REQUEST FOR PROPOSAL

Project: Regional Floodplain Management Plan (Phase 1)
Request For Proposal #: R15-231

Date of Issue: August 13th, 2015

Closing Location: by hand, mail or courier to:

Regional District of Central Okanagan
Reception
1450 KLO Road
Kelowna, BC V1W 3Z4

Closing Date and Time:
Three (3) complete copies of each Proposal must be received prior to 3 pm Pacific Time, September 3rd, 2015

Enquiries: all enquiries must be directed to:

Andy Brennan – Purchasing Manager
1450 KLO Road
Kelowna, BC V1W 3Z4
Tel: 250-469-6170
Fax: 250-469-6171
andy.brennan@cord.bc.ca

Note: Should any potential Proponent download this Request for Proposal, it is the Proponent’s responsibility to check for Addenda, which will be posted on the Regional District of Central Okanagan’s website (www.regionaldistrict.com/purchasing)
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TERMS OF REFERENCE

1 Summary

This RFP document describes the supply of consulting services sought by the Regional District of Central Okanagan, and sets out the Regional District’s RFP process, evaluation and selection process, and Proposal requirements.

The Regional District wishes to engage qualified consultant to create a Regional Floodplain Management Plan (Phase 1) for the central Okanagan region. Full details on the Scope of Work are provided under Section 4 herein.

The total budget for the work is not to exceed $62,000 (including GST).

The project is due to commence on September 16th, 2015, with the final deliverables complete by May 2nd, 2016.

2 Definitions

Throughout this Terms of Reference, terminology is used as follows:

“Contract” or “Agreement” means the written agreement resulting from this Request for Proposal.

“Contractor” or “Consultant” means the successful Proponent to this Request for Proposal who enters into a written Contract with the Regional District.

“Infrastructure” means the basic equipment and structures (such as roads and bridges) that are needed for the Region to function properly.

“Proponent” means an individual or a company that submits, or intends to submit, a Proposal in response to this RFP.

“Proposal” means the Proponent’s response to this RFP.

“Member Municipalities” means District of Peachland, City of West Kelowna, City of Kelowna, and District of Lake Country.

“Regional District” or “RDCO” means the Regional District of Central Okanagan.

“Region” means all member municipalities, First Nations, and the regional district within the geographic area of the Regional District of Central Okanagan.
“Regional District of Central Okanagan” means the Regional District of Central Okanagan as incorporated under the Local Government Act.

“RFP” means this Request for Proposal.

3 Background

As noted in the RDCO Regional Emergency Flood Plan 2013 (Appendix B hereto), the Region may experience flooding throughout the entire year due to natural or human made conditions and geography. In addition, ice jams, reservoir releases and mechanical failure of flood protection works may also cause flooding. The RDCO Strategic Plan, Vision 2020 – Planning for the Future (https://www.regionaldistrict.com/media/28056/Strategic%20Plan.pdf) identifies hazard management as priority with a need for a regional coordinated approach to efforts aimed at risk assessment, mitigation, and emergency planning. The RDCO Regional Growth Strategy Bylaw No. 1336, 2013, (http://www.regionaldistrict.com/your-services/planning-section/regional-growth-strategy.aspx) provides direction to work with local governments and provincial agencies to assess and mitigate risks in floodplains.

Currently, there is very little flood hazard analysis or floodplain mapping in the Region. There is floodplain mapping and diking for lower Mission Creek; flood hazard analysis for portions of Mill Creek and flood mitigation along Bellevue Creek. There is also provincial floodplain mapping along sections of Okanagan Lake. In addition, zoning bylaws set floodplain setbacks and flood construction levels for watercourses based on the Flood Hazard Area Land Use Management Guidelines (MWLAP, 2004). The RDCO Regional Emergency Flood Plan, 2013, outlines emergency operations during flood events. Overall, there is a need for a complete regional analysis of flood hazards and an assessment of flood risk in order to better assist in planning for and addressing flood hazards and the consequences in the Region.

4 Scope of Work

The following works shall be undertaken by the Consultant within the scope of the Project Fixed Fee:

4.1 Overview of the Project:

The Regional District requires a Consultant to prepare a Regional Floodplain Management Plan (Phase 1). The geographic plan area is to encompass the entire Central Okanagan region, which includes the member municipalities of District of Peachland, City of West Kelowna, City of Kelowna and District of
Lake Country, as well as First Nations lands and the two Electoral Areas (Central Okanagan West and Central Okanagan East).

The Region is challenged with addressing flood hazards to existing development, and addressing potential hazards to proposed development on previously undeveloped lands. In the absence of complete floodplain maps, guidelines for land use management are incorporated into bylaws; however, the approaches are inconsistent and potentially overlook the broad, regional perspective.

As outlined in Figure 1, Phase 1 of the project is to create a Floodplain Management Plan and prioritization for subsequent phases. Results of Phase 1 will determine whether subsequent phases of the study move forward.
4.2 Objectives:

The overall objective of the project is to better understand the flood risk within the Region such that the likelihood of flood damage is reduced. The following are expected to benefit from the project:

- People, property and the environment. Proactively identifying mitigation opportunities to protect people and property as well as surface and ground water resources from contamination due to flooding in lakes, streams and watercourses.
- Water purveyors, local governments, provincial agencies and other stakeholders. Flooding has impact on various levels of governments and organizations; through collaboration this project will ensure the information is beneficial to other agencies and jurisdictions.

Determining flood risk takes a number of steps as outlined in Figure 1. Locating flood hazards or areas that may be subject to flooding is an initial task, followed by assessing how likely flooding will occur now and in the future, and identifying consequences of the flooding.

Phase 1 of this project, which is the Scope of Work for this RFP, is intended to set the regional framework for the identification of flood risk. A Regional Floodplain Management Plan will be developed which identifies flood hazards, assesses the likelihood of flooding, and identifies potential consequences. From this information, priority areas are to be identified that may warrant further review and floodplain mapping in a subsequent Phase 2 of the project.

FIGURE 2: STEPS IN FLOOD RISK ASSESSMENT

The RDCO has identified several specific outcomes of the Regional Floodplain Management Framework. These include:
1. Reduce flood risk. Flood management will strengthen the ability of local governments to address long-term planning practices and asset management. Floodplain hazard and risk maps may be used to restrict development in potentially hazardous locations. The mapping may be used to develop proactive policies regarding new development, or changes to existing development.

The hazard identification process will help to understand flood hazards and through identification of upstream dams and reservoirs, for example, will help to identify potential flood hazards to downstream areas.

2. Improve emergency flood response. Floodplain hazard and risk maps can be used to identify and support those already situated within flood-prone areas. Mapping historically impacted areas will formalize what is currently known and allow for more efficient and effective emergency response during flood events. Mapping also provides a means for proactive (as opposed to reactive) strategies to mitigate risks that are focused on priority areas.

3. Increase the resilience to climate change. Flood management increases resiliency to changing flood risk by increasing the ability to anticipate, absorb, accommodate and recover from flood events. Hydrologic analysis will include climate change scenarios and this information may be used for asset management and infrastructure planning.

4.3 Phase 1 Project Methodology:

The Regional District requires the methodology for this Phase 1 to broadly align to the following steps:

1. Project Initiation
   a. Start-up meeting with RDCO staff
   b. Set task timelines, including periodic RDCO staff review and comment throughout the Project
   c. Identification of stakeholders

2. Conduct interviews with affected member municipalities, First Nations, water purveyors, and other stakeholders

3. Clarify the purpose and content of the Floodplain Management Plan

4. Provide context and background for flood hazards in the Region
   a. Describe the physical and hydrological characteristics of the Region with a focus on flood hazard
b. Collate information available on past flood events in the Region and summarize the financial impact of some of the more recent flood events in the Region

c. Identify existing floodplain mapping

d. Identify existing flood protection infrastructure, and summarize what is known about their effectiveness

e. Identify hydrometric and climate data sources (former and existing) in the Region

f. Identify, in general, infrastructure in the Region that may be prone to flood hazard damage (geographic locations of specific infrastructure not required)

g. Locate, identify ownership, and map upstream dams and reservoirs

h. Generalize climate change projections and implications for flood hazard

i. Identify areas that may become vulnerable in the future with increased runoff related to hardscaping, logging, fires, or other influences on the change of rate of runoff

j. Summarize data gaps

5. Identify and Prioritize Current and Future Flood Hazard Areas

a. Identify hazard-prone streams (current and future) in the Region at an overview level – on the basis of elevation and landform (specific methodology to be proposed by consultant)

b. Identify the likelihood and consequences of flooding in these areas (including sediment and impact to the environment and infrastructure)

c. Compare the hazard areas with known priority areas identified by the Regional Emergency Program

d. Develop Prioritization Criteria for further hazard and risk assessment

e. Summarize results of prioritization

6. Mechanisms for Land Use Management on Floodplains

a. Incorporate flood management policy and approaches currently in use by the Region

b. Compare results (mapped flood hazard areas) with existing floodplain bylaw regulations

c. Recommend options for land use management in flood-prone areas (planning approaches)

d. Provide recommendations for emergency response (triggers, monitoring, priority areas)

7. Recommend options for subsequent phases of the floodplain management framework (if applicable)

8. Presentation to the Regional Board
4.4 **Project Deliverables:**
The following are deliverables to be delivered by the Consultant upon completion of the work.

- **The Plan:** The final Regional Floodplain Management Plan (Phase 1) document will be delivered in duplicate bound hardcopy, as well as in digital format (PDF and Word) to the RDCO. The final document is to include all applicable information discovered during the methodology as outlined in Section 4.3, and will include but not be limited to the following sections:
  
  - Front Cover
  - Table of Contents
  - Introduction
    - Overview and Objectives of the Project
    - Regional Context
  - Background
  - Interviews with Stakeholders
    - Interview dates, attendees, and concise conversation summaries
    - Analysis / End Conclusion
  - Context and Background on Flood Hazards in the Region
  - Identify and Prioritize Current and Future Flood Hazard Areas
  - Mechanisms for Land Use Management on Floodplains
  - Recommendation
    - Outline options, if any, for subsequent phases of the floodplain management framework

- **Photos:** All photos contained in the document to be provided in digital format (jpeg format). Should any videos be created for the project, all footage is to be provided (wmv format).

- **Maps:** All maps contained in the document to be provided as an ESRI map package. Map packages may have orthophotos removed to decrease the file size. Any additional data not contained within the Map Packages, including raw and derived data, is to be delivered in the following format:
  
  - ESRI Shapefile or Geodatabase;
  - Projected (geo-referenced) to UTM Zone 11, NAD83, GRS80;
  - Data Dictionary – Describing fields, files, and accuracy;
  - Metadata – Describing where data came from, and the limitations of the data, and the intended purpose for each data set.

- **Additional Documentation:** Copy of any documentation used in the creation of the Regional Floodplain Management Plan (Phase 1) including digital version where possible.
• **Presentations:** The consultant will be required to make one presentation to the RDCO Board of Directors:
  - Presentation of the final Regional Floodplain Management Plan (Phase 1) plan for Board consideration.

  **Note:** All deliverables are to be submitted to the RDCO Community Services Department – Planning Section and will become the property of the Regional District. All consultation (ie. interviews with stakeholders) is to be arranged by the Consultant.

4.5 **Budget:**

The Regional District has a maximum budget for this work of $62,000 (including GST). Proposals to this should have a total remuneration which does not exceed this maximum budget.

4.6 **Project Timeline:**

The following are preferred major milestones for the work:

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Milestone Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 16, 2015</td>
<td>Preliminary start-up meeting</td>
</tr>
<tr>
<td>First Quarter 2016</td>
<td>Presentation to RDCO Board</td>
</tr>
<tr>
<td>May 2, 2016</td>
<td>Submission of Final plan and deliverables following RDCO Board presentation</td>
</tr>
</tbody>
</table>
5 Proposal Submission

5.1 Proposals should include the following: (all appendices for completion are attached to this RFP):

- Completed Appendix C – Certification Document
- Completed Appendix D – Remuneration
- Completed Appendix E – Methodology & Team
- Completed Appendix F – Company Knowledge, Experience and References

5.2 Date and Time for Receipt of Proposals

Sealed Proposals, clearly marked on the outside of the envelope with the words “Regional Floodplain Management Plan (Phase 1) RFP, File R15-231” will be received at Reception, Regional District of Central Okanagan, 1450 KLO Road, Kelowna, BC, V1W 3Z4 up until 3:00PM, Local Time September 3rd, 2015. Proposals will not be opened publicly.

Proposals must not be submitted electronically by facsimile or email. Proposals and their envelopes should be clearly marked with the name and address of the Proponent, the Request for Proposal number, and the project or program title.

Late Proposals will not be accepted and will be returned to the Proponent.

6 Proposal Evaluation

6.1 Evaluation Criteria:

The following criteria, shown in order of importance, form the basis upon which evaluation of Proposals will be made.

6.1.1 Mandatory Criteria:

The following are mandatory requirements. Proposals not clearly demonstrating that they meet all mandatory criteria will receive no further consideration during the evaluation process.

<table>
<thead>
<tr>
<th>Mandatory Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Completed Certification Document (Appendix C)</td>
</tr>
</tbody>
</table>
6.1.2 Scored Evaluation Criteria:

Proposals meeting all the mandatory requirements will be further assessed against the following criteria.

The relative weighting for each criterion is also given.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed remuneration (based on response to Appendix D - Remuneration)</td>
<td>30%</td>
</tr>
<tr>
<td>Proposed methodology, timeline and project team members, (based on response to Appendix E - Methodology &amp; Team)</td>
<td>35%</td>
</tr>
<tr>
<td>Proponent’s knowledge and experience (based on Appendix F – Company Knowledge, Experience &amp; References)</td>
<td>35%</td>
</tr>
</tbody>
</table>

By responding to this RFP, Proponents will be deemed to have agreed that the decision of the Evaluation Team will be final and binding.

7 RFP General Terms & Conditions:

7.1 The Regional District reserves the right to do the following at its absolute discretion:
   a) to reject any or all proposals, or any part thereof;
   b) to waive any informality in the proposal;
   c) to accept the proposal that is in the best interest of the Regional District;
   d) to request clarification of any proposal prior to award; and
   e) to choose not to proceed with any award.

7.2 Proposals shall be valid and irrevocable for thirty (30) days.

7.3 No Obligation To Proceed:
Though the Regional District fully intends at this time to proceed through the RFP in order to have the Project completed, the Regional District is under no obligation to proceed. The receipt by the Regional District of any information (including any submissions, ideas, plans, drawings, models or other materials communicated or exhibited by any intended Proponent, or on its behalf) shall not impose any obligations on the Regional District. There is no guarantee by the Regional District, its officers, employees or agents, that the process initiated by the issuance of this RFP will continue, or that this RFP process or
any RFP process will result in a contract with the Regional District for the development of the Project.

7.4 Form of Contract
Appendix A of this RFP contains the Form of Contract the Regional District proposes to enter into with the successful Proponent. By submitting a Proposal, the Proponent agrees to all terms and conditions in Appendix A: Form of Contract. If a Proponent requires amendment to any terms in Appendix A: Form of Contract, it must clearly state such proposed amendments in its Proposal. Significant amendments may render the Proposal non-compliant. The Regional District is not bound to accept any Form of Contract amendments proposed.

7.5 Confidentiality
All Proponents and any other person who through this RFP process gains access to confidential financial information of the Regional District’s are required to keep strictly confidential all information which in any way reveals confidential business, financial or investment details, programs, strategies or plans, learned through this RFP process. This requirement will continue with respect to such information learned by the successful proponent, if any, over the course of any contract for service which arises out of this RFP process.

7.6 Freedom of Information & Protection of Privacy Act
The Regional District is subject to the British Columbia Freedom of Information and Protection of Privacy Act. Subject to Sections 12 through 22 inclusive of the Act, any reports and or documents produced on behalf of the Regional District are subject to public review under the Act.

7.7 Proponent’s Expenses:
Proponents are solely responsible for their own expenses in preparing a Proposal and for subsequent negotiations with the Regional District, if any. If the Regional District elects to reject all Proposals, the Regional District will not be liable to any Proponent for any claims, whether for costs or damages incurred by the Proponent in preparing the Proposal, loss of anticipated profit in connection with any final Contract, or any other matter whatsoever.
APPENDIX A: FORM OF CONTRACT - CONSULTING SERVICES AGREEMENT

Note: Proponents are not required to complete any information in this Appendix A as part of their Proposal submission.
This Agreement made in duplicate and entered into effective as of the ______ day of ________, in the year 2015.

By and Between:

REGIONAL DISTRICT OF CENTRAL OKANAGAN
1450 K.L.O Road
Kelowna, B.C. V1W 3Z4

(hereinafter referred to as the "Regional District")

And: Consultant Name
Consultant Address

(hereinafter referred to as the "Consultant")

Witnesses: That the Regional District and the Consultant in consideration of their mutual rights and obligations to one another as hereinafter set forth, DO AGREE AS FOLLOWS:

1.0 SERVICES TO BE PERFORMED

Under this Consulting Services Agreement, the Consultant shall supply all professional expertise necessary for the proper performance of the Service, and do and fulfil everything required by this Agreement for the following project:

R15-231 - Regional Floodplain Management Plan (Phase 1)

(hereinafter referred to as the "Project").

The work shall be performed in accordance with the Consultant's Proposal; Attachment B dated, ________________ and the Regional District Terms of Reference; Attachment C – ________________ both of which constitute a part of this Agreement.
The work shall be performed in accordance with this Agreement and the fee schedule included as part of Attachment B, all of which constitute a part of this Agreement.

(the “Fee Schedule”)

The term of this Agreement shall be from ________________ until completion of the work, which is schedule to be on ________________.

(the “Term”)

2.0 SCHEDULE

2.1 The Consultant shall use its best efforts to perform the Services in accordance with the Project timeline schedule in Attachment B.

2.2 The Regional District may reasonably adjust any schedule or specified timing during the course of the project after consulting with and obtaining the approval of the Consultant.

3.0 CONSULTANTS DUTIES

3.1 In performing the Services identified under this Agreement, the Consultant shall, at all times, act in the best interests of the Regional District and exercise that degree of professional care, skill and diligence required according to generally accepted professional consulting standards

3.2 The Regional District will provide upon request from the Consultant, any information or data that is pertinent to and identified in, the Terms of Reference which are attached to this Agreement and made a part hereof.

3.3 The Consultant shall be responsible for determining the accuracy and completeness of all information and data furnishes by or through the Regional District.

3.4 The Consultant is responsible for the complete co-ordination of all professional services rendered to the Regional District by the Consultant or by the Consultant’s Sub-consultants on the Project.

4.0 PAYMENT

4.1 Subject to 4.2, the Project Fixed Fees shall be paid as identified in the Regional District Terms of Reference, and as supplied with the Consultant’s proposal, as each of the files are completed. The Regional District shall have no obligation to pay any fees or costs to the Consultant for services or materials/equipment
beyond the Project Fixed Fee for any reason whatsoever, other than as may be agreed in writing by the Regional District and the Consultant.

4.2 The Consultant shall make application to the Regional District for payment, together with supporting documents, when required by this Agreement, on or before the last day of each month for approval and due processing. Payment shall be for that proportion of the various parts of the Services completed against the files and any identified reimbursable disbursements incurred during the preceding month. The sum shall become due and payable thirty (30) days after the date the invoice is received by the Regional District. Should the Regional District be unable to verify any invoice within the said period, payment by the Regional District may either be withheld or may be made and treated as an advance pending verification of the invoice. Where required by the Regional District, the Consultant shall provide substantiation to the Regional District in order to verify any invoice. Where only a part of an invoice can be verified by the Regional District, the Regional District may, at its discretion, choose to pay that part only, pending proper verification of the remainder of the invoice by the Consultant.

4.3 Account adjustments which have not been made prior to payment of an invoice, may be made by the Regional District at the time of a later payment. Where it has been established that the Regional District has overpaid against an invoice, the Consultant will deduct the amount from the next invoice, or the Consultant shall pay the amount to the Regional District within five (5) working days of the amount being identified, as required by the Regional District.

4.4 The Regional District may request the Consultant to submit with the final invoice, a Statutory Declaration or other proof, that there are no outstanding costs, assessments, liens or claims against the Consultant or against the Regional District’s property arising out of or in connection with the Consultant’s Services rendered on the Project.

5.0 TERMINATION AND SUSPENSION

BY THE REGIONAL DISTRICT:

5.1 Should the Consultant neglect to complete the Services properly or fail to perform any provisions of this Agreement, the Regional District may notify the Consultant in writing that it is in default of its contractual obligations and instruct it to correct the default or take steps to correct the default, within seven (7) working days of receiving the notice. Failure to comply with the default request extends to the Regional District the option, without limiting any other right or remedy the Regional District may have, of immediately terminating this Agreement. Subject to a right of set-off the Regional District shall have for damages incurred due to
such neglect or failure by the Consultant, the Regional District shall pay the Consultant for all Services performed and all disbursements incurred pursuant to this Agreement and remaining unpaid as of the effective date of such termination.

5.2 Other than for reasons set forth in 5.1, the Regional District may terminate this Agreement for any reason by giving thirty (30) days prior written notice to the Consultant. Upon receipt of such written notice, the Consultant shall perform no further Services other than those reasonably necessary to close out the Project. In such event, the Consultant will be paid by the Regional District pursuant to this Agreement, for the completed tasks according to the Schedule of Tasks referred to in 4.1 remain unpaid as of the effective date of such termination.

BY THE CONSULTANT:

5.3 Should the Regional District fail to perform any provisions of this Agreement, the Consultant may notify the Regional District in writing that it is in default of its contractual obligations and instruct it to correct the default within seven (7) working days of receiving the notice. Failure to comply with the default request extends to the Consultant the option, without limiting any other right or remedy the Consultant may have, of immediately terminating this Agreement and requesting settlement for all Services performed and all disbursements incurred pursuant to this Agreement and remaining unpaid as of the effective date of such termination.

5.4 Should the Consultant's Services be suspended by the Regional District at any time for more than thirty (30) calendar days in any calendar year through no fault of the Consultant, then the Consultant shall have the right until such suspension is lifted by the Regional District, to terminate this Agreement upon giving three (3) working days written notice thereof to the Regional District. In such event, the Consultant will be paid by the Regional District pursuant to this Agreement, for the completed tasks as per the Schedule of Tasks referred to in 4.1 that remain unpaid as of the effective date of such termination.

6.0 SUCCESSORS AND ASSIGNS

6.1 This Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective executors, administrators, successors and permitted assigns.

8.2 Neither party shall assign this Agreement or any portion thereof without the prior written consent of the other, which consent shall not be unreasonably withheld.
7.0  CHANGES IN THE WORK

7.1 The Regional District and the Consultant may, by agreement in writing, without invalidating this Agreement, make changes by altering, adding to or deducting from the Services. In such event, the Consultant’s Project Fixed Fee and Project timeline schedule shall be adjusted accordingly. Any Services rendered by the Consultant to the Regional District beyond those Services set out in the Consultant’s Proposal and the Regional District Terms of Reference shall be considered to be Additional Services, with the Consultant to be compensated therefore on an hourly or per diem basis to be agreed upon by the Regional District and the Consultant in writing prior to the Consultant rendering any such Additional Services to the Regional District.

8.0  APPLICABLE LAWS

8.1 The Consultant shall observe and abide by all applicable laws, regulations, ordinances and other rules of the Regional District, the Federal Government and the Province of British Columbia. Without restricting the generality of the foregoing, the Consultant shall abide by all provisions of the Workers Compensation Act of British Columbia, and upon request of the Regional District, shall supply proof that all assessments thereunder have been paid.

8.2 This Agreement and any rights and remedies arising out of this Agreement, shall be construed in accordance with the laws of British Columbia.

9.0  PERMITS AND LICENSES

9.1 The Consultant(s), their employees, agents and vehicles shall have and maintain valid permits and licenses as required by law for the execution of services related to this agreement.

9.2 The Consultant will be required to conform to all Federal, Provincial, and Regional District Acts and Regulations that may apply to the operation of this contract. The Consultant is required to obtain and pay for all necessary permits, licenses, and inspection fees.

9.3 Certified copies of required permits/licenses will be available upon request.

9.4 The Consultant must comply with all conditions and safety regulations of WorkSafe BC act of British Columbia and must be in good standing and must maintain this standing throughout the term of the contract.
10.0 INSURANCE

10.1 The Consultant shall, without limiting its obligations or liabilities under this Contract, procure and maintain, at its own expense and cost, the insurance policies listed in Attachment A and A1, attached hereto and made a part of this Contract. The insurance policies shall be maintained continuously from the date of commencement of the Work or Services provided under this Contract until the date that the Regional District certifies in writing completion of the Work or Services or such further period as may be specified in Attachment A.

The Consultant shall provide proof to the Regional District, and shall, upon request, provide the current policy certificate of insurance for inspection by the Regional District.

The Consultant accepts responsibility for the acts and omissions of all sub-consultants it may engage in rendering the Service on the Project.

11.0 WORKSAFE BC

11.1 If the Consultant or any approved sub-Contractors will be physically present on Regional District of Central Okanagan property or will be attending a worksite on behalf of the Regional District of Central Okanagan, they must be registered with WorkSafe BC (formerly WCB), in which case coverage must be maintained for the duration of the Agreement. Prior to receiving any payment, the Contractor may be required to submit a WCB Clearance Letter indicating that all WorkSafe BC assessments have been paid.

12.0 WAIVER

12.1 The waiver by the Regional District of the breach of any condition, covenant or obligation under this Agreement required to be kept, observed and performed by the Consultant, will not operate to waive or deemed to waive any subsequent breach of the same condition, covenant or obligation.

13.0 CONFIDENTIALITY, OWNERSHIP AND USE OF DOCUMENTS AND MATERIALS

13.1 The Regional District is subject to the British Columbia Freedom of Information and Protection of Privacy Act. Subject to Sections 12 through 22 inclusive of the Act, any reports and or documents produced by or on behalf of the Regional District are subject to public review under the Act.
13.2 The Consultant shall keep confidential for an unlimited period of time all communications, plans, specifications, reports or other information used in connection with the Project except:

13.2.1 those requiring disclosure by operation of law; or

13.2.2 any disclosure authorized in writing by the Regional District or

13.2.3 those in the possession of or that come into the possession of the Consultant and not obtained directly or indirectly from the Regional District; or

13.2.4 those in the public domain through no act or omission of the Consultant.

The Consultant shall, by employing written agreements, bind all employees, sub-consultants and agents to the obligations required by this Article.

13.3 All concepts, plans, drawings, specifications, designs, models, reports, photographs, computer software, surveys, calculations, construction and other data, documents, and processes produced by the Consultant in connection with the Services (the Instruments of Service), including all copyright and other intellectual property therein, are and shall at all times remain the property of the Regional District.

14.0 CONFLICT OF INTEREST

14.1 During the Term, the Consultant must not engage in or provide, to any other person or company or entity, any service or thing which would be reasonably perceived to be in conflict with the interest of the Regional District in respect of the Services. Should any real or potential conflict of interest arise during the Term, the Consultant shall declare it immediately to the Regional District and upon receipt of notice of a conflict, the Regional District may, at its option and despite section 5.0, immediately terminate this Contract.

15.0 SUBCONSULTANTS

15.1 The Consultant agrees to employ those sub-consultants and to supply the Services identified in its Proposal at the time of signing of this Agreement. The Consultant agrees that it has the responsibility for the complete coordination of all professional Services rendered to the Regional District by the Consultant or by its sub-consultants on the Project.
15.2 Any sub-consultants used by the Consultant must be identified in the Consultants Proposal and approved in advance by the Regional District.

15.3 All costs associated with any sub-consultants required to supply the services identified in the Scope of Work are included in the Fee Schedule.

16.0 ARBITRATION

16.1 All matters in dispute under this Agreement which cannot be settled by the Regional District and the Consultant may, with the concurrence of both the Regional District and the Consultant, be submitted to final and binding arbitration to a single arbitrator appointed jointly by them.

16.2 No person shall be nominated to act as arbitrator who is in any way financially interested in the Project or in the affairs of either the Regional District or the Consultant.

16.3 In the event that the Regional District and the Consultant cannot agree to an arbitrator, such arbitrator shall be chosen by reference to a Judge of the Supreme Court of British Columbia.

17.0 RECORDS AND AUDIT

17.1 The Consultant shall keep reasonable and proper records, accounts, statements and other relevant documents for a period of not less than six (6) years after completion of the Project or for such extended period as may be required by law or as the Regional District may request in writing.

17.2 The Consultant shall permit the Regional District to inspect, audit and copy all records, accounts, statements and other relevant documents of the Consultant relating to the Project at all reasonable business hours in the offices of the Consultant.

18.0 INDEMNIFICATION

18.1 The Consultant shall be liable for all loss, costs, damages, and expenses whatsoever incurred or suffered by the Regional District, its elected officials, officers, employees and agents (the Indemnities) including but not limited to damage to or loss of property and loss of use thereof, and injury to or death of a person or persons resulting from or in connection with the negligent performance or non-performance of this Contract, except only where such loss, costs, damages and expenses are as a result of the acts of the Indemnities, and in such event only to the extent such claim, demand, action, proceeding or liability is attributable to decisions or acts of the Indemnities, as are actionable and sustainable against the Indemnities pursuant to British Columbia law.
The Consultant shall defend, indemnify and hold harmless the Indemnities from and against all claims, demands, actions, proceedings and liabilities whatsoever and all costs and expenses incurred in connection therewith and resulting from the negligent performance or non-performance of this contract, except where such claim, demand, action, proceeding or liability arise out of the, acts of the Indemnities, and in such event only to the extent such claim, demand, action, proceeding or liability are attributable to decisions or acts of the Indemnities, as are actionable and sustainable as against the Indemnities pursuant to British Columbia law.

This section shall survive termination of this Agreement.

19.0 TIME

Time is of the essence of this Contract.

20.0 ENTIRE AGREEMENT

20.1 This Agreement constitutes the sole and entire agreement between the Regional District and the Consultant relating to the Project and completely supersedes and abrogates any prior Agreements existing between the Regional District and the Consultant whether written or oral.

21.0 RECEIPT OF AND ADDRESSES FOR NOTICE

21.1 Communications in writing between the parties shall be considered to have been received by the addressee on the date of delivery if delivered by facsimile by hand to the individual or to a member of the company for whom they are intended, or if sent by post, telegram, facsimile or telex within five (5) working days of the date of mailing, when addressed as follows:

the Regional District at Regional District of Central Okanagan, 1450 KLO Road, Kelowna, B.C. V1W 3Z4

Purchasing Manager

the Consultant at Consultant Name Consultant Address

_________________________________________________________________
IN WITNESS WHEREOF the parties have executed this Agreement on the day and year first above written by their officers or persons duly authorized to execute on their behalf.

Signatures for the REGIONAL DISTRICT OF CENTRAL OKANAGAN were hereto affixed:

________________________________________________)

Project Manager)

________________________________________________)

Title)

________________________________________________)

Witness)

________________________________________________)

Title)

________________________________________________)

Date

Signatures for the CONSULTANT were hereto affixed:

________________________________________________)

Authorized Signatory)

________________________________________________)

Title)

________________________________________________)

Authorized Signatory)

________________________________________________)

Title)

________________________________________________)

Witness)

________________________________________________)

Title)

________________________________________________)

Date
ATTACHMENT A-1 – INSURANCE REQUIREMENTS

1. **Consultant To Provide**

   The Consultant shall procure and maintain, at its own expense and cost, the insurance policies listed in section 2, with limits no less than those shown in the respective items, unless in connection with the performance of some particular part of the Work or Services, the Regional District advises in writing that it has determined that the exposure to liability justifies less limits. The insurance policy or policies shall be maintained continuously from commencement of the Work or Services until total completion of the Work or Services or such longer period as may be specified by the Regional District.

2. **Insurance**

   As a minimum, the Consultant shall, without limiting its obligations or liabilities under any other contract with the Regional District, procure and maintain, at its own expense and cost, the following insurance policies:

   2.1 **WorkSafe BC insurance** covering all employees of Consultant engaged in the Work or Services in accordance with the statutory requirements of the province or territory having jurisdiction over such employees.

   2.2 **Comprehensive General Liability Insurance**
      
      (i) providing for an inclusive limit of not less than $2,000,000 for each occurrence or accident;
      (ii) providing for all sums which the Consultant shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting there from) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Work or Services or any operations carried on in connection with this Contract;
      (iii) including coverage for Products/Completed Operations, Blanket Contractual, Contractor’s Protective, Personal Injury, Contingent Employer’s Liability, Broad Form Property Damage, and Non-Owned Automobile Liability.
      (iv) including a Cross Liability clause providing that the inclusion of more than one Insured shall not in any way affect the rights of any other Insured hereunder, in respect to any claim, demand, suit or judgment made against any other Insured.

   2.3 **Automobile Liability Insurance** covering all motor vehicles, owned, operated and used or to be used by the Consultant directly or indirectly in the performance of the Work or Services. The Limit of Liability shall not
be less than $2,000,000 inclusive, for loss or damage including personal injuries and death resulting from any one accident or occurrence.

3. **The Regional District Named As Additional Insured**
The policies required by sections 2.2 and 2.3 above shall provide that the Regional District is named as an Additional Insured thereunder and that said policies are primary without any right of contribution from any insurance otherwise maintained by the Regional District.

4. **Consultant’s Sub-Consultants**
The Consultant shall require each of its sub-Consultants to provide comparable insurance to that set forth under section 2.

5. **Certificates of Insurance**
The Consultant agrees to submit Certificates of Insurance, in the form of Attachment A-1, attached hereto and made a part hereof, for itself and for all of its sub-consultants to Regional District prior to commencing the Work or providing the Services. Such Certificates shall provide that 30 days’ written notice shall be given to the Regional District, prior to any material changes or cancellations of any such policy or policies.

6. **Other Insurance**
Not applicable

7. **Additional Insurance**
The Consultant may take out such additional insurance, as it may consider necessary and desirable. All such additional insurance shall be at no expense to the Regional District. The Consultant shall ensure that all of its sub-Consultants are informed of and comply with the Regional District’s requirements set out in this Attachment A.

8. **Insurance Companies**
All insurance, which the Consultant is required to obtain with respect to this contract, shall be with insurance companies registered in and licensed to underwrite such insurance in the province of British Columbia.

9. **Failure to Provide**
If the Consultant fails to do all or anything which is required of it with regard to insurance, the Regional District may do all that is necessary to effect and maintain such insurance, and any monies expended by the Regional District shall be repayable by and recovered from the Consultant. The Consultant expressly authorizes the Regional District to deduct from any monies owing the Consultant, any monies owing by the Consultant to the Regional District.

10. **Nonpayment of Losses**
The failure or refusal to pay losses by any insurance company providing insurance on behalf of the Consultant or any sub-Consultant shall not be held to waive or release the Consultant or sub-Consultant from any of the provisions of the Insurance Requirements or this Contract, with respect to the liability of the Consultant otherwise. Any insurance deductible maintained by the Consultant or any sub-Consultant under any of the insurance policies is solely for their account and any such amount incurred by the Regional District will be recovered from the Consultant as stated in section.

End of Attachment A
**CERTIFICATE OF INSURANCE**

This Certificate is issued to: The Regional District of Central Okanagan  
1450 KLO Road  
Kelowna, BC V1W 3Z4

<table>
<thead>
<tr>
<th>Insured</th>
<th>Name:</th>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broker</td>
<td>Name:</td>
<td>Address:</td>
</tr>
</tbody>
</table>

Location and nature of operation or contract to which this Certificate applies:  
R15-231 – Regional Floodplain Management Plan (Phase 1)

<table>
<thead>
<tr>
<th>Type of Insurance</th>
<th>Company &amp; Policy Number</th>
<th>Policy Dates</th>
<th>Limits of Liability/Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1</strong></td>
<td></td>
<td></td>
<td>Bodily Injury and Property Damage</td>
</tr>
<tr>
<td>Comprehensive General Liability including:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Products/Completed Operations;</td>
<td></td>
<td></td>
<td>$2,000,000 Inclusive</td>
</tr>
<tr>
<td>• Blanket Contractual;</td>
<td></td>
<td></td>
<td>$____________ Aggregate</td>
</tr>
<tr>
<td>• Contractor’s Protective;</td>
<td></td>
<td></td>
<td>$____________ Deductible</td>
</tr>
<tr>
<td>• Personal Injury;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Contingent Employer’s Liability;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Broad Form Property Damage;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Non-Owned Automobile;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cross Liability Clause.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Section 2</strong></td>
<td></td>
<td></td>
<td>Bodily Injury and Property Damage</td>
</tr>
<tr>
<td>Automobile Liability</td>
<td></td>
<td></td>
<td>$2,000,000 Inclusive</td>
</tr>
</tbody>
</table>

It is understood and agreed that the policy/policies noted above shall contain amendments to reflect the following:

1. Any Deductible or Reimbursement Clause contained in the policy shall not apply to the Regional District of Central Okanagan and shall be the sole responsibility of the Insured named above.
2. The Regional District of Central Okanagan is named as an Additional Insured.
3. 30 days prior written notice of material change and/or cancellation will be given to the Regional District of Central Okanagan.

Print Name ____________________ Title ____________________ Company (Insurer or Broker) ____________________

Signature of Authorized Signatory ____________________ Date ____________________

Page 28 of 64
APPENDIX B: RDCO REGIONAL EMERGENCY FLOOD PLAN 2013
REGIONAL EMERGENCY PLAN

FLOOD PLAN

Last Revised April 1, 2013
PREAMBLE

The Regional District of Central Okanagan (RDCO) may experience flooding throughout the entire year, due to natural or human-made conditions and geography. Some communities are more susceptible to fall flooding due to heavy rains or rain-on-snow events, while other communities are susceptible to spring freshet flooding from rapid snow melt. The regional district, in general, remains susceptible to flooding by intense precipitation which may occur at any time of the year. Ice jams, reservoir releases and mechanical failure of flood protection works may also cause flooding anywhere in the district.

Freshet is the period of time in the spring, typically from April to July, where creeks swell from snowmelt. Freshet flooding may occur where atmospheric conditions lead to rapid melt and stream channels become overwhelmed. Freshet flooding can generally be forecast using information related to snow packs, predicted weather and knowledge of stream channel capacities. These forecasts generally create a foundation for an enhanced level of readiness.

Less predictable are localized weather conditions such as rain-on-snow or intense rain events. Each situation demands specialized attention and unfortunately, neither provides adequate advance warning, making response reactionary.

Localized or regional weather may cause ice jams anywhere on a stream. Ice jams may form in intense cold where ice forms on the stream bottom becoming anchor for further ice development or reducing the ability for other floating ice to pass downstream. Where conditions persist, the ice continues to grow and will eventually dam the creek. Alternatively, ice runs formed by the release of developed ice sheets flow downstream and accumulate in creek sections eventually choking the creek. Generally, the resulting flood occurs upstream of the ice dam until the reservoir formed behind the dam breaks through or finds an alternative path around it. Creek level changes may be rapid or gradual.

Mechanical failure of flood protection works or human-made dams have potential for flooding and are generally not predictable. Also difficult to predict are sudden releases by natural reservoirs formed by beavers or landslides.

The Regional Emergency Plan Flood Plan describes the methodology the members of the Regional Emergency Plan will utilize for coordinating activities to manage a flood event. This includes laying the foundation for describing a flood event, the structure to be utilized, and the general expectations for roles and responsibilities of other levels of government, provincial ministries and agencies and other stakeholder groups.
**Legislation**

Local Authorities, as described under the *Emergency Program Act*, have a legislated duty to respond first to emergency situations within their jurisdictions and to have an emergency plan in place to keep citizens, infrastructure and the community as safe as possible.

The legislation outlined below provides details on the roles, responsibilities and authority of local authorities and the Province and what they need to have in place to be prepared for emergencies.

*Emergency Program Act*, 1996, details roles and responsibilities of the Province, sets out local authority emergency organization, provides information declaring local or provincial emergencies and the extraordinary powers a declaration provides.

*Emergency Program Management Regulation*, 1994, details the responsibilities and authorities of provincial ministers, ministries, programs, and government corporations and agencies.

*Local Authority Emergency Management Regulation*, 1995, outlines what must be in a local emergency plan as well as the powers and responsibilities of a local authority.

*Compensation and Disaster Financial Assistance Regulation*, 1995, details eligibility requirements, payment limits, and payment processes for all DFA claims whether for an individual or a Local authority.

*Dike Maintenance Act*, 1996, details the legislative basis for operation and maintenance of public dikes in British Columbia. Other legislation relative to diking authorities in British Columbia include the *Drainage, Ditch and Dike Act* and the *Local Government Act* which allows local governments to undertake diking and drainage through local bylaws and Improvement Districts.

*British Columbia Dam Safety Regulation*, 2011, provides guidance on the application process as well as reporting and inspection guidelines specific to dams.

*RDCO Emergency Planning Bylaw #635*, 1995, provides a structure for emergency planning and the management of major emergency events.
# FLOOD MANAGEMENT PHASES

## Generic Schedule for Freshet Preparations

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Action</th>
<th>Notes/Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provincial River Forecast Centre posts snow survey info</td>
<td></td>
<td><a href="http://www.env.gov.bc.ca/rfc/index.htm">http://www.env.gov.bc.ca/rfc/index.htm</a></td>
<td></td>
</tr>
<tr>
<td>March 1</td>
<td>1</td>
<td>Flood Plan Review</td>
<td>Input and Circulation from program partners</td>
</tr>
<tr>
<td>March 15</td>
<td>15</td>
<td>Check of sandbag inventory</td>
<td>Replenishment via Resource Request to EMBC Central PREOC</td>
</tr>
<tr>
<td>April 10</td>
<td></td>
<td>Spring Seasonal Session hosted by EMBC</td>
<td></td>
</tr>
<tr>
<td>April 15</td>
<td>15</td>
<td>Policy Group briefings</td>
<td>Email Briefing to all Program participants based on EMBC forecast</td>
</tr>
<tr>
<td>April 15</td>
<td>15</td>
<td>Regional Chiefs</td>
<td>Review the Flood Plan with Regional Fire Chiefs</td>
</tr>
<tr>
<td>April 15</td>
<td>15</td>
<td>Targeted info out to residents in probable flood areas</td>
<td>Pre-formatted PSA’s designed and ready for dissemination</td>
</tr>
<tr>
<td>May 1</td>
<td>1</td>
<td>Mission Creek/Okanagan Lake situation reports</td>
<td>Daily sitreps on lake and creek levels</td>
</tr>
</tbody>
</table>

Flood management will be undertaken in four phases. These are:

- Planning
- Preparedness (Readiness)
- Response
- Recovery

## Phase 1 – Planning and Pre-flood Preparation

Phase 1 may be described as the normal day-to-day operations for the Emergency Program Coordinator (EPC) to monitor water levels, continue efforts in planning and exercises, and provide information for mitigation.
Early in the spring, the EPC alerts members of the Emergency Program, and commences implementing the Flood Plan, reviews resources, assigns personnel, and meets with other Emergency Coordinating bodies. Preliminary inspection and familiarization tours of diking areas may be undertaken, and remedial works required are identified and undertaken (where possible) in preparation for projected water levels.

The province via Emergency Management BC (EMBC) may, from time to time, provide strategic recommendations to local authorities (via Regional Seasonal Sessions) and engage in flood response training or exercises. Of particular interest is 'Flood Observer Training' which is offered to local Public Works and Fire Crews, who provide a valuable resource, acting as observers during flood emergencies.

The River Forecast Centre of the Ministry of Forests Lands and Natural Resource Operations (FLNRO) provides snow and river level forecasts and bulletins [per Schedule 2 EPM Reg] as necessary during flood windows.

**Phase 2 – Preparedness (Readiness)**

Phase 2 occurs when flooding potential is possible. Special resources may be pre-positioned, advisories are prepared and active communication between the EPC, local authorities and the Province occurs regarding the potential for flooding.

The EPC will ensure the Emergency Operations Centre (EOC) is ready; in addition, all related plans are reviewed. Information Officers will provide public information about the risks of flooding and what individual, families and businesses can do to be prepared.

Diking Authorities should actively monitor their flood protection works to ensure that such things as electrical connections are functional, and any gates or valves are operational and clear.

The province may hold regional information meetings with local authorities to provide flood event information as possible and to ensure technical experts are available to answer questions.

The City of Kelowna will begin reviewing plans for pumping of the downtown storm water system. The target lake level for this pumping to begin is 342.70m (2013).

The EPC will prepare and diseminate daily ‘Situation Reports’ (sitreps) during this and subsequent phases.
### ‘Sitreps’ will draw on information from the following sources:

<table>
<thead>
<tr>
<th>Source Description</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission Creek Watershed Temperature</td>
<td><a href="http://bcrfc.env.gov.bc.ca/data/asp/realtime/data/2F05P.csv">http://bcrfc.env.gov.bc.ca/data/asp/realtime/data/2F05P.csv</a></td>
</tr>
<tr>
<td>Brenda Watershed Temperature</td>
<td><a href="http://bcrfc.env.gov.bc.ca/data/asp/realtime/data/2F18P.csv">http://bcrfc.env.gov.bc.ca/data/asp/realtime/data/2F18P.csv</a></td>
</tr>
<tr>
<td>OK Lake Level @ Kelowna (342.540)</td>
<td><a href="http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM083">http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM083</a></td>
</tr>
<tr>
<td>OK Lake Discharge @ Penticton</td>
<td><a href="http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM050&amp;prm1=3&amp;prm2=6&amp;mode=graph">http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM050&amp;prm1=3&amp;prm2=6&amp;mode=graph</a></td>
</tr>
<tr>
<td>Whiteman Creek (near Short’s Creek)</td>
<td><a href="http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM174&amp;prm1=3&amp;prm2=6&amp;mode=graph">http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM174&amp;prm1=3&amp;prm2=6&amp;mode=graph</a></td>
</tr>
<tr>
<td>Kal Lake</td>
<td><a href="http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM143">http://www.wateroffice.ec.gc.ca/graph/graph_e.html?stn=08NM143</a></td>
</tr>
</tbody>
</table>

### Phase 3 – Response

Phase 3 is described as when flooding is imminent to occurring or when an emergency response is initiated. Generally, this will occur when water height is expected to reach or exceed capacity resulting in water threatening or impacting any people, property, or infrastructure.

During this period - the River Forecast Centre may issue advisories based on expected conditions, particularly for Mission Creek.

- **A High Streamflow Advisory** means that river levels are rising or expected to rise rapidly, but that no major flooding is expected. Minor flooding in low-lying areas is possible.
- **A Flood Watch** means that river levels are rising and will approach or may exceed bankfull. Flooding of areas adjacent to affected rivers may occur.
- **A Flood Warning** means that river levels have exceeded bankfull or will exceed bankfull imminently, and that flooding of areas adjacent to the rivers affected will result.
The response phase is broken down into stages. Events may dictate a non-linear or circular path through the response stages and may move up or down as the conditions improve or deteriorate further. The response stages are defined as:

- Flood Alert
- Flood Order
- All Clear

**Stage 1 – Flood Alert**

Stage 1 is reached when the emergency response is elevated to Phase 3, Response. Local Authorities and Diking Authorities should proactively patrol creek banks on a priority basis and as conditions dictate. This should include all dikes or other flood protection works and should specifically observe for the appearance of instability or deficiencies.

Dam owners should increase the monitoring of their structures and ensure that spillways are clear and the structure(s) are in working order. MoE staff may assist Local Authorities with river monitoring. MoT will provide the primary monitoring where highway infrastructure may be at risk.

The EOC may open and operate at minimum staffing levels with flexible operational hours (Activation Level 1) to monitor status of potential flooding and perform pre-response functions. The EOC may reach Activation Level 2; that is, fully staffed for extended operation.

Public information on flood proofing homes, businesses and threatened infrastructure as well as public safety advisories will be issued by the EOC. The EOC will create opportunities such as public service announcements, public meetings, local bulletin board postings or local newsprint articles to provide flood safety awareness to citizens and explain flood response plans.

In the event of a sudden, local serious flood event it may be necessary to declare a local state of emergency to exercise local extraordinary powers as designated under the *Emergency Program Act*.

**Stage 2 – Flood Order**
Stage 2 occurs when there is a high probability of damage due to flooding. Full flood response or control programs are implemented due to severity of flooding. Mandatory evacuation is contemplated or ordered.

The EOC moves to Activation Level 3 (fully staffed for 24/7 operation, where there may be a declaration of a local state of emergency where large evacuations are imminent).

Stage 3 – All Clear

Stage 3 is realized when the threat of continued flooding has past and evacuees may return to the flood area on a permanent basis. Outstanding issues such as building occupancy due to electrical problems or drinking water contamination may persist; however, people may proceed with cleanup activities.

This stage may also be characterized by the implementation of demobilization plans and recovery activities. The EOC may reduce their Activation Levels to support recovery activities.

Concept of Operations

The Regional Emergency Plan has a duty to the people they represent and generally is in the best position to oversee and support an immediate response. BCERMS recognizes this fact and the Emergency Program Act indicates members of the Regional Emergency Plan have the primary responsibility for protection and response within their boundaries. The province supports those efforts as deemed necessary.

The province is committed to supporting Local Authorities and effectively managing natural hazard events in the most efficient and appropriate manner. In order to achieve this goal, the province has created a concept of operations that utilizes the British Columbia Emergency Response Management System (BCERMS) as its core. BCERMS is an integrated response model with prevention, mitigation, response and recovery as its foundation to reduce risk to people and property throughout British Columbia. This system will be utilized for dealing with flood hazard management, as it is for other types of emergencies.

In responding to an event, the actions and decisions of the members of the regional emergency plan for consequence management will be based on the BCERMS objectives:

1. Provide for the safety and health of all responders
2. Save lives
3. Reduce suffering
4. Protect public health
5. Protect government infrastructure (roads, communications and utilities)
6. Protect private property (buildings and livestock)
7. Protect the environment, and
8. Reduce economic and social losses.

The BCERMS structure will be used at all levels of response.

The following table outlines the regionally understood roles and responsibilities for each party during all phases. Cells highlighted in yellow designate party with primary responsibility – others support to ensure public safety.

<table>
<thead>
<tr>
<th>Action</th>
<th>Provincial Government</th>
<th>Regional Emergency Program</th>
<th>Local Authority</th>
<th>Public/Individual Property Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and Preparedness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Planning (for respective roles)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Flood observation, hydrological data collection and analysis, flood projections</td>
<td></td>
<td>X</td>
<td></td>
<td>Provides observation and reporting to Provincial Flood Reporting Line, monitors media for public information</td>
</tr>
<tr>
<td>Public Warnings, media releases and messaging</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandbag provision</td>
<td>Supplies bags to Regional Emergency Program</td>
<td>Distributes Sandbags to local authorities</td>
<td>Coordinates specific distribution sites</td>
<td>Monitors flooding risk and determines need for sandbags</td>
</tr>
<tr>
<td>Provision of Sand</td>
<td>Funds under EMBC Task number</td>
<td>Coordinates cost recovery under EMBC Task Number – supports local authority</td>
<td>Arranges delivery of sand to designated sites where flooding is imminent</td>
<td>Fills sandbags and removes/disposes post-event</td>
</tr>
<tr>
<td>Removal of trees along waterways</td>
<td>Crown Lands and when impacting Provincial infrastructure</td>
<td>Coordinates cost recovery under EMBC Task Number – supports local authority</td>
<td>Public Land when threatening or impacting local authority infrastructure or a threat to public safety</td>
<td>Along or through private property</td>
</tr>
<tr>
<td><strong>Response</strong></td>
<td></td>
<td></td>
<td><strong>X – may be supplemented by assistance from volunteers</strong></td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td></td>
</tr>
<tr>
<td><strong>Sandbagging/Protection of private property</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>On-Site Incident Command</strong> (when required to support response and protect public safety)</td>
<td>Central Region PREOC issues task number to local authority – authorizes expenditures via EAF</td>
<td>Regional EOC/EPC obtains task number and tracks authorizations (EAF) and costs</td>
<td>Fire Department within Fire Protection areas when public safety at risk</td>
<td></td>
</tr>
<tr>
<td><strong>EOC/Site Support</strong> (when required to support response and protect public safety)</td>
<td>Supports local authority under EMBC Task Number</td>
<td>Regional EOC/EPC obtains task number and tracks authorizations (EAF) and costs</td>
<td>Supports Regional Emergency Program</td>
<td></td>
</tr>
<tr>
<td><strong>Flood Containment</strong> (dykes, bank protection, diversions or related works)</td>
<td>X</td>
<td>Regional EOC/EPC obtains task number and tracks authorizations (EAF) and costs</td>
<td>Local authority may undertake in extreme circumstances – threat to public safety along or through private property under authority of Provincial and Federal Authorities – may be supplemented by assistance from volunteers</td>
<td></td>
</tr>
<tr>
<td><strong>Protection of municipal infrastructure / Blocked Culverts and Drainage</strong></td>
<td>Supports local authority under EMBC Task Number</td>
<td>Regional EOC/EPC obtains task number and tracks authorizations (EAF) and costs</td>
<td>X</td>
<td>Assists to clear obstructions where safe and practical</td>
</tr>
<tr>
<td><strong>Tactical Evacuation</strong></td>
<td>X</td>
<td>Regional EOC/EPC obtains task number and tracks authorizations (EAF) and costs</td>
<td>RCMP when public safety at risk</td>
<td></td>
</tr>
<tr>
<td><strong>Evacuee Reception and Care</strong></td>
<td>Supports local authority under EMBC Task Number</td>
<td>Regional EOC/EPC obtains task number and tracks authorizations (EAF) and costs</td>
<td>Emergency Support Services</td>
<td></td>
</tr>
<tr>
<td><strong>Recovery</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial and Cost Recovery</strong></td>
<td>Funds as per EMBC Guidelines</td>
<td>Supports Local Authority</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Intelligence gathering</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
## Provincial Roles and Responsibilities

There are several provincial ministries/agencies involved in support and response. These include:

- **Emergency Management BC (EMBC)** has the primary responsibility for coordinating the provincial emergency management structure. EMBC will activate PREOCs and the PECC to coordinate and implement the provincial response and provide support to local government response efforts. EMBC will also support recovery efforts through the administration of the DFA program.

- **Ministry of Transportation and Infrastructure (MoTI)** will provide expertise and resources, as required. MoTI will also remain responsible for the safety and protection of provincial public highway road and bridge infrastructure. Ministry representatives may deploy staff to the PREOC, PECC or local EOC(s)

- **Ministry of Environment (MoE)** addresses hazardous material and other threats to the environment. MoE liaises with Environment Canada and other federal agencies as required and provides direction and leadership regarding waste and flood debris management issues that arise. In
addition, ministry representatives may staff the PREOC, PECC or local EOC(s).

- The Government Communications and Public Engagement (GCPE) implements the provincial communications strategy once the provincial emergency management structure is activated. GCPE provides information officers to the PREOCs, the PECC and to local EOCs as needed to provide expertise in media relations and public information activities.

- The Ministry of Health supports regional health authorities to ensure the continuity of health services and monitoring and managing Public Health impacts. If the situation becomes severe, the ministry may activate its Health Emergency Coordination Centre (HECC) in Victoria, in support and coordination of the health sector response.

- The Ministry of Agriculture facilitates the relocation of livestock and provide support to the agricultural industry. If the situation becomes severe, the ministry may activate its ministry operation centre (MOC) in Abbotsford. If there is a threat of flooding in the lower Fraser Valley, due to heavily concentrated dairy farm industry in high risk areas, it is likely that Ministry of Agriculture will perform significant advanced planning and readiness activities.

Further information including a list of roles and responsibilities for each agency and the anticipated timing (phase) is contained within the BC Flood Response Plan (Appendix E).

**Emergency Response Structure**

The regional emergency plan also sets forth the emergency response structure. It is comprised of the following:

- Site Level Response
- Site Support – Emergency Program Coordinator (EPC) and Emergency Operations Centre (EOC)

**Site Level Response**

The regional emergency plan dictates that during normal operations each municipality (or the district in unorganized areas) assumes the responsibility of initial site level response. In most cases, this site level response is actioned by the local fire department.
Site Level Response Activities:

- Establish an incident command post
- Direct all resources at the incident
- Notify the EOC of situational awareness on a regular interval and in coordination with the EOC
- Establish response parameters in consultation with the EOC
- Implement emergency plans
- Implement flood protection measures
- Information officers will maintain media liaison
- Provide post-flood information about health issues, cleanup, etc.
Site Support Response

The Emergency Program Coordinator may become involved and may also activate the Emergency Operation Centre (EOC) to provide support to the site level response activities and work directly with the Central PREOC which is opened by the Province to support local emergency response activities.

Site Support Activities:
- Establish response parameters in consultation with the site and the PREOC
- Create opportunities to provide the public with flood safety information and potential local response information
- Activate emergency plans
- Notify the PREOC of initiation and level of readiness
- Prepare a situation report (SITREP) (EOC 501 form) and distribute to PREOC and other appropriate agencies or EOCs on a regular basis
- Coordinate evacuation and care of displaced residents, in conjunction with Emergency Support Services (ESS), this may also include activating reciprocal evacuation agreements with other jurisdictions
- Implement flood protection measures
- At the onset of any flooding, a detailed log of damages, with photographs, should be initiated; this will help to validate and maximize any financial assistance claim submissions.
- Update and/or activate recovery plan and begin restoration processes
- Information officers will maintain media liaison. Local call centres for public inquiries are activated as necessary
- Provide post-flood information about health issues, cleanup, etc.
Declaration of an Emergency

Declarations of a local state of emergency are required when extraordinary powers are necessary to effectively respond to an emergency event. The most common reasons for an emergency declaration are:

- Mandatory evacuation of people and livestock, and
- Access to private property where public safety is an issue.

Declarations will be made by the EOC, in accordance with the EOC Operational Guidelines.

Evacuations

Ordering an evacuation of all or part of an emergency area requires detailed planning and support from the entire emergency management structure. The EOC is responsible for creating evacuation plans and their implementation. This includes a component to identify vulnerable populations; coordination with Interior Health Authority is imperative to evacuate any community based patients.

Emergency Accommodation for Evacuees

Support for Evacuees may be provided by ESS. Evacuees may be eligible for lodging, food and incidentals during an evacuation. Anticipated needs for Emergency Support Services (ESS) are communicated from the EOC to the PREOC(s) and supported where necessary by other agencies such as the Canadian Red Cross.

Finance and Administration

EMBC is the organization though which funding for provincial emergency response and recovery is managed.

Normal operating costs for site operations and the EOC is the responsibility of the respective organizations that activate them. Response costs such as overtime paid out, travel, etc. that are incremental to an EOC emergency activation and are above normal operating costs may be recoverable through the from EMBC.
Expenditure Control

INVOICES OR EXPENDITURES WILL NOT BE PROCESSED BY EMBC UNLESS ACCOMPANIED BY COMPLETED AND AUTHORIZED SUPPORTING DOCUMENTATION

All actions that are anticipated to result in costs being incurred (that will be recovered from EMBC) must have a task number and environmental incident number associated with them.

In most cases, an Expense Authorization form must also be submitted to the PREOC.

Under normal circumstances, this must be obtained in advance of any actions being taken.

Financial Assistance for Emergency Response and Recovery

A guide has been developed to provide local authorities and First Nations with information on the procedures required to maximize claims for financial assistance with the costs of both response and recovery. The guide may be found on the internet at URL:
http://embc.gov.bc.ca/em/Community/fund&supporttk.html

Phase 4 – Recovery/ Disaster Financial Assistance

Phase 4 may be described as when the threat of flooding is over and the replacement and restoration of uninsured essential property to pre-event condition commences.

Local authorities are the best equipped to provide leadership for integrated local recovery initiatives and to deal with both short- and long-term local recovery activities that may include:

- Reconstruction of critical infrastructure
- Re-establishment of services by local authorities (utility services, roads, buildings, dams and dikes)
- Actions to limit losses, reduce suffering, and restore the psycho-social and economic viability of the community.

For more information on regional recovery, refer to the Disaster Recovery Guide.
For more information on local infrastructure recovery, refer to the Financial Assistance Guide for Local Authorities and First Nations at URL: http://embc.gov.bc.ca/em/dfa_claims/dfa.html

Support from ESS (Emergency Support Services) and the Canadian Red Cross may be engaged, depending on the scope of the incident.

Other recovery actions may include debris and gravel removal, as well as recovery of incremental costs for a local authority’s Recovery activities under Community Disaster Recovery as administered under Disaster Financial Assistance (DFA) programs. This recovery is at 80% of total eligible costs, as outlined in provincial legislation.

Prior to accessing recovery funding under the Provincial DFA Program, the province must declare the flooding event as an ‘eligible disaster’. Such a declaration must be applied for by the RDCO. The Emergency Program coordinator will prepare a submission to EMBC outlining the application for disaster eligibility on behalf of all affected areas within the region.

Public information from the EOC should be provided through public meetings, newspaper articles, EOC website, etc. to residents of impacted areas about the health risks they may encounter, how to clean up flood impacted property and structures, how and where to go to access DFA information, and other sources to assist people in need.

Following declaration of an ‘eligible disaster’ all further applications for assistance are coordinated by EMBC via the Disaster Financial Assistance Program.
**Safety Related Information**

**Safety Considerations**

Safety requirements for flood response personnel must be carefully considered since the work involves exposure to hazardous conditions.

Great care should be taken if water is flowing over the ground surface. A minimum depth of flowing water can produce a large force on a human being and/or vehicle. The largest numbers of injuries and deaths during flooding is from vehicles being swept away and pulled under the water.

Personnel Safety planning is required and includes:

- Personal Protective Equipment (PPE)
- Safety Working Procedures:
  - Check in time
  - Communication equipment
  - Less experienced personnel should be accompanied by experienced person
  - Volunteer safety requirements must be met

The Workers Compensation Board Regulations and the applicable local authority’s safety guidelines must be followed.

**Safety Checklists**

It is the responsibility of supervisors to ensure that safety of response personnel is of the highest priority. All new response personnel arriving on the scene must be briefed on safety matters and informed of unsafe situations. Hazard response work has a Hazard Classification under the *Workers’ Compensation Act (WCA)*. Safety requirements must be organized according to the requirements of the *Occupational Health and Safety Regulations*, and are dependant on the number of workers per shift and the travel time to the nearest hospital.

Ideally, response personnel should work in teams of two in the field, and must have ready access to communications (radios, phones). Operations under night, or very severe weather conditions, should be carefully considered. The well-being of personnel working alone must be checked in accordance with WCA requirements. Checks should be made at such intervals and by such means as are appropriate to the nature, hazard and circumstances of the employment.

A safety and general functions checklist is included in Appendix B.
Appendix A: Flood Observer/Assessor Checklists

This checklist is for reference only. There was an attempt to reconcile against legislation or requirements at the time this edition was created. However, the legislation or requirements may change and demand attention to specialist equipment or personal supplies. Any worker’s supervisor must take appropriate precautions for their employees.

1. Basic Personal Supplies
   - Hard Hat
   - Rain Gear - coat and pants
   - High Visibility Reflective Vest
   - Rubber boots
   - Cell phone or other communication device
   - Personal first aid kit. See page 31 of the OHS Guidelines Part 3.

2. Specialized supplies and equipment
   - Buoyancy Equipment - (WCB section G8.26, G8.27, G8.28). Section G8.27 (a), (c), or (d) requirements.
   - Hand Held GPS - set to UTM (Albers).
   - Extendable rod (Roman Method) c/w string and weight
   - Bundle of wooden survey stakes
   - Keel (lumber crayon)
   - Survey Ribbon
   - 1 million to 15 million candle power portable light
   - Digital camera
   - Several copies of the "Dike and River Assessment Form" found in Section 15 of the Flood Assessor Manual -preferably waterproofed.
   - Copies of pertinent maps such as Flood Plain Maps and GPS dike survey maps for each flood protection works
   - At least two gauge plates c/w nails and hammer

3. Vehicle Equipment

<table>
<thead>
<tr>
<th>Vehicle first aid kit meeting WCB regulations</th>
<th>2 traffic cones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashlight</td>
<td>1 fire extinguisher</td>
</tr>
<tr>
<td>3 flares</td>
<td>1 floating life line rope</td>
</tr>
<tr>
<td>Additional reflective vests for passengers (1 per person)</td>
<td>1 reflective warning kit</td>
</tr>
<tr>
<td>Blankets</td>
<td>1 shovel</td>
</tr>
<tr>
<td>Vehicle radio - standards seem to vary with each region</td>
<td>1 tool bag c/w tools</td>
</tr>
<tr>
<td>Standard vehicle jack</td>
<td>1 jack-all jack</td>
</tr>
<tr>
<td>Spare mounted and inflated tire</td>
<td>1 wheel wrench</td>
</tr>
<tr>
<td>1 set of winter tire chains</td>
<td>1 set jumper cables</td>
</tr>
<tr>
<td>1 axe or sandvick</td>
<td>1 package of water proof matches</td>
</tr>
<tr>
<td>Candle - (emergency heat source)</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B: Safety and General Functions Checklist

The following are general instructions applicable to all hazard response personnel:

- Determine re-assignment of priority work (your normal job)
- Acquire work material and safety gear required for field work
- Determine initial location, staging area, and means of transportation
- Report to assigned location (in larger incidents this may be a formal Staging Area) and obtain situation briefing and assignment(s)
- If not already established, identify supervisor (may be Incident Command in larger incidents) and obtain all necessary safety/survival equipment and procedures
- Ensure arrival and location recorded by supervisor
- Obtain checklists of respective function(s)
- Obtain appropriate forms for field operations
- Identify and brief subordinates on situation, safety, reporting relationship and functions
- Maintain a Personal Log (ICS/EOC 214)
- Check out with supervisor on completion of functions and/or end of shift
Appendix C: Dike Locations, Dam Locations, Other Works, and Flood Plain Maps

This Appendix contains maps and/or information on the following:

<table>
<thead>
<tr>
<th>Name</th>
<th>Consequence Class</th>
<th>Authority</th>
<th>File Number/Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver Lake</td>
<td></td>
<td>See Crooked Lake</td>
<td></td>
</tr>
<tr>
<td>Belgo Creek</td>
<td></td>
<td>Province</td>
<td></td>
</tr>
<tr>
<td>Belgo Lake Reservoir*</td>
<td>High</td>
<td>Black Mtn. Irrigation District (BMID)</td>
<td>D240001/16/17</td>
</tr>
<tr>
<td>Bellevue Creek</td>
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<td>RDCO</td>
<td></td>
</tr>
<tr>
<td>Big Meadow Lake Dam</td>
<td>High</td>
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<td>D220105</td>
</tr>
<tr>
<td>Brenda Mines Site*</td>
<td>High</td>
<td>Falconbridge Ltd.</td>
<td></td>
</tr>
<tr>
<td>Crooked Lake/Swallwell Lake Reservoir*</td>
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<td>District of Lake Country (DLC)</td>
<td>D240212</td>
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<tr>
<td>Fish Hawk Lake Reservoir*</td>
<td>High</td>
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<td>0</td>
</tr>
<tr>
<td>Graystoke Lake Reservoir*</td>
<td>High</td>
<td>BMID</td>
<td>D240001</td>
</tr>
<tr>
<td>Ideal Lake Dams</td>
<td></td>
<td>See Belgo Lake</td>
<td></td>
</tr>
<tr>
<td>Industry Brook Dam</td>
<td>Very High</td>
<td></td>
<td>D240155-01</td>
</tr>
<tr>
<td>(Tower Ranch)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jack Pine Lake Dam</td>
<td>High</td>
<td></td>
<td>D240157</td>
</tr>
<tr>
<td>James Lake Reservoir*</td>
<td>High</td>
<td>BMID</td>
<td>D2400158-01</td>
</tr>
<tr>
<td>Kelowna (Mill) Creek*</td>
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<td>City of Kelowna (COK)</td>
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<tr>
<td>McCulloch Dams</td>
<td>High</td>
<td>Southeast Kelowna Irrigation District (SEKID)</td>
<td>D240022/24/25/26</td>
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<tr>
<td>McKinley Reservoir*</td>
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<td>GEID</td>
<td>D240002</td>
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<tr>
<td>Mission Creek</td>
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<td>175</td>
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<tr>
<td>Location</td>
<td>Probability</td>
<td>District</td>
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<tr>
<td>-------------------</td>
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<td>------------</td>
</tr>
<tr>
<td>Okanagan Lake</td>
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<td>Province</td>
<td></td>
</tr>
<tr>
<td>Oyama Lake Dam*</td>
<td>High</td>
<td>DLC</td>
<td>D240192</td>
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<tr>
<td>Peachland Lake Dam*</td>
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<td>District of Peachland (DPL)</td>
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<tr>
<td>Postill Lake Dam*</td>
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<td>GEID</td>
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<tr>
<td>Rose Valley Dam</td>
<td>Very High</td>
<td>District of West Kelowna</td>
<td>D240005</td>
</tr>
<tr>
<td>Silver Lake Dam</td>
<td>High</td>
<td>DPL</td>
<td>D240207-01</td>
</tr>
</tbody>
</table>

Notes:

* Denotes a separate action plan has been devised for each of these works
  
  Yellow highlight indicates more information is required

Additional detailed information is also filed at the EOC and at Kelowna Fire Dispatch.
Appendix D: Flooding Communications Plan and Messaging

All Hazards Integrated Response

Communications Action Plan

FLOODING

Background
Local governments and regional districts are required to have an all-hazards emergency plan in place for their jurisdiction. This includes the ability to activate an emergency operations centre and issue evacuation orders under a declared State of Local Emergency within an all-hazards context (floods, interface fires, hazardous material spills etc.)

Local authorities will monitor weather conditions and lake and river levels and activate their local emergency plan to respond within their jurisdiction as the flood threat increases.

Under the BCERMS the province supports local authorities as required, and provides additional help and leadership if local resources become overwhelmed during a large scale or serious event. The provincial role is detailed in the B.C. Flood Hazard Mitigation Plan (2006 edition).

During the response phase, the provincial emergency management structure is activated to support local government. Local authorities may request added support, in the way of provincial public information officers and/or emergency management staff in their emergency operations centres, in a command post or at site, acting on their behalf.

Evacuation Alerts, Orders, Rescinds
In an escalating emergency situation such as a flood, decisions about evacuations are generally made at the local community or incident level.

In the normal course of events, local governments and regional districts will activate a local emergency operations centre, declare a local state of emergency, and issue an evacuation alert or order based on degree of risk to the public.

RCMP and municipal police carry out evacuation orders, often with the support of Search and Rescue or other volunteers.
The evacuation process has **three key stages**. *This approach is consistent for all types of emergencies throughout the province.*

- **Evacuation Alert**: A warning is issued about an imminent threat to life and property, and people are asked to be ready to leave on short notice. When people choose to leave an area before or during the issue of an alert, this is referred to as a voluntary evacuation.

- **Evacuation Order**: When an evacuation order is issued, people must leave the area immediately due to serious public safety concerns. RCMP or municipal police carry out evacuations.

- **Evacuation Rescind**: An evacuation order or alert is rescinded when an area is determined to be safe. People under order may return. An evacuation order may be reinstated if the threat returns.

**Information and Communications**

In a flood event, the Central Okanagan Regional Emergency Plan is responsible to provide public safety information to their residents directly.

When the Regional EOC is activated to a higher level in response to flooding threats, information officers (IOs) will work in a coordinated manner with spokespeople and information officers in other involved agencies and levels of government to support their counterparts at the local authority level.

Information officers report to the information chief (or manager) of the unit, who is responsible to the EOC Director. The section provides information and updates to the Provincial Emergency Coordination Centre (PECC) public information section.

*The British Columbia Crisis Communications Strategy for Major Provincial Emergencies* is used to guide the activities of provincial information officers. The strategy is an all-hazards approach which outlines procedures and best practices in activating public information units within the BCERMS structure.

**Communications Objectives**

Information officers will ensure appropriate information is provided to the public and media during the response phase of a flooding event, including:

- Providing timely, accurate public safety information which could include such things as weather forecasts, stream conditions, and road status
• Informing the public, media, local governments and stakeholders as to what measures the Province has in place to assist communities

• Communicating the roles and responsibilities of (ESS) and its volunteers in the case of an evacuation

• Informing on the status of any activated public information services including telephone access to the Central Registration and Inquiry Bureau (CRIB) supported by Emergency Social Services, which provides family reunification services.

• Helping the media understand the emergency management structure and operational protocols in emergency situations.

**Communications Strategies and Tactics**

• Coordinate all EOC communications with PREOC(s)

• Provide overview information (evacuation information, maps, photos) from site or EOC (for bulletins, web site updates etc.)

• Provide media, public and stakeholders with regular updates/overview on regional situation through appropriate spokesperson(s)

• Update and provide relevant information to the public/media via the local www.cordemergency.ca website.

• Identify and develop recommendations/messaging to address emerging issues

• Develop key messaging, brief spokespeople and support need for media availabilities and public meetings as required by local authorities

• Support establishment of a media relations centre at ESS reception centres by the local team (as required)

• Attend site or command post as directed to enhance flow of information to the EOC

• Request activation of call centres for public information, as necessary

• Arrange media news conferences and VIP tours, as directed
**Key Messages:**

- Local governments and regional districts are required to have an all-hazards emergency plan in place for their jurisdictions. Public safety is always the highest priority.

- Local government authorities will keep residents informed of developments in areas most likely to be affected by flooding. Regular advisories will recommend actions that people should take to limit or prevent disaster.

- When there is a potential threat to a community from flood water, the Province will monitor the situation and support local authorities in assessing the risk to the public and to local industry. Potential threats to government infrastructure, the environment, or to the provincial economy are also monitored.

- Provincial support may include providing resources for the care of evacuees, providing emergency management expertise, technical advice, public information management, equipment and supplies and the transportation of materials as requested by local authorities.

- BCERMS is used to ensure coordinated effort when an emergency or disaster situation occurs in the province.

- Whenever a local authority activates an EOC, a Provincial Regional Emergency Operations Centre (PREOC) and the Provincial Emergency Coordination Centre (PECC) will also be activated.

**Tools:**

- Information bulletins and/or media releases
- [www.cordemergency.ca](http://www.cordemergency.ca) website.
- PSAs
- Information-based advertising
- EMBC web site
- Other government web sites
- News conferences and media availabilities
- Posters and handouts
- Town hall meetings
- One-on-one media interviews/voice clips
- Call centres
- Media information centres (reception centres/site etc.)
**Post-Disaster and Recovery**

As communities move into the recovery phase, the Province may again be asked by the local authority to provide support/guidance.

Members of the Regional Emergency Plan may activate the Recovery Task Force or Recovery Organization, in accordance with the Regional Disaster Recovery plan, to coordinate actions of multiple stakeholders to limit losses, reduce suffering, and restore the psycho-social and economic viability of the community.

Through the Provincial Integrated Recovery Council (PIRC), the province provides coordination for non-profit agencies such as The Salvation Army, Red Cross, Mennonite Disaster Services and other resources to ensure communities are best served, and that there are no gaps or duplication in efforts in the recovery process.

**Disaster Financial Assistance for Impacted Residents**

British Columbia has a program to help disaster victims cope with the cost of repairs and recovery from disaster-related "uninsurable" damage to property (as well as contents, personal effects, equipment etc.) The Ministry of Justice administers the Disaster Financial Assistance program through EMBC.

The impacted area has to be authorized as "eligible for DFA" before the individual application process can start. An application on behalf of affected jurisdictions will be made by the Regional Emergency Program.

Disaster Financial Assistance is available to help victims of a disaster with the cost of essential losses that cannot be covered by insurance or other programs.

Disaster victims will be advised through local announcements when DFA has been authorized in their area. Maximum payout for each qualified claim is $300,000 for home owners, tenants, small businesses, farms or charitable organizations. Other items such as recreational or seasonal residences, luxury goods, recreational items, are not covered by the program.

Local government bodies are also eligible for DFA to replace essential materials, repair or restore essential infrastructures, and for incremental costs associated with the operation of their Recovery Organization or Recovery Centre to assist their community in recovering from a disaster.

Impacted residents and local authorities are notified about the program through DFA staff in the area, public meetings and advertising in local papers.
Appendix E: BC Flood Response Plan

Information stored in a separate file.
APPENDIX C: CERTIFICATION DOCUMENT

R15-231 Regional Floodplain Management Plan

Certification:

We have carefully read and examined the RFP document and have conducted such other investigations as were prudent and reasonable in preparing this response.

We certify that the statements made in this response are true and complete. These statements and prices in our Proposal represent our response to the Regional District of Central Okanagan. We agree to be bound by statements and representations made in this response and to any agreement resulting from this response.

We hereby agree that this RFP response may only be withdrawn by written notice delivered to the office of the Purchasing Manager – Regional District of Central Okanagan, prior to the Closing Date and Time for Receipt of Proposals. We agree that the RFP response attached hereto shall be irrevocable by us for a period of sixty (30) days after the Closing Date and Time for Receipt of Proposals.

Print Company Name and Address: _____________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

Print Name and Title of Authorized Signing Officers:
___________________________________________________________________________________
___________________________________________________________________________________

Signature of Authorized Signing Officer: ________________________________________________

Telephone Number: _____________________  Fax Number: ___________________

E-mail address: __________________________________________________________

Acknowledgement of Addenda

We acknowledge receipt of the following addenda which become part of this RFP:
ADDENDUM # _____________
ADDENDUM # _____________
ADDENDUM # _____________

Signed this _______ day of __________________, 20__.
APPENDIX D - REMUNERATION

All proposals shall include this Appendix D, with the tables under D2 and D3 completed.

D1 Project Fees - General

a) Pricing should be submitted as in the tables under D2 and D3.
b) GST is to be excluded, except where specifically noted.
c) Proponents should note the Regional District has a maximum budget of $62,000 (including GST) for this work.

D2 Project Fixed Fees

For completion of the Scope of Work detailed in the Terms of Reference, the Proponent agrees to complete the work for the following Project Fixed Fees:

<table>
<thead>
<tr>
<th>#</th>
<th>Scope of Work Item</th>
<th>Project Fixed Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Project Initiation, Interviews, Clarify Purpose &amp; Content</td>
<td>$</td>
</tr>
<tr>
<td>B</td>
<td>Context and Background, Identify and Prioritize, Mechanisms</td>
<td>$</td>
</tr>
<tr>
<td>C</td>
<td>Recommendations</td>
<td>$</td>
</tr>
<tr>
<td>D</td>
<td>Presentation</td>
<td>$</td>
</tr>
<tr>
<td>E</td>
<td>All Project Disbursements</td>
<td>$</td>
</tr>
<tr>
<td>F</td>
<td>Any other costs ____________ (please specify)</td>
<td>$</td>
</tr>
<tr>
<td>G</td>
<td>TOTAL PROJECT FIXED FEE:</td>
<td>$</td>
</tr>
<tr>
<td>H</td>
<td>GST:</td>
<td>$</td>
</tr>
<tr>
<td>I</td>
<td>TOTAL PROJECT FIXED FEE, INCLUDING GST</td>
<td>$</td>
</tr>
</tbody>
</table>
D3 Reimbursable Rates (For Work Changes Only):

The following reimbursable rates shall be used to price any changes to the scope of work or extra work (if any).

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Project Manager</td>
<td>$_________ per hour</td>
</tr>
<tr>
<td>B</td>
<td>Project Team Member 1: (please specify)</td>
<td>$_________ per hour</td>
</tr>
<tr>
<td>C</td>
<td>Project Team Member 2: (please specify)</td>
<td>$_________ per hour</td>
</tr>
<tr>
<td>D</td>
<td>Disbursements</td>
<td>At cost + ______ %</td>
</tr>
</tbody>
</table>
APPENDIX E: METHODOLOGY & TEAM

Proposals shall include the following in their Proposal, labelled as “Appendix E – Methodology & Team”.

E1. Methodology Overview: Provide a brief overview of the methodology to be use in approaching the scope of work.

E2. Proposed Project Manager: Identify the proposed Project Manager who will be the main point of contact and who oversee the work. State his/her position, experience and professional discipline.

E3. Proposed Project Team: Identify key individuals who will have key responsibilities for the performance of the Work, identify the individual’s employer, experience and their professional discipline.

If using any sub-contracted services, provide the same details for Sub-contractors as under E3. including their company and staff experience specifically related to their role in the work.

E4. Timeline: Provide an overview of the timeline for the work, by listing key scope of work milestones and dates.
APPENDIX F: COMPANY KNOWLEDGE, EXPERIENCE & REFERENCES

Proposals shall include the following tables completed, labelled as “Appendix F – Company Knowledge, Experience & References” showing projects of a similar scope and size completed in the last five years.

Reference #1

| Company Name: |  |
| Company Address: |  |
| Contact Name: |  |
| Contact Telephone Number: |  |
| Date Work Undertaken: |  |
| Nature of Assignment & Value: |  |

Reference #2

| Company Name: |  |
| Company Address: |  |
| Contact Name: |  |
| Contact Telephone Number: |  |
| Date Work Undertaken: |  |
| Nature of Assignment & Value |  |

Reference #3

| Company Name: |  |
| Company Address: |  |
| Contact Name: |  |
| Contact Telephone Number: |  |
| Date Work Undertaken: |  |
| Nature of Assignment & Value |  |

By submitting this Appendix, the proponent is granting the Regional District permission to contact the project’s Owner and anyone related to the project to obtain a reference check.