Strategy and Procedures for Compliance and Enforcement

Dam Safety Program

Ministry of Forests, Lands and Natural Resource Operations
A Dam Safety Compliance & Enforcement Policy was endorsed by Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) executive and approved by the Water Policy & Legislation Committee and the Director of the Compliance & Enforcement Branch of MFLNRO in November 2014. The Compliance & Enforcement Strategy and Procedures were prepared by the Dam Safety Section, Water Management Branch in consultation with regional Dam Safety Officers and the Compliance & Enforcement Branch. These two documents are identified in the Policy as related documents and referenced in Sections 7 and 8 of that policy.
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Strategy

Policy
A Dam Safety Compliance & Enforcement Policy was endorsed by Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) executive and approved by the Water Policy & Legislation Committee and the Director of the Compliance & Enforcement Branch of MFLNRO in November 2014. The Compliance & Enforcement Strategy and Procedures were prepared by the Dam Safety Section, Water Management Branch in consultation with regional Dam Safety Officers and the Compliance & Enforcement Branch. These two documents are identified in the Policy as related documents and referenced in Sections 7 and 8 of that policy.

Goal
Dam Owner compliance with all regulatory requirements for the protection of public safety and to minimize impacts to the environment and the economy.

A regulatory requirement is defined as an obligation, demand or prohibition placed by legislation or regulation on an individual, entity or activity. This includes authorizations, permits or other requirements derived from a legislative or regulatory authority. Guidelines and Information Bulletins have been prepared by the Dam Safety Program and partners to assist dam owners to understand and follow these regulatory requirements.

Objectives
- Establish regulatory requirements that are clear, practical, measurable and enforceable.
- Achieve high rates of voluntary compliance.
- Ensure the Ministry has the information necessary to determine compliance.
- Enforce regulatory requirements using a consistent, clear and predictable approach.

Compliance Principles
- Establish priorities (focus on risk)
- Be accountable, transparent and consistent among all dam owners and between regions
- Use the best available information
- Choose the most appropriate approach
- Coordinate compliance activities
- Foster a culture of continuous improvement

Compliance Model
The strategy describes the four steps of the provincial standard Compliance Model, i.e. Setting Requirements and Promoting, Verifying and Enforcing Compliance. Section 4, Enforcing Compliance provides a brief written description and explanation of the compliance and enforcement actions that can be taken by the Dam Safety Officers (DSOs) and/or the Natural Resource Officers (NROs) for non-
compliance by dam owners. The compliance and enforcement actions for non-compliance are described in detail in the Dam Safety Compliance and Enforcement Procedures.

1. Dam Owner Requirements

These regulatory requirements have been set in a manner that:

- Best achieves the desired public safety, environmental, social and economic outcomes
- Can be readily understood and complied with
- Balances the social, environmental and economic costs associated with compliance

The primary legislation for dam owner requirements is the Water Act (Act) of British Columbia. The diversion and use of water in British Columbia requires a water license issued pursuant to the Act administered by either the Water Management Branch or the Regional Resource Authorizations units of the Ministry of Forests, Lands and Natural Resource Operations (FLNRO). Further, authorization must be received prior to the construction or rehabilitation of any dam under Section 4 of the BC Dam Safety Regulation. This authorization may be in the form of a water license, approval, order or letter. Under the Act, dam owners are required to follow conditions in their water license, or conditions of Orders issued under the Act.

The British Columbia Dam Safety Regulation, a regulation under the Act, was proclaimed in 2000 and amended in November 2011. A “dam owner” is the person who holds a Water License to store or divert water under the Act. Under the regulation the dam owner can also be the last licensee, or, if no license was issued, the owner of the land or person who constructed the dam. The regulation specifically addresses the responsibilities of the dam owner for the safe operation of a dam and prescribes documentation requirements, such as Operation, Maintenance & Surveillance Manuals and Emergency Preparedness plans for the dam. It also prescribes surveillance activities, dam safety reviews and operational testing of flow control equipment. Under the regulation, dam owners are required to apply for and receive authorization from the Dam Safety Officer or other designated official for a number of things such as altering or de-commissioning a dam and notifying a Dam Safety Officer if there is a hazardous condition. The regulation includes the determination of the classification of dams based on the consequences of a postulated failure of the dam.

The regulation does not contain any specific technical details pertaining to dam safety engineering. The Canadian Dam Association (CDA) guidelines and technical bulletins provide the bulk of the specific engineering and technical details. Other guidelines and information bulletins have been prepared by the Dam Safety Program and the Association of Professional Engineers and Geoscientists of BC (APEGBC) to assist dam owners to understand and follow these regulatory requirements. Please see Section 2, Promoting Compliance for information on these guidelines.
2. Promoting Compliance

This is the part of the program that increases awareness, educates, motivates, or changes behaviour and most importantly encourages voluntary compliance. Voluntary compliance requires that the dam owner is:

- Aware of the requirements and understands the benefits;
- Understands the requirement and consequences of non-compliance;
- Willing to comply:
  - Risk of getting caught is sufficiently high;
  - It is more costly to pay the fine than not comply;
- Able to comply – environmentally, technically & financially feasible.

To promote compliance with the Regulation, the Dam Safety Program conducts periodic audits, provides education and awareness to dam owners, maintains information on every regulated dam in the province, prepares and publishes guidelines and sends an annual compliance letter to all owners of high, very high and extreme consequence classification dams.

Education and Awareness

Dam Safety Program staff conduct one day courses on inspection and maintenance of dams for dam owners and their representatives. These credited courses are sponsored and partially funded by various stakeholder groups such as the BC Water & Waste Association and the Water Supply Association. On average, four of these courses are offered each year at various locations across the province. Over one thousand people have attended the course since 2001. Additionally, dam safety staff inform stakeholders about the program through dam safety presentations at public meetings including association conferences, local government meetings and other interest group gatherings. Dam Safety Officers also conduct informal training when conducting the regularly scheduled dam audits with dam owners. All of the requirements of the Dam Safety Regulation are covered during the dam audit process. The Victoria Dam Safety Section meets regularly with large dam owners to discuss their dam safety programs and reservoir operations.

Annual Dam Status Report by Dam Owners

At the end of November each year, a letter and dam status reporting form is sent to all owners of high, very high and extreme consequence classification dams. The purpose of the letter is to regularly remind dam owners of their responsibilities under the regulation and to verify compliance (see Section 3, Verifying Compliance). The letter and form promote compliance by providing dam owners with information on their dam owner requirements as described in Section 1, Dam Owner Requirements.

Dam Safety Website

Information on all aspects of the BC Dam Safety Program is posted on the BC Government website for the information of dam owners and the general public. The Dam Safety Annual Report is also posted on this site each year.
Guidelines
The 2007 CDA guidelines and associated technical bulletins provide guiding principles for the management of dams and the technical bulletins suggest methodologies and procedures for use by professional engineers as they carry out dam analyses and safety assessments. The CDA guidelines were developed by working groups of the CDA who represented a cross section of dam engineering professionals across Canada. The CDA guidelines have no legal status in BC, however, the guidelines are considered to be the principal technical guidance document in Canada by all provinces, including BC.

The Association of Professional Engineers and Geoscientists of BC (APEGBC) in partnership with the province prepared professional practice guidelines for Dam Safety Reviews in BC. This guideline was published in July 2013 and replaces the previous provincial Dam Safety Review Guidelines.

A guideline titled “Plan Submission Requirements for Construction and Rehabilitation of Dams” has been developed to assist dam owners to obtain authorization for constructing a new dam or rehabilitating an existing dam. For construction of a new dam this guideline would be used in conjunction with a water license application package.

Construction for decommissioning and/or removal of a dam must be approved by a Dam Safety Officer under Section 9 of the Dam Safety Regulation. The dam owner should contact the Dam Safety Officer directly to discuss the procedure for dam decommissioning. A guide to decommissioning dams will be prepared and made available on the dam safety website in due course. The steps for decommissioning are similar to the steps for rehabilitation as per the plan submission guidelines.

A number of other guidelines have been prepared for dam owners by the Provincial Dam Safety Program, including a guide for inspection and maintenance of dams and a guide for submission of plans for construction and rehabilitation of dams. In addition, the BC Dam Safety Program web site has information bulletins, templates and checklists to assist dam owners to meet the Dam Safety Regulation requirements.

3. Verifying Compliance
Verifying compliance refers to the monitoring and audit activities that the Ministry employs to determine if dam owners are meeting regulatory requirements.

- The progress and effectiveness of these compliance efforts is reported and tracked in the Dam Safety Program Annual Report.
- Information gathered during these compliance efforts is used to update the dam registry.
- The risk level number in the dam registry may be modified to reflect new information about the condition of the dam.
- The frequency and nature of verification may be dictated by risk, resources available and public (community) interest.
Dam Safety Officers are responsible for verifying compliance with Dam Owner Requirements as described in Section 1. The Dam Safety Program is responsible for assessing, evaluating and reporting that compliance. The Natural Resource Officers from the Compliance and Enforcement Branch provide a support role in verifying compliance.

**Dam Safety Program Annual Report – Compliance Reporting**

The BC Dam Safety Annual Report is a commitment of government to summarize activities of the Province’s Dam Safety Program and the progress of dam owners in achieving compliance with the BC Dam Safety Regulation (Regulation). Compliance is verified in various ways as described below; progress will continue to be monitored and reported annually.

**Annual Compliance Letter**

As noted in Section 2, Promoting Compliance, the Comptroller of Water Rights annually sends a letter to all owners of high, very high and extreme consequence classification dams at the end of November of each year. Enclosed with the letter is a dam status reporting form on which the dam owners are required to provide factual information related to their dam safety program including; Formal Inspections, Site Surveillance, Dam Safety Reviews, Operation, Maintenance and Surveillance Manuals, Emergency Preparedness Plans, and indicate whether any new dam safety concerns have been identified in the past year. Those dam owners are required to report on the work they have undertaken over the past year in keeping their dams safe and in compliance with the BC Dam Safety Regulation.

**Dam Audits**

Under the Dam Audit Program, Dam Safety Officers are required to meet with dam owners and conduct a dam audit once every 5 years for High, Very High and Extreme consequence dams and once every 10 years for Significant consequence dams. The audits are an opportunity for Dam Safety Officers to meet with dam owners, review the records being kept and assess the condition of the dams with the dam owner. These audits help determine if the dam owner is aware of and are carrying out requirements under the Regulation. If deficiencies are found, the Dam Safety Officer can usually assist the dam owner in resolving the problem. Where necessary, follow up is done by the Dam Safety Officer or a Natural Resource Officer to ensure that deficiencies are corrected.

**Dam Construction**

Construction work on a new dam or rehabilitation can only be started following receipt of a “leave to commence construction” letter under a water licence or authorizing order, and, for decommissioning, following receipt an approval letter by a Dam Safety Officer. Dam owners should be following the “Plan Submission Guidelines” as outlined in Section 2 Promoting Compliance. It is important for the dam owner to contact the Dam Safety Officer early in the process to ensure that the owner is aware of and addresses all necessary requirements. The leave to commence construction letter stipulates the reporting requirements to ensure that the owner is complying with the approved design and construction plan. The Dam Safety Officer can also verify compliance by undertaking in construction
inspections. If non-compliance is an issue, Natural Resource Officers can be called on to inspect and investigate the issue.

Unauthorized dam construction has led to serious public safety situations in the past and must be addressed in a timely manner. Dam Safety Officers would not be aware of unauthorized construction until it is reported by the public, other government agents or discovered during assessments of other dams. This type of unauthorized activity is usually dealt with by taking enforcement measures immediately.

4. Enforcing Compliance

Enforcement is necessary to compel compliance when voluntary compliance cannot be achieved. By requiring parties to address non-compliance, enforcement responses can be effective in:

- Creating a level playing field, i.e., ensuring that no party benefits from not complying;
- Creating a deterrence effect for other potential violators; and
- Increasing awareness of dam safety to dam owners and the public.

The NROs in the Compliance and Enforcement Branch, MFLNRO are taking the lead role in enforcing compliance with dam owners who do not voluntarily comply with Dam Owner Requirements as described in Section 1. Enforcement options fall into 2 main categories described below. The NROs will take the lead role for all of these options except for cancellation of water licenses, which will be the responsibility of the DSO or Regional Water Manager. DSOs will provide support and expertise throughout the enforcement phase.

- Administrative Options: advisories, warnings, directives (Orders), and administrative sanctions such as cancelling an authorization.
- Prosecution Options: tickets and court prosecutions.

A table “Roles and Responsibilities Matrix for Dam Safety Officers and Natural Recourse Officers” is at the end of the Procedures section of this document. The table is based on the four components of the Dam Safety Program: compliance; plans review and approval; emergency planning and response; and program management. Lead roles and support roles are identified in the table for all aspects of the dam safety program.

A wide range of compliance and enforcement options are available to DSOs and NROs, see the Procedures page 13. It is important that a consistent, province wide approach be taken to ensure that specific enforcement options are appropriate for non-compliance for the various dam owner requirements. Enforcement responses must be appropriate for the alleged contravention and sufficient to achieve ongoing deterrence. Natural Resource Officers are authorized to use their discretion when applying enforcement and will discuss appropriate action in consultation with a DSO as necessary.
For more information on the Compliance and Enforcement Branch please see the following web links on
the Ministry of Forests, Lands and Natural Recourse Operations web site:

The Role of Compliance and Enforcement:  http://www.for.gov.bc.ca/hen/program/role.htm

Compliance and Enforcement Options:  http://www.for.gov.bc.ca/hen/program/CE%20Actions.htm
Procedures

Background
In June 2010 the Testalinden Dam near the Town of Oliver failed and the resultant flood caused extensive damage to the downstream area. A number of recommendations are made in the Deputy Solicitor General report “Review of the Testalinden Dam Failure”, July 2010, to strengthen the dam safety program and to ensure appropriate enforcement and compliance.1 This procedure addresses that recommendation. Reducing the risk of a dam failure is a key component of this procedure.

These procedures have been developed to help DSOs and NROs promote, verify and enforce compliance with the Dam Safety Regulation in a consistent manner across the province. Concurrent with the procedures, a Dam Safety Program Policy has been developed to better address non-compliance with the Dam Safety Regulation. The Policy is a signed agreement between by the Water Policy and Legislation Committee and the Compliance and Enforcement Branch to provide a framework on roles, responsibilities and enforcement options. The Strategy is based on a four step compliance model, i.e. Setting Requirements, Promoting Compliance, Verifying Compliance and Enforcing Compliance. These procedures build on the Policy and the Strategy, and are intended as a tool for DSOs and NROs to promote, verify and enforce compliance in a consistent manner across the province. A table explaining the Roles and Responsibilities for DSOs and NROs is included as an attachment. The table is based on the four components of the Dam Safety Program: compliance, plans review and approval, emergency planning and response and program management. Lead roles and support roles are identified in the table for all aspects of the dam safety program. The intent is to fully integrate the services of the Compliance and Enforcement Branch into the program and provide clear direction to staff on compliance and enforcement in dam safety.

Lead Roles and Support Roles
Dam Safety Officers take a lead role in the Dam Safety Program with the exception of most enforcement options which fall into two main categories described below. Natural Resource Officers will take the lead role in delivery and resolution of the following enforcement options:

- Administrative Options: advisories, warnings, directives (Orders), and administrative sanctions such as cancelling an authorization.
- Prosecution Options: tickets and court prosecutions.

Cancellation of water licenses is an administrative option which is the responsibility of the DSO or Regional Water Manager because a water license cancellation is done under the Act. The NRO would take the lead role in enforcing the conditions of the water license cancellation.

DSOs will provide support and provide expertise to the NROs throughout the enforcement phase.

1 DSG Report July 2010 p. 15 – Recommendation 7 Dam Safety Regulation
Compliance & Enforcement Action Options

A wide range of compliance and enforcement options are available to DSOs and NROs. It is important that a consistent, province wide approach be taken to ensure that specific enforcement options are appropriate for non-compliance for the various dam owner requirements. Enforcement responses must be appropriate for the alleged contravention and sufficient to achieve ongoing deterrence. Natural Resource Officers are authorized to use their discretion when applying enforcement and will discuss appropriate action in consultation with a DSO as necessary.

Dam Safety Officers and NROs must assess requirements and determine appropriate compliance and escalating enforcement action consistent with Dam Safety Program policy, strategy and procedures. There are a suite of options identified to go along with a comprehensive list of possible non-compliance with the Dam Safety Regulation. Specific actions appropriate for various types of non-compliance are at the discretion of the DSO and NRO. Compliance actions can include the following, provided in escalating order:

1. Letter – clear written communication with the dam owner describing what needs to be done and when it is to be completed.
2. Email reminder
3. Telephone reminder
4. Letter reminder
5. DSO visits site and may conduct a dam audit
6. DSO & NRO visit site together
7. NRO visits dam owner
8. NRO follow-up site visit
9. Write Water Act Order
10. Cancellation of the Water License

Enforcement actions include the following, usually in this order. Specific actions appropriate for various types of non-compliance are identified in the options table.

1. Ticket is issued to a dam owner by the NRO. The three types of tickets are: compliance notice, warning ticket and fine ticket.
2. Deliver Water Act Order² to dam owner to: repair the dam, drain or lower the reservoir or to stop work.
3. Deliver Water Act Order³ or DSO directive to remove the dam.
4. Charges under the Act

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² By the appropriate official under the Water Act
³ Signed by a Dam Safety Officer or the appropriate authority under the Water Act
For more information on the Compliance and Enforcement Branch please see the following web links on the Ministry of Forests, Lands and Natural Recourse Operations web site:

The Role of Compliance and Enforcement:  [http://www.for.gov.bc.ca/hen/program/role.htm](http://www.for.gov.bc.ca/hen/program/role.htm)
Compliance and Enforcement Options:  [http://www.for.gov.bc.ca/hen/program/CE%20Actions.htm](http://www.for.gov.bc.ca/hen/program/CE%20Actions.htm)

**Options for Funding Immediate Remediation Work – Owner Unwilling**

Under certain circumstances, a Natural Resource Officer may access funds from the Environmental Remediation Sub Account (ERSA), October 12, 2012. The purpose of the ERSA is to provide a mechanism for funding works and to defray investigation costs related to contraventions under the *Forest and Range Practices Act*, the *Wildlife Act* and other referenced acts including the *Water Act*.

In addition, if an owner is unwilling to undertake remedial measures required under a *Water Act* order, the Comptroller can authorize another person to do the work under Section 86, Powers of Comptroller if disobeyed. Also under Section 86, any expenses incurred by that person can be recovered in a court of law by that person.

**The Role of other Provincial Government Agencies**

Some other provincial government agencies may have a compliance and enforcement role under certain circumstances. The Fish & Wildlife Branch would be involved when a dam owner is required to modify reservoir operation or drain a reservoir. Emergency Management BC, along with the Local Government would be involved in the event that a hazardous condition exists or if reservoir draining involves high or unusual flows downstream.

**Future Enhancement to the Compliance and Enforcement Procedures**

At present, risk reduction targets are limited to those that can readily be measured such as the return of the annual dam owner compliance forms and the completion of Dam Safety Review reports by the dam owners. Improvements to the dam registry and ongoing auditing and monitoring will allow us to measure other regulation requirements in future, such as acceptance of dam owner Operation, Maintenance and Surveillance Plans and Emergency Preparedness Plans. The dam registry is being improved to allow more effective tracking of compliance by DSOs and NROs. For example, under the *compliance* tab in E-Licensing, the *Compliance with Regulations* options can now be manually set to take into account a broader range of issues. In addition, an “Enforcement” tracking tab has been added to record enforcement activities and to monitor the required timelines and deadlines.
Statutes and Regulations pertaining to Enforcement

Natural Resource Compliance Act:
http://www.bclaws.ca/civix/document/id/complete/statreg/11021_01

Offence Act:
http://www.bclaws.ca/civix/document/id/complete/statreg/96338_01

Offence Act:
Violation Ticket Administration and Fines Regulation: Schedule 1, see Water Act under Items 1B, 9B and 28B
http://www.bclaws.ca/civix/document/id/complete/statreg/89_97_02

Offence Act:
Violation Ticket Administration and Fines Regulation: Schedule 2, see Water Act under Column 1, pages 43 to 47.
http://www.bclaws.ca/civix/document/id/complete/statreg/89_97_03

Offence Act: under Section 81 (2) of the Offence Act
Investigation and Prosecution Costs Regulation, see Water Act under Column 1, p. 2
http://www.bclaws.ca/civix/document/id/complete/statreg/227_90

Water Act: Offences under Section 93 and 94
http://www.bclaws.ca/civix/document/id/complete/statreg/96483_01

BC Dam Safety Website

Additional Resources

Dam Safety Compliance and Enforcement Policy and Dam Safety Audit Policy
http://www.env.gov.bc.ca/wsd/water_rights/policies/water_policies.html

British Columbia Dam Emergency Response Plan – please contact the Victoria Dam Safety Section. Phone: 250-952-6790 or Email: dam.safety@gov.bc.ca
Attachment – Dam Safety Program Roles and Responsibilities for Dam Safety Officers and Natural Resource Officers
## Attachment - Dam Safety Program – Roles & Responsibilities for DSOs and NROs

<table>
<thead>
<tr>
<th>Dam Safety Program Component</th>
<th>Dam Safety Program Sub-Component</th>
<th>Dam Safety Officers (DSOs) Lead Roles and Responsibilities</th>
<th>Natural Resource Officers Support Roles &amp; Responsibilities for the Dam Safety Program</th>
<th>Natural Resource Officers Lead Roles &amp; Responsibilities for the Dam Safety Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance</td>
<td></td>
<td>Specific On-site training to dam owners during audits and follow-up site visits.</td>
<td>Informing dam owners about the requirements of the Dam Safety Regulation and basic dam inspection &amp; maintenance.</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>1. Education &amp; Awareness</td>
<td>Dam Owner Training &amp; Presentations: N/A</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>2. Annual Compliance Letter</td>
<td><strong>Victoria Dam Safety Function:</strong> annually prepare, mail and compile returns. Sends forms to Regional DSOs for action.</td>
<td>Conduct site visit to dam owners who:</td>
<td>Issue tickets and/ or deliver Orders</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Don’t answer compliance letters.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Report non-compliance or dam problems on their compliance forms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Dam Auditing Program</td>
<td>Conduct Scheduled Audits as per Policy and follow up on any dam safety issues reported</td>
<td>On-Site Follow-up; confirm compliance or non-compliance.</td>
<td>Issue tickets, deliver Orders or press charges under the Water Act for non-compliance.</td>
</tr>
<tr>
<td></td>
<td>4. Dam Registry</td>
<td>Managed by Victoria Dam Safety - Tracking &amp; Reporting</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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4 This table is an update to the 2011 table “Dam Safety Program – Roles & Responsibilities for Dam Safety Officers and Natural Resource Officers”

5 For details of specific compliance and enforcement options see the “Compliance and Enforcement Options Table for the Dam Safety Regulation – 2014”

Last Update: November 2014
<table>
<thead>
<tr>
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<th>Natural Resource Officers Lead Roles &amp; Responsibilities for the Dam Safety Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Review &amp; Approval</td>
<td>New Dam Projects</td>
<td>Prepare Water Licences.</td>
<td>On-Site: ensure compliance with licence conditions and Leave to Commence Construction (LCC) conditions.</td>
<td>Issue tickets, deliver Orders or press charges under the Water Act for non-compliance with licence conditions and LCC conditions.</td>
</tr>
<tr>
<td></td>
<td>Dam Rehabilitation Projects</td>
<td>Prepare Water Licences or Orders.</td>
<td>Deliver Orders under the Water Act.</td>
<td>Issue tickets, deliver Orders or press charges under the Water Act for non-compliance with licence conditions and LCC conditions.</td>
</tr>
<tr>
<td></td>
<td>Dam Removal Projects</td>
<td>Prepare approval letter or Orders and Licence Cancellations.</td>
<td>Deliver Orders under the Water Act.</td>
<td>Issue tickets, deliver Orders or press charges under the Water Act for non-compliance with approval letter or Order conditions.</td>
</tr>
<tr>
<td>Emergency Planning &amp; Response</td>
<td>Activate Dam Emergency Response Plan (DERP)</td>
<td>Single Incident Report: · Classify as Incident, Alert or Breach. · Follow DERP Procedures. · Assume Site Command as necessary</td>
<td>· Conduct on-site assessment with the DSO or others as requested by the DSO.</td>
<td>· Report any problems discovered during the assessment; initiate emergency action if necessary. · Conduct ongoing surveillance of emergency situations (reservoir levels, seepage readings, etc.) · Provide security as required</td>
</tr>
<tr>
<td>Dam Safety Program Component</td>
<td>Dam Safety Program Sub-Component</td>
<td>Dam Safety Officers (DSOs) <strong>Lead Roles and Responsibilities</strong></td>
<td>Natural Resource Officers <strong>Support Roles &amp; Responsibilities for the Dam Safety Program</strong> (^5)</td>
<td>Natural Resource Officers <strong>Lead Roles &amp; Responsibilities for the Dam Safety Program</strong> (^1)</td>
</tr>
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</tr>
<tr>
<td>Emergency Planning &amp; Response (cont.)</td>
<td></td>
<td><strong>Extreme Natural Event – Flood/Earthquake</strong>&lt;br&gt;Follow procedures in the DERP including identifying the dams in the affected area which need to be assessed. Activate Rapid Dam Assessment (RDA) of affected area.</td>
<td>• Proceed as per Single Incident above but for multiple dams.</td>
<td>• Proceed as per Single Incident above but for multiple dams. • Provide security as required</td>
</tr>
<tr>
<td>Other RDA (^6)</td>
<td></td>
<td><strong>Organize RDA by helicopter or on ground. Activate and supervise other staff, including C&amp;E Officers as necessary.</strong></td>
<td>Similar to emergency roles &amp; responsibilities above</td>
<td>Similar to emergency roles &amp; responsibilities above</td>
</tr>
<tr>
<td>Program Management</td>
<td></td>
<td>• Compile and Prepare Annual Report&lt;br&gt;• Produce Policies &amp; Guidelines - Website&lt;br&gt;• Internal Training &amp; Education</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

\(^6\) e.g. Freshet or wholesale assessment as per 2010 Testalinden Dam failure Rapid Dam Assessment.