RESOURCES

NATURAL

HABITAT CONSERVATION PLAN FOR STATE TRUST LANDS

Implementation Monitoring Report for Fiscal Years 2009-2011

March 2012

Revised May 2012

WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

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by

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www.dnr.wa.gov/ResearchScience/TurstlandsHCP/Pages/lm_hcp_implementation_monitoring.aspx
www.dnr.wa.gov

Contents

This report was revised in May 2012. In addition to minor corrections, information was added to clarify northern spotted owl strategy review results. The information regarding database validation has been consolidated in one chapter to enhance readability.

List of Tables

List of Acronyms

DFC	Desired future condition
DNR	Washington State Department of Natural Resources
FMU	Forest management unit
FPA	Forest Practices Application
FY	Fiscal year (July 1 – June 31)
GIS	Geographic information system
HCP	1997 Habitat Conservation Plan for state trust lands
IMR	Implementation monitoring report
NRF	Nesting, roosting and foraging (a designation of northern spotted owl habitat)
NSO	Northern spotted owl
OESF	Olympic Experimental State Forest
P&T	Planning and Tracking, a database system
RMZ	Riparian management zone
SEPA	State Environmental Policy Act
SOMU	Spotted Owl Management Unit

Executive Summary

With this document, the Forest Resources and Conservation Division resumes the commitment of the trust lands Habitat Conservation Plan (DNR 1997) to produce an annual monitoring report. Due to the economic downturn and resulting lack of management funds, in 2009 the state Department of Natural Resources (DNR) suspended the monitoring program. As the financial challenges eased, the agency has renewed efforts on monitoring and the reporting of these efforts. This report documents implementation monitoring efforts reviewing management activities completed in fiscal years 2009 through 2011. For this report, strategies and elements were monitored primarily in the office with limited field verification. As we move forward with the monitoring program, expanded field review will be a component of our monitoring efforts.

Timber sales completed in fiscal years (FY) 2009, 2010 and 2011 in all planning units, excluding the OESF (Olympic Experimental State Forest) Planning Unit, were reviewed for compliance with the northern spotted owl strategy. Timber sales completed during this time period within the Westside planning units, excluding the OESF Planning Unit, were reviewed for compliance with the rain-on-snow element of the riparian strategy. Timber sales completed during this time period within the Westside planning units, including the OESF Planning Unit, were reviewed for compliance with the roads element of the riparian strategy in the Habitat Conservation Plan (DNR 1997).

Monitors examined documentation regarding specific timber sales reported as implemented in two tracking systems, the P&T system and the NaturE system, and reviewed results of the Forest Practices Division compliance monitoring program. The HCP checklists for FY 2009-2011 were collected. Data from the checklists were recorded to determine the most frequently checked HCP strategy or element.

Concerning the spotted owl conservation strategy, of the six sales needing timing restrictions, three had adequate timing restrictions in the contract. All timber sales were found to comply with the rain-on-snow element of the HCP. Compliance with the roads element of the riparian strategy was 88 percent. A review of the HCP checklists showed the elements most frequently implemented were riparian management zones; large, structurally unique trees; and roads. Recommendations for further improving compliance with the HCP are included.

In addition, the reliability of the DNR's Planning and Tracking (P&T) database was assessed by verifying the completion status of silviculture activities. The completion status of silviculture activities assessed was correct in P&T, however not all sales recorded as complete in NaturE were also complete in P&T.

Chapter 1: Implementation Monitoring

INTRODUCTION

Background

This report is produced as a part of the Washington State Department of Natural Resources (DNR) trust lands Habitat Conservation Plan (HCP) (DNR 1997) commitments that are outlined in the HCP Implementation Agreement. The primary audience is the US Fish and Wildlife Service and the National Oceanic and Atmospheric Administration (together referred to as the Services), and other interested parties. For general background information on implementation monitoring, please see Appendix A. For more information on the HCP Implementation Agreement, please see the Trust lands HCP webpages.

Forest Resource and Conservation Division implementation monitoring offers an opportunity for review of land management activities and:

- Identification of successes and achievements;
- Identification of areas where compliance has occurred;
- Identification of areas where compliance did not occur, where there were challenges and contributing factors; and
- Identification and implementation of best practices and improvements, resulting in improved program performance.

In the context of the HCP, the reviews are focused on land management activities that occur on DNR-managed state trust lands within HCP planning units. Examples of activities that may be monitored include timber sales, recreation, and roads. The emphasis is on ensuring that land management is conducted in a manner consistent with the HCP strategies and related guidance. The implementation monitoring work, while perhaps supporting effectiveness monitoring efforts, is not focused on measuring the longer-term effectiveness of management decisions.

Because of time constraints and the re-initiation of our monitoring program after a three-year hiatus due to budget reductions, the focus for this report has been an office review of timber sale activities that have taken place during fiscal year (FY) 2009-2011. The choice of which HCP strategies to review was based on those for which the assessment could be completed in an in-office review during the available timeframe. Data were available for the northern spotted owl (NSO) strategy and the rain-on-snow and roads elements of the riparian strategy.

In 2012, office and field work will resume with review of field activities and subsequent reporting. Priorities for future monitoring efforts are still to be determined. However, further review of the timber sales completed in the FY 2009-2011 may be included in a future report.

Objectives

The objectives for this reporting period are to:

- Re-institute DNR's 1997 HCP implementation monitoring efforts.
- Determine whether timber sale activities as implemented are consistent with the HCP northern spotted owl strategy in all eastside and Westside HCP planning units except the Olympic Experimental State Forest (OESF) Planning Unit.
- Determine whether timber sale activities as implemented are consistent with the rain-on-snow element of the HCP riparian conservation strategy in all Westside HCP planning units except the OESF Planning Unit.
- Determine whether roadwork activities as implemented are consistent with the road element of the riparian conservation strategy for Westside HCP Planning Units, including the OESF Planning Unit.

METHODS

Background

A total of 563 timber sales were listed as completed in DNR's NaturE financial management system in FY 2009-2011 in all planning units on state lands managed under the HCP. Activities included in this report may be shown in different fiscal years than in the HCP annual reports. This is because DNR's Planning & Tracking database was used to determine completion status of activities for the HCP annual report. The trust lands HCP includes five strategies: marbled murrelet, northern spotted owl, riparian, multispecies conservation for federally listed species, and multispecies conservation for unlisted species. The marbled murrelet and northern spotted owl strategies are not subdivided into elements in the HCP. The riparian and two multispecies strategies consist of elements that detail the approach for supporting the particular species or individual components of the strategy.

HCP checklists

An HCP checklist is a summary document prepared for each timber sale that occurs within an HCP Planning Unit. It indicates which of the conservation elements or strategies applied to the particular timber sale (see Appendix B for an example HCP checklist). An attempt was made to collect HCP checklists for all the timber sales completed during the reporting period.

HCP checklists were found for 556 timber sales out of the total of 563 timber sales completed in the FY 2009-2011 (Table 1). These checklists were found in electronic form as part of the timber sale packet and were originally not entered into a database. Subsequently, the data from these forms were entered into an Excel spreadsheet by the monitoring staff.

Table 1. Number of timber sales on state lands managed under the HCP and number of HCP checklists found for those sales, by fiscal year.

Fiscal year	Sales on lands managed under the HCP	Sales with available HCP checklists
2009	211	206
2010	191	189
2011	161	161
Total	563	556

For each fiscal year the number of times each element was checked on an HCP checklist was tallied and the proportion of checks to the number of sales with HCP checklists was calculated.

Northern spotted owl strategy

Sales evaluated

GIS was used to determine which of the 503 sales outside the OESF Planning Unit required timing restrictions or included activities within nest patch core and buffer areas.

None of the 60 sales in the OESF Planning Unit were evaluated for the NSO strategy. Sales in the OESF were excluded because of inadequate staff time to evaluate sales given the experimental aspects of the management strategy for this planning unit.
Sixty different sales, including 27 variable retention harvest sales and 33 thinning sales, occurred in NRF or dispersal / DFC management areas. The 27 variable retention harvest sales all had documentation indicating compliance with the 50% habitat requirements for Spotted Owl Management Units (SOMUs). No GIS analysis or field evaluation was made to determine actual compliance of these sales in this monitoring period. Evaluation of thinning sale documentation was not undertaken because field data is necessary to determine compliance on these sales.

Evaluation process

The location of each sale was determined using GIS data layers. A GIS layer showing the forest management units for the timber sales completed in each fiscal year was intersected with northern spotted owl habitat layers including nesting, roosting and foraging (NRF) and dispersal management areas, NSO nest sites, and best 70 acres locations. The proprietary DNR HCP Implementation Checklist form for Northern Spotted Owl, a form submitted with each Forest Practices Application for sales covered by the HCP, and the State Environmental Policy Act (SEPA) form were also reviewed to determine if the information on the forms matched the GIS layers. Sales were assessed to determine whether:

- Harvesting occurred in designated 500 acre nest patches.
- The harvesting operations timing restriction (March 1 to August 31) was documented properly and included in the sale contract when necessary.
- Variable retention harvesting of suitable spotted owl habitat in NRF or dispersal/ DFC management areas occurred only if the SOMU was above the habitat threshold defined in the HCP.

For sales requiring harvesting operation timing restrictions, the FPA and State Environmental Policy Act (SEPA) forms were reviewed to determine if the need for a timing restriction was documented. It was expected that these two forms and the contract would address the timing restriction.

Rain-on-snow element of the riparian strategy

Sample selection

Compliance with the rain-on-snow element was assessed for all western Washington timber sales, excluding those in the OESF Planning Unit. The monitors evaluated sales completed in FY 2009-2011 that included forest management units (FMU) that intersected the rain-on-snow and snow dominated zones and had Forest Practices Application (FPA) decision due dates on or after March 23, 2009. Nineteen sales, all completed in FY 2011, met these criteria. The March 23, 2009 cut-off date for assessment was selected because, after this date, hydrologic maturity reports were automatically generated on a daily basis. Previously, these reports were run on an as-needed basis during pre-sales layout work by regional field staff and were not saved or easily accessible for monitoring purposes.

Evaluation process

GIS was used to determine the number of acres harvested in each sub-basin in which each timber sale was located. Although riparian areas in the FMUs were accounted for in the GIS layer, the database did not differentiate between the harvested areas and leave tree clumps in the FMUs. Because of this, the actual area of hydrologically mature forest in each sub-basin is underestimated. Nonetheless, for compliance assessment, the area of FMUs in GIS was used to calculate the post-harvest area of sub-basin hydrologically mature forest.

The daily hydrologic maturity report for each sub-basin was used to determine compliance. The date for the report used to monitor a sale was the Forest Practice Application (FPA) decision due date. If the decision due date was on a weekend, the sale was evaluated based on the Friday prior to the due date. In all but one of the daily hydrologic maturity reports used in monitoring, hydrologic maturity was defined as stands greater than 25-years old. One report uses a different definition of hydrologic maturity. In this report hydrologic maturity is defined as stand age greater than 25-years old and relative density equal to or greater than 25. The definition used in the reports was changed again in 2011 to stand age of equal to or greater than 25 years and relative density equal to or greater than 25. Only this most recent definition is fully consistent with the definition in DNR Procedure 14-004-16 Assessing Hydrologic Maturity, approved in 1999.

Information in the daily hydrologic maturity report was used to first determine if implementation of the rain-on-snow element was required and then, if required, whether the sale was in compliance with the HCP. If the rain-on-snow element needed to be implemented in a sub-basin, compliance was determined by subtracting the number of acres in the timber sale in the rain-on-snow or snow-dominated zones from the surplus acres in the sub-basin as listed on the daily hydrologic maturity report. If a surplus remained after harvest (i.e., greater than 2/3 of the DNR-managed land in the rain-on-snow or snow-dominated zones remained in a hydrologically mature state), the sale was considered compliant with the HCP.

Nineteen timber sales were evaluated. Seventeen sales were evaluated based on the daily hydrologic maturity report. Two sales were covered by watershed analyses. No other sales were evaluated.

Timber sales within watershed analysis areas are compliant with the HCP if they adequately address the requirements stated in watershed analysis. These two sales were evaluated by determining whether the FPA for the sales included plans addressing the watershed analysis results.

Roads element of the riparian strategy

Data source

The HCP outlines a vision for a future roads development strategy. At this time, the roads element of the riparian strategy requires following laws contained in Washington Administrative Code 222-24 and the policies in the Policy for Sustainable Forests (DNR 2006). Implementation monitoring of the roads element is done by DNR Forest Practices Division. Data from the Forest Practices office and field monitoring of roads on DNR-managed lands covered by the HCP were used in this report. No additional field or office data were used.

Sample selection

The Forest Practices Division selected activities to monitor by first stratifying Class II renewal, Class III, and Class IV special Forest Practices Applications (FPA) by DNR region and then randomly selecting individual applications. Only applications with road or riparian activities were retained in the sample. Road activities include road abandonment, road construction, culvert installation and water crossing replacement, among others. If multiple road activities of the same type were present in the selected FPA, only one occurrence of each type was randomly selected for monitoring. Further details on the methods used in sample selection can be found in the Forest Practices compliance monitoring program description, pages 11-12 (Lingley et al. 2010). This report only includes Forest Practices Division road monitoring data for calendar years 2009 and 2010 because monitoring data is not yet available for 2011.

A total of 1,090 FPAs on DNR-managed forest lands covered by the riparian strategy (the Westside HCP planning units, including the OESF) were active during the 2009 and 2010 calendar years. Sixteen of these 1,090 FPAs were reviewed by Forest Practices Division staff.

Evaluation process

Interdisciplinary teams performed field reviews of the selected activities between March 2010 and September 2011. These teams include representatives from Forest Practices Division, regional Forest Practices foresters, Washington Departments of Fish and Wildlife and Department of Ecology, as well as tribal representatives. Landowners or their representatives were invited to participate as observers in the assessment.

The characteristics of the site determine whether and how particular rules need to be implemented. Compliant activities meet the requirements of the Forest Practices Rules, given the site characteristics in which the activity is located. Non-compliance can occur in different situations.

- The first is when the site is correctly identified but the activity does not comply with the rules.
- The second is when the site is incorrectly identified and the resulting activity does not comply with the standards required for the actual site characteristics. This means that even if the activity is implemented correctly for the site characteristics identified on the FPA, the site is non-compliant if the activity does not meet the requirements for the actual site characteristics. If a majority of the ID team cannot agree on the compliance level, the activity is recorded as undetermined.

If an activity is non-compliant, the level of non-compliance is recorded. Three levels of non-compliance are defined by Forest Practices Division. *'Minor non-compliance'* means that the activity may cause impacts of short duration over a small area. *'Moderate non-compliance'* means the activity has the potential to impact resources. *'Major non-compliance'* means the activity has a high potential for damage or damage to public resources is evident.

Statistical analysis

The percent of activities in the each of the two sample groups that were compliant was calculated. The 95 percent confidence intervals* were then calculated for proportion of compliant timber sales.

*The confidence interval is a statistical description of the certainty of the reported compliance rate.

RESULTS

Elements reported on HCP checklists

Between the beginning of FY 2009 and the end of FY 2011 a total of 563 timber sales took place on state trust lands managed by DNR under the HCP. Of these sales HCP checklists were located for 556 sales (Table 1). Seven HCP checklists were not found.

The roads, large, structurally unique trees, and riparian management zone (RMZ) elements were the most commonly marked elements on the HCP checklists in each fiscal year (Table 2).

Table 2. Elements most commonly marked (greater than 10 percent) as implemented on the HCP checklists in FY 2009, 2010, and 2011, for all HCP Planning Units.

HCP Element	FY 2009	FY 2010	FY 2011
Roads	77%	84%	94%
RMZ	83%	88%	92%
Large, structurally unique trees	79%	85%	92%
Slope stability	40%	46%	40%
Wetlands	30%	38%	34%
Marbled murrelet	31%	42%	29%
NSO	35%	43%	26%
Rain-on-snow	26%	27%	26%
Cliffs	10%	11%	11%

Northern spotted owl strategy

Of the 503 sales evaluated to determine if timing restrictions were necessary, six sales needed timing restrictions. Four of these six sales were in NRF or dispersal/DFC management areas where the timing restriction applies within 0.7 mile of an NSO nest. The other two sales were outside NRF and dispersal/DFC areas where timing restrictions are required within the best-70 acre habitat areas. Based on the timber sale contract, four of the six sales had timing restrictions in the harvest contract. However, in one case the timing restriction did not cover the entire area necessary. A determination whether harvesting actually took place during the timing restriction period cannot be made.

FPA and SEPA forms are submitted as part of the timber sale packet. If a timing restriction is required it should be listed on both of these forms and the timber sale contract. A complete set of documentation was found for only two of the six timber sales reviewed.

While reviewing timber sales for actual harvest entry in the 500-acre nest patch core and buffer, two overlaps in the GIS layers in between the timber sale boundary and the nest patches were identified. The sale with the largest overlap was visited. No operations were found in the overlap area and the on-the-ground timber sale boundary was found to be outside the nest patch area, so

no harvest occurred within the nest patch. The overlap areas in the other sale are long and narrow and appear to be due to inexact digitization.

Rain-on-snow element

Of the 17 sales assessed using the daily hydrologic maturity report, six were in sub-basin where the rain-on-snow element applied and 11 were in sub-basins where it did not apply. A surplus of hydrologically mature forest remained in the sub-basins of the six sales were the rain-on-snow element applied.

The two sales covered by watershed analyses both included plans in the FPAs which address the watershed analysis results for hydrologic maturity. These two sales, and the six sales where surplus hydrologically mature forest remained in each sub-basin, were considered compliant with the HCP.

Roads element

Of the 16 FPAs reviewed for the roads element on state lands managed under the HCP, most were found to be compliant (88 percent ±16 percent). One activity was rated undetermined and one activity was rated non-compliant-minor. The reason for the non-compliant-minor rating was the finding of three over-steepened stream banks on non-fish bearing streams as a result of culvert removals. These removals were part a 13,304 foot road abandonment activity which included eight culvert removals, one of which was on a fish bearing stream.

DISCUSSION

Elements reported on HCP checklists

The consistency with which the HCP checklists were filled out was not formally evaluated. Anecdotally, however, there appear to be cases where strategies are marked on the checklist when it does not appear they apply, and vice-versa. Reducing these "false positives" and "false negatives" may require some additional clarification or training regarding when a strategy or element applies and how to fill out the checklists.

Northern spotted owl strategy

Based on available documentation, the monitors were unable to determine whether timber management operations occurred between March 1 and August 31 in sales that required timing restrictions. It is possible that operations occurred outside of this period in sales which did not have a timing restriction clause in the contract. If this was the case the sales would be compliant with the HCP. Likewise, if harvesting occurred between March 1 and August 31 in areas with a timing restriction clause in the timber sale contract, an HCP violation would have occurred.

In the course of monitoring it was found that the locations of NSO nest sites in the Washington Department of Fish and Wildlife GIS data layer changed over time. The locations of some nest sites that required the timing restriction changed in the data layer in 2004, which was prior to the submission of FPAs for two of the sales with timing restriction errors. HCP Amendment No. 1 (DNR 2004, pg.25), states: "Nest site plans are documented on orthophotos as well as in DNR's Planning and Tracking System and the GIS database." Reference to this data layer during sale development will help ensure compliance with the HCP.

Road element

The compliance rate for road activities was 88 percent, which compares favorably to state-wide compliance by all landowners. Results from the past reports show that 86 percent (±7%) and 79 percent (±10%) of industrial landowners were compliant with forest practice rules in the 2006-2007 and 2008-2009 biennia, respectively (Lingley and Gregory 2009; Obermeyer and Shelly 2011).

RECOMMENDATIONS

Selection of elements to monitor based on frequency of implementation and relative risk of non-compliance

Future monitoring of trust lands HCP elements should consider the frequency that the elements are applied, as well as the relative risks inherent in each element. Only risk assessment of non-compliance for elements of the riparian strategy has been completed (DNR 2001). The most common elements could be monitored more frequently, with less frequent elements monitored periodically. Based on FY 2009 to 2011 data from the HCP checklists, the most common strategy elements are large, structurally unique trees, riparian management zone, roads, slope stability, northern spotted owl, marbled murrelet and wetlands.

Ensure oversight of road abandonment and culvert removal

Proper road abandonment and culvert removals are critical to successfully implementing the riparian strategy. Oversight and communication regarding these activities by DNR staff increases the chance of successful implementation. Even though the compliance level was high, DNR must continue to ensure adequate communication of requirements between DNR land management staff and Forest Practices staff, and clear direction to equipment operators for road abandonment and culvert removal projects.

Collaboration by HCP implementation monitoring and Forest Practices compliance monitoring staff

Compliance data on forest road activities are needed for both Forest Practices compliance monitoring and HCP implementation monitoring. In collecting these data, duplication of work effort should be avoided and opportunities for collaboration sought. Communication between the two monitoring programs during the planning and field work stages is crucial to accomplishing this. Analysis of road activity data could also be done collaboratively to increase efficiency.

Chapter 2: Database Validation

INTRODUCTION

The HCP states that, "statistically valid sampling of management activities will be conducted to evaluate the reliability of information stored in [DNR's planning and tracking and geographic information system] databases." DNR's planning and tracking (P&T) database is the central repository for information on statewide forest management activities. Local managers use the database to plan and track specific activities across the landscape, such as planting or thinning. Forest planners use the data to project forest growth and landscape conditions. At the agency level, the data are used to develop budgets, monitor performance, and meet reporting requirements for trust beneficiaries or public inquiries. Silviculture activities are necessary to perpetuate stands. Accurate tracking of silviculture activities is necessary to ensure that landscape level HCP goals are achieved. The information in this database is heavily used for reporting, including for HCP and forest certification reports.

This monitoring effort is focused on assessing the reliability of completion of activities and completion of sales information stored in the P&T database, checking the database against aerial imagery, contract records, and the financial tracking system.

Methods

Sample selection

During FY 2009 and FY 2010, 2,044 individual silviculture activities conducted as part of site preparation, regeneration, and vegetation management (Table 4) on state trust lands managed under the HCP were reported as complete in P&T. A stratified random sample of 204 of these activities (10 percent) was selected for evaluation to determine the reliability of silviculture activity completion information stored in the database. The sample was stratified by HCP Planning Unit. No activities occurred in the Chelan Planning Unit in the in FY 2009-2011.

In addition, the timber sale completion status in P&T was compared against NaturE, DNR's financial tracking system for FY 2009-2011. The comparison was done with the complete list of sales completed in this time period. No sampling was done.

Table 3. Silviculture activity types from which the monitoring sample was drawn.

Activities	
Hand planting	Ground mechanical preparation
Natural regeneration	Hand cutting
Aerial herbicide	Seeding grass
Broadcast burn	Pile and burn
Ground herbicide	Under (brush) burning

Evaluation process

Completion of the silviculture activities was determined by various methods. The primary method was to review office documentation, including contracts and invoices, to find corroborating evidence that activities were completed. This evaluation assumed that activities included in a contract were completed. Invoices were reviewed if the activity listed in P&T was not included in a contract. Activities which could not be verified by documents were checked on three-dimensional aerial images using the SOCET SET software (BAE, 2009), and if necessary, field visits. Aerial imagery was sufficient to confirm completion of undocumented pile and burn treatments; however other undocumented activities required a field visit. No assessment of the quality of activities or whether the work fulfilled contractual obligations was made.

The completion status of timber sales in P&T was compared with the completion records in the NaturE financial system. Completion status in P&T is entered by region foresters. NaturE status is updated by region timber sales staff when all payments are made and the retaining bonds have been returned to the purchaser. The retaining bond is returned only after all work specified in the timber sales contract, including the timber harvest, road maintenance and road abandonment, is complete. Since road work can occur after harvesting is complete, a timber sale is expected to be shown as closed in NaturE on or after the completion date of the timber harvest activity in P&T.

Results

The completion status of activities sampled in P&T was correct in 100 percent of activities in the included in the sample (Table 2).

Table 4: Number and proportion of activities listed as complete in P&T which were determined to be completed.

HCP Planning Unit	Sample size	Number complete	% complete	95% confidence interval
Chelan	0	N/A	N/A	N/A
Columbia	39	39	100	93 – 100
Klickitat	5	5	100	55 – 100
North Puget	37	37	100	92 – 100
OESF	16	16	100	83 – 100
South Coast	44	44	100	93 – 100
South Puget	19	19	100	85 – 100
Straits	28	28	100	90 – 100
Yakima	16	16	100	83 – 100
Total	204	204	100	99 – 100

Over 98 percent of sales closed in NaturE in FY2009-2011 were reported complete in P&T (Table 3).

Table 5. Number and percent of timber harvests reported as complete in P&T compared to the number of closed timber sales in NaturE

Fiscal year	Sales shown as closed in NaturE	Timber harvests reported complete in P&T	% sales in NaturE for which the timber harvest is reported complete in P&T
2009	211	210	99.5
2010	191	189	99.0
2011	161	155	96.3
Total	563	554	98.4

Discussion

All silviculture activities conducted as part of site preparation, regeneration, and vegetation management that were sampled were found to be complete.

A few timber sales listed as closed in NaturE were not shown to be complete in P&T. The status of these sales should be changed in P&T to show that the sales are complete. If the sales were not complete, for example due to operator default, this information needs to be added to P&T.

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Appendix A: Status of the DNR HCP Implementation Monitoring Program

The 1997 trust lands Habitat Conservation Plan (HCP) guides DNR management of approximately 1.9 million acres of forested state trust lands within the range of the northern spotted owl (NSO)—throughout Western Washington and the eastern slopes of the Cascade Mountain Range. State natural areas also contribute habitat to the HCP commitments. DNR and the Federal Services established a contractual agreement to implement and monitor the HCP where forest activities occur on HCP-managed lands. One aspect of monitoring forest activities is implementation monitoring.

The trust lands HCP states that, "implementation monitoring will document the types, amounts, and locations of forest management activities carried out on DNR-managed lands in each HCP planning unit…" (HCP 1997 p. V. 2). The HCP also states that the DNR shall monitor "to determine whether the HCP conservation strategies are implemented as written" (HCP 1997, p. V.1). The HCP guides the monitoring program by stating that, "Activities in areas addressed by the HCP will be described in sufficient detail to document compliance with the requirements of the conservation strategies" (HCP 1997 p. V. 2). Implementation monitoring priorities were identified each year by selecting conservation strategies or components of strategies, called elements, to monitor (Table A-1).

DNR has produced six HCP Implementation Monitoring Reports to date (Table A-2). These documents are intended to meet the commitment in the HCP that DNR must report to the Federal Services.

The department continues to recover from the broad budget reductions of fiscal years 2009-2011. During that time multiple key staff positions in our Research and Monitoring Section were eliminated. Since FY 2009, funding and staffing have been severely restricted, and implementation monitoring results have not been compiled or published. On the positive side, some funding has been restored to the monitoring program beginning July 2011. Several key monitoring positions have been filled to help meet HCP-related commitments. Although funding levels for Research and Monitoring still remain below pre-2009 levels, staff is outlining monitoring priorities and protocols for upcoming work.

Table A-1. Summary of completed implementation monitoring publications and reporting years

Implementation monitoring report title	Completion fiscal year of timber sales in the report	Publication Date
IMR 2003	FY2002	March, 2004
IMR 2004	FY2003	February, 2005
IMR 2005	FY2004	February, 2007
IMR 2006	FY2005	October, 2007
IMR 2007	FY2006	July, 2008
IMR 2008	FY2008	December, 2009
IMR 2012	**FY 2009, 2010, 2011**	**March, 2012**

Note: This report is listed in **bold**.

Appendix B: HCP checklist

Below is a copy of the most recent edition of the HCP checklist, created 5/17/2011, many different prior editions of this form exist.

HCP SUMMARY/CHECKLIST

Name of Proposed Activity _____ Agreement # 30-0_____ FPA# _____ Planning Unit _____

Location T _____ N R _____ (E/W; W.M.) Sec _____ (Attach Map if one has been prepared for the proposal)

HCP STRATEGY/ ELEMENT	HCP THRESHOLD	CONSIDER IN THESE PLANNING UNITS	STRATEGY DOES NOT APPLY (Element does not exist on proposal NOR within threshold distance)	STRATEGY APPLIES* (Protection, Avoidance, Mitigation measures implemented; OR, thresholds met)
Northern Spotted Owl	Different thresholds and strategies apply depending on Planning Unit. Evaluate proposal for potential impact.	WOE	☐	☐
Bald Eagle	HCP requires compliance with WAC 222-16-080 and WAC 232-12-292.	WOE	☐	☐
Grey Wolf	Proposed activities within 8 miles of a class 1 gray wolf observation within the past 5 years require HCP evaluation.	WOE	☐	☐
Grizzly Bear	The HCP requires compliance with WAC 222-16-080.	WE	☐	☐
Oregon Silverspot Butterfly	Proposed activities within 0.25 miles of an Oregon silverspot butterfly occurrence require HCP evaluation.	WOE	☐	☐
Columbian White-tailed Deer	Evaluate proposal for potential impact.	WOE	☐	☐
Marbled Murrelet	Different thresholds and strategies apply depending on Planning Unit.	WO	☐	☐
Lynx	Evaluate proposal for potential impact.	WE	☐	☐
RMZ	Proposed activities within or adjacent to streams require HCP evaluation.	WO	☐	☐
	Proposed RMZ includes habitat enhancement activities	WO	☐	☐
Wetlands	Proposed activities within or adjacent to wetlands require HCP evaluation.	WO	☐	☐
Rain on Snow	Proposed activities in the rain-on-snow zone require HCP evaluation and analysis.	W	☐	☐
Slope Stability	Proposed activity must be in compliance with WAC 222-16-050 (1)(d).	W	☐	☐
Large, Structurally Unique Trees	5 live trees and 3 snags per acre leave tree requirement for regeneration harvests.	W	☐	☐
Talus	Proposed activities located within forested talus or within 100 ft. of non-forested talus require HCP evaluation.	W	☐	☐
Caves	Proposed activities within 0.25 mi. of a cave require HCP evaluation.	W	☐	☐
Cliffs	All cliffs greater than 25 feet tall and below 5000 feet elevation require HCP evaluation.	W	☐	☐
Roads	Roadwork proposed in conjunction with this proposal requires HCP evaluation.	WO	☐	☐
Oak Woodlands	Evaluate potential for impact.	W	☐	☐
Balds	Evaluate potential for impact.	W	☐	☐
Mineral Springs	Proposed activities within 200 feet of a mineral spring require HCP evaluation.	W	☐	☐
Common Loon	Proposed activities within 500 feet of a common loon nest require HCP evaluation.	W	☐	☐
Harlequin Duck	Proposed activities within 165 feet of a harlequin duck nest require HCP evaluation.	W	☐	☐
Northern Goshawk	Proposed activities within 0.55 miles of a northern goshawk nest site located in a NRF management area require HCP evaluation. Outside NRF management areas, trees or snags that are known to contain active goshawk nests will not be harvested.	W	☐	☐
California Wolverine	Proposed activities within 0.5 miles of a known active California wolverine den site located in a spotted owl NRF management area require HCP evaluation.	W	☐	☐
Pacific Fisher	Proposed activities within 0.5 miles of a known active pacific fisher den site located in a spotted owl NRF management area require HCP evaluation.	WO	☐	☐
Pileated Woodpecker	Live trees or snags known to be used by pileated woodpeckers for nesting shall not be harvested.	WO	☐	☐
Vaux's Swift	Live trees or snags known to be used by Vaux's swifts as night roosts shall not be harvested.	WO	☐	☐
Bats	Live trees or snags known to be used by myotis bat species as communal roosts or maternity colonies shall not be harvested.	WO	☐	☐
Western Pond Turtle	Proposed activities within 0.25 miles of a known occurrence of a western pond turtle require HCP evaluation.	W	☐	☐
Purple Martin	Trees or snags known to contain active purple martin nests will not be harvested.	W	☐	☐
Western Bluebird	Trees or snags known to contain active western bluebird nests will not be harvested.	W	☐	☐
Sandhill Crane	Proposed activities within 0.25 miles of a known active nesting area of a sandhill crane require HCP evaluation.	W	☐	☐

W=Westside HCP Planning Units O=OESF E=Eastside HCP Planning Units

SIGNATURES

Proponent: _____ Title: _____ Date: _____

Approved by: _____ Title: _____ Date: _____

* It is assumed that it can be demonstrated that the activity is in compliance with the Habitat Conservation Plan through both an audit function and appropriate documentation. **Forest Practices requires documentation describing the HCP protection measures implemented be attached to the Forest Practices Application.**

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