

## **Forest Management on the Hoopa Reservation Development of the Tribe's Forest Management Plan**

### **1940-1960**

Intensive forest management at Hoopa essentially began in the mid-1940s. Up until that time, poor markets for Douglas-fir coupled with Hoopa's remote location inhibited development. In the decade between 1946-56, about 3000 acres were harvested with a combination of clear-cutting and selection techniques. By the late 1950s there were three sawmills on the Reservation and another four mills within 20 miles of it.

Agency Forester A.G. Hauge made preliminary estimates of reservation volume and allowable cuts in 1947 (see Forest History Hoopa Valley Indian Reservation, p. 213). Hauge estimated the timber inventory in 1947 at 673 mm b.f. on 61,000 acres, which would support an annual allowable cut (AAC) of 15 mm b.f./year over a 52.4 year completion cycle. The Portland Area office prepared a 1947 Sustained Yield Plan adopting the above recommendations, including a rotation length of 80 years. The Central office declined to adopt the plan in a memo to the State Director of the California Indian Service, stating that the rotation should be substantially reduced to 25 years.

A cooperative agreement was drafted, but never approved, between the Forest Service and the BIA, in 1949, which was set to adopt an AAC of 12 mm b.f. from the reservation.

The first known management plan was written in 1957 (approved in 1958). Inventory data was obtained from an inventory made in 1954 by Western Timber Services. The AAC as adopted by 35 mm b.f. for the five-year period 1958-1963 and then was proposed to drop to 21 mm b.f. for the remaining 75 years of the rotation (i.e. 80-year rotation).

### **1960-1970**

An amendment was prepared in 1961 and approved in 1962 to increase the allowable cut. This increase was based on an analysis that revealed the 1954 inventory underestimated the volume scaled by 60%. (In later years this assumption was discredited because the overrun was thought to be due to a substantial amount of cutting beyond the contracted block boundaries, without increasing the acreage in the contracts.) The approved allowable cut was 40 mm b.f. beginning on January 1, 1962.

A re-inventory of the Reservation was made in 1965 by the BIA using 150 1/5-acre plots in a 77 chain grid. According to the Area Forester, the analysis of the inventory data showed that the 1961 amendment to the 1957 management plan was correct and that the allowable cut should stay at 40 mm b.f. The allowable cut in 1965 was "certified" in memo from the agency forestry office to the Sacramento Area director.

Several natural disasters, including the floods of 1955, 1962 and 1964 resulted in substantial damage to Hoopa forests. In 1966, local BIA staff requested an acceleration of the AAC to allow salvage. The request was granted, and until 1973 the pace of harvesting averaged about 60 mm b.f./year. The Tribal Council was aware of, and supported these salvage operations. In 1972, it passed two resolutions (57 and 132) requesting increased AAC. In Resolution 72-132 it also requested that one-half of the additional stumpage value be put into a fund for reforestation projects.

## 1970's

In 1971, 266 continuous forest inventory (CFI) plots were installed at Hoopa. After the data were analyzed, the AAC was recalculated and reduced from 40 to 26 mm b.f. The reasons for fall-down in AAC were clear to local BIA staff but apparently, not well-understood by the Tribe, or for that matter, the BIA Sacramento Area Office. These reasons were: 1) accelerated salvage cuts between 1966-71; 2) cutting blocks being larger on the ground than indicated on timber sale contracts; and 3) inappropriate use of yield tables. The revised AAC was not adopted by Sacramento BIA and the 40 mm b.f. limit was retained.

In 1976 Hoopa Valley Indian Reservation Annual Allowable Cut Recalculation Reinventory - Depletion & Regeneration by Lee Jahnke proposed an increase in rotation to 110 years based on brush regrowth, lack of adequate regeneration, and comparison of empirical yields to yield tables. (Earlier calculations in the 1954 and the 1961 amendment used Bulletin 201 normal yields for calculation of the rotation.) The change in rotation resulted in a proposed AAC of 26.65 mm b.f. based on the 1971 inventory and analysis of inventory volumes. This allowable cut calculation was not made using the 1972 timber type maps.

## 1980's

Documentation which was begun in 1981 included a Forest History, Environmental Assessment and Forest Management Plan. During the planning process, several land areas totaling more than 30,000 acres were withdrawn or restricted from intensive commercial forest management. These areas included: 1) the Valley Viewshed; 2) stream protection zones along class 1 (fish-bearing) and class 2 (tributaries to fish-bearing) streams; and 3) soils subject to high erosion or burn hazards. Constraints on management plus recognition of the effects of hardwood competition on plantation growth resulted in a further reduction of the AAC to 13.4 mm b.f. The Sacramento BIA adopted this AAC in 1986 as the Interim Operating Plan, 1983-1992; the Tribe rejected the proposed Management Plan by resolution in 1984.

Changes in the administrative AAC over the years have been confusing to the Tribe but have, for the most part, determined the level of harvesting on the Reservation. Harvesting was maintained at a high level (>1000 acres/year) until 1975, when it fell drastically. It then rebounded until the very poor markets of 1982. The result of this pattern over time is exhibited in a relatively large stock of older (>25 years old) harvest areas. Most of these areas were either expected to regenerate to conifers naturally or were aerially seeded.

Since 1967, there have been periodic surveys to determine the condition of existing harvest areas. There are over 700 identifiable clear-cut blocks encompassing over 34,000 acres (roughly 40 percent of the total Reservation area). These surveys collected information on site preparation method effectiveness, stocking, crop tree (conifer) competitive status and environmental conditions. In 1987, there was an exhaustive analysis of regeneration survey data (Blomstrom et al. 1987) in part to support efforts at rehabilitation authorized by PL 94-373. That legislation provides funding for reducing the backlog of lands in Indian country harvested prior to 1977 that require cultural treatments.

The 1987 study is a sobering picture of the status of the Reservation's future stands. Briefly, the study showed that about 30 percent of the plots (statistically representing >10,000 acres) in the cutover area were not stocked with conifers but instead, completely captured by brush and hardwoods. In an additional 20 percent (representing >7000 acres) of the plots conifers were suppressed (overtopped) by brush. Since the desirable condition in plantations is to have the crop trees free to grow, the fact that is not true for the majority of existing plantations is a significant management issue. At present, this issue is being addressed through a vigorous rehabilitation program using manual release techniques. Use of herbicides on the Reservation was banned by Tribal Council vote in the late 1970s, although there is no resolution to that effect.

The conditions in existing plantations are reflected in the average stand descriptions for those areas as determined through CFI plot analysis. Modeling the growth of those stands with and without remedial treatments has an effect on the calculation of long-term sustained yield allowable cut. Volume growth in plantations also can have an effect on time of harvest (i.e. rotation age). Options for treatment may be limited by the age of a plantation as well as the expected value at harvest.

It should be noted that in the past decade regeneration practices at Hoopa have changed but this has not yet resulted in better stocked plantations. The development of the Tribal tree nursery and the general planting of new cutover areas may improve future conditions.

### 1990's

After the division of the Reservation in 1988, the Tribe has increasingly taken over forest management, first through a 93-638 contract in 1989, and then by entering into a compact of self-governance in 1990. By early 1991, the Hoopa Forestry program was 100% tribally run including timber sale layout, administration, scaling, wildland fire, planning, silviculture, administration and forest development.

Tribal Forestry operations however were still governed by the BIA's Interim Forest Management Plan. That plan was based on BIA measures and philosophies regarding the management of the Hoopa Lands. As the Tribe gained control of Reservation Forestlands, it became necessary to revise the Forest Management Plan to meet Tribal needs. During the considerations of Alternatives for the current FMP, the Alternative requiring no action was to continue the BIA FMP. However, that plan was deemed unworkable. At the time, it was stated: *"The single largest reason not to consider the Interim Operating Plan as an alternative is that it is seriously out-of-date with regard to the impact of Threatened and Endangered Species on reservation management. Without amendment, the Interim Operating plan would likely be illegal. . ."* Despite the Tribe's refusal to adopt the Interim Operating Plan, it was extended in 1991 to allow continued harvesting. It was extended two more times in 1992 and 1993 so that the current FMP could be completed. However, on December 31, 1993, the last extension Interim Operating Plan Expired and the Interim Operating Plan, which was never approved by the Tribe, became void.

Year	Acres Harvested
1994	363.87
1995	332.34
1996	220.64
1997	336.60
1998	262.21
1999	795.82
2000	445.33
2001	377.17
2002	329.20
2003	348.17
2004	178.45
2005	379.23
2006	586.56
2007	524.62
2008	355.41
2009	0

**Table 1 -Timber Harvesting under the 1994 FMP**

On January 1, 1994, the Tribe was without an approved Forest Management Plan. However, the Forestry Department had been anticipating this day for over two years, and had, since 1992, been actively engaged in drafting a Forest Management Plan that was tailored to the needs of the Tribe.

For two years Tribal Forestry worked with all other Departments to develop a Forest Management Plan. Scoping was conducted and two tribal membership polls were taken. A policy committee was established to produce policies of all aspects of the plan. This team met seven times over the course of 1992 and 1993. A technical team was also formed and met 25 times between February of 1992 and April of 1994.

On April 20, 1994, a Tribal Resolution was signed by the then Chairman Dwayne Sherman. The Plan was then send to BIA for review and approval on September 20, 1994.

This was a ten year plan and set to expire on December 31, 2003. However, after being in use for only a handful of years, there were desired amendments to the plan. So in 1999, a review team was gathered and amendments were prepared for the FMP. These included the creation of a Yew Reserve, exclusion of modified clearcuts in riparian zones, use of the group shelterwood prescription, changes in archaeological consequences, establishment of a Woodland classification, and changes in spotted owl management to meet new regulations. The intent was to streamline and shorten the plan, bring the plan into conformance with new tribal resolutions, include the 2,651 acres of forestland acquired in the southern boundary annexation, and clear up guidelines for the Trinity and Klamath viewsheds. There were also some cultural areas added to “no-cut” areas. This reduced the landbase of the LTSYA, causing a drop in the AAC from 10.36 MMBF to 9.853 MMBF. The AAC has remained at that level since.

With the reduction in AAC levels from their unsustainably high levels in the 1960’s, 70’s, and 80’s meant a dramatic reduction in the average number of acres harvested each year. The average dropped from greater than 1,000 acres to less than 400. The average from 1990 to 1999 is 390 acres, and from 2000 to 2006 is only 377 acres. The actual acres that were harvested under the 1994 FMP are show on the table to the right.

The reduction in the AAC by 500 MBF has not resulted in a significant reduction of the number of acres harvested.

Other factors have begun to emerge that are impacting the future of the AAC. In the 1990’s the Tribe began to see a new phenomenon occurring within the plantations. Starting in the Northwest corner of the reservation, bears began stripping the bark of trees to get to the sugary pitch underneath. This has quickly spread across the western half of the reservation and has become entrenched on the eastern half as well. Tribal Forestry met with the cultural committee and gained approval to begin a program to trap and tag bears. Those that were identified as tree strippers were then removed from the population. This has not decreased the spread of the damage, and Tribal Forestry is looking at changing the way regeneration and TSI work is done to find other ways to modify the bear behavior. In early 2000, the listing of coho salmon has brought the need to have consultations with NOAA-NMFS to ensure that the yearly harvests are not adversely impacting habitat for anadromous fish. Marbled murrelet surveys have not conclusively determined that murrelets are not using stands in the western portion of the Reservation. This area is being considered for a Murrelet reserve. All of these factors have impacted the AAC to the level that it is at the present revision of the FMP.

#### **During Previous FMP (2000 to 2010)**

The turn of the century brought few changes to the forest management activities. In 2000 the Tribe amended the FMP to extend it to the end of 2008. This amendment was approved in 2002. That amendment made changes to help streamline and shorten the plan, add the Yew Reserve, and bring the plan into conformance with tribal ordinances passed after approval of the original FMP. The amended FMP made IDT members responsible for tracking when blocks open and close, added the 2,651 acres of lands from the South Boundary annexation and other fee parcels purchased since 1994, cleared up standards and guidelines for the Trinity and Klamath viewsheds, and updated Spotted owl restrictions. Throughout this decade, the incident of bear damage to plantations has continued to spread across the Reservation, and increase in intensity, despite the Wildlife Department’s attempt to reduce the number of tree stripping bears. Also the population of northern spotted owls which had remained stable since listing has become impacted by the invasion of barred owls.

The FMP revision process began in 2007, but has continued now for some time, requiring first and extension until the end of 2009 and then another until the end of 2010.

## 2011 Forest Management Plan Revision

The Hoopa Valley Tribe approved the original tribal Forest Management Plan (FMP) on April 20, 1994 in accordance with Federal Law. The Bureau of Indian Affairs Regional Director for the Sacramento Area approved the 1994-2003 Forest Management Plan on September 20, 1994. At the time, Federal law limited the life of a FMP to 10 years.

In 1999, the Tribal Council directed the Forestry Department to recommend changes to the Forest Management Plan to address Council concerns about forest management practices in anticipation of the 2003 expiration. The Interdisciplinary Team (IDT) of Tribal resource specialists recommended adoption of non-controversial changes to the FMP in order to make editorial corrections, clear up confusing language, and make changes to dates and citations. It was determined at that time that changes in the Federal Law could allow the plan to be extended for an additional 5 years. So later, in 1999, the IDT recommended additional minor amendments to the FMP to, among other actions, bring the South Boundary lands under Tribal management, change various land use allocations and land use intensities, incorporate new and revised Tribal ordinances, and lengthen the period covered by the plan from 2003 to 2008.

On March 22, 2000 the Council approved resolution 00-41 adopting the recommended changes to, and extended the life of the Hoopa Valley Indian Reservation Forest Management Plan for the period 2003-2008. Tribal Forestry then began a NEPA Review of the proposed Amendment which culminated in an Environmental Assessment. The Amended FMP was signed by the Tribal Chairman on May 13, 2002 and by the BIA on October 8, 2002. That set the expiration date of the FMP to December 31, 2008.

On March 27, 2007, the Tribal Forestry Forest Manager issued a Project Initiation Letter to commence the Revision of the Hoopa Valley Indian Reservation Forest Management Plan that was set to expire in December 2008. This was followed by a notification in the Newspaper in July of 2007. The table on the following page lists the Dates of the IDT meetings.

<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
April 9	January 3	January 29	May 26
May 31	February 13	February 26	June 30
July 26	February 29	April 2	July 27
September 6	March 20	April 30	August 26
October 30		June 4	October 12
November 27		June 30	
December 19		July 23	

A Tribal Newsletter was prepared for the Tribal Membership meeting in December of 2007. This newsletter outlined a number of the issues and concerns that the IDT determined to address in the revision of the FMP, as well as presenting some of the successes that Tribal Forestry considered important.

The yearly Tribal Sovereign's Day celebrations provide an opportunity to get the impressions and concerns of the Membership. Over the past several years, Tribal Forestry has given out Forestry Department T-Shirts to anyone filling out a questionnaire. Although lacking any statistical viability, these polls nonetheless give the IDT a sense of Tribal memberships concerns. These polls occurred on August 10, 2007, August 8, 2008, and August 10, 2009. For the 2010 Sovereign's Day celebration, a typical questionnaire was put out, and an additional raffle for a Tribal Forestry Jacket was also held for those filling out a more complete survey.

Because of the length of the Review process, the Tribal Council extended the amended FMP for a one year period on November 20, 2008 and again on December 30, 2009.

On November 9, 2010 an Interdisciplinary Team (IDT) of Tribal resource specialists recommended adoption of the proposed revisions to the FMP in order to make update the FMP to current standards and practices and to allow the Plan to become adaptive to current and future alternative Forest Uses.

Tribal Forestry met with the Tribal Council on November 12, 2010 and December 15, 2010 to present the proposed Revisions to the FMP. At the request of Tribal Forestry, the Tribal Council extended the FMP for the period until the Revised Forest Management Plan for the Period of 2011-2026 is approved, not to exceed three years, in December of 2010. This would allow for the completion of the Tribal and agency review, and set the expiration date to December 31, 2013.

Tribal Forestry, TEPA, and Tribal Fisheries did meet with the Tribal Council on January 25, 2011 to discuss the RPZ provisions of the FMP. The Council voted to accept the proposed FMP Revision for LPA review on February 23, 2011. Two public meetings were held on March 28, 2011 and April 11, 2011. During those meetings all members of the public and Tribal Council were able to ask questions. There were no proposed amendments to the FMP during these meetings. The Council approved the FMP in its entirety without any proposed revisions or amendments on April 22, 2011.

The NEPA Review of the FMP has been conducted concurrent with the FMP revision. The IDT concluded that an Environmental Assessment was adequate NEPA review. This EA was presented to the Tribal Council for a decision on July 19, 2011. The decision notice was signed by the Tribal Chairman on January 23, 2012. The approval of the Decision Notice signified that the Tribal Council concurred with the IDT assessment that the Proposed Revision of the Hoopa Valley Tribe Forest Management Plan for the period 2011 to 2026 does not create a significant adverse impact on the human environment.

A Consultation with the US NMFS was commenced on May 4<sup>th</sup>, 2011 The NMFS requested an extension in the date to provide a Biological Opinion on the Assessment. That request, issued on June 27, 2011, stated that a BO would be provided by November 15, 2011. That goal was not accomplished and the NMFS has informally requested a further extension to mid-January 2012. Although numerous delays occurred, the NMFS finally issued a Biological Opinion that the activities of the FMP would not result in a jeopardy for SONCC on December 27, 2013. That is 968 days after the Biological Assessment commenced and 774 days beyond their requested extension in their June 27, 2011 acceptance letter.

The USFWS Consultation was initiated with the submission of a Biological Assessment on January 16, 2012. The USFWS issued a Biological Opinion that the plan "is not likely to result in jeopardy to Marbled Murrelet or northern spotted owl" on June 6, 2012, 134 days after the commencement of the consultation.

The Environmental Assessment was submitted to the BIA on May 23, 2011. After extensive review, the BIA chose to close the review process and issued a conditional FONSI on November 13, 2012. The BIA issued the conditional FONSI for 7 reasons, including their statement that “throughout this [the NMFS] consultation, NMFS reviewers have verbally indicated to Tribal Forestry Division staff that a Biological Opinion concurring with the Tribe’s ‘may Affect, Not likely to adversely affect’ determination for threatened Southern Oregon-Coastal California (SONCC) coho is forthcoming.” This condition was met on December 27, 2013 when the NMFS issued their Opinion.