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## **Compliance Inspections and Management**

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### **Special Investigation Report**

**FPB/SIR/23**

**May 2008**

# Table of Contents

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|   |           |
|---|-----------|
| <b>Executive Summary</b> .....                    | <b>1</b>  |
| Recommendations .....                             | 2         |
| <b>Introduction</b> .....                         | <b>3</b>  |
| <b>The Investigation</b> .....                    | <b>4</b>  |
| Background .....                                  | 4         |
| Scope and Methodology .....                       | 5         |
| Description of the C&E Inspection Framework ..... | 6         |
| The Inspection “Model” .....                      | 6         |
| Inspection Policies .....                         | 7         |
| Inspection procedures .....                       | 8         |
| Inspection Standards .....                        | 9         |
| Findings .....                                    | 9         |
| Policy Requirements .....                         | 9         |
| Numbers of inspections .....                      | 9         |
| Consistency .....                                 | 14        |
| Innovations .....                                 | 16        |
| <b>Conclusions</b> .....                          | <b>17</b> |
| Variations in Inspection Numbers .....            | 17        |
| Inspection Consistency .....                      | 18        |
| <b>Appendix A</b> .....                           | <b>20</b> |
| <b>Appendix B</b> .....                           | <b>21</b> |
| <b>Appendix C</b> .....                           | <b>22</b> |

# Executive Summary

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The Ministry of Forests and Range (MFR) Compliance and Enforcement (C&E) program is responsible for promoting compliance with, and ensuring enforcement of, the province's forest legislation. Conducting inspections to determine licensee compliance is a key activity of this program, and is the ministry's primary source of information to assess compliance.

This investigation examines, at the district level, the number of compliance and enforcement (C&E) inspections completed in 2005 and 2006, and the range of alleged non-compliances<sup>1</sup> identified in inspection reports for six forest districts: North Coast and Campbell River in the Coast Region; Skeena-Stikine and Fort Nelson in the Northern Interior Region; and Kamloops and Chilcotin in the Southern Interior Region.

**The investigation found a wide range in inspection numbers and non-compliances among districts.**

The Board investigated these districts following a 2005 review of harvesting and roads inspection data extracted from the MFR compliance information management system (CIMS). Information collected by the Board was analyzed to show statistics by type of inspection, by inspector and as a measure against volumes harvested. Investigation results show that the number of inspections done in the six forest districts varies widely, as does the amount of alleged non-compliances. The investigation sought to identify reasons behind the range of results shown in the data.

While the investigation could not determine precisely the reasons for the variations, it found that the range of inspection numbers and of identified non-compliances within and between districts is strongly influenced by some or all of the following three factors:

## **1. Policy**

There is currently no official policy guiding local district C&E program management in how to achieve a particular level of inspection coverage, how it will be apportioned, or how to measure the effort. The investigation found that most districts do not set targets for inspection numbers, and the result is a lack of certainty in inspection performance. Only one of the six districts visited emphasizes accountability for inspection coverage.

## **2. Availability and utilization of management information with which to assess numbers of inspections and consistency of performance**

While CIMS is the system that records the inspection effort, it was not well-regarded in two of the districts, and no particular CIMS report appears to be used extensively by local management as an aid to manage these aspects of the C&E function.

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<sup>1</sup> An alleged non-compliance is where the inspector has identified a situation or practice which they think is non-compliant with the legislation, but it has not been formally determined as such. A variety of actions may be taken in response to an alleged non-compliance, including further inspections, an investigation, issuance of a violation ticket, or, for issues of a trivial nature, no further action.

### **3. Work force issues, particularly in the northerly parts of the province**

Three of the six districts visited identified workforce issues that negatively influenced their numbers of inspections. For example, districts in the north of the province, which already have to deal with climate and access limitations, have difficulties recruiting and retaining staff.

Inspections are the key means by which MFR determines the level of compliance with forest and range legislation. If inspection coverage is not adequate or inspections are inconsistent in identifying non-compliances, then knowledge of the actual level of compliance becomes less certain. Overall, the Board considers that MFR needs to strengthen its controls in relation to C&E inspections:

## **Recommendations**

As a result of this investigation, the Board recommends that the Ministry of Forests and Range should:

1. strengthen policy guidance for C&E inspection coverage; and
2. ensure CIMS provides information in a form more useful to local C&E management to achieve good inspection coverage and consistency in identifying and addressing non-compliances.

These recommendations are intended to help equip district C&E staff with the tools they need to ensure they can perform adequate inspection coverage and obtain an overall higher confidence in the level of compliance with forest practices legislation.

Prior to the publication of this report, MFR was invited to submit representations on any aspects of the Board's investigation findings. These submitted representations were considered in finalizing this report. In the representations, MFR indicated that the following measures are underway and are expected to improve management controls:

- Staffing a vacant position to lead provincial C&E quality assurance and to implement revised compliance procedures to help improve consistency of inspections.
- Improving the effectiveness of the CIMS application, currently with a focus on the reporting function.

The findings of this special investigation will be a resource for further Board work on the appropriateness of government enforcement of forest practices.

# Introduction

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The Ministry of Forests and Range (MFR) Compliance and Enforcement (C&E) program is responsible for promoting compliance with forest legislation and ensuring that it is enforced. Conducting inspections to determine compliance of licensees is a key activity in this program. The compliance information management system (CIMS) is a web-based database application that serves as the MFR's record of inspection activities and compliance actions. Ministry staff use CIMS to document risk evaluations, inspection plans, and inspections. C&E staff at all levels rely on this system to help manage inspections.

Part of the Forest Practices Board's mandate under the *Forest and Range Practices Act* is to audit the appropriateness of government's enforcement of forest practices legislation. To do this, the Board examines government's enforcement practices using nine criteria<sup>2</sup> that it developed for this purpose. Of the nine criteria, aspects of the following are relevant to the ministry's inspection function and CIMS:

- Government agencies obtain, use and maintain adequate information on the forest activities subject to enforcement.
- Government agencies have an effective way of identifying risks associated with forest activities and utilizing risk in inspection planning.
- Government agencies conduct a sufficient number of inspections in a fair, objective and effective way, and accurately record and report results.
- Reporting systems provide adequate information on agency performance in relation to enforcement objectives.

The inspection function of the ministry's C&E program is critically important because it discerns what forest activities are taking place; the risk of those activities in relation to forest and revenue values; and licensee performance in relation to legislated requirements.

**Inspections are critical because they:**

- document industry's compliance level.
- deter inappropriate forest practices.

Inspection results provide an essential record of the level of compliance with legislated requirements and also act as a deterrent to inappropriate practices. Enforcement actions, such as determinations and violation tickets, follow from inspections and depend on good inspection coverage and the inspections being done well. The ministry relies primarily on inspections to assess whether forest activities comply with the law and to account for that performance to the public. Inspection information also forms the basis of MFR's public reporting on the level of compliance with forestry legislation in the province, and therefore it should be accurate and reflective of the real situation on the ground.

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<sup>2</sup> For a complete list of enforcement audit criteria, refer to the Board's Enforcement Audit Reference Manual at: [http://www.fpb.gov.bc.ca/audit\\_reference.htm](http://www.fpb.gov.bc.ca/audit_reference.htm).

For appropriate enforcement of forest practices to occur, it is reasonable to expect that inspections are completed efficiently, with adequate coverage of forest operations, and that they are consistently conducted and produce similar results for similar fact patterns. For example, an inappropriate forest practice (a non-compliance) identified by an inspector in one location should be treated in a comparable way to a similar instance found by another inspector in another location. The identification of a non-compliance should be consistent in any part of the province, with appropriate action resulting. Appropriate action is not necessarily identical action, however. Action may vary from location to location depending on values at risk, past performance and other considerations.

Therefore, the objectives of this investigation were, within and among districts, to:

1. examine the inspection data in CIMS; and
2. examine the basis for variations found in CIMS statistics in the six districts, by assessing CIMS inspection data and through communication with C&E staff.

Properly identifying and recording non-compliances is a key skill for C&E inspectors. However, this investigation was based largely on assessing CIMS data, so it did not examine the quality of inspections, such as whether non-compliances are accurately identified and recorded. To assess inspection quality, one would need to field review recently inspected areas and compare inspection records with actual field conditions.

## The Investigation

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### Background

In January 2006, the Board examined the 2005 CIMS inspection data for all districts in the province to compare numbers and consistency of the inspections among inspectors, districts and regions. The 2005 review was limited to road and harvesting inspections, although C&E staff also conduct silviculture, range, recreation, pricing/revenue and general inspections.

The Board asked the following questions:

- How many sites were inspected?
- How many sites were compliant?
- How many sites had alleged non-compliances?

The initial results varied widely among district offices. For example, in assessing numbers of inspections, the number of harvest and road inspections made during 2005 ranged from a low of 31 in one district to a high of 835 in another district. Also, the average number of road and harvesting inspections by each C&E inspector within one district in 2005 ranged from 45 to 135. Alleged non-compliant harvest and road inspections at the district level ranged from 2.6 percent to 30 percent; meaning one inspector noted non-compliances in 2.6 percent of inspections and another in the same district noted non-compliances in 30 percent of their inspections.

A table compiling the 2005 roads and harvesting data is shown in Appendix A, with data analysis results for all districts in the three regions.

The original intent of the investigation was simply to report the findings from the 2005 data. However, the high degree of variation in results among districts led to additional questions, such as:

- Why would one district have 25 times more harvesting and road inspections than another district?
- Why, over the same period in the same district, would one C&E inspector conduct 135 inspections but another only 45 inspections?
- Why would there be a range of three percent to 30 percent alleged non-compliances for different inspectors within a district?
- How could one district have three percent alleged non-compliance and another district with apparently similar attributes have 25 percent alleged non-compliance?

Since the initial results left so many unanswered questions, the Board decided to conduct additional investigative work in a smaller group of forest districts, to seek a better understanding for the differences noted in the initial analyses.

## Scope and Methodology

The follow-up evaluation included the data from all inspections tracked in CIMS in six districts - North Coast and Campbell River in the Coast Region; Skeena-Stikine and Fort Nelson in the Northern Interior Region; and Kamloops and Chilcotin in the Southern Interior Region.

Two districts from each forest region were selected to investigate the basis for some of the noted variations in the 2005 statistics, and to provide a wide geographic insight into issues affecting the ministry's inspection program. The collected information was analyzed to statistically sort by type of inspection, inspector and as a measure against volumes harvested. The attached Appendix B, which details some of the 2006 inspection information, was prepared from the CIMS data and forwarded to the six districts.

For each of the six districts, the investigation examined:

- the number of inspections completed in 2005 and 2006;
- how inspections are allocated among inspectors;
- district inspection plan (DIP) performance and controls;
- establishment and management of production and consistency standards;
- evaluation of inspectors' inspection performance; and
- reporting on inspection objectives required by the DIP.

The inspection information was collected at the headquarters level and analyzed, then results were discussed with each district based on the CIMS data as well as respective district management practices for their inspection programs. Questions around these matters were supplied to the six districts in advance of the Board's visit.

In addition, investigators collected information from C&E staff at the regional level concerning quality assurance of each districts' C&E, plus any inputs by the region to the district's inspection plans. Discussions focused on the 2005 and 2006 calendar years, but often covered 2007 plans as well. Inspection policy was also discussed with district staff and with regional representatives during telephone conversations.

Although the Board investigation collected some evidence that supported the current systems and procedures described, the investigation did not assess the performance of these practices in detail, instead relying on answers provided by regional and district staff.

## **Description of the C&E Inspection Framework**

### **The Inspection "Model"**

Government's enforcement of forest practices legislation is intended to promote compliance and enforce statutory obligations. This is an explicit objective for C&E in the Ministry of Forest and Range's service plan.<sup>3</sup> The ministry's performance indicator is, "percent of forest and range operators' compliance with statutory requirements that regulate forest practices," as compiled from CIMS data.

The ministry's reported performance for the 2006/07 fiscal period is 96 percent.<sup>4</sup> This figure is derived from the number of inspections completed without any non-compliances that led to a determined or prosecuted enforcement action, versus the total number of inspections completed. This indicator likely overstates the compliance level since it excludes non-compliances that did not actually result in an enforcement action. The "true" level of compliance may be difficult or impossible to accurately measure without first establishing a clear demarcation between non-compliances that are significant and worthy of reporting as such, and those that are not. At present, the ministry draws the line at non-compliances that result in enforcement actions. This has the advantage of being an easily measured indicator, although it provides the public with a simplistic interpretation of the level of compliance.

It is difficult to overstate the importance of the inspection function in the C&E mandate. To ascertain whether forest operations are in compliance, the ministry relies almost exclusively on its own inspections. In addition to regular inspections, the ministry also obtains anecdotal information regarding forest practices compliance from public or agency complaints or observations, as well as from industry self-reporting of incidents. Inspections of logging sites

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<sup>3</sup> From the Ministry of Forests and Range 2007/08 – 2009/10 Service Plan dated February 12, 2007 located at: <http://www.bcbudget.gov.bc.ca/2007/sp/for>.

<sup>4</sup> From the Ministry of Forests and Range 2006/07 Annual Service Plan Report dated June 15, 2007 located at: [http://www.bcbudget.gov.bc.ca/Annual\\_Reports/2006\\_2007/for/for.pdf](http://www.bcbudget.gov.bc.ca/Annual_Reports/2006_2007/for/for.pdf).



are also extremely important as a deterrent to inappropriate forest practices. Inspections must accurately assess the compliance of forest practices with legislated requirements. Without adequate inspection coverage of all forest operations, there is a lingering risk of inadequate examination of operations to assess compliance.

Various options are available to inspectors to address noted instances of non-compliance found in inspections. For instances of low severity, *compliance* actions would normally be warranted. These include issuance of a compliance notice, a warning ticket or no action in the case of a trivial or inconsequential non-compliance. For more severe instances, *enforcement* actions are warranted. Enforcement actions include violation tickets, monetary penalties, remediation orders, orders to vacate and licence suspensions and cancellations. C&E staff have latitude to apply their judgment and undertake different actions in different circumstances.

The ministry cannot inspect all forest operations because it does not have sufficient resources to do so. Therefore, the ministry's framework appropriately requires that forest operations be risk rated for environmental, economic and social factors, with inspection coverage biased towards higher risk sites. The ministry tracks the percentage of high and very high priority sites inspected<sup>5</sup> for its service plan report. The utility of this indicator depends on site risk ratings being accurate and completed for all sites. The ministry's reported performance for 2006/07 is 86 percent of high and very high priority sites inspected for forest and range practices. This investigation did not examine the ministry's risk assessment processes, even though they are very important in the successful application of its enforcement model. The risk rating system and results were not assessed and were assumed to be correct for this investigation.

Generally, the ministry's inspection framework targets high and very high risk sites but not moderate and low risk sites. In a DIP, each district documents its planned inspection level in percentage terms for each type of operation and risk level. Appendix C contains an example excerpt from a DIP. The ministry's inspection framework does not specify a predetermined amount of inspection coverage that is to be achieved for active operations, other than the percentage of high and very high risk sites. No inspection targets are set for moderate and low risk sites, although there is an assumption that some will be inspected in conjunction with high and very high risk sites.

The ministry's inspection framework targets higher risk sites but not lower risk sites.

## Inspection Policies

Ministry policies related to C&E inspections cover risk assessment, inspections and monitoring, all effective since 1996, and management roles and responsibilities, effective since 2004.

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<sup>5</sup> Site priority is similar to risk rating. Sites are risk rated as very high, high, moderate or low based on general or site level risk factors such as resource values at risk and operator compliance history. A site priority rating is the priority placed on a site for inspection. In general, sites with higher risk are a higher priority for inspection.

Risk assessment policy requires that activities be consistently evaluated for risk and documented accordingly. Ministry resources are to be allocated in accordance with identified risks, and inspection resources are to be directed towards activities with the highest risk.

Inspection policy requires that inspections be prioritized by risk and that risk be continually reassessed throughout the inspection process. Inspections are to be documented and recorded and the results reported internally and externally in a timely fashion.

Compliance monitoring policy requires that risk assessment and inspection activities and performance be monitored, primarily by the regions.

The policy outlining C&E program management roles and responsibilities requires:

- regions to annually build a regional inspection plan;
- districts to annually build a DIP; and
- regions to review each DIP for consistency.

The policy also requires regional and district C&E inspection quality assurance (QA) plans. The district compliance leader must ensure relevant data systems are maintained and the regional compliance leader must support those systems and monitor district maintenance.

## **Inspection Procedures**

C&E have established procedures in place to inspect forestry activities for compliance with forestry related acts and regulations, but the procedures do not detail a district management role in planning the inspection program for the year.

Procedures generally follow the following sequence:

- The district identifies inspection activities and risk levels for various forest practices and documents these in the DIP for the year. Risk aspects include environmental, social and economic factors. The DIP guides the inspectors on the number of inspections to be made on each individual site, according to its relative risk.
- Information from the MFR forest tenure administration system is used to update CIMS with new tenures, and the licensees notify the district with an activity start date. The inspector “risk ranks” the site, either before or on receipt of the startup notice, and refers to the DIP to determine if the activity, at the established site risk, is to be inspected.
- Once notified of the forest activity start the inspector updates CIMS, and, using the activity priority in the DIP, schedules inspections given the activity’s site priority.

## Inspection Standards

Generally, within the districts assessed, practices undertaken to maintain inspection quality and consistency are: Justice Institute training; peer review and discussion; interactive training; C&E team meetings regarding standards and staff training; one-on-one discussions; in-the-field training; manuals, etc. Standards are also maintained by a quality assurance program covering the quality of district inspections, to be operated in each of the districts and by the regional offices.

## Findings

### Policy Requirements

The investigation found general compliance with the ministry's inspection-related policies. However, there were some exceptions:

- There is a requirement for: *regional management teams to provide input into Regional C&E priorities. The regional inspection plan and risk rating procedures will reflect those priorities.*  
**No regional inspection plans for the Northern or the Southern Interior regions were noted.**
- There is a requirement for: *the regional compliance and enforcement leader to review the district inspection plans for consistency and provide an evaluation of these plans to the regional management team.*  
**No such evaluations in the Northern or the Southern Interior regions were noted.**
- There is a requirement for: *the district compliance leader to report on quality assurance within the C&E regime to the regional compliance leader.*  
**Of the six districts reviewed, only the two districts in the Coast Region provided such a report.**

The districts complied with other inspection policy requirements. C&E policies not specific to inspections, such as those concerning investigations and complaints, were not reviewed.

## Numbers of Inspections

### General

The purposes of enforcement are to promote compliance with legislation, detect non-compliance, and take enforcement action where necessary. The measure of whether enforcement is successful in promoting compliance is a combination of the actual level of compliance and the degree to which this level is attributable to enforcement efforts as distinct from other factors, such as certification and professional responsibility. The measure of whether enforcement is successful in detecting non-compliance and taking enforcement action depends on successfully identifying actual non-compliances and then taking appropriate enforcement action.

Adequate inspection coverage is essential because:

- inspections are the single most important source of information to the ministry, and thus to the public, about the level of compliance with forest legislation;
- the more complete the inspection coverage, the higher the degree of confidence about the actual level of forest practice compliance; and
- presence of MFR staff on the ground acts as a deterrent to non-compliant practices.

However, the Board understands that C&E staff are required to perform more than inspections, including investigating and preparing evidence regarding non-compliant conditions, and responding to public complaints. Also, management and performance of the inspection role is more complex than simply dealing in numbers of inspections taking place. Nonetheless, determining the amount of inspections required for effective coverage is a useful starting point for local C&E management.

There is no policy requirement for overall inspection coverage.

Unfortunately, C&E compliance procedure and policy makes no mention of planning for the overall amount of inspections to be accomplished. While percentage targets are established for inspections of high and very high risk sites, no such targets exist for moderate or low risk sites. Accordingly, the investigation found a lack of attention to numbers of inspections and adequacy of inspection coverage. In three of the six districts examined, districts did not plan the C&E year by taking a ‘work volume’ approach. Instead, they ran their operations day-to-day and week-to-week, not setting inspection number targets, and reacting to, and dealing with, whatever turned up. From a productivity viewpoint, their production was simply what it was. There was no objective way to assess productivity because there wasn’t a production plan. Underperformance or overperformance could not be identified because no clear expectations were laid out.

**Table 1 - Road and Harvesting Inspection Numbers**

| District       | FTEs assigned ** | ***Total Number of Inspections – roads and harvesting |       | Average number of road and harvesting inspections per inspector |      | District harvest volume from HBS (m <sup>3</sup> ) |           |
|----------------|------------------|---|-------|---|------|--|-----------|
|                |                  | 2005  | 2006  | 2005  | 2006 | 2005   | 2006      |
| Kamloops       | 6                | 100   | 114   | 21  | 28   | 3,042,253  | 3,657,832 |
| Chilcotin      | 5                | 31  | 34    | 24  | 15   | 763,556  | 434,344   |
| Campbell River | 8                | 392   | 243   | 65  | 40   | 3,598,970  | 6,018,568 |
| North Coast    | 5                | 106   | 92    | 51  | 46   | 233,627  | 162,693   |
| Skeena-Stikine | 7                | 209 *   | 161 * | 50 *  | 38 * | 431,160  | 491,406   |
| Fort Nelson    | 7                | 126   | 121   | 28  | 30   | 1,123,990  | 1,250,693 |

\* Note 1 – Due to low harvesting activity levels by licensees, Skeena-Stikine Forest District loaned their inspectors to other districts. Those inspections (92 in 2005 and 151 in 2006) are not included in the above table. Some other districts also conducted inspections for other districts, but to a very minor extent compared with Skeena-Stikine.

\*\* Note 2 – These are the FTE numbers assigned to C&E duties in the district, including supervisors and inspectors assigned to road, harvesting, range, silviculture, and general inspections. The FTE numbers do not include district C&E management. In some cases the numbers do not fully account for temporary vacancies or distribution of duties within the C&E function so they may slightly exaggerate the number of personnel actually conducting inspections during the investigation period.

\*\*\* Note 3 – Only road and harvesting numbers are shown since other types of inspections are highly variable among the districts (see Appendix B for more detailed 2006 inspection numbers).

Table 1 shows the total and average numbers of road and harvesting inspections in each of the six districts during 2005 and 2006. The numbers show considerable variation from district to district in total inspections, average number of inspections per inspector, and number of inspections in relation to harvest volume.

### **Accountability for Numbers of Inspections**

Appendix C contains an excerpt from a district DIP. In this example, the inspection objectives are to inspect 91 percent of all high and very high risk harvesting and road construction sites. Moderate and low risk sites (the majority) are to be inspected only when the high and very high risk sites inspections are complete, or when an appropriate opportunity arises. In relation to the DIP, the investigation found that, in most of the six districts, C&E was missing a process to evaluate performance.

At the start of our investigation, board investigators considered the DIP to be a plan; a series of procedures thought out in advance to accomplish an objective within a given time frame.

Usually a plan will:

1. state an objective;
2. set out a series of steps to attain the objective;
3. establish milestones along the way to tell if performance is on or is veering off target;  
and
4. provide for an evaluation at the end of the plan period.

However, the investigation found that the DIP is not being used in the manner described above. Instead, most districts use it simply as a reference guide, referred to only after a site has been risk ranked to determine if an inspection should be done. In these districts, the DIP has no other apparent function, making accountability for achieving DIP goals uncertain. This is consistent with the Board's finding that there is a general lack of clear goals on expected numbers of inspections for district C&E.

To have value, the DIP needs to be credible, but the Board found that in preparing their DIPs, some districts simply replicated the previous year's version. One region suggested that the DIP was of limited value due to the changing nature of the business and a consequent lack of fit of the DIP. This may be the case but, for the most part, board investigators saw no evidence of evaluations of the utility of the DIP.

Of the six districts visited, only one district gave the DIP credibility, in that the DIP was thoughtfully considered, used throughout the year, and performance in relation to it was evaluated on a regular basis. This district used the DIP to help control and manage the C&E program and to calculate whether their DIP goals had been met for high and very high risk rated sites (although they did not use it to evaluate for medium or low ranked sites). However, while they treated the DIP as a plan with measureable goals, and used it to determine specific accomplishments, it is significant to note that, to determine this they needed to collect relevant information from a variety of CIMS reports.

The other five districts did not have a methodology to show whether they were meeting their DIP goals, but a second district is moving in that direction and is starting to implement a C&E management plan by estimating the numbers of inspections required during the year and allocating the requirements in numbers into each inspector's performance appraisal. It is also designing monthly accountability reports and researching in CIMS where the information for such reports may be obtained.

Each district is required to file a quarterly service plan report on ministry-wide key performance goals, including the number of inspections made of high and very high risk ranked sites. The service plan goal percentage is usually 85 percent of all high and very high risk sites, which does not necessarily coincide with individual district DIP required percentages of inspections. Ideally, to correctly compute the percentage, the districts need to know the total number of sites, by risk category, available for inspection (i.e., what is 100 percent?). However, districts cannot know in advance the exact numbers of high and very high site risk sites that will be active during the year, so the next best means is to estimate the number using historical information. Only three of the six districts had an estimate of this number based on reasonable criteria.

Although the service plan and the DIP can be linked by their common attributes (number of inspections, number of high and very high risk sites), most of the six districts did not make the link. CIMS does not provide the total active sites available for inspection, so staff must use other sources to determine this. A framework in CIMS where districts report both service plan and district inspection plan performance could help avoid duplication of work.

Districts are not required to report estimates of the numbers of potential inspections for each activity and each risk category, or to match the actual number of inspections to the plan at regular intervals. Where there is no report of performance in relation to the DIP goals, there is a lack of accountability for numbers of inspections.

### **CIMS Management Information**

One of the assessed districts had concerns over CIMS reports; the district had an experience where not all inspections were reported. This probably occurred because when a site inspection is entered before the site has been risk rated, the inspection is not included in the CIMS reports. This has been an issue for several months. Also, district staff questioned the correctness of a CIMS report regarding harvest and road sites that have a start up notice but have not been inspected. This incident prompted the district to maintain its own ledgers to make up for perceived shortfalls in CIMS accuracy and/or reporting. From the district's viewpoint, CIMS needs input rules that deal with these problems.

In another district, board investigators found several instances where inspectors entered one inspection into CIMS to cover numerous sites, which largely invalidated CIMS report data for that district.

Only one district uses the DIP format, along with Excel spreadsheets, to assess its inspection numbers. Estimates were made of the activities to be inspected during the year; then, monthly statistics were compiled using output reports from CIMS showing production, each inspectors' contribution and where each inspector and the district was in relation to the plan. Thus, this district was in control of its numbers of inspections, and had the information on hand to tell when adjustments should be made. Another district was developing a process to design needed information reports, and identifying information sources.

None of the other four districts produced information demonstrating control of numbers of inspections, and generally the Board is of the opinion that these districts manage their C&E operation on a day-to-day basis. CIMS outputs include a report on completed inspections that matches the DIP classifications but don't equate that to the total number of sites available for inspection. This limits support for district C&E management efforts to be accountable.

**CIMS does not provide information in a way that adequately supports ministry reporting requirements.**

### **Work Force Issues**

This investigation did not look at how the ministry balances work volume and resources among districts to achieve overall required C&E inspections; the Board assumption is that the correct number of staff has been allocated to districts. District staff informed us, however, that workforce difficulties have had an adverse effect on inspection numbers in most of the six districts visited:

- Campbell River and Skeena-Stikine were not negatively affected by work force issues;
- Kamloops had work force issues but most are now resolved;
- Chilcotin, with its secluded location, had work force issues but most are being dealt with;
- North Coast, another remote location, had difficult work force issues that are being worked on; and
- Fort Nelson, a very isolated location, had severe work force issues that are being worked on, but with limited success.

Districts described workforce issues as:

- **C&E staff position vacancies**

Some districts suffered persistent shortages due to staff vacancies, and were finding that attracting staff to a remote location was difficult. At the time of the investigation field visit, one district had 50 percent of its C&E positions vacant.

- **Staff turnover**

Turnover also caused difficulties for several of the more remote districts. Districts estimated that new C&E staff require several months of training and joint field inspection work before they are equipped to independently manage a full inspection workload, but, because staff hired and trained in remote areas often move to the southern part of the province, the investment these districts put into training new C&E inspectors doesn't benefit them. These problems were particularly evident in the three most remote districts visited, where continual staff training apparently consumed much of the available C&E resources. For example, since 2005 (the beginning of our investigation period) one remote district experienced 100 percent staff turnover in C&E staff.

- **Other staff slotted into C&E positions**

During the ministry restructuring of 2002 and 2003, some ministry staff were declared redundant due to downsizing, and were offered C&E positions in district offices. The investigation found that, in some cases, these placements put staff who were not well suited to C&E work into district offices, creating productivity problems. Ultimately, these people relocated as soon as they could. This circumstance affected more than one district.

## Consistency

### Consistency Considerations

Consistency in inspections is important to help ensure fair treatment of operators under similar circumstances. Consistency is also important to accurately assess the overall level of compliance. Licensees and the public have good reason to expect ministry officials to enforce forest practices legislation in a way that results in a similar outcome (such as a violation ticket) for a similar non-compliance (such as unauthorized cutting outside a block boundary).

Districts achieve consistency through training, field trips involving all C&E staff for calibration purposes, regular meetings of the C&E section staff to discuss issues and case files, field visits with new staff and the C&E supervisor, etc. Overall, the investigation found many similarities in the methods used by districts to achieve consistency.

**Table 2 - Range of Alleged Non-compliances**

| District       | Percentage of the range of alleged non-compliances recorded by inspectors - 2005 |          | Percentage of the range of alleged non-compliances recorded by inspectors - 2006 |          |
|----------------|--|----------|--|----------|
|                | Low (%)  | High (%) | Low (%)  | High (%) |
| Kamloops       | 7.4  | 59.5     | 0  | 61.1     |
| Chilcotin*     | n/a  | n/a      | n/a  | n/a      |
| Campbell River | 3.3  | 46.9     | 6.3  | 48.5     |
| North Coast    | 1.9  | 15.0     | 0  | 1.2      |
| Skeena-Stikine | 19.7   | 48.6     | 7.1  | 32.4     |
| Fort Nelson    | 0  | 12.5     | 0  | 12.5     |

\* Chilcotin is not included in the consistency table due to its small number of inspections.

Table 2 shows a wide range of alleged non-compliances for harvesting and road inspections both within and among the districts visited. For example, in Kamloops in 2005, one inspector



**A substantial variance in the percentage of alleged non-compliances can suggest consistency problems.**

found one or more alleged non-compliances in 7.4 percent of their inspections and another found one or more in 59.5 percent of their inspections. A substantial variance in the percentage of alleged non-compliances identified by inspectors can suggest consistency problems. Three of the six districts show a very wide range in alleged non-compliances. Interestingly, these three districts have less staff turnover and generally more seasoned C&E staff than the districts with the lowest range (and lowest incidence of alleged non-compliances).

There is a wide range of experience among the staff of the districts the Board examined. In two districts, the Board was told that some inexperienced inspectors may not yet recognize some alleged non-compliances in inspections, since they may be unsure if they are observing non-compliances or how to deal with what they've found. In some cases, they may be reluctant to make the call. This is a potential weakness in consistency for the ministry. C&E management told us that they would not expect an inexperienced inspector to observe and treat the same issues in the same way as an experienced one, so non-compliance numbers are likely to increase as inspectors gain experience. To address this issue, several districts are seeking consistency by teaming inexperienced staff with experienced staff, or the C&E supervisor.

The Board also found inconsistencies in the way inspectors in some districts were recording inspection details in CIMS. In more than one instance, the low incidence of recorded alleged non-compliances was because inspectors were not entering non-compliances into CIMS when they found them because they were unsure if they were truly observing a non-compliant situation and so they were reluctant to document them as such. In another district, different inspectors treated alleged non-compliances in inconsistent ways, with one inspector recording all alleged non-compliances, even when they were inconsequential when compared with other inspectors' inspections. In this district, C&E management believed that the inconsistency was not important because, although the inspectors manage tracking of alleged non-compliances differently, they have similar levels of determined non-compliances. The Board investigation was unable to verify this.

### **Peer Review**

Most of the districts the Board investigated organized inspection responsibilities on a zonal basis, with inspections divided by geographic or licensee zone. While a zone system has many advantages, such as travel efficiency, the Board notes that it is possible that dealing with the same licensees in the same terrain over a long period may introduce a degree of familiarity that can affect objective enforcement. Also, there is less opportunity for an inspection conducted by one inspector to be subject to a follow-up inspection conducted by another inspector. However, if zones are reassigned regularly there would be a higher level of contact with, and peer review of, colleague workmanship, and this would likely create a positive influence on standards.

Most districts organized C&E meetings where possible non-compliant situations encountered in the field were discussed and reviewed by all inspectors. This increased awareness of consequences for any given set of circumstances among all inspectors.

## Quality Assurance

It is C&E policy that each district and region operate a quality assurance (QA) program, with the intention of maintaining high inspection standards. The Coast and Northern Interior regions had developed quality assurance programs. However, the Southern Interior QA process was inactive for the 2006/07 year, due to a staff vacancy. Of the six districts visited, only the two coastal districts had an active district C&E QA program. The Board investigation found that, apparently, district resources rarely accommodate a district QA program. It also found that the annual regional QA program evaluation of the districts' numbers of inspections, and inspection standards, is welcomed and that practices are altered in response to recommendations.

## Innovations

The investigation found several good innovations in inspection planning and management.

- Campbell River used a spreadsheet that carried individual inspection information to the program level and the district also ran an excellent quality assurance program. In Campbell River, site risk is derived from site level data provided by the licensees, who provide information on six values on the site.
- Skeena-Stikine used GIS mapping to help set site risk and also devised a series of inspection bulletins to help inspectors achieve consistency in inspections. Because their work load was lessened, due to licensees reducing their cut, the Skeena-Stikine district loaned C&E inspectors to other districts to help with work load.
- Chilcotin utilized a detailed diary tracking system to determine how C&E staff time was spent. This enabled them to determine the proportion of time spent on inspections, investigations, record keeping, training, etc.
- Kamloops initiated processes to identify and address information gaps in management reports to increase district C&E management control. They also started an accountability process by outlining inspection expectations in C&E staff performance appraisals.
- North Coast wrote terms of reference for the district's 05/06 and 06/07 inspection plans, laying out the DIP purpose and priorities. Unfortunately, workforce issues intervened in the execution. As in Campbell River, site risk is derived from site level data provided by the licensees, who provide information on six values on the site.
- Fort Nelson established two excellent communication tools to help deal with extreme staff shortages. The first is a "C&E round table," called by an inspector when he or she comes across something in the field that raises uncertainty. The round table consists of district staff and colleagues who help the investigator decide whether a non-compliance has been identified, providing advice, but not directing, the inspector's decision. This tool helps to ensure consistent treatment of issues. The second innovation is the installation of a white board that inspectors use to log inspections to be done, and which shows which jobs have been 'claimed' by which inspectors (inspectors don't operate on a zone system in Fort Nelson).

# Conclusions

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During the course of this investigation, the Board set out to answer the questions posed in the introduction – basically, what are the reasons for the high degree of variability in inspection numbers and alleged non-compliances found throughout the province? Board investigators were not able to explain the variations with any objective precision. Nonetheless, the Board came to the following conclusions, based on the six forest districts visited.

The Board could not explain the reasons for variability with objective precision.

## Variations in Inspection Numbers

The investigation confirmed a wide range in numbers of inspections, both total numbers per district and average inspections per inspector. There are legitimate contributing factors, such as overall harvest levels, that contribute to the wide range between districts. Also, there are other factors, such as chronic staff vacancies, that can partially account for low inspection numbers. Each district visited had its own unique blend of challenges affecting the number of inspections it undertook, including variation in level of inherent site risk, which is a legitimate reason for more inspections in one district than another. Nonetheless, a remaining issue for the majority of the six districts is that they did not clearly establish inspection number expectations or monitor performance.

### *A. Policy*

There is no policy to guide local management about the desired quantity of inspections. The absence of guidance has left uncertainty as to the numbers of inspections expected, leading to a varied approach. Two districts understand the need for controls; one is building processes to manage C&E inspections, while another has built, implemented and is using procedures to manage the inspection process, despite the absence of policy. However, most districts do not have any controls in place to ensure that they can carry out the number of inspections needed.

### *B. Accountability*

The DIP sets out inspection targets at specific site risk levels, but there are no regular performance reports issued in relation to the DIP goals. As a result, there is a lack of accountability for numbers of inspections. Only three of the six districts had an estimate of the numbers required to constitute 100 percent of the high and very high risk sites likely to be eligible for inspection, and only one district tracked the numbers monthly.

If districts do not establish targets and monthly attainments, there is little to help them manage for numbers of inspections so they can achieve adequate inspection coverage. It would be beneficial if districts could update the DIP with estimates of potential inspections for each activity at each risk level, and match the actual number of inspections at regular intervals to these estimates

### *C. CIMS Information*

Despite a variety of ‘off the shelf’ CIMS output reports, and the required service plan report on ministry-wide performance goals, district C&E management is not well supported by program management information. District management information should be a CIMS output, but available reports do not properly match inspection performance to DIP goals. One district prepared its own management information by estimating numbers of activities to be inspected during the year, and then using DIP classifications to assess whether their C&E inspection plan works correctly.

The Board concludes that CIMS needs to generate better output reports that support and enhance accountability of district C&E management. CIMS should produce reports that detail inspections completed for available sites in a format that matches DIP classifications, and includes numbers and percentages. Also, inconsistent CIMS use currently does not provide helpful information for management. One district entered a single inspection into CIMS to cover numerous sites, thereby weakening its data. In other districts, the Board investigation found that there was a distrust of CIMS output reports due to concern that not all inspections are reported. Two districts preferred to maintain their own ledgers to provide correct information. In our opinion, CIMS needs rules to deal with both input and output problems encountered in the districts.

### *D. Work Force*

Districts believe that instability of the work force plays a large role in their ability to maintain numbers of inspections. The northerly districts, in particular, have a difficult time retaining staff, since people often move south after being trained and gaining valuable experience. Also, uncertainty caused by inexperience—presently being dealt with by joint discussions and field trips—needs additional attention.

## **Inspection Consistency**

Three of six districts had a wide range of alleged non-compliances among inspectors, an indicator of potential inconsistency both within and between districts. There are legitimate contributing factors, such as varying terrain or operator performance, but, there are also indicators of operational inconsistency among inspectors. In some cases, inspectors of similar experience documented inspections differently, for example, where one would record minor non-compliances, another would not. In more than one instance, the low incidence of alleged non-compliance occurred because inspectors were not entering non-compliances into CIMS. Also, inexperienced inspectors may not identify or record alleged non-compliances as readily as more experienced staff. All these factors contribute to a weakness in inspection consistency.

### *A. Inspection Standards*

Some inexperienced inspectors do not yet recognize some alleged non-compliances, because they are unsure if they are observing non-compliances or not. This is a potential weakness in consistency for the ministry.

### *B. Quality Assurance*

Despite policy requiring that each district conduct a quality assurance review of its inspection program, only the two coastal districts did so. QA in most of the districts was dependent on whether resources to conduct evaluation of QA were available. A district QA program would help ensure that standards are upheld, but to be effective it must be adequately prioritized and resourced. The regional QA programs' evaluation of the districts' inspection numbers and standards is a very good method of maintaining standards. However, the one-year absence of a QA program in the Southern Interior Region is a noted weakness.

### *C. Peer Reviews*

Most districts organized inspection responsibilities by zone. Long term zone allocation can allow familiarity to creep into work habits. In the zone model there are fewer crossover inspections by different inspectors, so often there is no meaningful peer review. If zones were reassigned periodically to different inspectors, there would be a higher level of contact among inspectors, and this would likely improve consistency of results among districts. Most districts organize full C&E staff meetings to discuss possible non-compliant situations, and communicate the standards applicable in the situation to their peers. In the Board's opinion, these are good strategies for communicating the expected inspection standards.

# Appendix A

## Results of 2005 Analyses of Harvesting and Road Data

| Districts                                    | Region | Inspections   |              |              | Alleged Non-Compliant Inspections |            |            | Number of Harvesting Inspectors | Average # of Inspections | Districts 2005 Harvest Volume from HBS * | Volume per harvest Inspection ** |
|--|--------|---------------|--------------|--------------|-----------------------------------|------------|------------|---------------------------------|--------------------------|--|----------------------------------|
|  |        | Total         | Harv         | Roads        | Total                             | Harv       | Roads      |                                 |                          |  |                                  |
| Campbell River Forest District               | C      | 392           | 197          | 195          | 101                               | 39         | 62         | 6                               | 65                       | 3,598,970                                | 18,269                           |
| Chilliwack Forest District                   | C      | 333           | 131          | 202          | 55                                | 19         | 36         | 6                               | 56                       | 730,802                                  | 5,579                            |
| North Coast Forest District                  | C      | 106           | 85           | 21           | 3                                 | 1          | 2          | 2                               | 53                       | 233,627                                  | 2,749                            |
| North Island - Central Coast Forest District | C      | 835           | 523          | 312          | 67                                | 26         | 41         | 6                               | 139                      | 4,363,995                                | 8,344                            |
| Queen Charlotte Islands Forest District      | C      | 270           | 108          | 162          | 7                                 | 0          | 7          | 6                               | 45                       | 983,460                                  | 9,106                            |
| South Island Forest District                 | C      | 598           | 327          | 271          | 80                                | 48         | 32         | 8                               | 75                       | 2,558,215                                | 7,823                            |
| Squamish Forest District                     | C      | 348           | 237          | 111          | 75                                | 41         | 34         | 3                               | 116                      | 503,149                                  | 2,123                            |
| Sunshine Coast Forest District               | C      | 522           | 315          | 207          | 69                                | 38         | 31         | 5                               | 104                      | 1,675,940                                | 5,320                            |
| <b>Coast Region Totals</b>                   |        | <b>3,404</b>  | <b>1,923</b> | <b>1,481</b> | <b>457</b>                        | <b>212</b> | <b>245</b> | <b>42</b>                       |                          | <b>14,648,158</b>                        |                                  |
| Fort Nelson Forest District                  | NI     | 126           | 103          | 23           | 9                                 | 6          | 3          | 4                               | 32                       | 1,123,990                                | 10,913                           |
| Fort St. James Forest District               | NI     | 444           | 255          | 189          | 27                                | 13         | 14         | 4                               | 111                      | 2,829,453                                | 11,096                           |
| Kalum Forest District                        | NI     | 230           | 80           | 150          | 51                                | 17         | 34         | 6                               | 38                       | 456,491                                  | 5,706                            |
| MacKenzie Forest District                    | NI     | 115           | 49           | 66           | 25                                | 9          | 16         | 2                               | 58                       | 2,661,324                                | 54,313                           |
| Nadina Forest District                       | NI     | 422           | 347          | 75           | 43                                | 30         | 13         | 7                               | 60                       | 5,209,527                                | 15,013                           |
| Peace Forest District                        | NI     | 212           | 179          | 33           | 5                                 | 1          | 4          | 6                               | 35                       | 3,167,668                                | 17,696                           |
| Prince George Forest District                | NI     | 284           | 209          | 75           | 61                                | 35         | 26         | 6                               | 47                       | 7,876,566                                | 37,687                           |
| Skeena Stikine Forest District               | NI     | 209           | 149          | 60           | 52                                | 27         | 25         | 4                               | 52                       | 431,160                                  | 2,894                            |
| Vanderhoof Forest District                   | NI     | 558           | 403          | 155          | 26                                | 17         | 9          | 4                               | 140                      | 4,574,723                                | 11,352                           |
| <b>Northern Interior Region Totals</b>       |        | <b>2,600</b>  | <b>1,774</b> | <b>826</b>   | <b>299</b>                        | <b>155</b> | <b>144</b> | <b>43</b>                       |                          | <b>28,330,902</b>                        |                                  |
| 100 Mile House Forest District               | SI     | 684           | 618          | 66           | 68                                | 53         | 15         | 5                               | 137                      | 2,036,211                                | 3,295                            |
| Arrow Boundary Forest District               | SI     | 601           | 424          | 177          | 46                                | 37         | 9          | 9                               | 67                       | 2,113,563                                | 4,985                            |
| Cascades Forest District                     | SI     | 197           | 169          | 28           | 46                                | 40         | 6          | 5                               | 39                       | 2,402,037                                | 14,213                           |
| Central Cariboo Forest District              | SI     | 460           | 382          | 78           | 31                                | 27         | 4          | 7                               | 66                       | 3,390,911                                | 8,877                            |
| Chilcotin Forest District                    | SI     | 31            | 24           | 7            | 9                                 | 5          | 4          | 1                               | 31                       | 763,556                                  | 31,815                           |
| Columbia Forest District                     | SI     | 455           | 301          | 154          | 116                               | 78         | 38         | 5                               | 91                       | 834,473                                  | 2,772                            |
| Headwaters Forest District                   | SI     | 140           | 124          | 16           | 22                                | 13         | 9          | 3                               | 47                       | 1,312,074                                | 10,581                           |
| Kamloops Forest District                     | SI     | 100           | 89           | 11           | 30                                | 25         | 5          | 4                               | 25                       | 3,042,253                                | 34,183                           |
| Kootenay Lake Forest District                | SI     | 328           | 270          | 58           | 46                                | 39         | 7          | 4                               | 82                       | 594,882                                  | 2,203                            |
| Okanagan Shuswap Forest District             | SI     | 585           | 500          | 85           | 49                                | 38         | 11         | 10                              | 59                       | 3,852,506                                | 7,705                            |
| Quesnel Forest District                      | SI     | 421           | 352          | 69           | 60                                | 50         | 10         | 4                               | 105                      | 5,010,941                                | 14,236                           |
| Rocky Mountain Forest District               | SI     | 416           | 338          | 78           | 14                                | 10         | 4          | 7                               | 59                       | 1,719,002                                | 5,086                            |
| <b>Southern Interior Region Totals</b>       |        | <b>4,418</b>  | <b>3,591</b> | <b>827</b>   | <b>537</b>                        | <b>415</b> | <b>122</b> | <b>64</b>                       |                          | <b>27,072,410</b>                        |                                  |
| <b>Totals</b>                                |        | <b>10,422</b> | <b>7,288</b> | <b>3,134</b> | <b>1,293</b>                      | <b>782</b> | <b>511</b> | <b>149</b>                      |                          | <b>70,051,470</b>                        |                                  |

\* Data compiled from the MFR Harvest Billing System (HBS)

\*\* Derived by dividing 2005 harvest volume by the number of harvesting inspections

# Appendix B

## 2006 District Data

| 2006  |                |              |                |              |                      |              |                |              |                    |              |                   |              |
|---|----------------|--------------|----------------|--------------|----------------------|--------------|----------------|--------------|--------------------|--------------|-------------------|--------------|
| District statistics   | Campbell River |              | North Coast    |              | Fort Nelson District |              | Skeena Stikine |              | Chilcotin District |              | Kamloops District |              |
|   | Number         |              | Number         |              | Number               |              | Number         |              | Number             |              | Number            |              |
| Number of Inspectors, excluding those with >10 inspections  | 7              |              | 2              |              | 5                    |              | 5              |              | 2                  |              | 6                 |              |
| Number of Harvesting Inspectors with > 10 inspections   | 6              |              | 1              |              | 4                    |              | 3              |              | 2                  |              | 4                 |              |
| <b>Number of Inspections</b>  |                |              |                |              |                      |              |                |              |                    |              |                   |              |
| Harvesting  | 155            |              | 41             |              | 107                  |              | 99             |              | 30                 |              | 97                |              |
| Roads   | 88             |              | 51             |              | 14                   |              | 62             |              | 4                  |              | 17                |              |
| Silviculture  | 48             |              | 18             |              | 5                    |              | 0              |              | 16                 |              | 51                |              |
| Range   | 1              |              | 0              |              | 7                    |              | 3              |              | 8                  |              | 87                |              |
| General   | 120            |              | 8              |              | 15                   |              | 38             |              | 10                 |              | 10                |              |
| Recreation  | 123            |              | 3              |              | 0                    |              | 0              |              | 0                  |              | 0                 |              |
| Inspection for other districts  |                |              |                |              |                      |              | 35             |              | 3                  |              | 30                |              |
| <b>Total</b>  | <b>535</b>     |              | <b>121</b>     |              | <b>148</b>           |              | <b>237</b>     |              | <b>71</b>          |              | <b>292</b>        |              |
| <b>Number of non compliant inspections</b>  |                | <b>% N/C</b> |                | <b>% N/C</b> |                      | <b>% N/C</b> |                | <b>% N/C</b> |                    | <b>% N/C</b> |                   | <b>% N/C</b> |
| Harvesting  | 18             | 11.6%        | 0              | 0.0%         | 4                    | 3.7%         | 12             | 12.1%        | 7                  | 23.3%        | 27                | 27.8%        |
| Roads   | 21             | 23.9%        | 2              | 3.9%         | 1                    | 7.1%         | 9              | 14.5%        | 1                  | 25.0%        | 12                | 70.6%        |
| Silviculture  | 3              | 6.3%         | 0              | 0.0%         | 1                    | 20.0%        | -              | -            | 0                  | 0.0%         | 21                | 41.2%        |
| Range   | 0              | 0.0%         | -              | -            | 0                    | 0.0%         | 0              | 0.0%         | 4                  | 50.0%        | 34                | 39.1%        |
| General inspections   | 31             | 25.8%        | 1              | 12.5%        | 1                    | 6.7%         | 8              | 21.0%        | 3                  | 30.0%        | 8                 | 80.0%        |
| Recreation inspections  | 10             | 8.1%         | -              | -            | -                    | -            | -              | -            | -                  | -            | -                 | -            |
| <b>Total</b>  | <b>83</b>      | <b>15.5%</b> | <b>3</b>       | <b>2.5%</b>  | <b>7</b>             | <b>4.7%</b>  | <b>29</b>      | <b>12.2%</b> | <b>15</b>          | <b>21.1%</b> | <b>102</b>        | <b>34.9%</b> |
| HBS total for harvesting only   | 6,018,568      |              | 162,693        |              | 1,250,693            |              | 491,406        |              | 434,344            |              | 3,657,832         |              |
| Average volume per inspection   | 38,829         |              | 3,968          |              | 11,689               |              | 4,964          |              | 14,478             |              | 37,710            |              |
| Average number of inspections per harvesting inspector  | 26             |              | 41             |              | 27                   |              | 33             |              | 15                 |              | 24                |              |
| <b>Range of n/c's between inspectors</b>  | <b>Low</b>     | <b>High</b>  | <b>Low</b>     | <b>High</b>  | <b>Low</b>           | <b>High</b>  | <b>Low</b>     | <b>High</b>  | <b>Low</b>         | <b>High</b>  | <b>Low</b>        | <b>High</b>  |
| - harvesting  | 4.7%           | 25.0%        | Not applicable |              | 0.0%                 | 7.1%         | 6.5%           | 27.3%        | 20.0%              | 26.7%        | 0.0%              | 56.3%        |
| - roads   | 10.0%          | 84.6%        | 3.8%           | 7.1%         | Not applicable       |              | 0.0%           | 40.0%        | Not applicable     |              | Not applicable    |              |
| - silviculture  | 9.5%           | 11.8%        | Not applicable |              | Not applicable       |              | Not applicable |              | Not applicable     |              | Not applicable    |              |
| - range   | Not applicable |              | Not applicable |              | Not applicable       |              | Not applicable |              | Not applicable     |              | Not applicable    |              |
| - general   | 9.8%           | 66.7%        | Not applicable |              | Not applicable       |              | 20.0%          | 30.0%        | Not applicable     |              | Not applicable    |              |
| - recreation  | 0.0%           | 25.0%        | Not applicable |              | Not applicable       |              | Not applicable |              | Not applicable     |              | Not applicable    |              |
| <b>H &amp; VH Sites not inspected</b>   |                |              |                |              |                      |              |                |              |                    |              |                   |              |
| - Roads   | 23             |              | -              |              | -                    |              | -              |              | -                  |              | -                 |              |
| - Harvesting  | 40             |              | -              |              | -                    |              | -              |              | 3                  |              | -                 |              |
| - Silviculture no year specified  |                |              | -              |              | -                    |              | 4              |              | -                  |              | -                 |              |
| <b>Total</b>  | <b>63</b>      |              | <b>-</b>       |              | <b>-</b>             |              | <b>4</b>       |              | <b>3</b>           |              | <b>-</b>          |              |
| <b>Harvest or road sites that have a start up notice on that site and it did not get priority set</b> |                |              |                |              |                      |              |                |              |                    |              |                   |              |
| - Harvesting  | 2              |              | -              |              | 3                    |              | -              |              | 43                 |              | -                 |              |
| - Roads   | 21             |              | -              |              | -                    |              | 22             |              | -                  |              | -                 |              |

# Appendix C

## Example Excerpts from a District Inspection Plan

| Activity                      | Site Priority     | Inspection Objectives  | Rationale  | Criteria                      | Risk     |
|-------------------------------|-------------------|--|--|-------------------------------|----------|
| 1) Harvesting, Major Licenses | Very High (10-99) | Refer to high.   | Refer to high.   |                               |          |
|                               | High (12-18)      | 91% of HIGH or VERY HIGH sites will be inspected.  | Promote compliance with FPC Act/Regs to reduce environmental, economic and social risk of harvesting. Detect non-compliance and take appropriate enforcement action, if necessary, as deterrent. | Public Health & Safety        | High     |
|                               |                   |  |  | Riparian Areas / Fish Habitat | High     |
|                               |                   |  |  | Site Productivity             | High     |
|                               | Moderate (6-11)   | Sites will be inspected only when the total population of very high and high sites have been done or when an appropriate opportunity arises.           | Promote compliance with FPC Act/Regs to reduce environmental, economic and social risk of harvesting. Detect non-compliance and take appropriate enforcement action, if necessary, as deterrent. | Public Health & Safety        | Moderate |
|                               |                   |  |  | Riparian Areas / Fish Habitat | Moderate |
|                               |                   |  |  | Site Productivity             | Moderate |
|                               | Low (0-5)         | Sites will be inspected only when the total population of very high, high and moderate sites have been done or when an appropriate opportunity arises. | Promote compliance with FPC Act/Regs to reduce environmental, economic and social risk of harvesting. Detect non-compliance and take appropriate enforcement action, if necessary, as deterrent. | Public Health & Safety        | Low      |
|                               |                   |  |  | Riparian Areas / Fish Habitat | Low      |
|                               |                   |  |  | Site Productivity             | Low      |

| Activity   | Site Priority     | Inspection Objectives  | Rationale   | Criteria                      | Risk     |
|--|-------------------|--|---|-------------------------------|----------|
| 1) Road Construction/Modification, Road Permit Roads, General construction | Very High (10-99) | Refer to high.   | Refer to high.  |                               |          |
|  | High (12-18)      | 91% of HIGH or VERY HIGH sites will be inspected.  | Promote compliance with FPC Act/Regs to reduce environmental, economic and social risk of road construction. Detect non-compliance and take appropriate enforcement action, if necessary, as deterrent. | Public Health & Safety        | High     |
|  |                   |  |   | Riparian Areas / Fish Habitat | High     |
|  |                   |  |   | Water Quality                 | High     |
|  | Moderate (6-11)   | Sites will be inspected only when the total population of very high and high sites have been done or when an appropriate opportunity arises.           | Promote compliance with FPC Act/Regs to reduce environmental, economic and social risk of road construction. Detect non-compliance and take appropriate enforcement action, if necessary, as deterrent. | Public Health & Safety        | Moderate |
|  |                   |  |   | Riparian Areas / Fish Habitat | Moderate |
|  |                   |  |   | Water Quality                 | Moderate |
|  | Low (0-5)         | Sites will be inspected only when the total population of very high, high and moderate sites have been done or when an appropriate opportunity arises. | Promote compliance with FPC Act/Regs to reduce environmental, economic and social risk of road construction. Detect non-compliance and take appropriate enforcement action, if necessary, as deterrent. | Public Health & Safety        | Low      |
|  |                   |  |   | Riparian Areas / Fish Habitat | Low      |
|  |                   |  |   | Water Quality                 | Low      |