Crystal Falls Forest Management Unit

2017 Forest Certification Internal Audit Report

Internal Audit Dates: August 8th-10th, 2017
Initial Post Audit Draft Audit Report: August 10th, 2017
Lead Auditor: Scott Jones
Internal Auditors: Gary Roloff, Cheryl Nelson and Jennifer Kleitch
Observers: Keith Kintigh
Trainee: Cody Norton

Opportunities for Improvement: 10
Minor Non-Conformances: 5
Multi-Unit Non-Conformances: 3
Major Non-Conformances: 0
Follow-Up Required:
- Opportunities for Improvement: 0
- Minor Non-Conformances: 2
- Multi-Unit Non-Conformances: 2

Internal Audit Report

Opening Comments:

The internal audit of the Crystal Falls forest management unit was held August 8th through August 10th, 2017. The scope of the audit was state forest land within the Crystal Falls forest management unit. The audit criteria were the June 1, 2016 version of the work instructions (WIs) and all supporting DNR policy, procedures, rules, management guides, guidance documents, plans and handbooks that were relevant to the management of state forest land including any Management Review decisions. The June 1st, 2017 version of the work instructions was made available to the forest management unit staff in mid-June, so the audit team agreed to evaluate any potential non-conformances against the prior version of the work instructions. We agreed that if the observed activity was not in conformance with the June 1st, 2017 and/or the June 1st, 2016 versions of work instructions, the activity warranted a non-conformance designation.

A candidate set of compartments and topics was sent to the forest management unit manager prior to arrival of the audit team. On Tuesday August 8th, the lead auditor worked with the forest management unit manager to finalize the route and stops. We selected two audit routes: 1) East Tour – Dickenson County (Ralph Ground Moraine Management Area where we viewed a northern hardwood research site; an active mixed upland deciduous sale with blowdown; a closed lowland spruce-balsam fir sale; a boating access site and state forest campground at Gene's Pond; several resource damage sites; a closed spruce budworm same; a grouse enhanced management site; a closed spruce plantation sale and a mixed upland deciduous sale with riparian buffers; a closed lowland harvest; and an emergency bridge replacement; and, 2) West Tour – Iron County where we viewed a jack pine trench and plant site; an herbicide, trench and plant site; a stream buffer; a boating access site and state forest campground at Glidden Lake; an opening maintenance

treatment; the Lake Mary controlled burn; a closed spruce budworm sale; a proposed mixed sale; a resource damage site; a hunter walking trail; and an open hardwood sale. On Tuesday afternoon, we conducted an opening meeting with the audit participants at the Norway office which consisted of staff introductions, purpose of the audit, management unit overview and a series of staff presentations covering a number of topics that would likely not get fully addressed in the field. Wednesday was tour day and Thursday morning we reviewed the audit findings, conducted follow-up interviews and further reviewed documents as needed. The audit team gathered evidence to determine work instruction conformance through interviews, document review and field observations. A closing meeting was held on Thursday at 1:00 pm.

Definitions:

Opportunities for improvement: An opportunity for improvement is a finding that does not necessarily represent a deficiency, but does indicate a function that can be strengthened thus improving some aspect of forest management or preventing a potential non-conformance in the future.

Unit-Level Minor Non-Conformance: A lapse in the implementation of a forest certification work instruction. A minor non-conformance is written against an individual work instruction – it does not cover multiple work instructions.

- Written against the responsible position.

Unit-Level Major Non-Conformance: This is issued against something that would jeopardize certification such as the use of a banned chemical, an external audit non-conformance that has not been addressed at the unit level or the use of a plant that is a genetically modified organism.

- Written against the unit manager.

Multi-Unit Non-Conformance: Two or more occurrences of the same or similar unit-level major non-conformances or three or more occurrences of a unit-level minor non-conformance or as recommended by the audit team and approved by the Forest Certification Team following the internal audit process.

- Written against higher levels of management
- Could trigger a 'theme' for the next round of internal audits (i.e. all units get assessed).

Audit Findings:

We greatly appreciated the cooperation, involvement and openness of the Crystal Falls unit staff. We were particularly impressed with the following aspects of their management program:

1. It was recognized that there is a need to protect areas that have potential to become old growth, but don't currently fit the Type 1 or Type 2 old growth designations. It is commendable that staff is looking for ways to protect areas that fit within the gap between the two designations.
2. Evidence of lowland protection in a hardwood sale that included an immediate inventory update to identify a new stand.
3. There was a good effort to identify resource damage sites and at least entre them into the database.
4. The audit team observed good examples of local exotic invasive species management.
5. Fisheries Division is working well with the other divisions in providing input where forest treatments abut water features, especially where buffers are needed along cold-water streams.
6. At the Camp Five Hunter Walk-in Trail, we observed a locally coordinated effort (within the Unit) of Early Detection, Rapid Response and Decontamination for control of wild parsnip (an exotic invasive species).
7. Local arrangements exist or are being developed with Cooperative Invasive Species Management Associations to help control and manage exotic invasive species.
8. Reporting of resource damage reports is part of LED Performance Expectations.
9. The efforts to decontaminate equipment such as trucks.
10. The audit team was impressed with the knowledge of unit field staff.
11. The unit's understanding of land use, minerals and use permit activities was very good.
12. The wildlife habitat component of the Compartment Narratives contains good rational for considering the habitat specifications of the features species.

Although an audit theme was added for the 2015 and 2016 audits, there was no theme audit for 2017.

Opportunities for Improvement (OFI):

OFI 12-1, W.I. 1.3: In checking the training records of unit staff and in interviewing unit staff during the field tours, there has been no training on the identification of threatened, endangered, rare or special concern species or natural communities as required in the Western Upper Peninsula Regional Sate Forest Management Plan.

Training is being developed and will be provided in late spring or early summer 2018.

OFI 12-2, W.I. 1.3: The Grouse Enhanced Management Site has been formally identified and given the difference in management direction and the amount of aspen in the area, the age-class distribution analysis should be revised so that there are no surprises in this planning period.

This will be addressed as part of the larger amendment process for each of the regional state forest management plans and should be completed by December 15th, 2018.

OFI 12-3, W.I. 1.4: Timber sale contracts in hardwood stands and other appropriate Red-Shouldered Hawk habitat should contain the specification 5.8.5 Protection of Raptor Nests.

Requiring this specification in appropriate contracts will be discussed during a spring 2018 staff meeting.

OFI 12-4, W.I. 2.1: Breakup Jackpine (Forest Treatment Proposal F12-396) sale was harvested in 2006 as part of jack pine budworm control. The stand was initially identified for natural regeneration, but the natural regeneration was deemed a failure in 2011. This stand did not appear in the regeneration tracking system until it switched over to artificial regeneration after 2011. The Unit should consistently implement the regeneration monitoring protocol either through use of the regeneration time clock spreadsheet or in Michigan Forest Inventory (MiFI) (W.I. 2.1.5).

Implementation of the regeneration monitoring protocol will be discussed with staff as part of a spring 2018 staff meeting in the unit.

OFI 12-5, W.I. 2.2: At artificial regeneration sites during the Crystal Falls Internal audit, auditors observed several opportunities for improved communication between unit staff and timber management specialist on the status of site preparation activities.

Staff turn-over issues have been addressed and all staff are aware of the need to ensure lines of communication are open.

OFI 12-6, W.I. 2.2: Work Instruction 2.2 was updated in 2017 to indicate that pesticide application plans shall only be developed by Certified Pesticide Applicators.

The unit manager will ensure that staff preparing pesticide application plans in the unit are appropriately certified for the use of chemicals being proposed.

OFI 12-7, W.I. 3.1: Vernal Pool Protection in Timber Sales. Within timber sale #12-065-17-01, "Pipeline Mix", an existing vernal pool was excluded from the timber sale with use of a red line. However, 1) the site should have been identified on the timber sale map; 2) timber sale spec 5.4.6 – wet area protection should have been included; and 3) buffering width, protections and allowable activities should be developed in accordance with The Michigan DNR/DEQ Sustainable Soil and Water Quality Practices on Forest Land (2009).

The unit manager will ensure that staff are aware of the need to include vernal pool identification and buffers in timber sale maps to ensure their protection.

OFI 12-8, W.I. 5.1: Staff was unaware of the need to use the Experimental Management project form R4010 to document experimental treatments and that these projects are deposited in the Great Lakes Silviculture Library. For example, staff prescribed treatments that included whole tree skidding, scalping with a bulldozer, and scarification with a bulldozer and swing rake to naturally regenerate red pine, as well as creating patch-cuts and harvesting all non-oak species to naturally regenerate red oak. Using the correct protocol will help ensure experimental prescriptions will be

monitored appropriately, results will be shared with other units and agencies and treatments aren't unnecessarily replicated.

> Staff will be made aware of the form R4010 for Experimental Management projects and the related requirements for experimental treatments at an upcoming spring 2018 staff meeting.

OFI 12-9, W.I. 6.2: There was evidence to suggest that on recreation trail designations, re-routes and other issues that impact the resources, managed by the various divisions, communication is inconsistent and approvals are going through without all impacted parties being aware, particularly on trails that crossed multiple ownerships.

> The unit manager will ensure that staff understand the need for communication with staff from other divisions and other landowners when work is to be performed on existing trails or new trail development on state forest land.

OFI 12-10, W.I. 7.1: Consideration should be given to recording comments in the comment section of the Pre-Sale Checklist to provide a clearer picture of what is needed in the contract and why.

> The need for supporting documentation it the form of comments on the pre-sale checklist will be addressed at a staff meeting to be held in the spring of 2018.

The DNR's internal audit review process (Work Instruction 1.2) requires a record, evaluation and report of non-conformances with forest certification standards and related work instruction at all levels of the department. As part of that process, we documented the unit's conformity with policy, procedures, management review decisions and work instructions. The observed non-conformances are listed below. There were nine unit-level minor non-conformances of which three were ultimately determined to be minor multi-unit non-conformances and no unit-level major non-conformances.

Minor Multi-Unit Non-Conformance 12-2017-01

- Work Instruction 1.4 – Biodiversity Management on State Forest Land

Requirement of Audited Standard/Work Instruction:

- "Conservation objectives listed in the Special Conservation Area category have been identified through a variety of methods and mechanisms and it is important to understand how the objectives were determined."

Observed Non-Conformity:

- There are several inconsistencies related to information available to staff and the public regarding State Wildlife Management Areas in the Crystal Falls Forest Management Unit. A State Game Area map for the Deer River Flooding in Iron County is available to the public through the DNR website and indicates the application of State Game Area land use rules on State Forest Land adjacent to the flooding. However, the flooding is an impoundment from a dam administered by the Iron County Road Commission and is not included in the Wildlife Management Area Special Conservation Area layer in the Geographic Decision Support Environment and is not listed on

State Wildlife Management Areas or on the In-scope/Out-of-scope Lands list memo developed in September 2009. In addition, the Lake 36 Flooding, Gene's Pond, Feltch Mountain Flooding, Hardwood Reservoir and Groveland Mine Flooding and adjacent lands (State Wildlife Management Area) are included in the Special Conservation Area layer in the Geographic Decision Support Environment as State Wildlife Management Areas though staff indicated that these sites are not managed as such. In addition, except for Gene's Pond, the floodings are not included on the In-scope/Out-of-scope Lands list memo developed in September 2009.

Root Cause:

- A State Wildlife Management Area is defined as an area with Wildlife Division interests (either funding or values), but that is administered by another division (often Forest Resources Division). In many cases, State Wildlife Management Areas were established in the 1950's and 1960's with partners to produce both wildlife and other recreation values. Often State Game Funds or Federal Pittman-Robertson funds were used to purchase lands and/or infrastructure associated with the sites which results in Federal interest and accountability. This Federal nexus requires that Master Plans be developed and updated and that USFWS be notified when areas have "outlived their useful purpose" and will no longer be actively managed for wildlife values (decommissioned). In addition, management history of individual areas is often unclear because of poor historical record keeping. State Wildlife Management Areas should be identified as Special Conservation Areas in the Geographic Decision Support Environment. Those State Wildlife Management Areas managed in partnership with Forest Resources Division should be characterized as In Scope.

Corrective Action:

- Verify Federal wildlife nexus for Deer River Flooding, Lake 36 Flooding, Gene's Pond, Feltch Mountain Flooding, Hardwood Reservoir and Groveland Mine Flooding and update status with USFWS as appropriate. Review and update Special Conservation Area layer and In Scope/Out of Scope Lands as needed.

Proposed Completion Date: September 1, 2018

Date of Closure: Pending

Minor Non-Conformance 12-2017-02

- Work Instruction 2.2. Use of Pesticides and Other Chemicals on State Forest Land

Requirement of Audited Standard/Work Instruction:

- When the decision has been made to implement an approved Forest Treatment Proposal (FTP, R-4048) requiring a pesticide application, complete a Pesticide Application Plan (PAP, R-4029E). PAPs shall only be developed by individuals with Commercial Pesticide Applicator Certification. Attach the PAP to the FTP. The PAP must include personal and environmental safety precautions, potential environmental effects, and the location of any environmentally sensitive areas, including threatened or endangered species and species of special concern. The PAP must also document planned public notification methods for each application.

Observed Non-Conformity:

- Several otherwise complete Pesticide Application Plans lacked approval signatures.

Root Cause:

- The Western Upper Peninsula Timber Management Specialist position was vacant at the time and was being addressed through acting assignments. As a result, this application was processed, but the required approvals were not made available to the unit and were not printed out and attached to the application it the compartment file.

Corrective Action:

- The Western Upper Peninsula Timber Management Specialist position has since been resolved the new incumbent will ensure that the appropriate approvals will be provided electronically to the unit to be kept on file with the applications in the appropriate compartment files.

Actual Completion Date: November 1, 2017

Date of Closure: April 10, 2018

Minor Non-Conformance 12-2017-03

- Work Instruction 2.3 Integrated Pest Management and Forest Health

Requirement of Audited Standard/Work Instruction:

- WI 2.3 Para 5B indicates that Forest Resources Division's Forest health Specialist should provide direction in regards to monitoring and limiting the spread of invasive plant species, including advice on available control measures.
- WI 2.3 Para 5C indicates that plans to limit the establishment/spread of invasive plant species should be developed and implemented for any situation/location where this is likely to occur, with emphasis on the probability of risk. Recreational facilities designed for equestrian and other uses (campgrounds, trails) should be considered as a high-risk priority for developing these plans.

Observed Non-Conformity:

- No specific and coordinated guidance on how to detect and limit the spread of exotic invasive species. The Unit has proactively managed forest health issues (oak wilt, spruce budworm) in consultation with Forest Resources Division forest health specialists and the audit team observed good examples of local exotic invasive species management, but a coordinated forest level effort on early detection and rapid response to exotic invasive species was lacking.

Root Cause:

- The Early Detection Rapid Response is relatively new and is not fully functional yet. Better communication and cooperation is needed between Forest Resources Division field staff and the Cooperative Invasive Species Management Area staff.

Corrective Action:

- Each year all 20 million acres of forest land in Michigan are surveyed from the air for new outbreaks of native and invasive forest pests and diseases. In addition, the state maintains a watch list of high threat aquatic and terrestrial invasive species that are not yet present in Michigan or not known to be widespread. The state is currently updating its Early Detection and Response Policy to include terrestrial invasive species.
  In addition, an early alert system is set up in MISIN, the state's invasive species database. It is available for any manager to add species for which they would like to receive alerts for a given region or county when reported to MISIN. Finally, all the state forest system falls into the borders of a Cooperative Invasive Species Management Area (CISMA). Michigan provides core funding to all the CISMAs in the state as part of the Michigan Invasive Species Grant Program. As part of their funding, they: 1.) provide education and outreach about invasive species to limit their spread, 2.) survey their areas for invasive species, 3.) respond to reports of new invasive species in their areas, and 4.) Conduct invasive species control projects.

Proposed Completion Date: October 15th, 2018

Date of Closure: Pending

Minor Non-Conformance 12-2017-04

- Work Instruction 3.1 Forest Operations

Requirement of Audited Standard/Work Instruction:

- Completion of intrusive activities will be documented by completion of a R4048-1 Forest Treatment Completion Report, and where appropriate updating of MiFI Stand and Treatment databases, including creation of any 'Next Step' treatments.

Observed Non-Conformity:

- In compartment 36 stands 39 and 79, the Michigan Forest Inventory (MiFI) database has not been updated for the next step treatment for Wildlife underplanting of white pine as well as regeneration monitoring the aspen treatment and the white pine underplanting.

Root Cause:

- The unit manager has talked to stand examiner and the cause of this is in the transfer to the new inventory system (Operations Inventory >IFMAP >MiFI) the comments were lost and it was assumed that everything carried over.

Corrective Action:

- Staff is aware that not all comments carried through from the transfer of the different inventory systems. Staff will be asked to look at the remaining Year of Entry Compartments that have not been inventoried under the MiFI system and make sure that comments and next steps are added.

Proposed Completion Date: December 31, 2018

Date of Closure: Pending

Minor Non-Conformance 12-2017-05

- Work Instruction 3.2 BMP Non-conformance reporting

Requirement of Audited Standard/Work Instruction:

- DNR employees must report problems using a non-conformance report form. This information will be sent to the Forest Resources Division Unit Manager who is responsible for the site. The Unit Manager is responsible for recording and tracking all reported best management practice problems.

Observed Non-Conformity:

- The Resource Damage Report database is not being maintained to the standard suggested in Work Instruction 3.2-4. Resource Damage Report entries have missing and/or incomplete information making conformance to Work Instruction 3.2-5 difficult and sub-standard. Examples of this are Resource Damage Report #'s 12032222016043, 12044222015002 and 12047222016011). Some that were identified as high or urgent priority also had little information and were not closed in the database (12154362006014, 12055222017038 and 12081222006011).

Root Cause:

- The new unit manager was not up to date on Resource Damage Report role.

Corrective Action:

- The unit manager will take a more active role in this process and work with unit fire supervisor on how to manage this data base.

Actual Completion Date: December 1, 2018

Date of Closure: April 10, 2018

Minor Non-Conformance 12-2017-06

- Work Instruction 3.3 Best Management Practices – Road Closures

Requirement of Audited Standard/Work Instruction:

- 3.3.2 Non-Emergency "normal" Road Closures: "Any DNR employee identifying an existing road under the administration of the Department which they believe should be temporarily, seasonally, or permanently closed should submit a proposal to the Forest Resources Damage Unit Manager…"

Observed Non-Conformity:

- There is a gate limiting motorized vehicle use along a trail maintained for walk-in access for hunting and other recreation. The audit team did not find any documentation that the procedure outlined in Work Instruction 3.3.2 was followed, nor is there a Director's Order closing the trail to motorized vehicle use.

Root Cause:

- Wildlife Division has found Documentation of the Directors Order for the closure of this forest road. It is included with this response. Wildlife Division insists that the Grouse Enhanced Management Site has a road closure plan that has been forwarded through the Forest Resources Division and Wildlife Division chains of command. No one seems to know where this has ended up and where it is in the system. There have been multiple acting unit managers on this unit and this has added to the problem of a specific person following through with the process.

Corrective Action:

- The District Supervisor will take the lead on discovering where the documentation is and moving it forward to approval.

Proposed Completion Date: September 30, 2018

Date of Closure: Pending

Minor Non-Conformance 12-2017-07

- Work Instruction 17.1 Timber sale preparation and administration procedures

Requirement of Audited Standard/Work Instruction:

- Timber Contract Inspection Process Part 2 Timber Sale Inspection Process
  Part A-1: Record pre-sale meeting date, attendance and method (on-site, telephone or in the office)
  Part A-2: Record name of the Sustainable Forestry Education (SFE) trained foreman and verification of status as a Qualified Logging Professional (has core training and annual continuing education).
  Part B-2: Payment unit start/finish dates.

Observed Non-Conformity:

- Timber sale administer did not record their name in the 'Attendees' section of the Field Inspection Report. Recorded Sustainable Forestry Education trained individuals were not up-to-date on their training qualification. Payment unit start/finish dates were not recorded in the 'Date Payment Unites Completed' section of the 'Field Inspection Report'.

Root Cause:

- Staff is familiar with this work instruction and failed to record the information on the inspection form.

Corrective Action:

- Verify Staff has been instructed that all information listed above is to be filled out properly on the timber sale inspection form. Unit Manager will check staff inspection forms periodically to insure staff is filling out the form properly.

Actual Completion Date: October 1, 2017

Date of Closure: April 10, 2018

Minor Non-Conformance 12-2017-08

- Work Instruction 8.1 Michigan DNR Staff Training for Forest Management

Requirement of Audited Standard/Work Instruction:

- 8.1.1.d "Supervisors will determine job training needs in conjunction with employees. As part of the annual performance appraisal process, supervisors must identify employee training needs per DNR Personnel Manual 21.10.02 and divisions' policies.

Observed Non-Conformity:

- Forest Resources Division staff has not had an annual performance appraisal in over a year; therefore, training needs have not been adequately identified.

Root Cause:

- The unit has been in transition from acting unit managers to a full-time unit manager that was only on the unit for 1 year and 3 months, back to an acting unit manager and now a new full-time unit manager. There has been no consistency at the unit manager position.

Corrective Action:

- The staffs have performance plans for 2017. The unit manager will be sitting down with staff and going over their performance evaluation during November/ December 2017. During the evaluation, a training plan will be developed for each individual.

Actual Completion Date: December 15, 2017

Date of Closure: April 10, 2018