Assessing the Efficacy of Rearing and Release of Orphaned Black Bear Cubs in BC

ISSUE:

BC currently allows rearing and release of orphaned black bear cubs in BC at permitted facilities; however the efficacy of this activity is unknown because the ultimate fate of these individuals is unknown post-release.

The goals of this project are to assess the fate of released orphaned black bear cubs reared in rehabilitation facilities and to establish rehabilitation policy and procedure and rearing standards for black bears in BC. Two main components of this work are a review of available information (including existing data, published and unpublished literature) relating to rearing and release of orphaned cubs and the development of a study design to assess the fate of released orphaned black bear cubs.

DELIVERABLES:

The contractor will provide a report detailing:

- A comprehensive literature review of orphaned black bear cub rearing methods and survival
 post release considering concerns, best practices, and outstanding issues, including
 references, hyperlinks to online references and copies of any grey literature cited. This must
 include, but not limited to:
 - a. Review of "Recommendations for Black Bear-Human Conflict Management and Black Bear Rehabilitation in British Columbia, Parker 2008", other government documents, and relevant scientific literature.
- 2. A review of available BC data on orphaned black bear cub rearing and fate post release. This must include:
 - a. Gathering, reviewing and analyzing existing information from BC to establish current knowledge, identify data gaps and provide recommendations for future data management. This will be conducted using the provincially held data on orphaned bear rearing and release. Rearing and release has been taking place for over 20 years in BC (over the last 5 years the BC Conservation Officer Service has transferred an average of 43 Black bear cubs of the year per year to one of three permitted rehabilitation facilities in BC: Northern Lights Wildlife Society in Smithers, North Island Recovery Centre in Errington, and Critter Care Wildlife Society in Langley) but data regarding reasons for orphaning, conditions of cubs, release times and areas, outcomes of released bears, etc. has not been organized or analyzed.
 - Evaluation of compliance with the permit requirement of rehabilitation facilities to develop standardized intake sheets and provide manadatory information summaries to regional COS offices.

- c. Summarizing and analyzing any ad hoc black bear collaring and tracking data from released orphaned bear cubs that may be with the province and/or rehabilitation facilities.
- d. Investigation into the complicance with permanent marking (ear tags/tattoos) of released orphaned cubs as is required for identification when bears are killed by hunting, MVA's or conflict response. Marking rate is not known and and much of the data on recovery of ear tags is unknown or unanalysed. This information may be with the province and/or rehabilitation facilities.
- 3. Development of a study design to monitor the fate of released orphaned black bear cubs from the 3 permitted rehabilitation facilities in BC. This should consider, but not be limited to:
 - a. Documenting post-release fate by recommending the number of bears to be assessed, assessing cause-specific mortality, human conflict activity, movements, habitat selection and reproduction for reared and released black bears in BC.
 - b. A review of the technology available to monitor juvenile bears and recommendations for appropriate tracking devices, battery life, fix rates, etc.
 - c. Identifying differences between orphaned bears without experience around humans and/or their attractants (i.e., sow killed in MVA) and those that did experience these (i.e., sow destroyed due to conflict behavior).
 - d. Using recommendations from the initial results, adapt monitoring in subsequent years to increase sample size and produce a robust dataset to analyse outcomes of captive care and release of bears.

Jim Standen Assistant Deputy Minister BC Parks and Conservation Officer Service Division 250-387-1288 BRITISH COLUMBIA
CONSERVATION
FOUNDATION

March 16, 2018

Attention: Jim Standen,

Request for Funds - Bear Cub Recovery Study

The British Columbia Conservation Foundation requests funds to manage a capture and release bear cub recovery study. The purpose of the study is to assess the outcomes for orphaned black bear cubs, reared in rehabilitation facilities in BC. This assessment is important to complete so that the province has a better understanding of the dynamics between successful and failed release efforts of bear cubs.

The project will be managed under the direction of project leads from the Ministry of Environment & Climate Change Strategy and the Ministry of Forests, Lands, Natural Resource Operations & Rural Development.

Requested funding for the initial stages of the study is in the amount of \$225,000 and would include a review of available data, development of a study design, and implementation of monitoring. Continued monitoring would take place in subsequent years at a cost of approximately \$150,000 per year.

BCCF has a long history of managing conservation projects in British Columbia and a strong working relationship with the province to complete projects to a high standard. BCCF has the ability to complete this project efficiently and effectively if provided the opportunity.

Thank-you for taking the time to consider this request for funds,

Trina Radford

Project Coordinator

British Columbia Conservation Foundation



Natural Resource Ministries

GOVERNMENT TRANSFER – GRANT AGREEMENT

Agreement #: TP18JHQ037

Project Title: OUTCOMES FOR RELEASED ORPHANED BLACK BEAR CUBS IN BC

THIS AGREEMENT dated for reference the 27 day of MARCH, 2018.

BETWEEN

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, represented by the Minister of ENVIRONMENT AND CLIMATE CHANGE STRATEGY CONSERVATION OFFICER SERVICE

(the "Province")

AND

BRITISH COLUMBIA CONSERVATION FOUNDATION

(the "Recipient")

The parties to this Agreement (the "Parties") agree as follows:

SECTION 1 - DEFINITIONS

- Where used in this Agreement
 - (a) "Business Day" means a day, other than a Saturday or Sunday, on which Provincial government offices are open for normal business in British Columbia:
 - (b) "Financial Contribution" means the total aggregate value stipulated in Schedule B;
 - (c) "Material" means all findings, data, reports, documents, records and material, (both printed and electronic, including but not limited to, hard disk or diskettes), whether complete or otherwise, that have been produced, received, compiled or acquired by, or provided by or on behalf of the Province to, the Recipient as a direct result of this Agreement, but does not include:
 - Client case files or Personal Information as defined in the Freedom of Information and Protection of Privacy Act; or
 - ii. Property owned by the Recipient.
 - (d) "Project" means the project described in Schedule A;
 - (e) "Services" means the services described in Schedule A;
 - (f) "Term" means the duration of the Agreement stipulated in Schedule A.

SECTION 2 - APPOINTMENT

The Recipient must carry out and complete the Project described in Schedule A and may use the Province's funding only for the purpose specified in Schedule A.

SECTION 3 – PAYMENT OF FINANCIAL CONTRIBUTION

Subject to the provisions of this Agreement, the Province will pay the Recipient the amount, in the manner, and at the times set out in Schedule B.

The Province has no obligation to make the Financial Contribution unless the Recipient has complied with the criteria set out in Schedule A.

Notwithstanding any other provision of this Agreement the payment of the Financial Contribution by the Province to the Recipient pursuant to this Agreement is subject to:

(a) there being sufficient monies available in an appropriation, as defined in the *Financial Administration Act* ("FAA"), to enable the Province, in any fiscal year when any payment of money by the Province to the Recipient falls due pursuant to this Agreement, to make that payment; and

(b) Treasury Board, as defined in the FAA, not having controlled or limited, pursuant to the FAA, expenditure under any appropriation referred to in subparagraph (a) of this paragraph.

The previous paragraph continues in force indefinitely, even after this Agreement expires or is terminated.

The Recipient is responsible for any Provincial Sales Tax (PST) and Goods and Services Tax (GST) and any other charges for which the Province has not expressly agreed to accept responsibility under the terms of this Agreement.

The Recipient must declare any amounts owing to the government under legislation or an agreement. Amounts due to the Recipient under this Agreement may be set-off against amounts owing to the government.

SECTION 4 - REPRESENTATIONS AND WARRANTIES

The Recipient represents and warrants to the Province, with the intent that the Province rely on it in entering into this Agreement, that

- (a) all information, statements, documents and reports furnished or submitted by the Recipient to the Province in connection with this Agreement are true and correct;
- (b) the Recipient has no knowledge of any fact that materially adversely affects, or so far as it can foresee, might materially adversely affect, the Recipient's properties, assets, condition (financial or otherwise), business or operations or its ability to fulfill its obligations under this Agreement; and
- (c) the Recipient is not in breach of, or in default under, any law of Canada or of the Province of British Columbia applicable to or binding on it.

All statements contained in any certificate, application, proposal or other document delivered by or on behalf of the Recipient to the Province under this Agreement or in connection with any of the transactions contemplated by it are deemed to be representations and warranties by the Recipient under this Agreement.

All representations, warranties, covenants and agreements made in this Agreement and all certificates, applications or other documents delivered by or on behalf of the Recipient are material, have been relied on by the Province, and continue in effect during the continuation of this Agreement.

SECTION 5 - INDEPENDENT RELATIONSHIP

No partnership, joint venture, agency or other legal entity is created by or will be deemed to be created by this Agreement or by any actions of the Parties pursuant to this Agreement.

The Recipient will be an independent and neither the Recipient nor its servants, agents or employees will be the servant, employee, or agent of the Province.

The Recipient will not, in any manner whatsoever, commit or purport to commit the Province to the payment of money to any person, firm, or corporation.

SECTION 6 - RECIPIENT'S OBLIGATIONS

The Recipient must:

- (a) carry out the Services in accordance with the terms of this Agreement during the Term stated in Schedule A;
- (b) comply with the payment requirements set out in Schedule B, including all requirements concerning the use, application and expenditure of the payments provided under this Agreement;
- (c) comply with all applicable laws;
- (d) hire and retain only qualified staff;
- (e) unless agreed otherwise, supply, at its own cost, all labour, materials and approvals necessary to carry out the Services;
- unless agreed otherwise, retain ownership to all assets acquired or intangible property created in the process of carrying out this Agreement;
- co-operate with the Province in making public announcements regarding the Services and the details of this Agreement that the Province requests; and
- (h) acknowledge the financial contribution made by the Province to the Recipient for the Services in any Materials, by printing on each of the Materials the following statement:
 - "We gratefully acknowledge the financial support of the Province of British Columbia through the Ministry of Environment and Climate Change Strategy"

SECTION 7 - RECORDS

The Recipient will:

- establish and maintain accounting and administrative records in form and content satisfactory of the Province;
- (b) establish and maintain books of account, invoices, receipts and vouchers for all expenses incurred in form and content satisfactory to the Province; and
- (c) permit the Province, for monitoring and audit purposes, at all reasonable times, on reasonable notice, to enter any premises used by the Recipient to deliver the Services or keep any documents or records pertaining to the

Services, in order for the Province to inspect, audit, examine, review and copy any findings, data, specifications, drawings, working papers, reports, surveys, spread sheets, evaluations, documents, databases and material, (both printed and electronic, including, but not limited to, hard disk or USB's), whether complete or not, that are produced, received or otherwise acquired by the Recipient as a result of this Agreement.

The Province does not have control, for the purpose of the *Freedom of Information and Protection of Privacy Act*, of the records held by the Recipient.

SECTION 8 - NON EXPENDED FINANCIAL CONTRIBUTION

At the sole option of the Province, any portion of the Financial Contribution provided to the Recipient under this Agreement and not expended at the end of the Term shall be:

- (a) returned by the Recipient to the Minister of Finance;
- (b) retained by the Recipient as supplemental funding provided for under an amendment to this Agreement; or
- (c) deducted by the Province from any future funding requests submitted by the Recipient and approved by the Province.

SECTION 9 - CONFLICT OF INTEREST

The Recipient must not, during the Term, perform a service for or provide advice to any person, or entity where the performance of such service or the provision of the advice may, in the reasonable opinion of the Province, give rise to a conflict of interest between the obligations of the Recipient to the Province under this Agreement and the obligations of the Recipient to such other person or entity.

SECTION 10 - CONFIDENTIALITY

The Recipient must treat as confidential all information and material supplied to or obtained by the Recipient, or any third party, as a result of this Agreement. The Recipient must not, without the prior written consent of the Province, permit its disclosure, except as required by applicable law or to the extent that the disclosure is necessary to enable the Recipient to fulfill its obligations under this Agreement.

SECTION 11 - DEFAULT

Any of the following events constitute an Event of Default:

- (a) the Recipient fails to comply with any provision of this Agreement;
- (b) any representation or warranty made by the Recipient in accepting this Agreement is untrue or incorrect;

- any information, statement, certificate, report or other document furnished or submitted by or on behalf of the Recipient pursuant to or as a result of this Agreement is untrue or incorrect;
- (d) the Recipient ceases, in the opinion of the Province, to operate;
- (e) a change occurs with respect to any one or more, including all, of the properties, assets, condition (financial or otherwise), business or operations of the Recipient which, in the opinion of the Province, materially adversely affects the ability of the Recipient to fulfill its obligations under this Agreement;
- (f) an order is made or a resolution is passed or a petition is filed for the liquidation or winding up of the Recipient;
- the Recipient becomes insolvent or commits an act of bankruptcy or makes an assignment for the benefit of its creditors or otherwise acknowledges its insolvency;
- (h) a bankruptcy petition is filed or presented against, or a proposal under the Bankruptcy and Insolvency Act (Canada) is made by, the Recipient;
- a receiver or receiver-manager of any property of the Recipient is appointed;
- (j) the Recipient permits any sum which is not disputed to be due by it to remain unpaid after legal proceedings have been commenced to enforce payment.

SECTION 12 - RESULTS OF AN EVENT OF DEFAULT

Upon the occurrence of any Event of Default and at any time after that the Province may, despite any other provision of this Agreement, at its option, elect to do any one or more of the following:

- (a) terminate this Agreement, in which case the payment of the amount required under the last paragraph of Section 12 of this Agreement discharges the Province of all liability to the Recipient under this Agreement;
- (b) require the Event of Default be remedied within a time period specified by the Province;
- (c) suspend any installment of the Financial Contribution or any amount that is due to the Recipient while the Event of Default continues;
- (d) waive the Event of Default;
- (e) require repayment of any portion of the Financial Contribution not spent in accordance with this Agreement;
- (f) pursue any other remedy available at law or in equity.

The Province may also, at its option, either:

- (a) terminate this Agreement on 30 days written notice, without cause; or
- (b) terminate this Agreement immediately if the Province determines that the Recipient's failure to comply places the health or safety of any person at immediate risk;

and in either case, the payment of the amount required under the last paragraph of Section 12 of this Agreement will discharge the Province of all liability to the Recipient under this Agreement.

Where this Agreement is terminated before 100% completion of the Project, the Province will pay to the Recipient that portion of the Financial Contribution which is equal to the portion of the Project completed to the satisfaction of the Province prior to termination.

SECTION 13 – DISPUTE RESOLUTION

The Parties agree to first refer any matter in dispute under this Agreement to senior officers of the Parties. If the matter cannot be resolved, they must submit it to a mediator as agreed upon by both Parties. The Parties must bear equally the expenditures directly related to the mediation process.

SECTION 14 - INSURANCE AND INDEMNITY

Insurance

Without limiting its obligations or liabilities under this Agreement, and at its own expense, the Recipient must obtain and maintain insurance which it is required to have by law and insurance which a prudent businessperson conducting similar operations would obtain and maintain to cover the risks it has assumed or may encounter as a result of entering into this Agreement or providing the Services during the Term.

If applicable, the Recipient must ensure the Province is added as an additional insured on insurance policies of the Recipient and third parties.

Within 10 Business Days of obtaining each relevant policy of insurance, and from time to time if requested by the Province, the Recipient must provide to the Province evidence of the insurance in the form of a completed Province of British Columbia Certificate of Insurance. If requested by the Province at any time, the Recipient must provide to the Province certified true copies of the relevant insurance policies.

The Recipient must require and ensure that each third party maintains insurances comparable to those required above.

Indemnity

The Recipient must indemnify and save harmless the Province, its employees and agents, from and against any and all losses, claims, damages, actions, causes of action,

cost and expenses that the Province may sustain, incur, suffer or be put to at any time either before or after the expiration or termination of this Agreement, if the same or any of them are based on, arise out of or occur, directly or indirectly, by reason of any act or omission of the Recipient, or of any agent, employee, officer, director or sub-contractor of the Recipient pursuant to this Agreement, excepting always liability arising out of the independent negligent acts of the Province.

SECTION 15 - ASSIGNMENT AND SUB-CONTRACTING

The Recipient must not, without the prior, written consent of the Province:

- (a) assign, either directly or indirectly, this Agreement or any right of the Recipient under this Agreement; or
- (b) sub-contract any obligation of the Recipient under this Agreement.

No sub-contract entered into by the Recipient will relieve the Recipient from any of its obligations, including Section 6, under this Agreement or impose upon the Province any obligation or liability arising from any such sub-contract.

This Agreement will be binding upon the Province and its assigns and the Recipient, the Recipient's successors and permitted assigns.

SECTION 16 - REPAYMENT OR REDUCTIONS

An amount paid by the Province to the Recipient or which is treated as such pursuant to the terms of this Agreement, and to which the Recipient is not entitled according to the terms of this Agreement is repayable to the Province and until repaid constitutes a debt due to the Province.

SECTION 17 – OTHER FUNDING

If the Recipient receives funding for or in respect of the Services from any person, firm, corporation or other government or governmental body, then the Recipient must immediately provide the Province with full and complete details thereof.

SECTION 18 - NOTICES

Where in this Agreement any notice or other communication is required to be given by any of the Parties, it will be made in writing. It will be effectively given:

- (a) by delivery, to the address of the Party set out below, on the date of delivery;
- (b) by pre-paid registered mail, to the address of the Party set out below, on the fifth Business Day after mailing;
- (c) by facsimile, to the facsimile number of the Party mentioned in this Agreement, on the date the facsimile is sent; or

(d) by e-mail, to the e-mail address of the Party mentioned in this Agreement, on the date the e-mail is sent.

The contact details of the Parties are

Province: Mike Badry, Box 9376 STN PROV GOVT, Victoria BC V8w 9M1, 778 698-4276, 250 356-9197

Recipient: *Trina Radford*, 1B - 1445 McGill Rd, Kamloops BC, V2C 6K7, 250 828-2551, 250 828-2597

The address, phone number, facsimile number, or email set out above may be changed by notice in the manner set out in this provision.

SECTION 19 - NON-WAIVER

No term or condition of this Agreement and no breach by the Recipient of any term or condition will be deemed to have been waived unless such waiver is in writing signed by the Province and the Recipient.

The written waiver by the Province of any breach by the Recipient of any term or condition of this Agreement will not be deemed to be a waiver of any other provision or of any subsequent breach of the same or any other provision of this Agreement.

SECTION 20 - ENTIRE AGREEMENT

The Schedules to this Agreement (including any appendices or other documents attached to, or incorporated by reference into, those Schedules) are part of this Agreement.

SECTION 21 - MISCELLANEOUS

All of the provisions of this Agreement in favour of the Province and all of the rights and remedies of the Province, either at law or in equity, survive any expiration or sooner termination of this Agreement.

Nothing in this Agreement operates as a consent, permit, approval or authorization by the Province thereof to or for anything related to the Project that by law, the Recipient is required to obtain unless it is expressly stated herein to be such a consent, permit, approval or authorization.

Any modifications to this Agreement will be made by agreement of both Parties in writing, which will be executed by both Parties.

SECTION 22 – EXECUTION AND DELIVERY OF AGREEMENT

This Agreement may be entered into by a separate copy of this Agreement being executed by, or on behalf of, each Party and that executed copy being delivered to the other Party by a method provided for in Section 18 or any other method agreed to by the Parties.

The Parties have executed this Agreement as follows:

Doug Forsdick, Chief Conservation Officer

Printed Name & Title of Province's Signing Authority

SIGNED AND DELIVERED on behalf of the Recipient	
= RON	Mar 29,2018
Signature of Recipient's Signing Authority	Date
Trina Radford, Project Coordinator	
Printed Name & Title of Recipient's Signing Authority	
SIGNED AND DELIVERED on behalf of the Province,	March 29, 2018
Signature of Province's Signing Authority	Date

SCHEDULE A - SERVICES

The Project

TERM

Notwithstanding the date of execution of this Agreement, the Term of this Agreement starts on March 27, 2018 and ends on March 31, 2020.

PROJECT

Manage a capture and release bear cub recovery study. The purpose of the study is to assess the outcomes for orphaned black bear cubs, reared in rehabilitation facilities in British Columbia.

PURPOSE & EXPECTED RESULTS

Review of available data, development of a study design, and implementation of monitoring for orphaned black bear cubs.

The recipient will benefit through the assessment of outcomes of released orphan black bear cubs. The rehabilitation community will use this information to inform and refine standards regarding orphaned black bear rearing and release.

The project meets the following objectives of the Province's Ministry of Environment & Climate Change Strategy (the Ministry) Service Plan:

Objective 3.1: Stewardship and management of natural values on BC landbase

Objective 3.2: Conservation and enhancement of native species and ecosystems

Objective 4.1: Inventory, monitoring, science and assessment for robust decision making

Objective 4.2: Policies, standards and regulations that are clear, consistent and predictable

The Ministry will monitor to ensure review of available data, development of a study design, and implementation of monitoring were delivered.

OUTCOMES

Through the delivery of the Services the Province wishes to realize the following outcomes and, without limiting the obligation of the Recipient to comply with other provisions of this Schedule A, the Recipient must use commercially reasonable efforts to achieve them:

This assessment is important to gain a better understanding of the dynamics between successful and failed release efforts of black bear cubs..

The Parties acknowledge that the Recipient does not warrant that these outcomes will be achieved.

DELIVERABLES

Assessment of outcomes for reared and released black bear cubs and the use of that information to improve and revise rehabilitation standards for black bear rearing and release.

REPORTING REQUIREMENTS:

Financial Reporting:

Final Reporting

Following completion of the Project the Recipient must, no later than 30 days after the end of the Term, provide a final financial report including

- a Project income and expenditure summary which identifies all sources and use of the total Project funds over the duration of the entire Agreement;
- a statement detailing the use of the Province's Financial Contribution provided over the duration of the entire Agreement, including an explanation of any financial variances.

Project Reporting

Ongoing Communication

The Recipient must make all reasonable efforts to respond to ad-hoc requests by the Province for information on Project progress. The Recipient must also advise the Province immediately of any substantial events that could impact the Project timeline.

Final Reporting

Following completion of the Project the Recipient must, no later than 30 days after the end of the Term, provide a Project performance report with Project highlights, description of outcomes with respect to results set out in this Schedule A, quantitative and qualitative description of the accomplishments / success of the Project; challenges faced and solutions found, information on results (negative or positive) that were not anticipated, and lessons learned.

SCHEDULE B - FINANCIAL CONTRIBUTION

PAYMENTS

- 1. The Province agrees to provide to the Recipient a maximum amount of \$225,000 during the Term of the Agreement.
- 2. Once this Agreement has been signed by both Parties, a payment of \$225,000 will be made, but not before the Term start date of this Agreement.

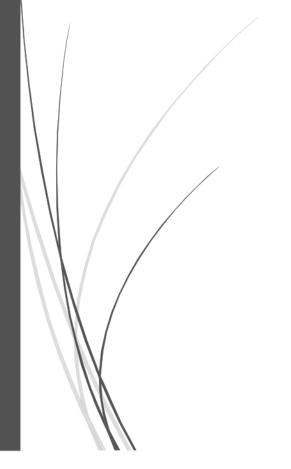
SCHEDULE C - PRIVACY PROTECTION

1. **N/A**

May 2019

Management of Orphaned Black Bear Cubs in British Columbia: Jurisdictional Summary, Recommendations for Best Practices, Summary of Research on Captive-Rearing Efficacy, and Study Proposal

for the British Columbia Conservation Foundation



Ramona Maraj, Ph.D. Chrysalis Ecological Page 020 of 128 to/à Page 128 of 128

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