

## A SUGGESTION FOR IMPROVING THE DOCKAGE DISCOUNT SCALE

### **Problem:**

PNW farmers harvest a significant amount of white wheat each year with dockage of .5% or less. The current dockage discount scales encourage growers and first handlers of wheat to blend high dockage wheat with this low dockage wheat. Under the current scales, blending is almost always profitable. Blending to minimize dockage discounts causes the following problems for the PNW wheat industry:

1. Barges and trains arriving in Portland will have dockage approximately equal to the average dockage in the area from which they originate. While some areas may ship average dockage of .5% or less in some years, the amount of "cleaner" (.5% dockage or less) wheat arriving in Portland is much less than the amount of "cleaner" wheat harvested, and thus, may not be sufficient to meet the needs of export customers with low dockage specifications.
2. Because much of the "cleaner" wheat is currently blended, the discount schedule must be punitive enough that *average* dockage at most locations is below the dockage specification of our important customers such as the Japanese. Reducing *average* dockage of the whole crop to the Japanese specifications may be impossible in some years and may require unnecessarily high discounts. In addition, it may induce farmers and first handlers to buy expensive cleaning equipment even though the amount of "cleaner" wheat harvested may well be adequate to meet demand.
3. The industry cannot offer higher dockage wheat at a discount to price-conscious buyers because it is already blended by the time it reaches export terminals. The price offered to buyers cannot reflect the discounts charged to farmers. For some customers, making higher dockage wheat available at a discount may make our wheat more competitive.

### **Solution:**

Change the dockage discount scale so that farmers and first handlers are encouraged to segregate white wheat into *two* groups - "cleaner" (.5% and less) wheat and wheat with dockage above .5%. Blending could occur within each group. It is not difficult to design simple scales that will provide this incentive (see examples). The main requirement is that the increments in the dockage discount scale should be smaller for higher dockage wheat than for "cleaner" wheat. If higher dockage wheat is too heavily penalized relative to "cleaner" wheat, it is always profitable to blend it.

### **Advantages:**

Segregating "cleaner" wheat would eliminate the problems listed above. It would allow the industry to meet the needs of customers who want low dockage wheat without cleaning or increasingly punitive dockage discounts. It would allow us to offer higher dockage wheat at a discount to price motivated buyers.

### **Disadvantage:**

The main disadvantage would be the additional cost in money and time of segregating the wheat at the first delivery point. Segregating based on dockage would slow harvest deliveries just as segregating for club and protein does now. A visual inspection by the warehouseman when a lot is opened should be sufficient to determine if the wheat should be segregated into the "cleaner" bin. Some elevators may not have adequate bins for additional segregation, but many do.

EXAMPLES OF DISCOUNT SCALES THAT ENCOURAGE SEGREGATION OF  
WHEAT WITH DOCKAGE LESS THAN OR EQUAL TO .5%

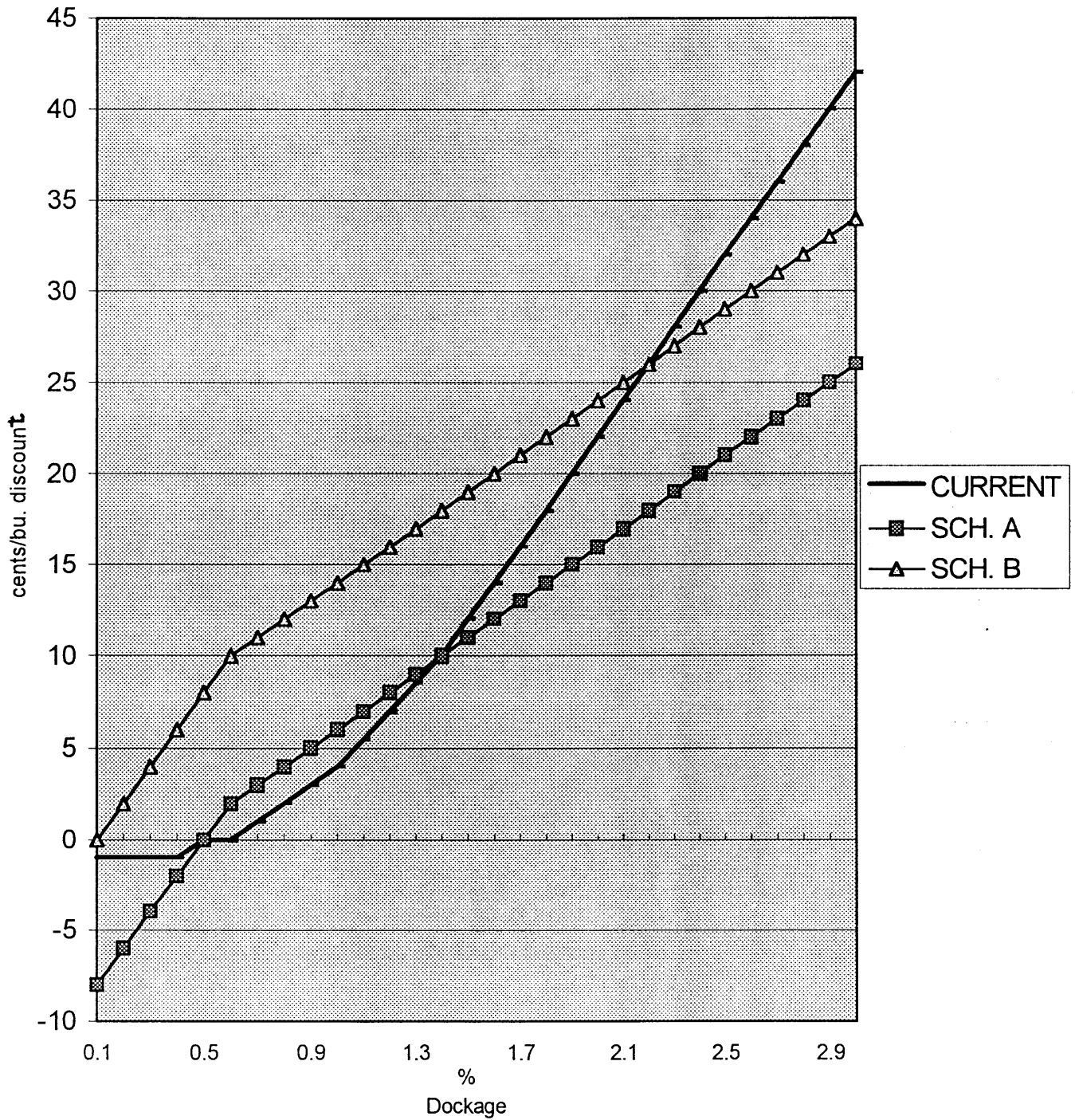
<u>Dockage %</u>	<u>Current SWW Dockage Scale</u>	<u>Scale A (with premium)</u>	<u>Scale B (without premium)</u>
0.1	1.0	8.0	0.0
0.2	1.0	6.0	-2.0
0.3	1.0	4.0	-4.0
0.4	1.0	2.0	-6.0
0.5	0.0	0	-8.0
0.6	0.0	-2.0	-10.0
0.7	-1.0	-3.0	-11.0
0.8	-2.0	-4.0	-12.0
0.9	-3.0	-5.0	-13.0
1.0	-4.0	-6.0	-14.0
1.1	-5.5	-7.0	-15.0
1.2	-7.0	-8.0	-16.0
1.3	-8.5	-9.0	-17.0
1.4	-10.0	-10.0	-18.0
1.5	-12.0	-11.0	-19.0
1.6	-14.0	-12.0	-20.0
1.7	-16.0	-13.0	-21.0
1.8	-18.0	-14.0	-22.0
1.9	-20.0	-15.0	-23.0
2.0	-22.0	-16.0	-24.0
2.5	-32.0	-21.0	-29.0
3.0	-42.0	-26.0	-34.0

**An example of calculating whether blending is profitable:**

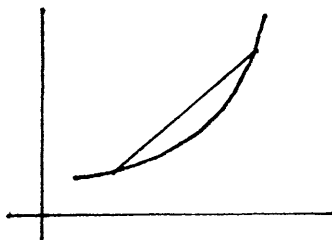
Should a bushel of .3% dockage wheat be blended with a bushel of 1.1% dockage wheat? If the two bushels are blended, the result is two bushels of  $(.3 + 1.1)/2 = .7\%$  dockage wheat.

	<u>Dockage discount if bushels kept segregated</u>	<u>Dockage discount if bushels are blended</u>	<u>Conclusion</u>
Current Scale	$-1\text{¢} + 5.5\text{¢} = 4.5\text{¢}$	$2 \times 1\text{¢} = 2\text{¢}$	blending is profitable
Scale A	$-4\text{¢} + 7\text{¢} = 3\text{¢}$	$2 \times 3\text{¢} = 6\text{¢}$	segregation is profitable
Scale B	$4\text{¢} + 15\text{¢} = 19\text{¢}$	$2 \times 11\text{¢} = 22\text{¢}$	segregation is profitable

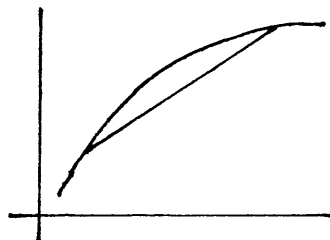
# DOCKAGE DISCOUNT SCALES



If a discount scale is graphed, it is easy to check whether it is profitable to blend. If a straight line connecting two points on a graphed scale lies above the graphed scale, blending wheat with the two dockage levels is profitable. If the line lies below the scale, segregation is profitable.



blending  
profitable



segregation  
profitable