AIS Impacts on Agriculture

Agriculture is an important industry in Montana. Wheat is Montana’s leading cash crop, and the state ranks fourth among the wheat-producing states in the nation. Montana is ranked 11th in the U.S. for total hay production and ninth for alfalfa hay. Alfalfa and alfalfa-grass mixtures, produced on approximately 1.25 million acres across Montana, account for about 75 percent of the state’s total. Montanans also produce barley, lentils, dry peas, sugar beets, and a variety of dry edible beans (source: www.farmflavor.com/montana).

Irrigation is the dominant commercial use of the state’s water resources, accounting for 96 percent of all surface and ground water withdrawn for any purpose, about 11 million acre feet (an acre-foot of water is the amount that would cover an acre one foot deep). To irrigate is to water crops by bringing in water from rivers or lakes via pipes, canals, sprinklers, or other man-made means. In places that have don’t get a lot of rain or they get rain only in some seasons, irrigation allows farmers to grow crops without relying on rainfall alone. In areas that have irregular precipitation, irrigation improves crop growth and quality. By allowing farmers to grow crops on a consistent schedule, irrigation also creates more reliable food supplies. (source: www.nationalgeographic.org/encyclopedia/irrigation). Irrigated agriculture is also an important component of the state’s economy. It directly produces economic benefits by increasing the supply and/or value of some crops, and it generates jobs and income for many Montanans.

How could invasive mussels impact this part of Montana’s economy? Invasive mussels can settle in and grow on canals and pipelines; clog irrigation pumps, screens, and head gates; and reduce pumping capacity.

The direct impact of invasive mussels to agriculture is estimated to be $5.75 per acre foot or $61 million per year (source: dnrc.mt.gov/divisions/cardd/docs/misac-docs/dnrc_econ_one_pager_final_0119.pdf)

Short PSA: https://www.youtube.com/watch?v=9Ipl9-zKD8Y
Irrigation and Montana Agriculture

The data provided by Montana producers lets us know what is produced in Montana using irrigation - from wheat to potatoes to sugar beets. NASS data help expand access to resources for Montana farmers to make business decisions and to diversify into new markets.

Montana’s total number of irrigated acres in 2012 fell to 1,903,019 acres from 2,013,167 in 2007.

According to the 2012 U.S. Census of Agriculture.

Total value of irrigated cropland rose in 2015 to $2,960.00 per acre.

An increase of $10.00 per acre from 2014.

The cost to rent an acre of irrigated cropland in Treasure County, the most expensive county, was $52.00 more than the state average for Montana in 2014.

Pondora County
The top county in Montana for producing winter wheat on irrigated land in 2014.

Pondora County produced 431,000 bushels of winter wheat on irrigated land in 2014.

Gallatin County
The top potato producing county in Montana in 2014.

Gallatin County seeded 4,400 acres of potatoes on principally irrigated land in 2014.

Richland County
The top sugar beet producing county in Montana in 2014.

Richland County planted 11,900 acres of sugar beets on principally irrigated land in 2014.

$83.00
The average cost to rent an acre of irrigated cropland in Montana in 2015.

This average was $2.00 per acre higher than 2014.