

## *Tongass National Forest Young-Growth Management – Acres of even-aged harvest by suitability*

	*Total	<sup>1</sup> Suitable	Unsuitable							Roadless	<sup>5</sup> Old Growth Habitat LUD
			<sup>2</sup> Non-Dev LUD (excluding wilderness)	Beach Buffer	Slopes>72%	<sup>3</sup> RMA Dev. LUD	<sup>4</sup> TTRA Dev. LUD	TTRA Non-Dev LUD	Wilderness		
<b>Forest-wide</b>	<b>435,858</b>	<b>273,232</b>	<b>60,389</b>	<b>26,167</b>	<b>2,817</b>	<b>34,206</b>	<b>23,333</b>	<b>4,469</b>	<b>11,244</b>	<b>11,205</b>	<b>41,890</b>
Thorne Bay RD	168,803	117,973	22,065	7,968	463	6,450	10,033	1,448	2,404	1,333	13,350
Petersburg RD	65,512	46,863	7,811	4,029	300	2,298	2,514	474	1,223	3,042	4,396
Sitka RD	53,183	20,611	9,866	2,407	642	12,861	4,319	972	1,506	185	7,402
Wrangell RD	43,670	29,302	5,193	4,964	344	1,605	1,534	567	161	1,293	5,232
Ketchikan-Misty RD	39,182	25,268	4,126	4,893	742	2,002	1,887	220	44	1,469	3,055
Craig RD	31,844	20,013	5,612	1,777	159	1,676	1,870	538	198	3,008	2,625
Hoonah RD	18,475	7,286	4,571	60	127	5,368	855	207	0	202	4,775
Admiralty RD	5,725	0	26	0	0	0		0	5,699	0	0
Juneau RD	5,443	2,182	1,042	62	40	1,869	198	42	9	645	1,051
Yakutat RD	4,019	3,733	78	6	0	77	124	1	0	29	4

\*Note: all acres exclude the non-vegetative road right-of-way. These right-of-ways were created in GIS by assigning buffers to all roads. The width of the buffers depend upon class of road.

<sup>1</sup>- young growth that occurs outside the 1,000' Beach Buffer, RMA, TTRA buffers, Slope Class >72% and within either Timber Production, Modified Landscape or Scenic Viewshed.

<sup>2</sup>- includes the non-development LUDs: L2, RM, SM, OG, MW, RN, SA, WR, SR, RR

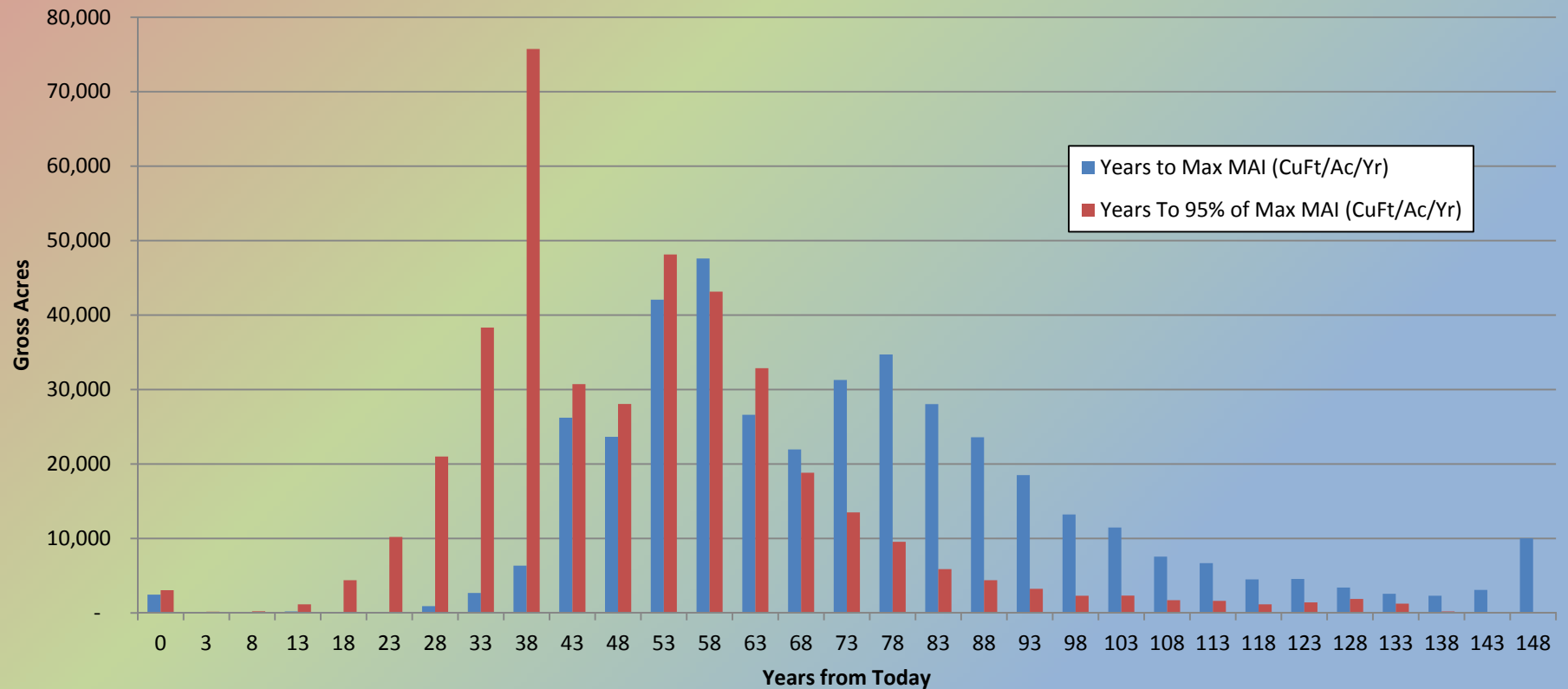
<sup>3</sup>- young growth that occurs in riparian management area (RMA) buffers in Development LUDs

<sup>4</sup>- young growth that occurs in TTRA buffers in Development LUDs

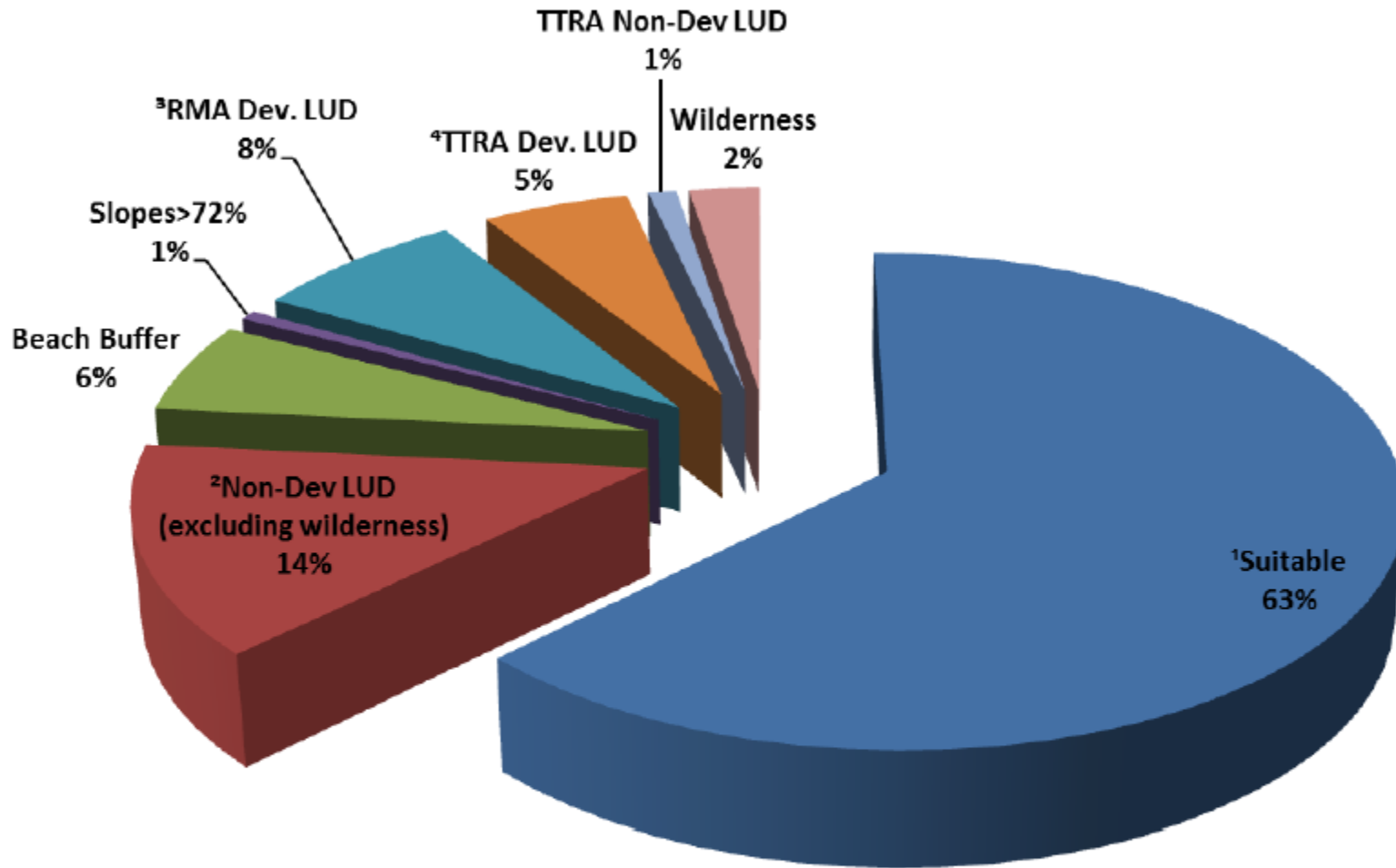
<sup>5</sup>- young growth that occurs in Old Growth Habitat LUD

**Culmination of Mean Annual Increment (CMAI):** The age in the growth cycle of a tree or stand of trees at which the mean annual increment for height, diameter, basal area, or volume is at a maximum. Prior to the passage of SB340 the National Forest Management act of 1976 limited the age at which a stand can be rotated to those stands that had achieved 95% CMAI

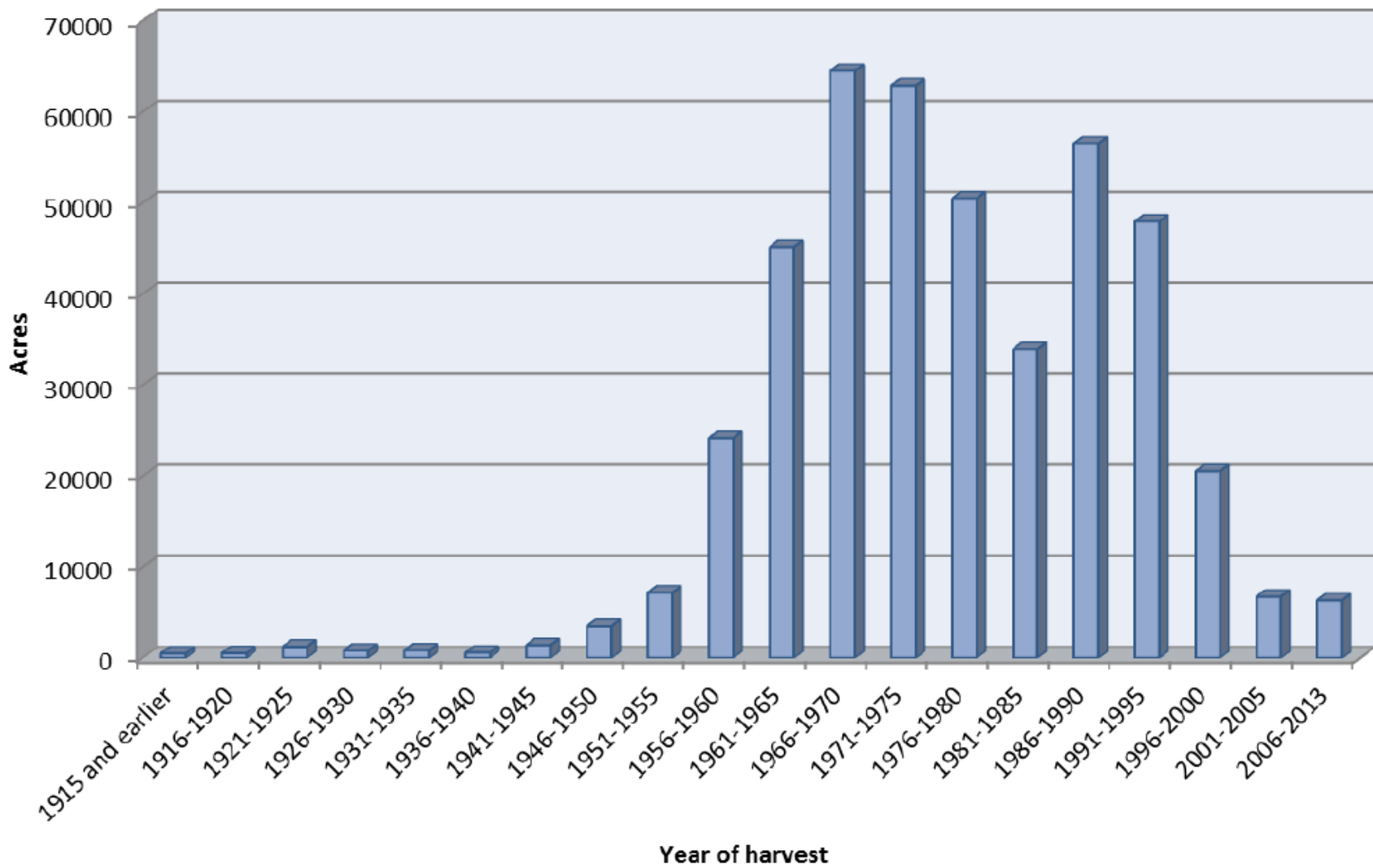
**Tongass NF - Gross Acres vs Years to Max MAI (CuFt), for stands with an Inventory**



# Young growth acres by Suitability



**Acres of young growth by harvest date (5 year increments)**

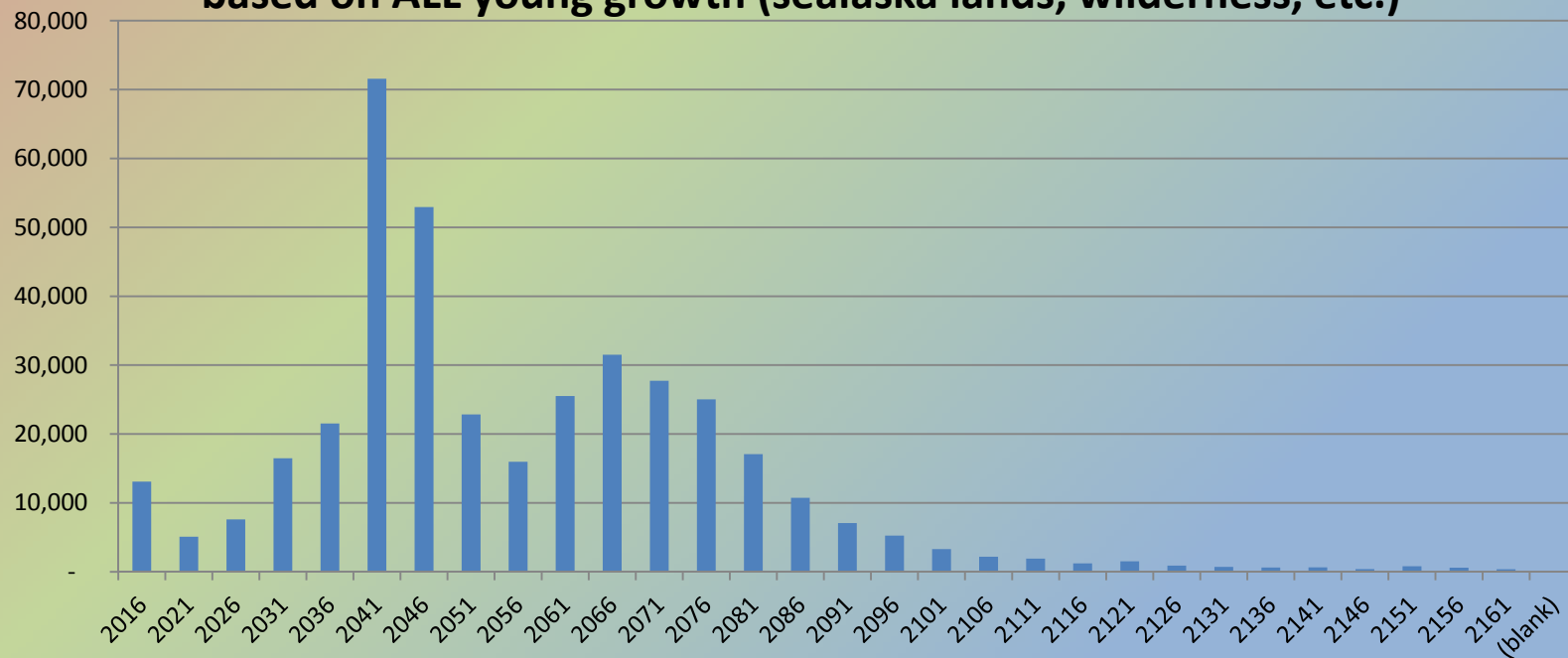


**Rotation:** in even-aged systems, the period between regeneration establishment and final cutting —*note* rotation may be based on many criteria including size, age, culmination of mean annual increment, or attainment of particular physical or value growth rate, and biological condition.

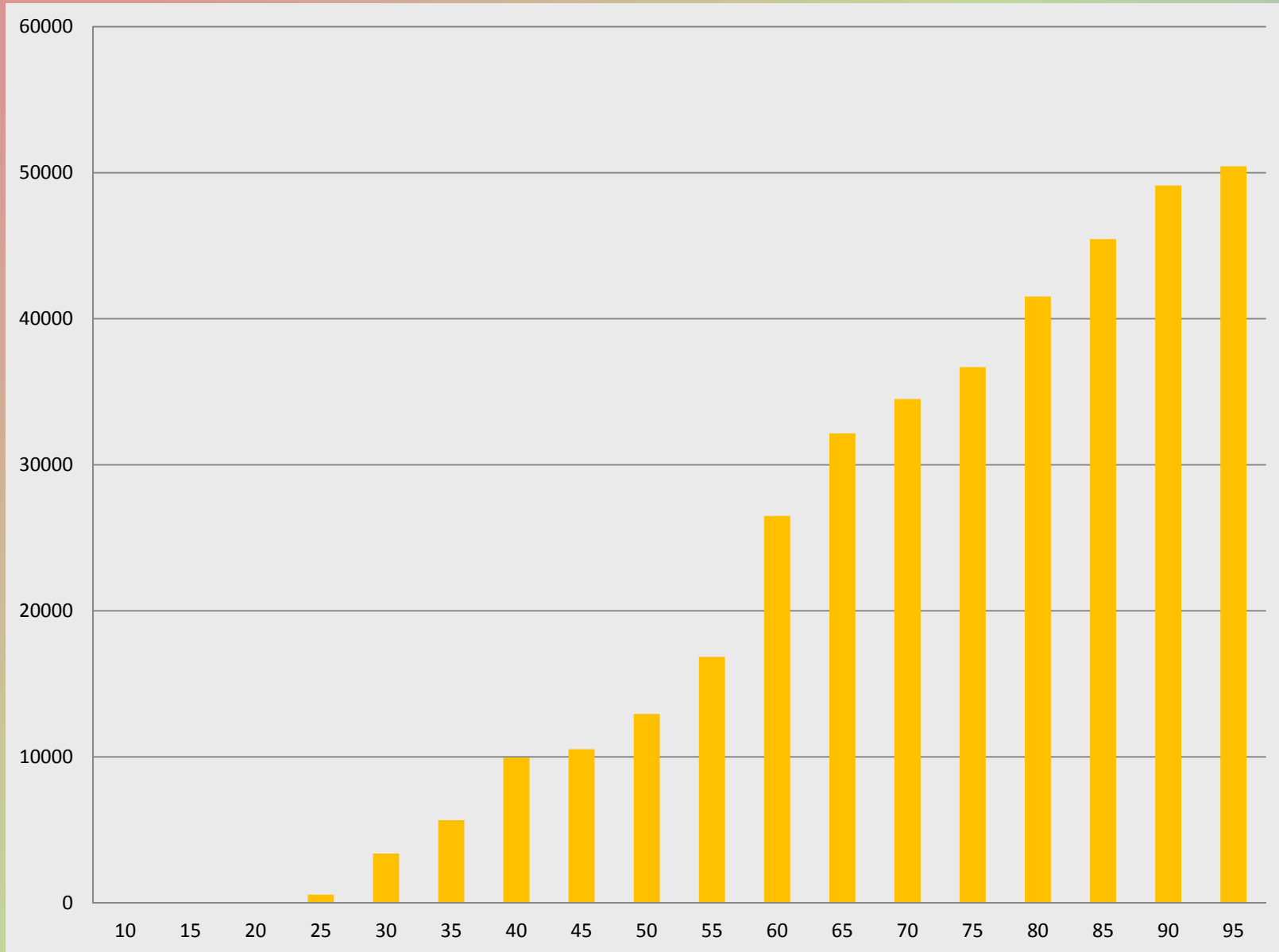
On the Tongass, the 2-Log rule was developed to better predict when stands reach an **economic** condition to see where economic harvest opportunities may exist earlier than waiting for stands to reach CMAI. The 2-Log Rule implies at least half of the merchantable volume within a stand is comprised of trees with two or more logs. A log for this exercise is defined by trees that are at least a 9” at breast height, 6” in diameter at the small end and are at least 34 feet long.

### When stands reach two log criteria

**\*based on ALL young growth (sealaska lands, wilderness, etc.)**



# Forest-wide average Volume per Acre by Age



## Comparison of YG Acres to Average Volume per Acre by 5-year Age Classes

