Reporting										106,000.00 \$	106,000.00 \$
	Insurance								42,000.00 \$	42,000.00 \$		84,000.00 \$
	Contingency								108,611.00 \$	733,329.70 \$	474,174.00 \$	1,316,114.70 \$
<b>Construction Supervision, Inspection and Quality assurance</b>												-
<b>Other Costs</b>			16,363.74 \$	45,915.00 \$	26,041.00 \$	102,168.08 \$	116,802.63 \$	115,500.00 \$	151,700.00 \$	196,300.00 \$	165,000.00 \$	968,790.45 \$
	Sallias Engagement/Coordination CA					12,785.81 \$	35,043.12 \$	20,000.00 \$	49,300.00 \$	49,300.00 \$	15,000.00 \$	181,428.93 \$
	Stakeholder/Public Engagement		16,363.74 \$	12,287.00 \$	15,120.00 \$	15,000.00 \$	-	-	-	-	-	58,770.74 \$
	Audio Engineering Contract								2,400.00 \$			2,400.00 \$
	Meat Recovery (Freezer trailers and Butcher)							30,000.00 \$	29,000.00 \$	51,000.00 \$	10,000.00 \$	120,000.00 \$
	Fallow deer eradication/ materials/services					31,585.82 \$	27,000.00 \$	12,000.00 \$				70,585.82 \$
	Camp costs (includes cook, food, materials)							-	25,000.00 \$	83,000.00 \$	42,000.00 \$	150,000.00 \$
	Black-tailed deer management/Indigenous Hunting					3,134.00 \$		10,000.00 \$	-			13,134.00 \$
	Forest Restoration Materials/Services				821.00 \$	12,786.68 \$	10,521.70 \$	5,000.00 \$	5,000.00 \$			34,129.38 \$
	Hawthorn Control, incl burning								22,000.00 \$	28,000.00 \$		50,000.00 \$
	Plants/seedlings/exclosures								14,000.00 \$	5,000.00 \$		19,000.00 \$
	Staff Training		750.00 \$	7,873.00 \$	9,421.74 \$	2,523.81 \$	2,000.00 \$	2,000.00 \$	1,000.00 \$			23,568.55 \$
	Vessel Maintenance and Fuel								5,000.00 \$	8,000.00 \$	5,000.00 \$	18,000.00 \$
	Boat Services								7,000.00 \$	5,000.00 \$	8,000.00 \$	20,000.00 \$
	Miscellaneous (travel, equipment, uniforms)			32,878.00 \$	4,227.00 \$	17,454.03 \$	5,714.00 \$	9,500.00 \$				69,773.03 \$
	Contingency									17,000.00 \$	14,000.00 \$	31,000.00 \$
<b>Contingencies</b>								83,173.70 \$	153,611.00 \$	869,329.70 \$	544,194.00 \$	1,650,308.40 \$
<b>Amount \$</b>												
<b>Percentage %</b>		0%	0%	0%	0%	0%	0%	9%	10%	16%	36%	14%
<b>Total Funding Requested</b>			19,200.00 \$	324,999.60 \$	423,202.02 \$	653,420.03 \$	879,024.73 \$	972,276.00 \$	1,619,613.19 \$	5,474,867.44 \$	1,530,794.07 \$	11,988,197.72 \$

**Literature Cited**

1	Côté, S.D., T.P. Rooney, J-P. Tremblay, C. Dussault, and D.M. Waller. 2004. Ecological impacts of deer overabundance. <i>Annual Review of Ecology, Evolution, and Systematics</i> . 35: 113-147.
2	Martin, T.G., P. Arcese, and N. Scheerder. 2011. Browsing down our natural heritage: deer impacts vegetation structure and songbird assemblages across an island archipelago. <i>Biological Conservation</i> 144: 459 – 469.
3	Arcese, P., R. Schuster, L. Campbell, A. Barber, and T.G. Martin. 2014. Deer density and plant palatability predict shrub cover, richness, diversity and aboriginal food value in a North American archipelago. <i>Diversity and Distributions</i> 20: 1368-1378.
4	Chollet, S., C. Bergmann, A.J. Gaston, and J-L. Martin. 2014. Long-term consequences of invasive deer on songbird communities: going from bad to worse? <i>Biological Invasions</i> . 16pp.
5	Russell, F., D.B. Zippin and N.L. Fowler. 2011. Effects of White-tailed Deer on plants, plant populations and communities: A review. <i>The American Midland Naturalist</i> 146: 1-26.
6	Wiegmann, S.M and D.M. Waller. 2006. Fifty years of change in northern upland forest understories: Identity and traits of "winner" and "loser" plant species. <i>Biological Conservation</i> 129: 109-123.
7	Perin, P.M., F.J.G. Mitchell and D.L. Kelly. 2011 Long-term deer exclusion in yew-wood and oadwood habitats in southwest Ireland: changes in ground flora and species diversity. <i>Forest Ecology and Management</i> 262; 2328-2337.
8	Stewart, A.J.A. 2001. The impact of deer on lowland wood land invertebrates: a review of the evidence and priorities for future research. <i>Forestry</i> 74: 259 - 270.
9	Miyashita, T., M. Takada, and A. Shimazaki. 2004. Indirect effects of herbivory by deer reduce abundance and species richness of web spiders. <i>Ecoscience</i> 11:74–79.
10	Moser, B.W., and G.W. Witmer. 2000. The effects of elk and cattle foraging on the vegetation, birds, and small mammals of the Bridge Creek Wildlife Area, Oregon. <i>International Biodeterioration and Biodegradation</i> 45:151-157.
11	Holt, C.A., R.J. Fuller, and P.M. Dolman. 2011. Breeding and post-breeding responses of woodland birds to modification of habitat structure by deer. <i>Biological Conservation</i> 144: 2151–2162.
12	Chollet, S., and J-L. Martin. 2013. Declining woodland birds in North America: should we blame Bambi? <i>Diversity and Distributions</i> 19: 481-483.
13	Gonzales, E.K., P.L. Liley, and A. Boag. 2014. Vegetation monitoring for effectiveness of deer management activities on Sidney Island, Gulf Islands National Park Reserve: 2013 data analysis report. Report prepared for Parks Canada. Parks Canada, Gulf Islands National Park Reserve, Sidney British Columbia. 54pp.
14	Gonzales, E.K., and P. Arcese. 2008. Herbivory more limiting than competition on early and established native plants in an invaded meadow. <i>Ecology</i> 89(12): 3282 – 3289.
15	Coastal Conservation. 2012. Sidney Island restoration and conservation initiative: eradication of fallow deer feasibility study. Parks Canada, Gulf Islands National Park Reserve, Sidney BC. 92pp.
16	Gonzales, E.K. and D.R. Clements. 2010. Plant community biomass shifts in response to mowing and fencing in invaded oak meadows with non-native grasses and abundant ungulates. <i>Restoration Ecology</i> 18: 753-761.
17	Wright, D.M., A.J. Tanentzap, O. Flores, S.W. Husheer, R.P. Duncan, S.K. Wiser, and D.A. Coomes. 2012. Impacts of culling and exclusion of browsers on vegetation recovery across New Zealand forests. <i>Biological Conservation</i> 153: 64 – 71.
18	Turner, N.J. 1988. "The importance of a rose": evaluating the cultural significance of plants in Thompson and Lilloet Interior Salish. <i>American Anthropologist</i> 90(2): 272 – 290.
19	Pellatt, M.G., Z. Gedalof. 2014. Environmental change in Garry Oak ( <i>Quercus garryana</i> ) ecosystems: the evolution of an eco-cultural landscape. <i>Biodiversity Conservation</i> 23: 2053 – 2067.
20	Twyford,V., Waters, S., Hardy, M. and J. Dengate. 2012. "The power of Co: The smart leaders guide to collaborative governance." Vivien Twyford Communication Pty Limited. 216 pages.

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**Phase 1 Expenses**

Coastal Conservation Firearms Purchase (TA 10)	25,980		
Coastal CRFSC Course (TA 9 )		54125	
Coastal RPAL applications (TA 8)		15,667	
Marksmen Immigration (TA 7)	20,545		
Coastal Conservation implementation of Phase 1	425,137		
First Nations participation: planning and implementation	79,715		
Meat collection (butchers + freezer trailers + barges)	49,900		
Sallas participation (planning and implementation)	24,300		
camp cook	34,348		
Equipment, Supplies, Fuel	136,415		34,449 in actuals + 102K Phase 1 MC purchases
<b>sum</b>	<b>796,340</b>		

\*These two lines are set aside and not included in sum below because I am not sure whether one would classify them as Phase 1 operational costs, or planning and prep.