The Economic Impact of Flooding on South Carolina Agriculture

The 2015 growing season in South Carolina has been marked by weather extremes with 66 percent of the state in serious or moderate drought in mid-September followed by the most significant rainfall event in the state's recorded history hitting in the first week of October. Rainfall amounts were highest along the coast and coastal plain, the state's most productive farmland. The largest flood losses were to the important cash crops of soybeans, cotton, and peanuts with collective losses of \$285 million. Losses were also incurred in vegetable crops including tomatoes, bell peppers, broccoli, eggplant, squash, and cucumbers accounting for an additional \$45 million in losses. Among fruit growers, damage to peach trees accounted for the major loss.

In addition to losses in the field, \$46 million of losses from prevented planting has occurred with the largest losses in grains primarily wheat and to a lesser extent oats. Among vegetable crops, the primary losses are in prevented planting for winter leafy greens, while for fruit growers losses are being incurred primarily from delayed strawberry planting. In aggregate, direct losses to South Carolina farmers from the October floods are estimated to be \$376 million.

Table 1: Estimated Losses in the Field and from Prevented Planting

Losses in the Field		Losses from Prevented Planting	
Peanuts Cotton	\$72,899,200 \$86,121,984	Wheat Oats	\$24,331,883 \$1,393,140
Soybeans Vegetables	\$125,846,000 \$45,000,000	Canola/Rapeseed Vegetables	\$284,646 \$15,000,000
Fruit	\$10,000,000	Fruit	\$5,000,000
Total	\$329,867,184	Total	\$46,009,669
Total Loss			\$375,876,853

Source: USDA, Farm Service Agency and South Carolina Department of Agriculture.

In addition to those direct losses, the ripple effect through the state's economy is being felt by reduced purchases from supporting industry (indirect effect) and through reduced purchasing power of workers in agriculture and related industry (induced effect). It is estimated that the total impact on the state's economy including direct and secondary impacts is \$588 million. In addition to production agriculture, sectors most impacted are agricultural services including contract labor, equipment and support services, real estate, restaurants, insurance, maintenance and repair construction, and trucking. The direct income effect is estimated to be \$115 million with a total income effect of \$185 million. In terms of employment loss, the loss in agricultural employment is estimated at 3,597 workers with a total loss in employment in the state of 5,528 workers.

Table 2: Direct, Indirect and Induced Loss to the South Carolina Economy

Impact Type	Employment	Labor Income	Output
Direct Effect	3,597	\$114,774,689	\$375,876,853
Indirect Effect	1,041	\$36,491,538	\$99,306,187
Induced Effect	890	\$33,332,761	\$112,651,436
Total Effect	5,528	\$184,598,986	\$587,834,476

November 2015