

Estimate of Production Losses in North Dakota Due to 2006 Drought Conditions

NOTE: This estimate was made on September 25, using trend yields rather than 5-year average yields as was used in the first estimate.

Livestock impact	\$31,135,000
Crop impact	\$403,612,000
Crop insurance indemnity payments	<u>\$292,873,000</u>
Estimated Net Direct Loss	\$141,874,000

The livestock losses are a result of lost pasture and hay production and therefore increased feeding costs. The January 1 inventory of adult beef, dairy and sheep located in the drought impacted area of the state were assumed to have 50 percent higher feeding costs than normal.

The crop losses were based on the estimated state yield for spring wheat, durum, corn, oats, barley, soybeans and edible beans. The estimated loss per acre for these crops was used to derive an overall loss for winter wheat, flax, sunflowers, peas and lentils. Yield estimates are from NASS. Current estimated yields were compared to thirty-year trend yields and the difference applied to planted acres for each crop and priced at marketing year average prices estimated by USDA.

Crop insurance indemnity payments were estimated based on the average of indemnity payments received from 2001 through 2005 excluding the highest and lowest payment.

Source: George Flaskerud, Tim Petry, Dwight Aakre – Agribusiness and Applied Economics, 701-231-8642

The North Dakota Input-Output Model was applied to the estimated net direct loss to estimate total impacts. The direct loss was treated as a reduction in household sector income. Model results indicated a total impact of \$436.7 million, including a reduction of ND households' incomes of \$220.2 million and a reduction in retail trade sector sales of \$105.7 million. This was estimated to result in a reduction of sales and use tax collections of \$4.9 million and a reduction in personal income tax collections of \$3.3 million.