



# Golden Gate Hop Ranches Inc.

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December 30, 2002

Mr. A. J. Yates, Administrator  
Agricultural Marketing Service, USDA  
1400 Independence Avenue SW  
Room 3071, MAILSTOP 0201  
Washington, DC 20250-0201

Dear Mr. Yates,

We are writing to express our opposition to the proposed Federal Hop Marketing Order. For your information we farm approximately 1,600 acres of hops in the State of Washington. We have been growing hops since 1940. It is our strong view that a marketing order for hops would result in loss of business for the U.S. hop industry since growing areas in other parts of the world would continue to fill demand for hops. In this connection, we enclose a copy of a paper setting forth our views in more detail.

Very truly yours,

Golden Gate Hop Ranches, Inc.

Paul B. Signorotti  
Vice President

enc.





**December 2002**

# **An Economic Analysis of an Allotment-Based Marketing Order for the Hop Industry**

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# **An Economic Analysis of an Allotment-Based Marketing Order for the Hop Industry**

## **Foreword**

The hop industry is debating the merits of instituting a marketing order to govern the sale of hops produced by growers in Washington, Oregon, California, and Idaho. While well intentioned and promoted as a form of industry “self-help,” allotment programs are known to cause substantial misallocation of resources and impose burdensome costs that are inequitably distributed throughout the industry and to consumers. Any short-term gains that might accrue to some producers will be offset by higher costs to others, and the competitive advantages enjoyed by the domestic hop industry will be put at substantial risk. In short, the appeal of a marketing order to quell the pressures currently faced by some producers must be balanced against the severe harm that such programs are known to inflict on entire industries. Economists at Sparks Companies, Inc. prepared the analysis that follows on behalf of hop producers opposed to the marketing order.

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# **An Economic Analysis of an Allotment-Based Marketing Order for the Hop Industry**

## **Background**

The Hop Marketing Order Proponent Committee (the Proponents) recently submitted to USDA a proposal to establish a marketing order governing the sale of hops by growers in the Pacific Northwest and California. The stated objective is to bring stability to the U.S. hop industry by balancing supplies with market demand, while also improving grower prices and returns.

If enacted, provisions included in the marketing order would:

- Establish base allotments for each grower based on his or her production history from 1997 to 2001.
- Establish a “saleable quantity” of Alpha Acid allocated to each base allotment, restricting by law the maximum amount each grower may market each marketing year.
- Severely restrict entry of new producers by allowing only a 1 percent increase in the total allotment base each year, half of which is to be allocated to existing growers.
- Allow the sale, trade, or lease of base allotments among existing growers.

The proponents suggest that low product prices and year-to-year variability in grower returns could be substantially alleviated if a governing body is granted legal authority to restrict the marketing activities of individual growers, ostensibly to “bring supply in line with estimated demand to satisfy the market’s needs.” However, history and economic theory make clear that the provisions of this marketing order would be detrimental to the domestic hop industry by distorting market signals, sacrificing international competitiveness, and imposing inequitable costs on the most efficient producers. This report illustrates the adverse and unintended consequences expected if the proposed Hop Marketing Order were promulgated.

## **Allotment Based Marketing Orders: The Theory and Controversy**

The enabling legislation for agricultural marketing orders dates to 1937, citing the need to establish “orderly” marketing conditions and assure equitable returns for producers. Presently, most marketing agreements and orders function by establishing grade, quality or package size standards; controlling product disposition into various alternative markets; and/or supporting research and promotion activities. Although the legislation allows for programs that control market sales through producer allotments, this option is rarely applied due to the administrative burden, repressive producer oversight required, and the inequitable transfers of wealth known to occur.

under-investment by industry, and reducing open competition through restricted entry of new producers.

In the spring of 1983, the question of production controls in marketing orders came before the President's Cabinet Council on Food and Agriculture. In a memorandum to the members of the Council, then OMB Director David Stockman noted that the adverse consequences of production restraints are easily predicted by economic theory and supported by empirical evidence. He went on to note that the customary economic devices for smoothing natural variations in output and prices are private storage and futures markets, which because they are voluntary and decentralized, are bound to be more accurate and responsive than federal regulations in balancing supply against anticipated future demand. Furthermore, OMB suggested that the Administration issue a policy statement that season-long marketing volume restrictions be no longer approved by either USDA or OMB.

Although the complete abolishment of allotment-based marketing orders was deemed too controversial at the time, erupting controversies within the hop industry regarding the objectives and operation of the marketing order could not be ignored. A sharp rise in prices due to European crop failures led growers to plead for more allotments, but the market remained restricted under the fiat of the marketing order. Growers quickly became disenchanted with this albatross around the neck of the industry, and sued for the right to produce in accordance with market signals. Ultimately, the legal and administrative burdens on USDA, combined with the principled opposition to these programs generally, prompted the Reagan Administration to simply terminate the hop marketing order altogether.

Given the controversial history of the previous hop marketing order and the policy principles espoused by the current Administration, it is difficult to imagine how the proposed hop marketing order would not be met with antipathy. Consider the "Lessons learned from 70 years of farm policy" upon which the current Bush Administration's "Farm Policy Principles" are based (from "Food and Agricultural Policy: *Taking Stock for the New Century*" September 2002. Available on the web at <http://www.usda.gov/news/pubs/farmpolicy01/fpindex.htm>):

- **History has shown that supporting prices is self-defeating.**

*...Government attempts to hold prices above those determined by commercial markets have simply made matters worse time after time.*

- **Supply controls proved unworkable too.**

*...Perhaps most important of all, limiting our acreage was a signal to our competitors in other countries to expand theirs, and we lost market share that is always difficult to recapture.*

when 122% of the crop was forward contracted as of March 1, to 66% in 2002. Two points should be noted:

Between 1992 (long after the previous marketing order was abolished) and 1997, the sold ahead position averaged 89.5% with only modest variability, before jumping to 122% in 1999 (*Hops Growers of America 2001 Statistical Report*). This is hardly evidence that the absence of a marketing order since 1986 is responsible for the very recent decline (2001 and 2002) in contract production. Furthermore, since sold ahead surveys are not mandatory, the figures cited could be subject to misinterpretation, possibly underestimating the true sold ahead position.

- Brewers' willingness to contract ahead reflects the degree to which supply is thought to be inelastic: a highly inelastic supply implies that a brewer could be "caught short" if their needs exceed that which is available on the open market.

Contracts are risk management tools that are invaluable to brewers as well as producers. A reduction in contracted production in recent years is certainly not a nefarious attempt by brewers to transfer additional risk to growers. In fact, it simply reflects abundant supplies, either held in storage or available on the open market from domestic or international sources. The sold ahead position is indeed a market signal—along with current prices—suggesting future price and supply expectations. These market signals are based on all available information at any point in time, and are (as they should be) used by producers and brewers alike in determining future optimal production and marketing decisions.

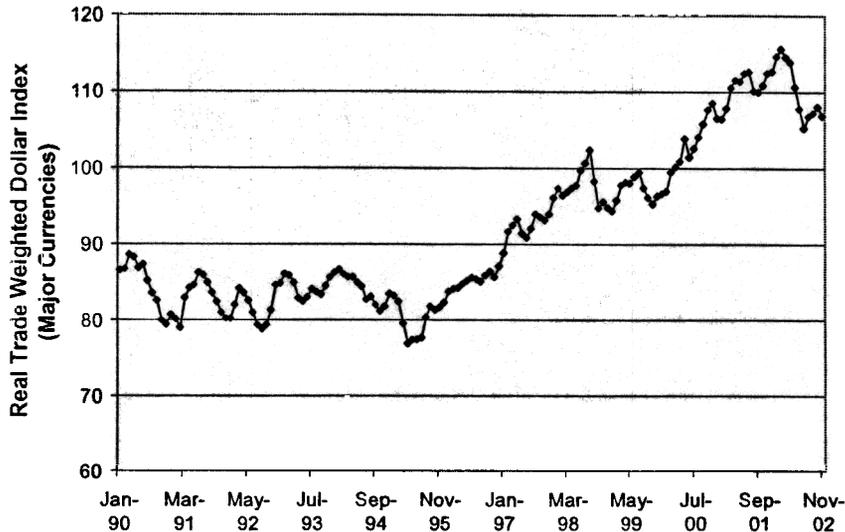
Implying that a marketing order could increase brewers' use of contracts for future production is at best an attempt to "hold brewers hostage" by limiting supplies available for purchase (creating, essentially, a more inelastic market supply), forcing them to contract ahead greater amounts lest they be caught in a situation where their needs exceed the saleable quantity allowed under a marketing order. While this strategy might increase grower prices (and sold ahead positions) in the short run, it would also certainly encourage brewers to find other ways to manage supply risk, such as increased purchasing in global markets or vertical integration into hop production. In the long run, domestic hop producers would not be better off than before the marketing order, despite the possibility of a short-term jump in the use of brewer contracts.

**Problem 2:** There is no structure currently in place to manage the quantity of hops produced or sold. Asset fixity and the few alternative crops available has been the stimulus for growers to continue producing hops despite poor prices in the hopes that economic recovery is right around the corner. There have not been any price spikes for over a decade and German crop failures, once fairly common (one in every three years or so) are also now a rarity.

*Response:* In all competitive markets, price expectations guide supply and production decisions. Efforts to "manage" supply to raise or stabilize prices tend to be the domain of

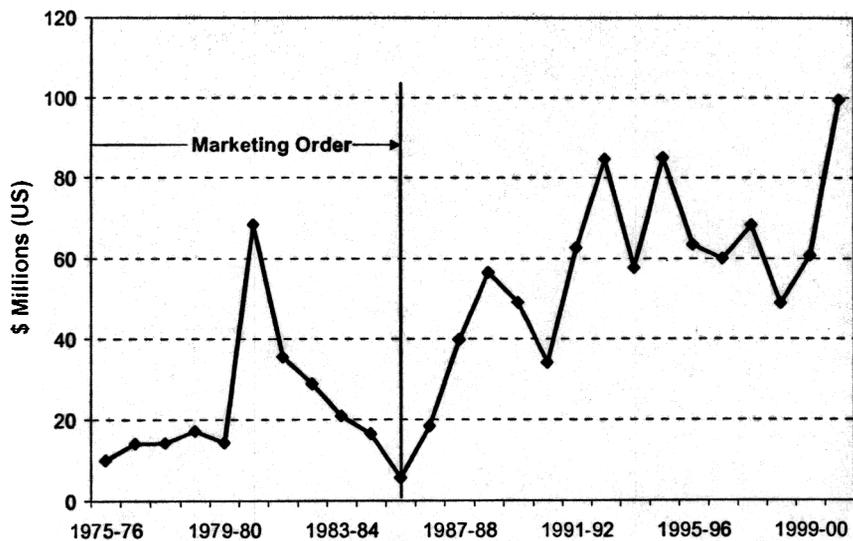
positive and upward trending balance of trade in international markets despite the steady rise in the value of the dollar (Chart 2).

**Chart 1. Value of the Dollar Against Major Currencies**



Source: Federal Reserve Board

**Chart 2. Net Balance of Trade in US Hops**



Source: Hop Growers of America Statistical Report, Various Years

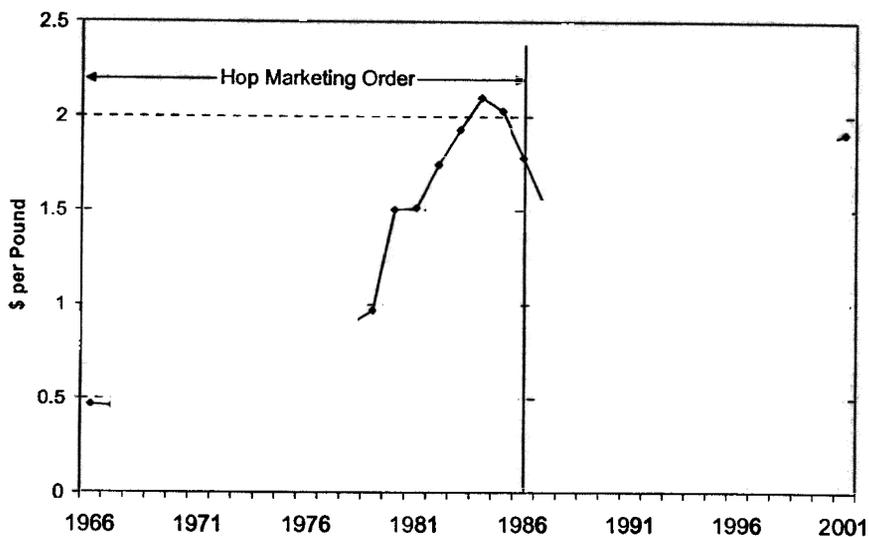
The strong trade balance evident in the 1980-82 marketing year (Chart 2, above) was mostly the result of crop failure in competing countries, which sharply reduced supplies worldwide and drove prices higher. But once the market adjusted in subsequent years,

### Did the Previous Marketing Order Achieve its Goal?

The proponents assert that under the previous marketing order, “growers did not get rich, but made a comfortable living,” and they point to the steady rise in the price of hops and relatively stable acreage and grower numbers from 1966-1985 as evidence that a new marketing order could improve the economic conditions currently facing the industry. However, whether the previous marketing order benefited the industry as a whole is subject to debate, as is its role in the meteoric rise in prices over this period.

Clearly, the period 1966 to 1985 was characterized by strong markets, rising prices and tremendous growth in revenue to the hop industry, as average US prices rose from less than 47¢/lb in 1966 to over \$2.00/lb in 1985 (Chart 3). Economics and the characteristics of the market during this time suggest that prices likely would have risen even without the marketing order.

**Chart 3. Average US Price of Hops**



Source: Price Data from Hop Growers of America and USDA

If hop prices would have strengthened on their own during the period when the marketing order was operating, this not only calls into question the effectiveness of the previous marketing order, but also suggests that the industry sacrificed profits and eroded its competitive position in world markets as a result of the marketing order. The 1970's and early 1980's were characterized by historically high price inflation, exceeding 10% in many years (Chart 4). As a result, prices for most farm commodities—including hops—also increased considerably, much more so than in recent years (throughout most of the last decade) when the general rate of inflation remained at or below 3%. Thus, some of the increase in the price of hops from 1970 to 1985 was likely attributable to general inflationary pressures.

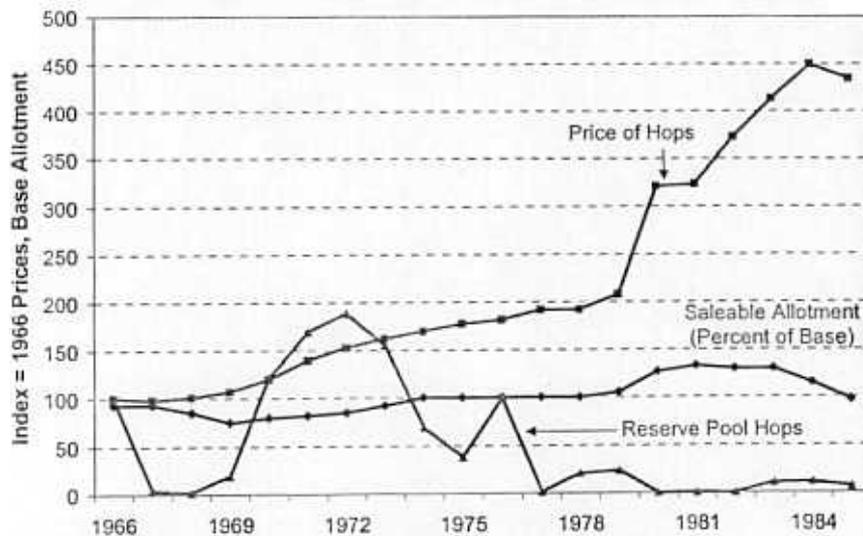
**Table 1. Hop Allotment Statistics, 1966-1985**

Year	Base Allotment*	Saleable Quantity	Total Allotment
	<i>1,000 lbs</i>	<i>%</i>	<i>1,000 lbs</i>
1966	59,270	94.8	56,173
1967	59,270	94.1	55,753
1968	59,270	86.9	51,497
1969	59,270	77.7	46,063
1970	59,270	81.3	48,208
1971	59,270	83.7	49,601
1972	59,270	86.7	51,380
1973	59,270	93.7	55,528
1974	60,270	100.0	60,270
1975	60,270	100.0	60,270
1976	60,270	100.0	60,270
1977	60,270	100.0	60,270
1978	60,270	100.0	60,270
1979	60,270	104.9	63,234
1980	60,270	126.7	76,346
1981	60,270	132.3	79,739
1982	60,270	129.8	78,257
1983	60,270	129.8	78,228
1984	60,270	115.0	69,299
1985	60,270	97.3	58,616

- Base allotment increased by 1 million pounds in 1974 to include the Fuggle variety

Source: U.S. Hop Administrative Committee; USDA

**Chart 5. Rise in the Price of Hops Under Limited Supply**



Source: Computed based on data from U.S. Hops Administrative Committee

characteristics of the market today would further complicate the situation, severely limiting the ability of the market order to achieve its stated goals.

In their justification paper, the Proponent Committee itself notes many of the ways in which the market is different today, albeit without acknowledging that these differences could diminish the effectiveness of the proposed marketing order. However, the reality is that the market today would be much more difficult to control through a marketing order. The most important factors to consider are described below.

The situation today:

**A global economy offering easier trade and sourcing of goods and services worldwide.** Enhanced global trade means that supply controls instituted in the United States will provide increased incentive for brewers and processors to look to overseas suppliers to fulfill their hop requirements. The higher prices that might result in the United States will simply increase the competitiveness of these foreign imports even after transportation costs are taken into account.

**Potential loss of alpha production base to China and other Central European countries.** With production already increasing overseas, including in non-traditional regions, supply controls and higher prices for domestic hops will only encourage investment in these other growing areas. The result will be decreased competitiveness of the domestic hop industry, and a signal to foreign competitors to increase investment in hop production over time.

**Alpha acid extracts and further processed products are now available that enable prolonged storage of the product.** With easier storage, supply becomes less inelastic. Over time this should decrease the year-to-year variability of prices and reduce the need for forward contracts. But it also makes it much more difficult to raise market prices in the short run by restricting supply. Domestic and foreign producers could work against the intentions of the Hop Administrative Committee by storing product when prices are low, only to sell for higher prices at a later date.

- **Widespread availability of super-high alpha hop varieties enabling higher yields with greater alpha content.** Varieties with greater yields and higher alpha content are adopted because of their ability to increase revenues per acre and decrease costs of production per kilogram of alpha acid produced. Limiting hop production on the basis on alpha content will dramatically reduce the incentive to invest in improved varieties in the United States. But investment in improved varieties overseas would likely increase, since those growers retain the incentive to produce the maximum amount of hops and alpha acid at any market price. Decreased incentive to invest in better varieties in the United States would further erode the competitive position of the domestic industry over time and cause long-term harm to the industry.

Furthermore, the increase in the price of hops—while only a small proportion of the cost of beer at the retail level—is likely to limit the ability for new firms to enter the brewing industry, since small, upstart breweries almost certainly face higher production costs and tighter margins than large, established brewery conglomerates. The higher price and lower availability of hops on the open market could be the difference between a brewer seeing a profitable opportunity to enter the beer market or choosing to avoid investing in this industry. Clearly, the trend toward brewer consolidation—again noted by the Proponent Committee—could only be enhanced through a marketing order.

### **Inequitable Transfer of Wealth From Efficient Producers**

Perhaps the most pernicious aspect of the proposed marketing order is its likely effect on resource allocation within the hop production industry. As noted throughout this document, the primary mechanism to be employed by this marketing order is strict supply controls imposed on growers. But clearly, such controls are only effective if they restrict production beyond what individual producers would choose in the free market. Producers who are optimistic about future market potential and hope to expand production or invest in higher-yielding varieties will be at the most disadvantage, since they would face a binding constraint on output potential based on historic production patterns. Producers who have not been investing in hop production, on the other hand, could be granted an allotment in excess of what they would likely produce in the free market. The result would be widespread transfer of hop allotments between growers at a negotiated market price, and a substantial transfer of wealth from optimistic, highly efficient producers to those unwilling or unable to compete in existing markets.

The most discriminatory and resource-misallocating aspects of the marketing order pertain to the allocation of base allotments, and these are described below by examining the actual text of the proposed marketing order. The relevant section regarding initial allotment bases for existing growers is discussed first, followed by a discussion of the provisions regarding allotment adjustments and entry of new growers. Finally, the discriminatory aspects of the proposed marketing order are illustrated using a hypothetical example of two representative hop farms.

#### Setting the Initial Allotment Base:

##### **§991.53 Allotment Base (Directly From the Proposed Marketing Order)**

- (a) The Representative Base Period shall be the marketing years 1997, 1998, 1999, 2000, and 2001; Provided that, a producer must have produced hops in the 2001 crop year to be eligible to apply for initial allotment base.
- (b) Initial Issuance: Each eligible producer desiring an allotment base for hops shall register with the Committee and furnish to it, on forms provided by the Committee, the following:

contribute to the base allotment calculation on the basis of 10% alpha, but actual alpha content will be used for all varieties yielding more than 10%.

- Base allotments are set according to an historic measure of “alpha acids” produced. But alpha acid content is not consistently or precisely measurable and official records are not compiled, resulting in the possibility of erroneous calculations and significant manipulation.

The sale, lease, or trade of allotment base from growers with declining production to those hoping to expand is inevitable, resulting in a misallocation of resources and an inappropriate and inequitable transfer of wealth from efficient producers to those unwilling or unable to compete in the market. Incentives for investment in new varieties or improved production techniques are dramatically reduced across the industry.

The marketing order considers production in years 1997-2001, so growers who entered the industry in 2002 would be forced out due to lack of appropriate production history, and those who expanded in 2002 would not have their most recent production count toward their allotment.

Adjustments to the Allotment Base and Entry of New Growers:

**§991.53 Allotment Base (continued; Directly From Proposed Marketing Order)**

(d) Adjustment to allotment base.

Periodically, but at least once every five years, the Committee shall review and may adjust each producer's allotment base to recognize changes and trends in production and demand. Any such adjustment shall be made in accordance with a formula prescribed by the Committee with the approval of the Secretary.

1. Beginning with the 2005-06 marketing year, the Committee annually shall make additional allotment bases available in the amount of no more than 1 percent of the total allotment base. Fifty percent of these additional allotment bases shall be made available for new producers and 50 percent made available for existing producers; Provided that, in any year in which the current salable percentage is equal to or less than the previous year's salable percentage, the Committee shall not be required to make additional base available for the ensuing marketing year.
2. Any person may apply for an additional allotment base by filing an application with the Committee on or before December 1 of the marketing year preceding the marketing year for which the additional allotment bases will be made available.

- Alpha production continued to decline in 2002 (consistent with 1997-2001 trend), but this information is not used in setting the base allotment.

**Characteristics of Hypothetical Farm 2:**

- Increasing acreage over time, from 500 acres in 1997 to 750 acres in 2001
- Variety = 100% Cluster in 1997, but investing in improved varieties (e.g. Columbus/Tomahawk, Zeus) over time. Nearly 100% improved variety by 2001.
- Average alpha = 8% in 1997, improving to 14% in 2001, with yield improving from 1870 lbs/acre in 1997 to 2400 lbs/acre in 2001.
- Alpha production increasing over time:

**Farm 2: Acreage and Alpha Production, 1997-2001 and 2002**

Year	Acreage	Alpha (%)	Alpha Production (lbs)
1997	500	8%	74,800
1998	550	9%	99,000
1999	600	10%	126,000
2000	650	12%	179,400
2001	750	14%	252,000
2002*	800	15%	300,000

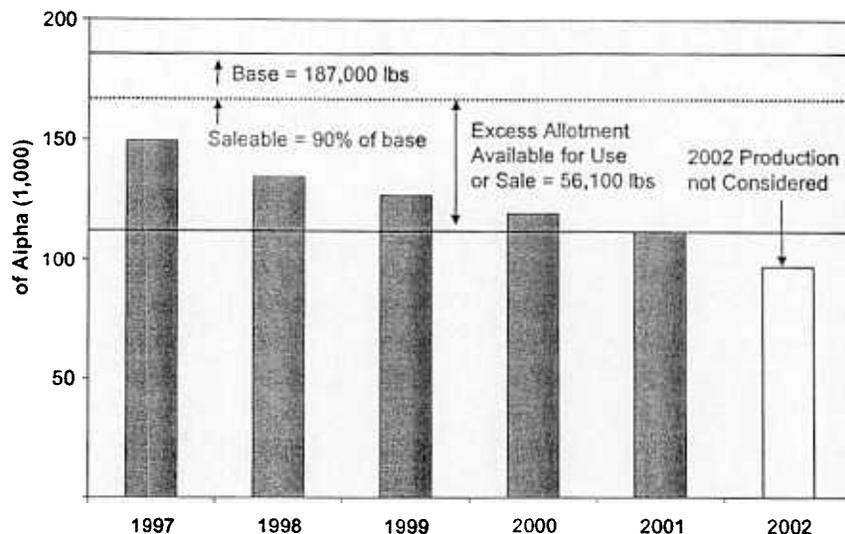
\* 2002 production not considered when setting base allotments

- Alpha production continued to increase in 2002 (consistent with 1997-2001 trend), but this information will not be used in setting the base allotment.

**Discussion:** Farm 1 is clearly decreasing output over time, by removing acreage from hop production and making no new investment in improved varieties. Thus, output has been declining since at least 1997. This production pattern would be characteristic of a farm that sees a limited future in hop production, and has therefore chosen to avoid the risks associated with investment in new varieties or other technologies that might increase output. This farm might be expected to continue to decrease output over time; at least until market conditions improve enough to justify new investment in hop production. The decreased acreage could either reflect a decision to stop farming altogether, or to switch to another crop that is believed to provide higher returns with lower risks.

Farm 2, on the other hand, has chosen to accept the inherent risk of hop production, and has invested in both increased acreage and replacing existing acreage with improved, high yielding hop varieties. The greater yield and alpha production per acre as a result of the risky investment has likely resulted in lower unit costs of production over time, and greater market returns. Of course, revenue is still determined largely by market price, and this producer might have experienced some losses in the short run in the hope of higher returns in the future resulting from its greater output and lower costs of production. The increased acreage and investment clearly reflect an optimistic view

**Chart 7. Excess Allotment Available to Farms that have Decreased Production Over Time (Farm 1)**



Source: Hypothetical Estimates by Sparks

On the other hand, Farm 2 would have the amount that it could sell limited to 226,800 lbs, 10% less than it sold in 2001, 24% less than the 300,000 lbs it sold in 2002, and 32% less than the 332,800 it might have expected to sell in 2003 based on a conservative estimate of historic production trends (Chart 8). Thus, Farm 2 finds itself severely constrained in the amount of hops it can sell—regardless of the investment made over previous years—while Farm 1 is rewarded with excess allotment far beyond that amount it would normally be expected to produce in 2003.

The result is easily predictable: Farm 2 will either be forced to curtail production (perhaps by not harvesting some hops), or purchase additional allotment base from a grower choosing not to produce the amount allocated to it—perhaps from Farm 1. In either case, Farm 2 is clearly punished by its previous decision to invest in greater output and lower costs of production, while Farm 1 is rewarded with the option of either increasing its production or selling its excess allotment on the open market.

While the advocates of the proposed marketing order point to its “no net cost” to the government, in fact the costs of the marketing order will be paid directly by the industry’s most efficient producers, by transferring wealth from the producers willing to take on additional risks, to the risk-averse producers unwilling or unable to invest in more efficient production and greater output.

experience with the previous hop marketing order shows that the allure of these programs can quickly turn to aversion when markets change and the constraints imposed are most pronounced.

Markets must be allowed to freely adjust to changing conditions. The technological breakthroughs that have reduced costs, increased supply, improved product storability, and enhanced the competitiveness of the domestic hop industry should not be viewed as reason to impose constraints on growers in an effort to shield them from market forces. The result would be to sacrifice the industry's long-term potential for short-term gains available to some.

At the very least, allotments in the United States will provide a clear signal to producers in foreign countries to increase their supply, and buyers worldwide will respond by turning to these competitors to fill their needs. There will be a chilling effect on investment by domestic producers, and a steady erosion of the competitive position of the domestic industry. And, the sale and trade of allotments will again be commonplace, resulting in inequitable transfers of wealth away from the most efficient segments of the industry. Such a system is sure to doom the domestic hop industry to a downward spiral of decreasing investment, reduced supplies, and lost markets.