

29. Timber Management: Non-Interchangeable Components

Goals: Provide for the continuation of timber uses and resources by the timber industry and Alaska residents. Manage the timber resources for timber production of saw timber and wood products from suitable forest lands made available for timber harvest on an even-flow, long-term, sustained-yield basis and in an economically efficient manner.

Objectives: Pre-commercially thin previously harvested suitable forestland. Evaluate non-clearcutting silvicultural systems. Seek to provide an economic timber supply sufficient to meet the annual market demand¹ for Tongass National Forest timber and the market demand for the planning cycle, up to a ceiling of the Forest Plan’s allowable sale quantity, which is 2.67 billion board feet in the first decade. Manage young-growth to improve habitat for wildlife and commercial timber products. Review standards and guidelines for applicability to young-growth stands. Provide 2 to 3 years supply of volume under contract to local mills and then establish shelf volume² to maintain flexibility and stability in the sale program. Review the timber sale program and work with the state and other partners to implement changes that will keep an “economic timber” perspective throughout the process and monitor the implementation of these reforms to ensure they are consistently employed across the Forest.

Background: Non-interchangeable components (NICs) are defined as increments of the suitable land base and their contribution to the allowable sale quantity (ASQ) established to meet Forest Plan objectives. NICs are identified as parcels of land and the type of timber thereon, which are differentiated for the purpose of Forest Plan implementation. The total ASQ is derived from the sum of the timber volumes from all NICs. NICs cannot be substituted for each other in the timber sale program.

NIC I - Normal Operability: This is volume scheduled from suitable lands using existing logging systems. Most of these lands are expected to be economic under projected market conditions. On average, sales from these lands have the highest probability for a purchaser to gain a profit from their investment and labor. This is the best operable ground. Normal operability includes those systems most frequently used on the Tongass. These systems are tractor, shovel, standard cable, and some helicopter.

NIC II - Difficult and Isolated Operability: This is volume scheduled from suitable lands that are available for harvest using logging systems not in common use in Southeast Alaska. Most of these lands are presently considered economically and technologically marginal.

¹ The annual market demand forecast is a methodology used to set the short-term goals for the Tongass Timber Program – volume the Forest plans to offer in the current year, pending sufficient funding and sufficient National Environmental Policy Act (NEPA)-cleared volume. NEPA-cleared volume is defined as NEPA documents with a signed decision.

² Shelf volume is volume that has been NEPA-cleared and is available for offer.

Timber Management Question: *Are the non-interchangeable components (NICs) of the allowable sale quantity (ASQ) consistent with actual harvest?*

Evaluation Criteria

The evaluation criteria include:

- Volume harvested by logging system from suitable lands from healthy commercial forest timber stands.
- Volume harvested by logging system from suitable lands from commercial forest timber stands that are unhealthy and currently in a non-productive status; for example, yellow-cedar decline and blowdown with heavy sap rot or breakage.
- Distance from the setting to landing. For helicopter settings, settings over 0.75-mile flight distance from landings, either on the land or in the water, is considered NIC II.

Sampling/Reporting Period

Geographical information systems (GIS) analysis of Forest Plan Logging System Transportation Analysis (LSTA) of the harvest setting compared with the actual timber harvest settings. The analysis can be produced annually.

Monitoring Results

In FY2014, there were approximately 39 MMBF harvested from the Tongass. All of the harvest was in NIC I areas. In 2012, timber harvest consisted of 82 percent conventional logging systems and 18 percent helicopter logging systems. Completed harvest was estimated based on normal operability to obtain the Forest Plan NIC data. The units harvested using normal operability within the Forest Plan were estimated by timber sale harvest unit and operability factors. The NIC Forest Plan calls were then compared to actual timber sale harvest unit maps to determine yarding methods.

Timber Management Table 1. Comparison of NIC I and NIC II harvest by fiscal year and percent of total harvest

Fiscal Year	NIC I percent of harvest	NIC II percent of harvest
1999	88	12
2000	77	23
2001	46	54
2002	90	10
2003	91	9
2004	84	16
2005	91	9
2006	78	22
2007	45	55
2008	95	5
2009	93	7
2010	100	0
2011	99	1
2012	99	<1
2013	100	0
2014	100	0

The 1997 Forest Plan Monitoring and Evaluation Report did not analyze the NIC I and NIC II timber harvest categories.

Evaluation of Results

NIC data has been reviewed for the past 16 years. An apparent upward trend was occurring in the proportion of the NIC II harvest component from 1999 through 2001. Fiscal years 2002, 2003, and 2005 show a reverse swing in the NIC trend; however, 2006 and 2007 showed a dramatic increase in the NIC II component. The increase in NIC I for 2002, 2003, and 2005 may be due to the poor timber market and higher fuel costs influencing purchasers to focus on more conventional harvests. The increase of NIC I component in 2008 and 2009 is likely due to changes in the appropriations law that requires the Tongass timber sale program to only conduct timber sales that appraised positively using the residual value appraisal approach. This trend continued in 2010. In 2009, the USDA established a process that required the Secretary to approve road building and timber harvest in inventoried roadless areas. Therefore, the Tongass began to focus on areas already roaded for timber harvest projects. Roaded areas are usually classified as NIC 1 components. These circumstances explain the shift away from harvest in the NIC II component. If the moratorium and approval process remain in effect, the offering a planned mix of NIC I and NIC II components of the ASQ is unlikely.