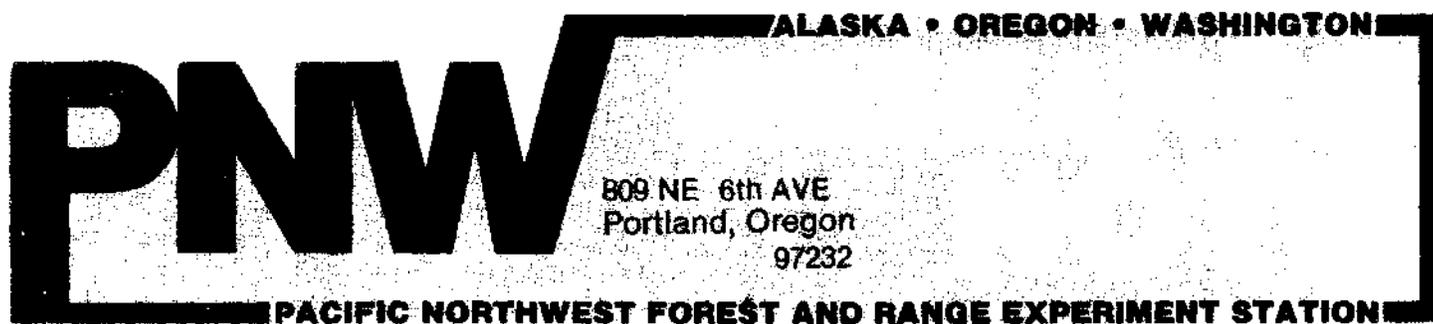


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## SUBSTITUTION AND THE USDA FOREST SERVICE LOG EXPORT RESTRICTIONS

by

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### Abstract

With some exceptions, the substitution of National Forest timber for exported private timber is forbidden by regulations. Certain firms may use a limited amount of National Forest timber as replacement for exported private timber, however, in accordance with their pattern of purchases and exports from 1971 through 1973. About 359 million board feet of National Forest timber could be used annually as replacement for exported private timber by this provision; in 1977 about 102 million board feet was used in this fashion. About 81 percent of the replacement volume was from National Forests in Washington.

KEYWORDS: Import/export (forest products), trade policy (international) National Forest administration.

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The pros and cons of permitting the export of unprocessed softwood logs from the west coast have been debated for a long time,<sup>2</sup> however, the conflict shows no signs of abating.

The controversy has led to the enactment of fairly extensive Federal regulations designed to prohibit the export of Federal timber and to prohibit the substitution of Federal timber for private timber to be exported. In addition, Oregon, California, and Alaska have implemented regulations to restrict the export of timber from State-managed lands. As a result of the combination of Federal and State restrictions, about 38 percent of the combined timber harvest of the three States of Washington, Oregon, and California is directly controlled by export regulations (table 1).

<sup>2</sup>For example, the October 3, 1936, issue of the Oregonian reported initiatives by the Portland chamber of Commerce to check the flow of Port-Orford-cedar logs to Japan.

The purpose of export restrictions may be to insure domestic processing of logs from public lands or it may be to restrict the volume of exports. The volume of logs exported is on the increase. For example, in 1979, log exports from the west coast and Alaska reached a record 3.4 billion board feet.<sup>3</sup>

As a result of the large volume of exports, questions have been raised about the effectiveness of current regulations. Opponents of exports have expressed concern that the regulations may contain loopholes that permit timber purchasers to take actions against the intent of the regulations.

<sup>3</sup>Ruderman, Florence K. 1979. Production, prices, employment and trade in northwest forest industries. Published quarterly. USDA For. Serv. Pac. Northwest For. and Range Exp. Stn., Portland, Oreg.

Table 1—Proportion of total timber harvest prohibited from export by Federal or State controls in Washington, Oregon, and California, 1977

State	Total timber harvest	Portion of total harvest prohibited from export by Federal controls		Portion of total harvest prohibited from export by State controls		Portion of total harvest prohibited from export by Federal and State controls	
	Million board feet	Million board feet	Percent	Million board feet	Percent	Million board feet	Percent
Washington	6,591	1,175	17.8		--	1,175	17.8
Oregon	7,525	3,952	52.5	228	3.0	4,180	55.5
California	4,787	1,757	36.7	28	0.6	1,785	37.3
Total (average)	18,903	6,884	(36.4)	256	(1.4)	7,140	(37.8)

Source: Ruderman, Florence K. 1979. Production, prices, employment, and trade in northwest forest industries. Published quarterly. USDA For. Serv. Pac. Northwest For. and Range Exp. Stn., Portland, Oreg.

Table 2---Volume of National Forest timber that may be used as replacement for private timber to be exported within the substitution regulations

National Forest	Volume (thousand board feet)
<b>Washington:</b>	
Gifford Pinchot	98,120
Olympic	73,735
Mt. Baker-Snoqualmic	29,073
Wenatchee	1,000
Total	201,928
<b>Oregon :</b>	
Mt. Hood	62,586
Siuslaw	3,498
Willamette	5,897
Siskiyou	25,652
Total	97,633
<b>California:</b>	
Tahoe	28,600
Six Rivers	26,989
Shasta Trinity	196
Klamath	13
El Dorado	3,267
Total	59,065
All National Forests	358,626

To obtain an estimate of how much replacement occurs, each National Forest was queried to obtain followup data on purchases and exports by those firms with established historical bases. As before, the lesser of the volume of timber exported or purchased was used as a proxy for the volume of National Forest actually used as replacement.

Data were summarized for all of the firms involved in export and purchase in 1977. For that year, approximately 102 million board feet of National Forest timber was used as replacement for private timber to be exported (table 3). Most of the replacement occurred with timber from National Forests in Washington.

Table 3--Volume of National Forest timber used as replacement for private timber to be exported, 1977

National Forest	Volume (thousand board feet)
Washington	82,919
Oregon	10,686
California	8,340
Total	101,945

## Discussion

Results of this study indicate that about 100 million board feet of National Forest timber is annually used as replacement for private timber to be exported. This study measured only direct replacement; no effort was made to determine the amount which is indirectly substituted for private timber to be exported.

## Historical Base Levels

To obtain an estimate of the amount of National Forest timber that can be used as replacement through this provision of the regulations, all of the Western National Forests were canvassed to determine the historical bases which have been established. It was necessary to canvass each National Forest since the monitoring and enforcement of the substitution regulations are done at the Forest level.

As of mid-1979, 49 historical bases had been established in Washington and Oregon and an additional 7 had been established in California. No quotas have been established by firms in the Intermountain or Rocky Mountain areas. In most cases a firm has only one historical base, but some of the larger firms have established bases for several different tributary areas.

During the 1971-73 period, the firms with historical bases exported a total of 1.6 billion board feet of private timber and purchased 4.2 billion board feet of National Forest timber. The sum of the established historical bases is thus 0.6 billion board feet for exports (1.6 - 3p×110 percent) and 1.5 billion board feet for purchases (4.2 - 3 × 110 percent).

This does not mean that an annual total of 0.6 billion board feet of National Forest timber may be used as replacement for exported private timber. For each firm the permissible volume is determined by the lesser of its export or purchase quotas. For example, a firm which has an export quota of 5 million board feet and a purchase quota of 25 million board feet can use no more than 5 million board feet of National Forest timber as replacement for exported private timber. To obtain a west-wide estimate of replacement, the lesser of these two figures are added for each firm.

Results indicate that 359 million board feet could be used annually as replacement in the West (table 2). Most of the quota has been established by firms operating in the State of Washington, particularly in the vicinity of the Gifford Pinchot National Forest. This does not mean that these volumes are necessarily tied to a particular National Forest; some firms have tributary areas which encompass more than one National Forest. Firms could switch their purchases to another National Forest as long as they fall within the same tributary area. The data in table 2 do indicate, however, the general area of activity of exporters which also were purchasers of National Forest timber.

Although 359 million board feet of National Forest timber could be used as replacement for exported private timber for any given year, the actual volume is less than the allowable. Some firms have stopped exporting. Some exporters have found their quotas too restricted and have stopped purchasing National Forest timber.

One loophole that has come in for particular scrutiny is the grandfather clause of the USDA Forest Service substitution regulations. Although substitution is forbidden, this provision enables certain firms to use a limited amount of National Forest timber as replacement for private timber to be exported. This paper reports the result of a study to determine the nature and extent of this practice.

## **Substitution Regulations of the USDA Forest Service**

The USDA Forest Service was specifically directed to control substitution according to the terms of a rider to the agency's 1974 appropriations bill (P.L. 93-120).<sup>4</sup> In October, 1973, proposed regulations were published and public comments were solicited. Considering these comments, the Forest Service implemented substitution regulations in March, 1974.

Public comments appeared to favor using traditional marketing patterns as a base in control of substitution. Replacement by National Forest timber would be permitted in accordance with the traditional or historical pattern and substitution would be considered as occurring only when the exporter increases purchase of National Forest timber or increases export of private timber.

<sup>4</sup>For additional details see: Lindell, Gary R. 1978. Log export restrictions of the Western States and British Columbia. USDA Forest Service Gen. Tech. Rep. PNW-63, Pac. Northwest and Range Exp. Stn., Portland, Oreg.

Consequently, the regulations recognized a firm's historical base period as 110 percent of the firm's average annual volume of National Forest timber purchases and export of private timber for the calendar years 1971-73. A firm which had been exporting private timber and purchasing National Forest timber during this period could continue to do so subject to the export and purchase limitation or quota. Substitution was defined as, for any subsequent year, an increase in exports relative to the historical base while the firm continues to purchase National Forest timber or an increase in National Forest purchases while the firm continues to export. A firm violating either of these provisos is guilty of a contract violation and faces possible debarment from subsequent sales and cancellation of existing contracts.

Since timber is not readily transportable, the regulations are tied to a particular market area or tributary area. Thus a firm may establish different purchase and export quotas for different tributary areas. A tributary area is established for each mill where National Forest timber is to be processed. The boundary of the area is determined by establishing from the records the area from which each mill received its supply of timber for the base period (1971-1973). Once established, a tributary area is not normally subject to change.

Firms which want to purchase National Forest timber and export private timber are required to submit data to establish their historical purchase and export base. The data must also support the proposed tributary area.

The Forest Service is not required to monitor export and purchase activity beyond the original purchaser. This means that a firm which is ineligible to purchase a National Forest, sale because it has exceeded its export quota can purchase National Forest timber from another firm and thus indirectly engage in substitution. Indirect substitution cannot be precisely determined. In response to a congressional request, however, the Forest Service concluded that indirect substitution is not widespread and that modification of the regulations is unwarranted.<sup>5</sup>

Our purpose is not to argue for more or fewer export restrictions. Whether or not the permitted replacement, approximately 100 million board feet, constitutes a major loophole depends on one's point of view. Although this represents the annual log requirements for five to six medium-size sawmills, it is a small proportion of total exports, the bulk of which come from private lands or from lands managed by the State of Washington.

<sup>5</sup>Letter dated September 28, 1979, from R. Max Petersen, Chief, USDA. Forest. Service to the Honorable Norman D. Dicks. Copy on file at Pacific Northwest Forest and Range Exp, Stn., Portland, Oreg.

There appears to be little basis for determining the net effect of closure of the replacement loophole on log supplies available to domestic processors. For examples, indirect substitution might increase in response to closure of the loophole, and firms affected by the closure who also buy and sell logs in the domestic market might reduce their domestic log sales in order to compensate for the loss of National Forest timber. Or firms might decrease export sales, decrease purchases of National Forest timber, and increase processing of private timber. Even in this situation, however, the net effect on supplies to domestic processors is uncertain: Firms not involved in purchasing National Forest timber might divert log sales from the domestic to the export market in response to any decline in export sales by competing firms.

In summmary, this study has documented the historical base level of 359 million board feet for firms eligible to substitute National Forest timber for private timber to be exported. Of this total, firms are substituting only about 100 million board feet. Over 80 percent of the substitution occurs in the State of Washington. Prohibition of substitution would not necessarily increase log supplies to domestic processors by 100 million board feet.