

# **Logging Near Endangered Plants**

**Complaint Investigation 030544**



**FPB/IRC/101**

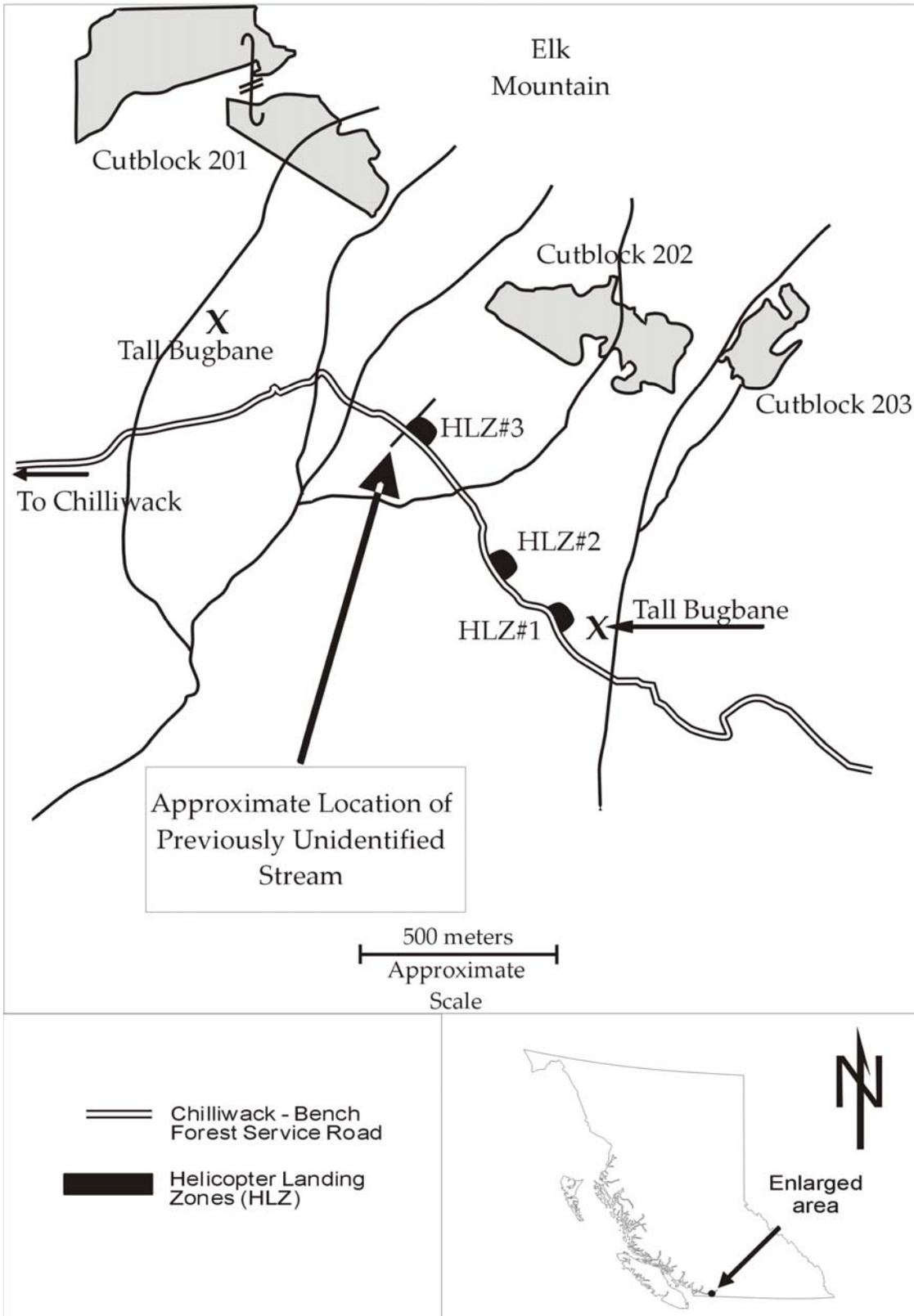
**February 2005**

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## Helicopter Landing Zones and Tall Bugbane Locations Reported by Complainant



## The Investigation

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In November 2003, the Chilliwack Field Naturalists submitted a complaint to the Forest Practices Board that a population of tall bugbane, an endangered plant (see Appendix A: Tall Bugbane and Habitat Range), was destroyed and a stream damaged by a logging operation near Chilliwack. The complainant was also dissatisfied with the Ministry of Forests' response to its concerns.

### Background

In 2001, the complainant learned that Cattermole Timber (the licensee) intended to develop several cutblocks in the Elk-Thurston Mountain area, a few kilometres east of Chilliwack. Subsequently, in November 2001, the complainant advised the Ministry of Forests (MOF) that tall bugbane, an extremely rare and nationally endangered plant<sup>1</sup> was likely to be found throughout the Elk-Thurston area. There are about 200 tall bugbane plants in 10 known locations in Canada, all in the Chilliwack River valley.

The complainant also gave MOF a topographic map of the area, on which it had marked the locations of several rare species. Most of the locations were obtained from an urban planning document written in 1994<sup>2</sup>, but others were collected and verified by the complainant itself. Two locations of tall bugbane were shown, one of which had been discovered by the complainant. For that location, the complainant included a precise mapping coordinate obtained with its own global positioning device.

In July 2002, the MOF district manager approved an amendment to the licensee's 2001-2005 forest development plan (FDP), adding three cutblocks in the Elk-Thurston area. The cutblocks were to be logged by helicopter, with the logs dropped on five helicopter-landing zones (HLZs) along a nearby forest service road. Ultimately, the licensee constructed three of those HLZs (see map on Page 1). Each was a cleared and partially gravelled area up to 50 metres wide by 100 metres long.

On October 25, 2002, the complainant noticed the licensee dragging and dropping logs and logging debris into a stream near HLZ #3. The complainant realized that the tall bugbane site that it had discovered earlier was close to where the licensee had constructed the HLZs, but the complainant could not recall the precise location. It did recall that it had marked the site with flagging tape. It searched for, but could not find the flagging tape. However, the complainant found another previously unidentified occurrence of tall bugbane just ten metres from HLZ #3.

On October 28, 2002, the complainant notified MOF about the debris in the stream. The next day a MOF staff person contacted the complainant and on November 6, 2002, visited the

area with the complainant. Neither person had a global positioning device with them so, again, the reported tall bugbane could not be precisely relocated. From its searches, the complainant ultimately deduced that the tall bugbane that it had discovered and subsequently reported in 2001 was buried under HLZ #1.

On November 26, 2002, the complainant asked MOF for a written report about the forest practices at and near HLZ #3. MOF staff did not provide a written report, but answered the complainant's questions. On October 6, 2003, the complainant again asked for a written report, but MOF staff suggested the complainant submit a request for information under the *Freedom of Information and Protection of Privacy Act*<sup>3</sup>. The complainant did not think that was an appropriate response, and complained to the Board.

## Issues

The forest law in effect when the complaint issues arose was the *Forest Practices Code of British Columbia Act* and regulations (the Code)<sup>4</sup>. The Board investigated forest practices and planning related to the HLZs and enforcement of the Code concerning the stream near HLZ #3. Specifically, the Board posed the following questions:

1. Was a tall bugbane population damaged?
2. Were the Code's planning requirements concerning tall bugbane met?
3. Was the stream near HLZ #3 damaged?
4. Was government's enforcement of the Code concerning the stream near HLZ #3 appropriate?

## Discussion

### 1) Was a tall bugbane population damaged?

The Board examined whether any recorded locations of tall bugbane coincided with the HLZs. Board staff determined that seven tall bugbane locations had been recorded in the Elk-Thurston area. Two of those were shown on the complainant's map from 2001. In addition, the Conservation Data Centre (CDC), a part of the Ministry of Sustainable Resource Management that maintains a provincial database of rare organisms, had recorded four other locations of tall bugbane along the forest service road in 1998. The seventh location was discovered in 1997, and was reported by a contractor to the Ministry of Water, Land and Air Protection (MWLAP) in 2003.

Both tall bugbane locations reported by the complainant in 2001 remain in undisturbed forest<sup>5</sup>. One is 800 metres from HLZ #3, the other 70 metres from HLZ #1 (see map on page 1). Neither location coincides directly with any HLZ. The complainant recalls that the tall bugbane it discovered and marked with flagging tape was nearer the road. It is possible that when the complainant originally located the plants, the dense forest caused its global positioning device to give an imprecise coordinate. Although the mapped location reported

by the complainant was unaffected by HLZ construction, the actual location of tall bugbane may still have been buried and, if so, most likely by HLZ #1.

Unfortunately, there is no way to determine whether the tall bugbane actually was buried, or whether the complainant's flagging tape somehow went astray, making it impossible to relocate the plants.

During the summer of 2004, a contractor for MWLAP found two more locations of tall bugbane near to HLZ #1, raising the possibility that the complainant's plants remain intact. Alternatively, those may be "new" plants and the complainant's tall bugbane may have been buried by HLZ #1. Without a precise location of the complainant's plants it is impossible to know. It would be unfair of the Board to blame the licensee for burying tall bugbane in the absence of persuasive evidence that it did so. Therefore, the Board gives the benefit of doubt to the licensee and concludes that tall bugbane was not buried by HLZ #1.

Of the other five recorded tall bugbane locations, one may have been affected by construction of a HLZ. One of the CDC records describes a tall bugbane location close to HLZ #3. The CDC record is not precise; as no specific map location for bugbane is provided. The "new" plants noticed next to HLZ #3 by the complainant during its search in October 2002 may be those previously recorded by the CDC. Again the Board cannot confirm whether a recorded tall bugbane location was fortuitously avoided, or if some plants were buried while others nearby survived disruption. Once more, given the presence of tall bugbane nearby, the Board gives the benefit of doubt to the licensee and concludes that tall bugbane was not buried by HLZ #3.

## **2) Were the Code's planning requirements concerning tall bugbane met?**

Although very rare, tall bugbane is not protected on provincial forest lands in British Columbia. The Code contained no specific provision to protect tall bugbane, but did provide government a means to do so. A "Species at Risk" and its habitat could be protected if designated as "Identified Wildlife" (which can include plants)<sup>6</sup>, and if government had established a wildlife habitat area or general wildlife measure for the species.

Tall bugbane was designated a species at risk for Code purposes in 1999, and noted as generally "requiring protection". However, tall bugbane was never designated "Identified Wildlife" under the Code<sup>7</sup>, so no wildlife habitat areas or general wildlife measures were established for it. Instead, tall bugbane remained just one of many forest values considered during planning and implementation of forest practices. That meant the licensee was not required by the Code to undertake any specific actions to identify or protect tall bugbane from potential damage.

Nevertheless, section 29(1) of the Code's Operational Planning Regulation required the licensee to consider public and agency comments to its proposed FDPs and to make appropriate changes. MOF had provided the licensee with the complainant's map of rare

species in the Elk-Thurston area. That map included two locations of tall bugbane. The licensee decided that none of its proposed cutblocks or HLZs overlapped the reported tall bugbane locations, so it made no changes to its plan to accommodate the tall bugbane.

The complainant asked MOF to assure that the locations of rare species in the area were verified prior to cutblock development, so that the licensee could design appropriate protective measures. The complainant's request was also sent to the licensee. When MWLAP commented on the licensee's plan, it also suggested the licensee assess each cutblock for tall bugbane and apply management measures to protect the plant. The licensee considered these suggestions, but there was nothing in the Code that required it to conduct such assessments.

The licensee opted to not survey the area for tall bugbane. However, it did ask MWLAP for any information about rare species in the area that had not already been brought forward. MWLAP did not have any further information. The licensee then wrote the complainant that no endangered species had been located, other than those shown on the complainant's previously submitted map. At that point, the licensee believed it had satisfied the Code's planning requirements.

The licensee was correct. By ensuring that it avoided the specific tall bugbane locations set out in the complainant's map from 2001, the licensee had complied with the Code. On the other hand, MOF and the licensee were both aware that there were a number of rare species dispersed in the area, and that credible sources were suggesting that specific locations of tall bugbane be verified. In that situation, the Board considered whether basic compliance with the Code was enough, or if in this case, whether achievement of sound forest resource management required more from government and the licensee. The Board reviewed how available information about tall bugbane was sought out, communicated and addressed.

In November 2001, the complainant first told MOF that tall bugbane occurs in the Elk-Thurston area and asked that special surveys be done so that timber harvesting could be designed to protect the plant. To help, the complainant offered to lead a field trip to the tall bugbane plants it had located. The district manager replied that he could not require a licensee to conduct a special survey, but agreed to arrange a field trip. The trip did not occur. The complainant thought it was up to the district manager to arrange the trip; the district manager thought his staff had done so. Neither party contacted the other.

Had MOF visited the area with the complainant prior to plan approval, the error in the reported location of tall bugbane would likely have been discovered and the correct location of the plants identified. In the circumstances, the Board finds that communication between the parties could have been improved.

The complainant's local knowledge was valuable, but it was not the only information available; the CDC also held records of tall bugbane in the area. MWLAP staff had assumed

that the licensee would normally check the CDC database for rare species information relative to its operations. MOF actually obtained the CDC information prior to approving the licensee's plan. However, the mapped information showed many overlapping locations of rare species and MOF decided that it was not sufficiently detailed for planning purposes. That meant the locations recorded by the CDC, and kept in a government database, were largely disregarded by both government agencies. This resulted in an elevated risk that tall bugbane might be inadvertently impacted by forest practices.

Although Board staff found the CDC information with ease, it was completely overlooked by the licensee. The licensee was not familiar with the CDC and was unaware that it could directly access CDC's rare species information. Nevertheless, the licensee came close; it had included information in its proposed FDP about another rare species. That information came from MSRM and MWLAP's website "BC Species and Ecosystems Explorer".<sup>8</sup> That website, in turn, links directly to the CDC data and provides contact information about the CDC.

Given the number of rare species in the area, the Board considers that the licensee could have, and should have, located and checked the CDC records for information about tall bugbane. In addition, the Board believes that the government agencies should have ensured the licensee was familiar with the CDC as a data source. Had the licensee searched the CDC records, it would likely have realized that at least one of its proposed HLZs might overlap a recorded location of tall bugbane. To verify whether tall bugbane was present, the licensee could have inspected the small area of its proposed HLZs.

In conclusion, the licensee complied with the Code's forest practices planning requirements. Its FDP amendment identified the location of its activities and it considered and responded to public and resource agency comments. However, given a clear risk of damage to a nationally-endangered plant, and a relatively simple and inexpensive means to verify that tall bugbane would not be unduly impacted, basic compliance with the Code was, in the Board's view, insufficient. In the circumstances, sound forest practice required the extra effort of searching for additional information and connecting some additional field inspection to confirm that tall bugbane would not be impacted by the licensee's activities.

### **3) Was the stream near HLZ #3 damaged?**

The participants agree that the licensee piled logs and logging debris over a 20 to 30 centimetre-wide non-fish stream in the cleared area of HLZ #3. The complainant is concerned about damage to the stream-related habitat in that area. It is important to note that the Code allows for licensees to fully harvest timber adjacent to streams such as the one affected. However, none of the licensee's harvesting or road-related plans identified or discussed the stream near HLZ #3.

The licensee explained that it did not detect the small stream during any of its field planning visits. In fact, the licensee's road-related application to construct the HLZs specifically states

that each landing was “located on firm, dry ground”. However, the complainant believes that water would have been flowing and evident to the licensee even in the driest weather. The complainant noted that salamanders were present just downstream of HLZ #3 and that salamanders need permanent water. The Board reviewed the licensee’s August 2002 field notes. They refer to a drainage culvert under the road near HLZ #3, but do not refer to flowing water there. The notes do record flowing water at several other culvert crossings. In the Board’s view, it is possible that the stream segment above the road was dry when the licensee designed HLZ #3.

In the circumstances, there was no Code requirement for the licensee to identify or describe the stream near HLZ #3 within its plans. Nevertheless, the Board expects that a licensee would typically detect streams in the vicinity of its forest activities and plan accordingly. In this case, it appears possible for the licensee to have overlooked the stream. The Code anticipated that resource features including streams might sometimes remain unnoticed as plans develop. For that reason, section 51 of the *Forest Practices Code of British Columbia Act* required a licensee to stop or modify its practices and promptly advise the district manager whenever a previously unidentified resource feature was detected after forest practices had begun.

In November 2002 when contacted by MOF enforcement staff following the complainant’s report of debris in the stream, the licensee immediately stopped its operations at HLZ #3. The next day, the licensee and MOF enforcement staff jointly developed a plan to remove some of the debris, grass-seed the exposed soils, and place additional logs to protect the stream. Once logging was complete, the licensee would remove a large debris pile and any remaining debris and grass-seed the disturbed area. The licensee so informed the district manager and, by mid-May 2003, completed the work. Thus, the licensee complied with section 51 of the *Forest Practices Code of British Columbia Act*.

Clearing streams of introduced debris and grass-seeding exposed soils are standard forestry practices where streamside damage has occurred, or where damage to a stream channel is expected. Nevertheless, the complainant was concerned that, in this case, the domestic grass that was seeded might impede recovery or establishment of tall bugbane near the stream. The complainant thought that coniferous trees should also be planted to shade out the grass in time. Board staff asked the licensee if it would plant trees at the site, and it has agreed to do so, following the advice of tall bugbane specialists.

In summary, logging operations at HLZ #3 damaged a previously unidentified stream by introducing debris to the stream and by exposing streamside soils. The licensee should have identified the stream but there were extenuating circumstances; the stream was small and possibly dry when field work was done. Once informed, the licensee immediately stopped its work and reported to the district manager. The licensee has since repaired the stream and has agreed to plant trees to aid recovery of tall bugbane habitat in the grass-seeded area.

#### **4) Was government's enforcement of the Code concerning the stream near HLZ #3 appropriate?**

The complainant was concerned about MOF enforcement in respect to the stream near HLZ #3. The Board considered whether government's enforcement of the Code was appropriate.

On October 28, 2002, the complainant reported logs and debris in the stream near HLZ #3 to MOF. MOF staff called the complainant the next day and, within a week, inspected HLZ #3 with the complainant. MOF decided the stream was permanent, that several rare plant and animal species were nearby, and that debris should be removed and the area grass-seeded. Two weeks later, MOF enforcement staff inspected all three HLZs. The enforcement staff confirmed that the stream near HLZ #3 had not been identified in the licensee's plan. MOF informed the licensee of the need to stop work and not further damage the stream. MOF then developed a remediation plan with the licensee.

In addition to investigating potential Code non-compliance concerning the stream, MOF enforcement staff also investigated whether the licensee had illegally harvested trees nearby. It took until April 2003 to conclude whether the trees were illegally harvested. In both cases, MOF ultimately concluded that there was no contravention of the Code. By mid-May 2003, when the licensee had finished its stream remediation works, MOF enforcement staff had visited HLZ #3 ten times. The Board considers that MOF took the complainant's concern about the stream seriously, acted in a timely fashion and followed the resulting compliance and enforcement issues through to conclusion.

The complainant asserted that MOF was not forthcoming with information about remediation of the stream resulting from its enforcement actions. On November 26, 2002, the complainant asked enforcement staff to provide a written report about remediation. That was never provided. Enforcement staff understood that the complainant was asking for an "investigation report"<sup>9</sup>, which is not publicly available until an investigation is concluded. The MOF investigation involved both the issue of the stream and the potentially illegal harvest. Since the harvesting issue was ongoing, the officer would not release a report. Nevertheless, the officer did provide some general information, telling the complainant that the stream near HLZ #3 would be cleaned of debris.

Once an enforcement file is closed, MOF asks that public requests for such information go through the formal Freedom of Information and Protection of Privacy Act (FOIPPA) process. In October 2003, the complainant again requested a written report from MOF enforcement staff. By then, the investigation was closed, so the enforcement officer suggested the complainant make a request under the FOIPPA. The complainant has since made the FOIPPA request and received some of the information it wanted. In the circumstances, the Board finds that MOF acted reasonably in dealing with the complainant's information requests.

In summary, government's enforcement response to the complainant's report about potential stream damage was promptly initiated, followed through with actions designed to promote compliance and rehabilitate any damage, and eventually confirmed that remediation work was completed as planned. MOF was reasonably concerned about public release of information during an incomplete, active investigation. Thereafter, MOF asked the complainant to apply for information in the standard way, through the FOIPPA. Ultimately, the information was provided.

The Board finds that government's enforcement of the Code concerning the stream near HLZ #3 was appropriate.

## **Conclusions**

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### **1. Was a tall bugbane population damaged?**

No. There was no persuasive evidence that tall bugbane plants were damaged by any HLZ.

### **2. Were forest practices planning requirements concerning tall bugbane met?**

Yes, but basic compliance in these circumstances was not enough. Sound and responsible forest stewardship requires more than bare compliance when a rare species is known to be present in an area. The licensee and government shared a responsibility to search out the readily-available CDC information on the reported locations of tall bugbane, and to follow-up with field assessments as appropriate.

### **3. Was the stream near HLZ #3 damaged?**

Yes, but not deliberately, by introducing debris to the stream and by exposing streamside soils. Once it was made aware of the stream, the licensee took steps to protect and rehabilitate the stream.

### **4. Was government's enforcement of the Code concerning the stream near HLZ #3 appropriate?**

Yes.

## **Commentary**

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Conservation of species at risk is in the public interest, so whose responsibility is it to decide whether such species are adequately protected in the course of forest development and what is the best method to do so? The former Code, in effect when this complaint arose, required the MOF district manager to be satisfied that the licensee's plan would adequately manage and conserve forest resources. In this case, the district manager was satisfied on the

basis of information at hand, and approved the plan. As this investigation demonstrates, such information - even for a nationally endangered species - may be incomplete, imprecise or inaccurate. In the circumstances, credible sources were calling for further assessment of rare species, including tall bugbane. However, the approach taken by MOF and the licensee was to deal only with reported locations. That left a residual risk that tall bugbane would be impacted by forest activities.

Logging inherently involves some risk to non-timber resource values. Where an endangered species is involved, the Board prefers a cautious approach; the risk need not be nil, but should be minimal. In the circumstances of this complaint, a more prudent approach would have been for the district manager to not be satisfied that forest resources would be adequately managed and conserved, until the areas slated for disturbance had been checked for tall bugbane. Alternatively, the district manager could have applied a condition to approval of the plan requiring that tall bugbane be looked for and avoided prior to the licensee commencing its forest practices.

Under the new Forest and Range Practices Act (FRPA), there will be no direct test to ensure that forest resources are adequately managed and conserved; the test is simply whether the licensee's results are consistent with broad objectives set by government. Government's objective for wildlife, which can include endangered plants, is to conserve sufficient habitat for the survival of certain species, including species at risk, without unduly reducing the province's timber supply.

In May 2004, tall bugbane was declared a species at risk under FRPA. The Identified Wildlife Management Strategy, released in June 2004, provides specific guidelines for management of tall bugbane habitat within wildlife habitat areas, but, as yet, there are no wildlife habitat areas established or proposed for tall bugbane. In the interim, MWLAP has developed a "Section 7 Notice" under the Forest Planning and Practices Regulation to ensure that licensees include results or strategies in their future forest stewardship plans that are consistent with government's objective for wildlife. For tall bugbane, the notice specifies that 200 hectares of suitable habitat must be distributed somewhere within the Chilliwack Forest District. Of the 200 hectares, up to 75 hectares can be from the mature timber harvesting landbase.

It appears that ultimately forest professionals in BC will decide whether species at risk are adequately protected during forest development. The Association of British Columbia Forest Professionals has already defined a standard for management of species at risk. That association confirmed that its members are obliged, to the extent that factors relate to forest management and are under their control, to manage for species at risk with the aim of recovering or adequately protecting these species at a level where they are no longer at risk.<sup>10</sup> As the Board said in its special report about Mountain Caribou<sup>11</sup> it seems likely that achievement of that obligation will require forest professionals to diligently seek out and employ low-risk approaches to forest management when operating in the habitat of species

at risk. Potentially, this could mean exceeding basic compliance with the law, particularly where the population at risk (like tall bugbane) is small, non-mobile and scarce.

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<sup>1</sup> Committee on the Status of Endangered Wildlife in Canada (COSEWIC), Assessment and Status Report on the Tall Bugbane *Cimicifuga elata* in Canada, 2001 [online] <http://www.cosewic.gc.ca/index.htm>

<sup>2</sup>Urban Systems. 1994. Environmental Sensitivities of the Ryder lake Uplands, Chilliwack, BC.

<sup>3</sup> More information available at the Office of the Information and Privacy Commissioner [online] <http://www.oipcbc.org>

<sup>4</sup> In January 2004 the Forest and Range Practices Act (FRPA) replaced the Forest Practices Code as British Columbia's forest practices legislation. The transitional provisions of FRPA state the Code continues to apply to forest practices carried out under a forest development plan. This continues until there is an approved forest stewardship plan, at which point, the requirements of FRPA apply. Licensees and the B.C. Timber Sales Program may continue to obtain approval of a forest development plan until December 31, 2005. Therefore, although many Code provisions are no longer in general effect at the time of writing, they will be referred to in this report in the present tense.

<sup>5</sup> Board staff visited the area in January 2004. The investigators did not attempt to identify whether tall bugbane was actually present at either location.

<sup>6</sup> The term "Identified Wildlife" refers to those Species at Risk and Regionally Important Wildlife that the Minister of Water, Land and Air Protection, designates as requiring special management attention under the FRPA [online] <http://wlapwww.gov.bc.ca/wld/identified/index.htm>

<sup>7</sup> In May 2004, government established a category of Species at Risk under FRPA, which includes tall bugbane.

<sup>8</sup> See: <http://srmwww.gov.bc.ca/atrisk/toolintro.html>

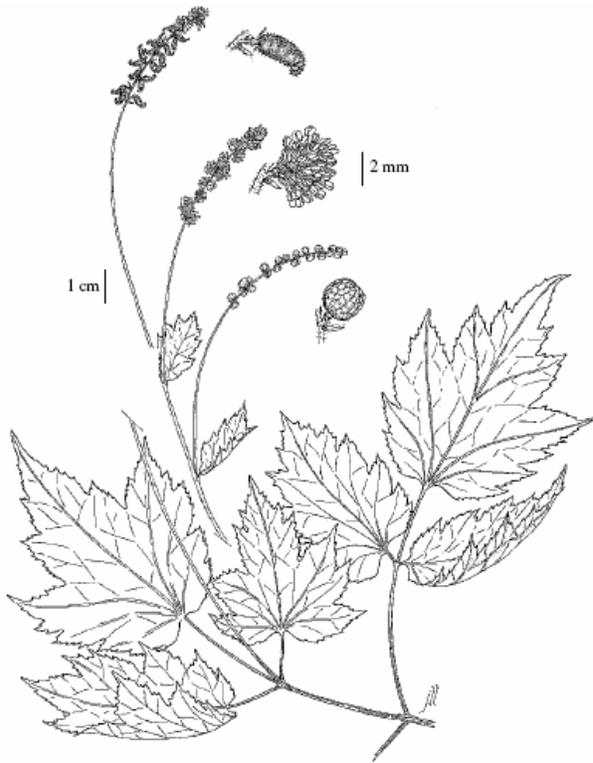
<sup>9</sup> An investigation report is a MOF file document giving summary of potential contravention, the issues investigated and the evidence collected to support the investigating official's opinion. The eventual outcome of the investigation and a record determination of penalty, if any, would follow on conclusion of the file.

<sup>10</sup> Association of British Columbia Professional Foresters. 2003. Managing for species at risk: What are a forester's professional responsibilities? ABCPF Species at Risk Working Group, Vancouver. (Page 5). <http://www.rpf-bc.org/download/species-at-risk.pdf>

<sup>11</sup> Forest Practices Board. 2004. BC's Mountain Caribou: Last Chance for Conservation? Special Report FPB/SR/22. <http://www.fpb.gov.bc.ca/special/reports/SR22/SR22.pdf>

## Appendix A: Tall Bugbane and Habitat Range

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### Habitat/Range:

- Moist forests in the lowland and montane zones.
- Rare in southwest British Columbia, known only from the Cultus Lake-Chilliwack River area.

**Source:** Adapted from the BC Species and Ecosystems Explorer tall bugbane "Species Summary" [online] <http://srmapps.gov.bc.ca/apps/eswp/reports.do?index=0>