The Alaska Wood Products Industry in 2001

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Preface

This report highlights pertinent issues and summarizes current information available about the Alaska forest products industry. Much of the industry activity has historically been in Southeast Alaska—based on harvests from the Tongass National Forest and in more recent times from Alaska Native corporation lands—but there are also activities in Southcentral and Interior Alaska. To prepare this report, we examined a wide range of literature and talked to a number of people closely associated with the Alaska forest products industry.

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Introduction

Timber harvests from national forests in the U.S. dropped 75 percent from their peak in 1987 to 1999. In a recent report, the U.S. Forest Service (USFS) said “the long-term [timber product market] outlook is one of continued growth in demand for most timber products.” However, the report also said, “Because sustainable forest management has become the top priority of the Forest Service, it is unlikely that the National Forest System harvest will increase significantly in the foreseeable future” (Howard, 2001). This is but one of several factors affecting the Alaska forest products industry.

The Alaska wood products industry has been experiencing significant market changes for the past several years. The industry has declined by all economic measures. As a result of this, the social and political structure in some Alaskan communities has also changed from a more timber supportive environment to one focused on non-timber related jobs and skill sets.

Market fluctuations are not new to the industry. However, the downturn in the Asian economy, the drop in timber prices, and the closing of pulp mills in Alaska—coupled with growing environmental concerns about timber harvesting in national forests—have brought about the end of what has been a volume-based harvest industry. State and community politics, a decrease in skilled labor force, environmental attitudes, regulatory concerns, world markets, engineered wood products, plantation forests throughout the world, and new competition are changing the way the Alaska forest products industry must do business.

Increased competition from European suppliers has negatively affected the Alaska forest products industry. European suppliers have increased their share of the Japanese market from 3 percent in 1994 to 20 percent in 1997 (McDowell, 2000). Favorable freight shipping costs facilitated this growing market share; containers shipped to Europe from Japan with goods are able to return to Japan with lumber.

The industry must change its focus to marketing Alaska forest products as unique and creating niche markets that accommodate changing consumer needs and address increasing competition in both the foreign and domestic markets. It should promote Alaska products that support smaller
specialized industry and meet the demand for old-growth timber in the world market. The industry must adapt and respond to the needs of the market, the customer, the politician, and the environmental and tourism communities to create a new Alaska forest products industry. It is key for Alaska to develop this new industry rather than attempting to perpetuate an old industry that is becoming non-existent.

The Alaska forest products industry has undergone major changes in the past; the question is, can it change now and in the future? In the 1940s, the USFS developed the pulp industry in response to the collapse of the mining and fishing industries (Morse, 1998) and significantly changed the Southeast Alaska forest products industry. There is currently a need for this same magnitude of change again, if Alaska forest products are to remain a part of the Alaska economy.

**Sampling of Current Literature**

A variety of entities produce information on the status of the Alaska forest products industry and related markets. Many publications address the opportunities and hurdles the Alaska industry faces.

**Southeast Timber Task Force Report**

[http://www.deed.state.ak.us/econdev/tree10.htm](http://www.deed.state.ak.us/econdev/tree10.htm)

The Southeast Timber Task Force Report contains extensive information on the Alaska forest products industry as of 1997. The Southeast Regional Timber Industry Task Force produced the report, at the governor’s request. The report recommends immediate and ongoing goals for a viable and sustainable timber industry.

**Immediate goals:**

1. Improve the reliability of the timber supply
2. Identify uses for low-end logs
3. Provide a dependable wood supply to small operators
4. Encourage capital investment in value-added manufacturing facilities

**Ongoing goals:**

1. Identify a steady and reliable long-term timber supply for local processors
2. Encourage smaller timber businesses to work together to become more competitive
3. Provide the public information it needs to make informed judgments about the activities of the timber industry in Southeast Alaska

The report discusses Alaska timber resources, the timber supply outlook across a variety of landowners in Southeast Alaska, and historical and existing wood processing facilities and products. It also examines key questions and alternative visions for the future, as well as discussing programs that encourage value-added processing in other regions.

Given how quickly change takes place in the timber industry, it is pertinent to find out what has happened in the industry since the publication of that report almost four years ago.
The Global Market for Timber from the Tongass National Forest
(as of June 2001, this report is not available on the web)

In April 2000, the McDowell Group, in association with H.R. Harwell & Associates, Con Schallau, and Walt Sheridan & Associates, produced a global market report for Tongass timber for the Ketchikan Gateway Borough. The report discusses timber management in the Tongass National Forest, global production and consumption of forest products, international trade in Tongass-type forest products, the sustainability of world timber supplies, and the global market trends for Tongass-type forest products. The report says that demand for Tongass-type timber far exceeds the allowable sale quantity of the USFS and the current mill capacity in Southeast Alaska. Keep in mind, however, most of the timber the USFS put up for sale in 1998 was not purchased.

Key findings of the report include:

1. Demand for products of the type that can be produced from the Tongass National Forest is very large relative to installed mill capacity in Southeast Alaska.
2. Demand for Tongass-type timber products will continue to grow well into the next century.
3. The 1998 predictions of world timber demand by the United Nations’ World Agriculture Organization are significantly stronger than the 1996 estimates used by the USFS to derive Tongass National Forest harvest needs.
4. Timber production in the Tongass National Forest has declined during the past decade because of global and local conditions that are both economic and political.
5. Current harvest policies in the Tongass will result in declining production due to lack of investment in new and upgraded facilities.
6. An important trend in the forest products industry is growth in demand for engineered wood products.
7. Integrated processing—i.e., complementary manufacturing operations that provide different levels of processing or combine to handle a range of species or grades of wood—offers efficiency and market advantages.
8. Targeting multiple markets, specifically a combination of North American and Asian markets, offers a degree of security but requires substantial skills and capacity that may be beyond the reach of smaller producers.
9. Large timber resources in China and the Russian Federation are not expected to affect world markets substantially in the foreseeable future, because of political, economic and infrastructure constraints.
10. Forest plantations, particularly in South America and New Zealand, will become an increasingly important source of softwood and hardwood timber over the next two decades.
Evaluating the Demand for Tongass Timber

This report, produced by the U.S. Forest Service in September 1998, discusses USFS estimates of the demand for Tongass timber. The report discusses market demand over a 10-year planning cycle as well as annual market demand. It presents sawmill capacity and utilization estimates for Southeast Alaska, Oregon, Washington and California. The report acknowledges the uncertainties inherent in such forecasts and says “the procedures outlined . . . have been designed to allow us to move forward with a timber sale program while the industry is in a complete structural transition.”

The report also discusses the historical development of the Alaska forest products industry and presents monitoring management issues, data collection and database development. The report projects National Forest timber harvest in Alaska based on three alternative future scenarios—one of low demand one of medium and one of high demand. The average demand from 1998 to 2007 is reported to be 112.8 mmbf for the low demand scenario and 132.6 mmbf and 182.2 mmbf for the medium and high demand scenarios respectively. Factors that are reported as influencing annual demand include the following:

- the number, capacity, and efficiency of wood processors in the region
- the volume and value of standing inventory owned by the firm
- the cost and availability of alternate sources of supply
- the relative cost of capital, labor, and other inputs to production
- the demand for the products manufactured in Southeast Alaska
- the technology employed in manufacturing those products
- currency exchange rates among trading partners
- contractual agreements with the purchasers of end products, and
- the extent to which government policies enhance or restrict market opportunities

The report notes that factors that influence annual demand “may not be predictable or...economically rational. Annual timber demand may well be a function of realistic or unrealistic speculation, desire to preserve market share, or some intrinsic value realized by the owner/operator who is preserving a lifestyle preference.” Maintaining market share and customer base through the supply of timber to buyers even in a depressed market is a factor considered by companies when making decisions regarding timber harvesting and purchasing.

The report notes “…movement away from maintenance of an industry structure planned in the 1950’s to an industry structure linked to the competitive market will be a lengthy and difficult process.” This complete structural transition has made it difficult to paint a reasonably accurate picture of the Alaska forest products industry. The report has been criticized for implying that “market demand in Southeast Alaska is independent of timber supply in the Tongass National Forest” (McDowell, 2000). What the reports says, however, is “...supply of national forest timber alone could not guarantee prosperity in the region’s [Southeast Alaska’s] timber industry. Market conditions and the demand for wood products were equally important.” The McDowell report agrees that “market demand for Tongass timber is a function of many factors,” but goes on to say that “federal timber supply sales that are well-timed, reliable and representative of current market conditions are a key factor in determining demand.”

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The Center for International Trade in Forest Products (CINTRAFOR) Reports
The center (at the University of Washington) issued two recent reports looking at opportunities and markets for Alaska forest products.

Survey of International Opportunities for Alaska Softwood Producers
http://www.cintrafor.org/RESEARCH_TAB/research_N.America.htm

The report, issued in September 2000, provides a detailed discussion of Alaska’s softwood forest resources and the markets for Alaska logs and lumber in Japan, Korea, China, and Western Europe. The report provides extensive background on factors affecting the Alaska forest products industry. It discusses current harvest trends, factors restricting harvests, future harvest trends, and costs in the timber industry. It also describes Alaska sawmills and their capacity.

An Assessment of Market Opportunities for Alaska Forest Product Exports

This report (1999) discusses potential market opportunities for forest product exports, identifies challenges to the industry, and discusses the need for further research and market development. The report says that although the timber industry in Alaska is impeded by various infrastructure and economy of scale factors, it does have high-quality raw materials. However, logs that are #3 grade or lower account for almost half of the timber inventory in the Tongass National Forest. Therefore, industry development must take into consideration the need to use not only the high-quality Sitka spruce but also the lower-grade logs. The report outlines specific challenges to the industry, including processing inefficiencies at mills—which are considered the most significant obstacles to developing the Alaska forest products industry. Also, the report asserts that promotion of secondary processing must be coupled with the development of a stable resource supply, if industry development is to be successful.

The report identifies the need for further research investigating the reasons for inefficiencies in processing and high manufacturing costs in Alaska, as well as the feasibility of more centralized production. It also calls for research on what products are being produced by species and grade in Alaska; how the Japanese market is using Alaska wood products and the distribution of those products; the economic feasibility of manufacturing engineered wood products in Alaska; and the viability of a centralized processing center in Southeast Alaska.
The Alaska Value-Added Forest Products Workshop was held in Sitka, Alaska on September 27 and 28, 1999. The Wood Utilization Research and Development Center of the Pacific Northwest Experiment Station conducted the conference. The proceedings from the conference present a wide variety of research that has been conducted on Alaska forest resources and the forest products industry.

Main conference topics covered in the proceedings include:
1. A Vision for the Revitalization of Alaska’s Forest Products Industry
2. Linking Healthy Forests, Communities, and Industry
3. Assuring Future Forest Potential
4. Enhancing Values in Lumber and Engineered Timber Products
5. Maximizing Value in Secondary Processes and Specialty Products
6. Assessing Market Conditions and Alaska’s Competitiveness

Alaska Department of Natural Resources, Division of Forestry, Year 2000 Annual Report
(not available on the web as of June 2001)

The Division of Forestry’s annual report for 2000 gives a good overview of the forest products markets throughout the state. The markets are summarized on a regional basis. In 2000, the state offered 25,504 mmbf (million board feet) of timber for sale, of which only 9,003 mmbf was sold.

• Timber markets in Interior Alaska did not change significantly during 2000. There continues to be no market for export of low-quality logs, which keeps stumpage low and makes harvesting of small logs difficult. Local sawmills continue to look into value-added processing and are producing a variety of items for the local market.

• Southeast manufacturers continue to develop high value-added products and explore different markets. Some local sawmills are investing in value-added manufacturing equipment and are exploring the market to supply wood for musical instruments. Due to the uncertainty of timber supply from the Tongass National Forest, there has been an increased demand for state timber sales.

• The Kenai Peninsula continues to harvest primarily beetle-killed spruce. Although the industry on the peninsula has been declining, it still contributes to the economy. Average annual gross logging sales over the past six years have been $23.6 million.

• The Matanuska-Susitna Valley demand for timber continues to be local and primarily for spruce sawtimber. A proposed chipping facility at Point McKenzie might increase the demand for wood fiber for export and has the potential to use 12 mmbf annually from sources statewide.
The Southeast Alaska Conservation Council (SEACC) reports in its publication Ghost Trees: Measuring the Vanished Forests of Southeast Alaska, “about 70% of the highest value forest stands [in the Tongass National Forest] have been clearcut and the timber industry [has taken] the biggest, easiest-to-log stands first. By logging the best timber first, the timber industry has jeopardized its own future” (SEACC, 2000). Buck Lindekugel of SEACC stated, “the best timber on the road system has been harvested yet the industry is still trying to compete like they used to. The forests have been high-graded in terms of having logged the best and most economical trees.” SEACC’s report entitled “Modeling a Small Scale Secondary Manufacturing Timber Industry for Southeast Alaska presents their “core timber supply” concept that focuses on a value added timber industry. “The switch from a volume to a value strategy mirrors similar transitions that have taken place in the Pacific Northwest and British Columbia.” The report recognizes that the “Southeast Alaska timber industry is in the midst of a fundamental transition, from a large-scale, volume driven industry to a smaller-scale industry that relies to a much greater degree on the production of secondary and finished wood products within the region.” “…the willingness on the part of the industry to embrace change will help facilitate the transition from a volume-based to a value-based industry” (Katz, 1997).

Discussion

Resources in the Region and Around the World

We can learn from the experiences of others. Organizations that exist in Canada and the Pacific Northwest that address timber industry issues similar to those in Alaska should be used as resources to help further the regional forest products industry. Such organizations may include but are not limited to the Northwest Policy Center at the University of Washington (http://depts.washington.edunpc/, the Evergreen Partnership http://www.ep.org/); the Northwest Wood Products Association (http://www.nwpa.org/); the Wood Products Competitiveness Corporation; the Center for International Trade in Forest Products (http://www.cintrafor.org/); the U.S. Forest Service’s Forest Products Laboratory in Madison, Wisconsin (http://www.fpl.fs.fed.us/); and the U.S. Forest Service’s Pacific Northwest Experiment Station Wood Utilization Research and Development Center in Sitka, Alaska (http://www.fs.fed.us/pnw/sitka/index.htm).

Examining what others around the world are doing to promote their wood products industry, how they are succeeding, and the pitfalls they have experienced provides vital information. The Alaska forest products industry should take advantage of the experiences of others in the world market within which Alaska must function—and look to other places with forest product industries for information and insights.

Constraints on the Alaska Wood Products Industry

The Alaska forest products industry faces many barriers. The recent economic downturn in the Asian market has brought about change, forcing mills in Southeast Alaska to close and placing hardships on others. Changing consumer preferences in Japan as a result of difficult economic times have also affected Alaska imports to Japan; Japanese consumers are buying more engineered wood products that in the past they did not find acceptable.
Barriers to the industry do not lie merely in the economies of Asia. A decrease in timber supply is a factor noted innumerable times as a basic reason for the decline in the Alaska forest products industry. Without a reliable supply of raw material, producers cannot plan for future capital investment in the industry or find timely ways of meeting consumer product needs. A case in point is Alaska Forest Creations, originally based in Anchorage, the business moved to Ketchikan to be closer to the raw materials it needed to make wooden bowls. Once in Ketchikan, the company couldn’t get the supply it needed from local mills and was forced to close, even though there was a national demand for its products (Hansen, 2000).

The Tongass National Forest Land Management Plan and the “roadless initiative” (which prohibits new roads in many areas of national forests) put in place by the Clinton administration are the main factors limiting potential harvests from the Tongass National Forest. Jack Phelps, past executive director of the Alaska Forest Association, recently estimated that if the roadless plan is implemented without modification, only 30 mmbf of timber per year would be available from the Tongass National Forest (Bonham, 2001). The export restrictions placed on federal timber are another constraint on the industry. Restrictions on the export of timber harvested from federal lands have not been coupled with incentives for industry to increase local manufacture of products—as the restrictions were meant to do. From the industry’s perspective, the restrictions have merely reduced the market value of the timber (McDowell, 2000).

We compiled the following list of challenges to the Alaska forest products industry from those identified in the McDowell Group’s report, Global Market for Timber from the Tongass National Forest, and CINTRAFOR’s Survey of International Opportunities for Alaska Softwood Producers. Challenges include:

- Forest management and federal regulations that restrict supply and increase costs
- High transportation costs related to Alaska’s geographic location
- High costs of labor, harvesting, energy, and manufacturing
- Aging production technology
- Inability to take advantage of economies of scale

Other factors, such as environmental regulation, affect the cost of doing business. Currently, disposing of wood waste from manufacturing processes by using it as fill material, burning it, or putting it in a land fill are acceptable means of disposal. Environmental concerns and potentially changing environmental regulations will most likely eliminate these options in the future, thereby increasing costs to the industry and reducing already slim profit margins. Such regulatory changes will necessitate creative solutions—such as converting wood residue to ethanol or developing consolidated means of treating the wastes. It is not known at this time whether such solutions are economically feasible.

Another hindrance to the industry is the lack of proper certifications of Alaska timber for structural use. “Most government construction projects in Southcentral Alaska do not use Alaska timber for development only because the proper certifications have not been arranged” (Swagel, 2000). Also of note is the damage to merchantable timber due to the spruce bark beetle infestation in areas of Southcentral Alaska.
Yet another problem is that the skilled labor force for the Alaska forest products industry is disappearing. Because of the poor industry environment, skilled laborers have left the state. The local skill and political support base that supported the industry in the past is diminishing. This has caused a significant constraint on the industry.

The above challenges increase the overall costs of harvesting, decrease the potential profits for the industry, and increase the scale at which it is economical to harvest timber—therefore necessitating a larger timber supply. This necessity often conflicts with environmental concerns about logging in Alaska and creates a litigious environment for doing business. The answer does not lie in alleviating just one of these constraints, but rather in dealing with the collective issues they present. Providing an increased timber supply, for example, will not resolve all the issues the forest products industry faces. Timber offered by the state and federal governments in recent times has often gone unpurchased, even though some analysts believe that a larger timber supply is a key to reviving the industry.

**Is there a Need for Additional Data?**

According to the Southeast Timber Task Force Report, Native corporations and other private landowners in Alaska don’t have to comply with any formal requirements for reporting timber harvests. Currently the U.S. Forest Service estimates private timber harvests from trade data the U.S. Department of Commerce collects from wood processors in Southeast Alaska.

Specific data about timber harvests on private lands in Alaska is lacking. Such data could aid state and federal planning efforts. Collecting and reporting this data would be an additional cost for the industry that might or might not be worth the limited benefits.

State policy would benefit from data on private forest land. If the state knew more about the resources on private lands, it would be better able to evaluate its own role in promoting the Alaska forest products industry. It would be better able to gauge whether it is competing with private landowners for the sale of timber or complementing industry needs. More information would enhance the state’s ability to make industry forecasts.

This greater depth of knowledge could also help advance the industry—which would be a direct benefit to the industry. However, there would inevitably be additional paperwork and potentially additional inventories necessary to capture pertinent information.

In collecting timber harvest data, the state would have to be sensitive to proprietary information and not inhibit private landowners’ opportunities in the market place. Although data about non-timber resources could also be valuable, collecting such information would be controversial, given the potential to hinder private land management. Landowners wouldn’t look favorably on providing information that had the potential to increase restrictions on private land use. Also, the planning value of such non-timber data would be limited. Even if the state knew the potential uses of private land, the lands wouldn’t necessarily be used for those purposes.

Opportunities for the state government to promote the Alaska forest products industry and its unique products may be more important than collecting additional data. The state could facilitate the marketing and promotion of Alaska forest products. This effort, however, will not work if
industry is not willing to take advantage of the opportunities presented. For example, the Alaska Department of Community and Economic Development currently attempts to provide support to the industry and to identify product requests from around the world—but many such requests go unanswered by the industry.

Where Have We Been and Where Are We Headed?

Timber harvests in Alaska have declined from approximately 900 mmbf (million board feet) annually in the past to a recent 283 mmbf. As of June 2000, forest industry employment statewide had dropped 65 percent from its peak (Swagel, 2000). The current industry outlook is not promising, based on actions companies have taken. Little timber purchasing or harvesting is taking place. Those businesses with the ability economically to shut down are doing so and bringing their activities in the market to a near standstill. “Despite the success of a handful of ventures, the larger timber operations in the state have been curtailed because of the lingering Asian economic flu and continuing environmental criticism [of the industry]” (Swagel, 2000). Large-scale logging for export has slowed. The Chugach Alaska Corporation fought for years before finally gaining road access rights to its lands near Cordova and now “does not anticipate doing anything soon” and will wait to harvest part of its acreage. Small companies throughout the Interior, Southcentral, and Southeast Alaska are, however, succeeding in niche markets and finding a sufficient supply of timber from state and private sales (Swagel, 2000).

Alaska Spruce Products in Anchor Point was one venture that successfully produced kiln-dried, planed and graded lumber for Home Depot, Spenard Builder’s Supply, Artic Builders and others (Jackinsky, 2000). They produced lumber for a variety of Alaska lumberyards with “the only production-sized drying kiln in the state.” Based on the predicted supply of timber from spruce bark beetle kill Alaska Spruce Products anticipated another 5-7 years of lumber production (Swagel, 2000). Unfortunately, Alaska Spruce Products burned in May 2000 and the company did not rebuild. It is, however, an example of one of the value-added efforts that have taken place throughout the state. It is important to remember that not all the forest products industry is in Southeast Alaska; Southcentral and Interior Alaska also contribute.

Jack Phelps (2000) notes “The Alaska timber industry in 2000 finds itself in a period of significant transition.” Another observer points out, “Due to the soft overseas markets, Alaska timber firms have begun to pay more attention to in-state Railbelt customers” (Swagel, 2000). The Japanese market is buying more manufactured products, especially engineered wood products. “The trend in Southeast and Southcentral Alaska is sawn products and niche markets, while Interior Alaska continues to focus on specialty products for the local market” (Swagel, 2000). In an interview, Jack Phelps said that “the industry has made a Herculean effort over the past few years to reconfigure itself to adjust to the continuous decline in the volume of available timber. It has shifted from a pulp-based industry to a sawn product industry, and from an industry whose primary markets were foreign to an almost completely domestic market” (Bonham, 2001).

The changes that are taking place in the forest products market throughout the world are forcing the need for changes in the Alaska forest products industry. This makes it exceedingly difficult to forecast future industry needs and market conditions. Reports discussing the demand for timber, the status of the local and world markets, industry capacity, and consumer preferences must be
viewed in light of when they were published, the data available at the time, and the fact that rapid
changes can quickly make information outdated. For example, only a year ago many observers
considered the laminated veneer lumber plant in Ketchikan a viable venture—but it is now in the
throes of Gateway Forest Product’s bankruptcy issues. The plant was operating as of June 2000,
but the borough was unsure how much longer it would operate either continuously or
intermittently (personal communication with Ketchikan Gateway Borough, 6/26/01). In
November 2001, Gateway timber filed for Chapter 11 bankruptcy and the Borough was
attempting to recover part of its investment in the plant (Alaska Public Radio Network).

A great deal of research has gone into analyzing the Alaska forest products industry. As a result,
there are many reports with valuable insights and recommendations for the industry. But it
appears that little has been done to use this information to facilitate policymaking or to
implement programs that would benefit the industry and the state’s forest resources. This
information could be very useful in resolving environmental and tourism issues related to forest
resources around the state. The Southeast Timber Task Force report has a tremendous amount of
information and was the result of great effort and the diversified knowledge of those who
developed it. Yet, there has been no follow-up to the report or to the task force. There has been
no group or entity responsible for seeing the recommendations through to implementation.
There has not been a follow-up to guide policy recommendations.

“Transitioning the forest industry in Southeast Alaska will require innovation, investment and
productive relationships between producers, suppliers, customers and government” (McDowell,
2000). The Alaska forest products industry is at a critical juncture. Can the industry survive as a
thriving part of the Alaska economy?

It is important to keep in mind that in world markets Alaska is a niche market. It is a small
player in the world forest products industry, and that shapes our industry. The question to ask is,
at what scale are we trying to solve the Alaska forest products industry issues—at an individual,
local, statewide, regional, or world scale? The answer to whether the industry can succeed will
be very different at each level.

**Additional Research**

We can always identify additional research needs when examining issues as complex and as
large as those facing the Alaska forest products industry. But existing research already provides
many valuable insights and recommendations that have yet to be implemented. We believe it is
time to follow up on suggestions made by others in the industry, government, environmental, and
research community for the future development of the forest products industry and its
relationship with environmental concerns and political environments. Implementation of
previous recommendations and suggestions should be accompanied by ongoing research and
evaluation of the programs developed.
Resources

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