

## Analysis of the Management Situation

70 percent of the suitable acres in the Hemlock/Spruce forest type. As displayed in Figure IV-23, sawtimber is the dominant stand structure class Forest-wide accounting for 92 percent of the available timberland acres. Sixty-six percent is in the old growth sawtimber structure class and from a timber production standpoint beyond rotation age and in an overmature condition.

With the exception of one sale on Montague Island for road right-of-way volume during Forest Plan implementation, all commercial timber sales, most personal use and Alaska free use permit areas have occurred on the Kenai Peninsula. Since practically no timber management has occurred in Prince William Sound or Copper River since implementation of the plan began in 1985, the timber supply in these two areas remains in an overmature condition.

On the Kenai Peninsula, the timber supply is deteriorating rapidly due to spruce bark beetle mortality in white (Zutz) spruce and rot in mountain hemlock and paper birch. Beetles have impacted approximately 118,900 acres over the last 37 years and very little has been salvaged to date. Beetle killed trees lose their sawtimber value within 2 years after dying and their pulp wood value after 15-25 years. Because there has been considerable public controversy over harvesting beetle killed trees, the Forest has all but stopped its timber management program after investing several million dollars in planning salvage sales on the Kenai Peninsula (Figure IV-30).

### Forest Products Industry (Southcentral Alaska)

The forest products industry in Southcentral Alaska is small and is not considered to be an important sector of the Southcentral Alaska economy. No communities are dependent on a supply of timber from the National Forest.

Three small sawmills located in Wasilla, Anchorage, and Cooper Landing have a combined estimated installed mill capacity of 2 MMBF per year or less. Currently the industry has eight principal sources of timber:

1. Timber inventory held by small, individual private landowners (tract sizes generally less than 100 acres)
2. Timber inventory held by private Native corporations.
3. Timber sales from the State of Alaska including mental health lands.
4. Timber sales from the University of Alaska
5. Timber sales from the Kenai Peninsula Borough
6. Timber sales from the Mat-Su Borough
7. Timber sales from the Chugach National Forest
8. Imported logs from other states or Canada.

Primary manufacture is required for Federally administered timber. On the Chugach National Forest, timber is used to make rough-sawn dimension lumber, rough-sawn timbers, house logs, pulp, and chips.

### *Projected Demand*

#### Commercial Timber

The 1984 Forest Plan estimated the maximum potential demand in Southcentral Alaska for timber from the Forest would be 40 MMBF per year or 400 MMBF per decade. This estimate consisted of 10 MMBF from existing mills, 20 MMBF from producers in Anchorage and Seward, and 10 MMBF from foreign exports. The projected demand level was dependent on the assurance of a long-term supply.

At the time, the Forest had been supplying approximately 3 MMBF annually, from a land base capable of producing 48 MMBF annually. The Plan concluded that the available supply of timber products during the plan period would not meet the estimated demand of 40 MMBF annually.

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The Forest's projected demand of 40 MMBF per year or 400 MMBF per decade has not materialized to-date for a number of reasons. First, while timber demand did significantly increase during the first decade of plan implementation, it was supplied primarily by Native Corporation lands and was mostly exported as round logs. Second, the Seward sawmill, the only larger capacity mill in the region, never really got off the ground and ended up shutting down permanently in 1993. Third, the Forest Plan's projected demand level was dependent on the assurance of a long-term supply of timber from the National Forest. Starting with the appeal of the Forest Plan ROD, a stable, long-term supply of timber in any quantity from the Chugach National Forest has never materialized, and thus neither did the projected demand level. Fourth, the only timber the National Forest has made available during plan implementation in any appreciable quantity has been low-value, highly depreciated, beetle killed spruce from the Kenai Peninsula.

Over the period of 1990-1996, harvest of National Forest timber in Alaska declined by nearly 80 percent. Factors contributing to this decline included changes in the structure of the Alaska forest sector, changes in markets for Alaska products, and changes in conditions faced by Alaska's competitors. Taking these changes into account, our revised projections of demand for Alaska National Forest timber over the next decade (1998-2007) range from 113 to 156 million board feet per year (Brooks and Haynes, 9/97).

Adjusting these projections to the Chugach (1% of total National Forest total timber harvest in Alaska) would mean a projected demand over the next decade ranging from 1.1 to 1.5 million board feet per year (net sawlog) for commercial timber sales.

### Personal & Alaska Free Use Forest Products

There is a growing demand for sawtimber, firewood, and cabin logs under personal use and Alaska free use permits, particularly around the communities of Seward, Moose Pass, Cooper Landing, Hope, Girdwood, and Cordova. Personal Use permits for sawtimber, firewood and cabin logs ranged between 100-500 MBF per year during the last 13 years. Total annual demand for personal use forest products over the next decade is estimated to be 400 MBF per year.

Alaska free use permits between 1994-1997 averaged 1,110 cords (555 MBF) per year. We estimate 100-200 cords (50 MBF - 100 MBF) per year of dead and down, for which no permits are required, are being harvested under Alaska free use on the Forest in addition to the permitted volume. Total annual demand for Alaska Free use forest products over the next decade is estimated to be 655 MBF per year.

### *Benchmarks*

Three benchmarks are relevant to the Forest Plan Revision. They are (1) minimizing the Forest's timber program, (2) maximizing timber in the first decade subject to legal requirements and long-term sustained yield, and (3) maximizing the present net value of the timber program, or financial efficiency.

For the Forest, the following basic minimum management requirements in benchmarks were considered by classifying these lands as unsuitable for timber production:

#### *Timber Harvest Regulation*

- No harvest in EVOS acquired lands, designated RNAs, or forest lands classified as physically or biologically unsuitable.
- Regeneration within five years following final regeneration harvest.
- Adequate response information is available.

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## *Review of Benchmark Analyses for the 1984 Forest Plan.*

The maximum timber benchmark in the Forest Plan was estimated to be 40 MMBF per year. Although the actual benchmark calculation was greater than 40 MMBF, it was capped at the 40 MMBF level because of the assumption that no volumes would be displayed in excess of estimated potential demand (40 MMBF).

## *Revision Benchmarks*

### 1. **Minimum Level Management**

In the minimum-level benchmark, no management of the Forest's timber resource would occur. The allowable sale quantity is assumed to be zero. Some commercial harvest may be done, if necessary, to meet other resource objectives for vegetation management, however the volume would be nonchargeable to an ASQ. An estimated annual average of 400 MBF in sawtimber, house logs, and firewood for Alaska free use would continue.

### 2. **Maximum Physical And Biological Potentials**

The maximum timber benchmark is 52.8 MMBF per year for sawtimber and 119,745 CCF per year all commercial products. The maximum timber benchmark is based on rotation ages at 95 percent of Current Mean Annual Increment (CMAI) which is 170 years for the Kenai Peninsula and 120 years for Prince William Sound and Copper River.

### 3. **Maximum PNV**

Present net value for this benchmark was calculated using the values shown below for yarding costs:

Timber Harvest	
Tractor Logging	\$ 51.40/MBF
Cable Logging	\$ 52.15/MBF
Helicopter Logging	\$278.00/MBF

In calculating MAX PNV, a four- percent discount rate was used and benefits were estimated for the next 50 years.

The maximum PNV at the end of the first decade is \$1,104.3 million; the timber portion is -\$10.7 million. This occurs by harvesting 59.9 MMBF or 119,745 CCF per year during the first decade.

## *Problems with Current Management Direction*

One of the most noticeable problems with existing direction is the lack of clear, concise timber production goals and objectives and the fact that the plan does not identify specific areas, watershed associations, or stands with a primary management emphasis of timber production or the production of other forest products.

Another problem has been the lack of site-specific location data for lands identified as suitable forest land from the Forest Plan planning record.

Current Forest Plan yields are based on 80 year rotations at 95 percent CMAI. Revision yields are based on a 170 year rotation for the Kenai Peninsula and a 120 year rotation for Prince William Sound and Copper River. Revision rotations are based on 95 percent CMAI of net merchantable volume.



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Using the inventory of existing visual conditions as adopted Visual Quality Objectives (VQO) for land management activities such as timber harvest has unnecessarily restricted management actions and has been the direct cause for four of the five Forest Plan amendments. The way this system is currently functioning, management has to amend the Forest Plan for almost every timber sale to be in compliance with Forest Plan VQOs.

Lack of current growth and yield data for trees species on the forest.

### *Management Concerns and Resource Use and Development Opportunities*

#### Management Concerns

- Long term loss of available commercial timber supply on the Kenai Peninsula.
- Long-term loss of Lutz spruce seed source and genetic diversity on the Kenai Peninsula.

#### Resource Use and Development Opportunities

The proposed Chugach Alaska Corporation (CAC) Carbon Mountain Road in the Copper River area will create an opportunity to access approximately 78,050 acres of tentatively suitable timberlands in Watershed Associations C17, C19, C21, C22, C24, and C25 on the Cordova Ranger District. Road access into these currently unroaded watershed associations would create an opportunity to initiate timber management on suitable lands and provide a local supply of available and accessible timber to the community of Cordova for commercial, personal, and/or Alaska free use. Where this potential road is located and how it is managed over the long-term will determine how much of this opportunity could be realized.

The CAC road crossing the National Forest on the south end of Montague Island between McLeod Harbor and Patton Bay provides a management opportunity to access and manage for commercial timber production approximately 24,960 acres of National Forest land classified as tentatively suitable timberlands in Watershed Associations P34 and P37 on the Cordova Ranger District. This road is currently scheduled for obliteration when CAC harvest operations have been completed. If obliterated, any future timber management opportunities on the south end of Montague Island would probably be precluded for the at least several decades.

### *Need to Establish or Change Management Direction*

There is a need to reassess National Forest System lands to determine which lands are suited for timber management as required by the National Forest Management Act and to assess changes in management emphasis brought about by changed conditions and public demand. The reassessment of suitable lands is necessary to determine changes in the long-term sustained yield capacity and the allowable sale quantity.

There is a need to change the rotation ages used in the existing Forest Plan (80 years) to rotation ages based on net merchantable volume at CMAI (170 years on Kenai; 120 years in PWS and Copper River).

In the Forest Plan, 69 percent of the annual ASQ was scheduled to come from Prince William Sound Management Areas (54%) and the Copper River Management Area (15%). Per Forest Plan Settlement Agreement (Amendment 1), the reduced ASQ volume was scheduled to come from two large timber sales in Prince William Sound, the South Montague Island Sale (36 MMBF) and the St. Matthews/Olson Bay Sale (20 MMBF). The Forest Service was in the process of preparing the EIS for the Big Islands Management Area Analysis in 1989, which included the South Montague Island Sale, when the Exxon Valdez Oil spill occurred. After supplementing the Final EIS for oil spill impacts, the Forest Supervisor

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made a decision to postpone any timber management activities in the Big Islands Management Area for the remainder of the plan implementation period due to the oil spill. The decision resulted in postponement of the 36 MMBF South Montague Island timber sale for the remainder of the plan implementation period, cancellation of precommercial thinning contracts for previously harvested areas on Montague Island, permitted Chugach Alaska Corporation to construct a road across National Forest lands between McLeod Harbor and Patton Bay to access their lands as required by ANILCA, and effectively precluded the agency from implementing the other 20 MMBF timber sale in the amended Forest Plan (St. Matthew's/Olson Bay Sale) for the same reason.

In this revision, the Forest Service will need to determine whether or not to resume timber management activities on lands suitable for timber production in Prince William Sound and Copper River. These decisions will be made in light of adjacent Native Corporation timber harvest, EVOS restoration efforts, and the purchase of Native lands by the EVOS Trustee Council to prevent additional timber harvest on Native lands.

The Forest needs to assess how it is going to meet the growing demand for personal and Alaska free use forest products around communities on the Forest.

The Forest needs to reassess its commitment to protect and manage the timber resource for long-term sustainability and production.

### *Revision Decision Space*

The amount of timberland found suitable for timber production is dependent upon how the Forest's land base is allocated, economic efficiency, and the priority given to vegetation/timber management. The final ASQ is dependent upon the number of suitable acres, methods of timber harvest allowed, and the resulting yields. Possible designation of wilderness, wild and scenic, Research Natural Areas or other special areas could have specific impacts on the Forest's ability to meet the needs for forest products production.

Alternatives will span the range from no commercial timber harvest to offering the maximum sustainable amount consistent with sound ecosystem management and legislated constraints. Even though one or more alternatives could have no ASQ, vegetation management for forest stewardship and resultant forest product outputs could still occur if designed to meet other resource objectives.

## 2. Fisheries Production

### *Current Management Situation*

Commercial fish harvest in the waters of Southcentral Alaska is an important component of local economies. Wild salmon harvest in Prince William Sound averaged approximately seven million fish per year for the past 30 years. Harvest of coho salmon and sockeye salmon attributable to Forest streams from the Copper River/Bering River is estimated to average around 500,000 per year since 1971. Streams within the Forest on the Kenai Peninsula are estimated to produce an annual harvest of 400,000 kings, sockeyes and cohos to the commercial fishery. Sport harvest within these same waters has also risen dramatically, increasing more than 100% in the waters within and adjacent to the Forest within the last 10 years. On the Chugach National Forest, a total of 170,000 anglers days were expended to capture approximately 210,000 fish. The American Sportfishing Association estimated the 1996 economic impact of recreational fishing in Alaska to be over one billion dollars. In combination with the 1996 ADF&G Sport Fisheries report the economic output of sport fishing created by fish produced on the Chugach is approximately 200 million dollars.

