

# High Conservation Value Forest Monitoring Report 2019

## Introduction

This High Conservation Value Forest (HCVF) monitoring report was completed in advance of the SCS audit of the MRC and HRC FMUs to address Corrective Action 2018.13. Specifically, the report addresses requirement 9.4.a of the FSC-US FM Standard (V1.0)

“The forest owner or manager monitors, or participates in a program to annually monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of Principle 8.”

Intent: Except where HCV attributes change rapidly or demonstrate ecological instability, or where site disturbing management activities occur, annual monitoring of all HCVFs may not be necessary and/or may be combined with other field activities.

Guidance: HCVFs that are not managed and/or are not easily accessible may have a basic form of monitoring, but the monitoring needs to adequately allow the forest owner/manager to be able to evaluate whether conservation attributes are being impacted.

## MRC and HRC’s High Conservation Value Forests

MRC and HRC independently evaluated and assessed their HCVFs in their Management Plans. While the result of this monitoring report indicates that there is a need for re-evaluation of the HCVF designation in some locations, the focus of this report is reporting on monitoring efforts and outcomes related to those currently designated HCVFs. Following the 2019 audit, MRC and HRC staff will re-evaluate designated HCVFs and revise the Management Plan to incorporate any changes based on that re-evaluation.

MRC currently designates the following High Conservation Value Forests (p 33-36 Management Plan):

Type	Acres
Type 1 old growth	101
Type 2 old growth	528
Pygmy forest	168
Oak Woodland	1,101
Coho Core areas – Class I riparian stands	3,320
Coho Core areas – Large Class II riparian stands	1,280
Lower Alder Creek Murrelet areas	1,133
Community Water source	9
Salt Marsh	66
Significant archaeological sites	*

Spotted owl core areas	7,309
Point Arena Mountain Beaver Areas	246

HRC currently designates the following High Conservation Value Forests (p 48 Management Plan):

Type	Acres
Type 1 old growth (outside MMCAs)	204
Type 2 old growth (outside MMCAs)	334
Marbled Murrelet Conservation Areas	6,630
Long Ridge Douglas-fir	203
Class I riparian stands	14,931
Large Class II riparian stands	20,899

## Methodology

Monitoring for each HCVF will vary in interval and intensity dependent on the resource protected and the likelihood of disturbance. A description of monitoring for each type is discussed below.

Type 1 old growth (both FMUs):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the old growth stands on aerial photos to ensure no unexpected change has occurred. If any disturbance or unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

Type 2 old growth (both FMUs):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the old growth stands on aerial photos to ensure no unexpected change has occurred. If any disturbance or unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

Pygmy forest (MRC only):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the pygmy stands on aerial photos to ensure no unexpected change has occurred. If any disturbance or unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

Oak woodland (MRC only):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the oak woodland stands on aerial photos to ensure no unexpected change has occurred. If any disturbance or unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

#### Coho Core Areas – Class I and II (MRC only):

All monitoring efforts on Class I and II and salmonids will be compiled and assessed annually to evaluate any need for additional efforts. This compilation may include monitoring for fish distribution, spawning, water temperature, water drafting information, or any other information collected in a given year. The type of information collected will vary, but will provide an assessment of the effectiveness of protections in the riparian areas. Where possible, additional information on effectiveness of riparian areas will be collected throughout the ecoregion to include and assess in the report. In this case, MRC collected information on spawning surveys and water drafting surveys in 2018 and early 2019.

#### Class I and II (HRC only):

HRC staff will review the annual aquatic trends report for HCP compliance. The report will be analyzed for any key trends and potential needs for change in management practices.

#### Marbled Murrelet Conservation Areas (HRC only):

HRC staff will review the annual marbled murrelet inland monitoring report for HCP compliance that reports on murrelet surveys within MMCAs. The report will be analyzed for any key trends and potential needs for change in management practices.

#### Long Ridge Douglas-fir (HRC only):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the Long Ridge Douglas-fir stands on aerial photos to ensure no unexpected change has occurred. If any disturbance or unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

#### Lower Alder Creek Murrelet areas (MRC only):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the Lower Alder Creek Murrelet areas on aerial photos to ensure no unexpected change has occurred. If any disturbance or unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

#### Community Water Source (MRC only):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the Community Water Source area on aerial photos to ensure no unexpected change has occurred. If any disturbance or unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

#### Salt Marsh (MRC only):

When new aerial photos are ordered (typically every four years) forestry or inventory staff will review the salt marsh area on aerial photos to ensure no unexpected change has occurred. If any disturbance or

unexpected outcome is detected, stand will be identified for a field visit to re-assess boundaries or review with on the ground reconnaissance.

Significant archaeological sites (MRC only):

These sites are revisited when potential timber harvest occurs in the area and reported on in a confidential archaeological addendum. Otherwise, they are left, untouched and undisturbed. Reports will occur whenever timber harvest occurs overlapping these sites and will be included in the confidential archaeological addendum.

Spotted owl core areas (MRC only):

MRC staff will review the number of spotted owl surveys and types of outcomes of surveys (unoccupied, single, pair, nesting pair, and fledglings) for patterns and determine if management actions should be taken in spotted owl core areas as a result.

Point Arena Mountain Beaver Areas (MRC only):

MRC staff will review recent surveys to determine if further action in these areas need to be taken – though MRC is inhibited from management actions within the mountain beaver areas due to its status as an endangered species.

## Results

Type 1 old growth (both FMUs):

No disturbance was identified in any Type 1 old growth stands in the June 2018 aerial photo reviews; the reviewer did identify 2 stands that do not meet the minimum size criteria for a Type 1 stand (< 3 acres) and should receive a visit to assess appropriate boundaries and delineate whether these stands are actually Type 1 old growth stands.

Type 2 old growth (both FMUs):

No disturbance was identified in the delineated Type 2 old growth stands. However, the reviewer did identify multiple Type 2 stands that do not meet the minimum criteria for Type 2 old growth and should be reviewed again for stand delineation on the ground. The reviewer also found a stand that included some grassland area – this stand should be re-assessed to appropriately map the Type 2 area and determine if the stand meets the minimum size criteria for Type 2.

Pygmy forest (MRC only):

No disturbance was identified in the delineated pygmy forest stands on MRC forestlands according to the APN layers. The reviewer did identify several locations where MRC property lines do not match APNs, and the MRC pygmy forest appears to include areas with houses and ponds. After further review,

it appears the MRC property line is incorrect – staff plan to develop a procedure for addressing property line boundaries issues in the next year and to fix this identified boundary issue in 2020.

#### Oak woodland (MRC only):

While no disturbance was detected in the oak woodland, the reviewer did identify 4 oak delineated polygons, composing 42.98065 acres of oak woodland that should receive a field visit to ensure they are truly oak woodland forest. These stands appear, from aerial photo review, to be dominated by tanoak and conifer (not true oaks). Further on the ground review will occur prior to any change in typing.

#### Coho Core Areas – Class I and II (MRC only):

The 2018 MRC fisheries report included reporting on salmonid life cycle monitoring (in the North Fork Navarro River and South Fork Albion River); fish presence in major drainage basins, stream temperature monitoring, precipitation monitoring, long-term channel monitoring, red-legged frog monitoring, and forestry assistance in identifying Class I and II streams and water drafting monitoring. In 2013, MRC entered a partnership with multiple groups to operate a life cycle monitoring stream in the North Fork of the Navarro (as well as an ongoing study in the Albion); the goal of this study is to estimate the number of adults returning to the region annually and monitor their numbers over time to understand regional trends. In the North Fork Navarro, the number of estimated coho salmon and steelhead trout increased from 2017 to 2018; while juvenile coho salmon decreased from the estimate in 2017. In the Albion, Coho decreased in 2018 from 2107 (though the high and two estimates overlapped in 2017 and 2018); while steelhead increased from 2017 to 2018. Juvenile coho and steelhead decreased from 2017 to 2018. Fish distribution surveys in 2018 found Coho in several locations where they were not seen in previous years including Cottaneva Creek, Greenwood Creek, and Elk Creek. Analysis of Maximum Weekly Average Temperatures over the past 16 years suggested a slightly decreasing trend that was not statistically significant – but could be indicative of improving stream conditions. Precipitation at stations across the MRC forestlands decreased between 2017 and 2018. MRC aquatic staff also measured stream flow at water drafting sites, completed stream classification surveys for forestry staff, and foothill yellow-legged frog surveys. Available long term trends in monitoring reported in 2018 indicate slight improvement in stream conditions and annual changes in the number of adult and young salmonids in streams. No changes to management activities within this HCVF are recommended given current conditions and monitoring results.

#### Class I and II (HRC only):

HRCs aquatic trends monitoring process is designed to track recovery of aquatic habitat which is expected over time as HRC Habitat Conservation Plan is implemented. Monitoring sites are tightly clustered in three watersheds of interest, Elk River, Freshwater Creek, and Bear Creek. For Freshwater Creek, there were improvements in habitat scores for pool characteristics however; scores for bed surface particle size and LWD frequency were decreased; while temperature and canopy remained even. For Elk river – there were improvements for pool characteristics and mid-channel canopy cover; water temperature achieved perfect scores; while bed surface particle size and LWD pieces frequency declined from 2014. For Bear Creek, there were improvements in mid-channel canopy cover, while bed surface

particle size and water temperature scores decreased; pool characteristics and LWD pieces frequency remained consistent. At this point, and in review with Wildlife Agencies, no revisions to conservation measures are proposed – though revisits to Watershed Analysis may result in management changes if necessary and agreed to by the regulatory Wildlife Agencies.

#### Marbled Murrelet Conservation Areas (HRC only):

Radar surveys to track murrelets traveling to and from nesting areas within the MMCAs and state/federal park reserves. These radar counts can be utilized as an index of nesting activity within the MMCAs while the reserves serve as controls to gauge changes in detections within MMCAs. There have been declines in radar counts in both the MMCAs and the reserves, however; the decline in the MMCAs has been smaller than in the reserves; indicating the decline is a region-wide issue – rather than related to management activities around the MMCAs. HRC is working with the Wildlife Agencies to review any additional data to better understand if the changes in annual trends are associated with management activity – but will continue monitoring effort in 2019.

#### Long Ridge Douglas-fir (HRC only):

There was no disturbance detected in in the Long Ridge HCVF. No further review or changes to management actions are prescribed at this time, however; HRC may consult with local experts and stakeholders to determine if management action can maintain or enhance the existing HCVF.

#### Lower Alder Creek Murrelet areas (MRC only):

Some signs of timber harvest around the edge - timber harvest was approved under LACMA protection rules by Wildlife Agencies under previous Planning Agreement as meeting the requirements of LACMA; including no harvest to core areas. This HCVF needs to be reviewed for appropriate biological boundaries - was extended beyond what would be required under FSC standards to meet proposed HCP description – lacking the HCP – MRC staff will review the appropriate boundaries of this HCVF moving forward.

#### Community Water Source (MRC only):

There was no disturbance detected in in the Community Water Source HCVF. No further review or changes to management actions are prescribed at this time.

#### Salt Marsh (MRC only):

There was no disturbance detected in in the Salt Marsh HCVF. No further review or changes to management actions are prescribed at this time.

#### Significant archaeological sites (MRC only):

No significant archaeological sites were covered under an MRC plan in 2019, thus no monitoring work was completed. MRC believes it is in the best interest of these sites to avoid them unless work is occurring nearby.

#### Spotted owl core areas (MRC only):

MRC numbers of nesting pairs have declined since 2011 and appear to be stabilizing around 9-12 on average per year from 2016-2018. Meanwhile, in most years, barred owl detections are above 40 (though in 2018 they declined to 27). The number of unoccupied activity centers increased in 2017 and slightly decreased in 2018 – while survey effort remains the same at approximately 1,500 acres. MRC and HRC staff will review HCVF status when the MRC and HRC management plans are combined in 2019-2020 since spotted owl core areas were identified as HCVF for MRC but not HRC. There is a recognized region-wide decline in spotted owl productivity and activity due to barred owl range expansion. MRC continues to engage with Wildlife Agencies on potential solutions to this issue – unfortunately, no habitat-based solutions have been proposed (proposals have focused on human-based removal of barred owls which is currently not a feasible option for MRC). No proposed changes at this time but continue to monitor barred owl and spotted owl populations across the forestlands.

#### Point Arena Mountain Beaver Areas (MRC only):

MRC has monitored PAMB burrows since early 2014 – with revisits to burrow sites occurring often. Due to the PAMB's status as an endangered species, MRC is typically precluded from doing any management work within burrow systems to maintain habitat that MAY be more hospitable to mountain beaver colonies (young seral stage, herbaceous vegetation). Some of the revisits to known mountain burrow sites have resulted in assessment of those sites as inactive – most likely due to the growth of taller vegetation no longer available for PAMB as food sources. Most revisits (7 of 10) did find remaining active burrow sites indicating continued activity. MRC is working to refine the survey protocol to not revisit too often as it may also attract predators to mountain beaver burrow sites. No change in management proposed (or likely allowed by Federal laws given the PAMB status as federally endangered).

## Conclusions

The identified HCVFs on both MRC and HRC forestlands maintain their identified HCVF attributes and have incurred limited disturbance or management actions. The most important priority action identified through this monitoring process is a review of existing HCVFs on both forestlands when the two Management Plans are combined into one. The initial process to identify HCVFs on both forestlands resulted in different and sometimes contradictory results (i.e., spotted owl core areas on MRC are HCVFs but not on HRC). MRC and HRC are embarking on a revision of management plans in the upcoming year to update and combine both into one consistent management policy and approach for both businesses including identification and protection of HCVFs. During this process, HRC and MRC staff will use the HCVF framework to re-evaluate and assess current and potential HCVF identification on both forestlands in a consistent process for both. Additionally, the review of old growth and oak woodland stands identified several stands that maybe either misidentified due to not meeting minimum size requirements (old growth) or have improperly mapped boundaries. These boundaries will also be reviewed during the management plan revision process. In conclusion, the attributes of the identified HCVFs appear to be maintained and functioning.