## The Current State of Glyphosate

Over that period, glyphosate helped enable the The total farm-level effect of more carbon capture and fewer carbon Glyphosate is the most widely used herbicide in the U.S. Glyphosate is **13%** (70 million tons) used on an average of 87% of corn, soybean and cotton acres<sup>1</sup>. It is reduction of tillage practices, yielding: emissions equals<sup>2</sup> the effect of offsetting the yearly emissions from: reduction water soil erosion effective in controlling weeds, cost-efficient compared to alternatives, and ▶ 1.2 million tons fewer CO<sub>2</sub> equivalent  $\square$ emissions from farm machinery, as has enabled valuable on-farm conservation practices to be employed reduced tillage results in less fuel use **16%** (94 million tons) ျှာ across millions of additional acres of U.S. farmland year after year. 36.48 million 5.95 million or 6.8 million or reduction wind soil erosion homes' electricity gasoline-powered acres of forests According to a benchmark study by USDA NRCS in 2016, an additional **32.495 million tons** per year of additional passenger cars use 53.4 million farm acres came under conservation practices over the  $CO_{2}^{3}$  equivalent captured by farmland soil, as driven **22%** (74 million tons) minimizing soil disturbance and maintaining previous ten-year period, helping to secure:  $\approx$ reduction sediment loss crop residues helps store carbon ... while still producing food, fiber, and feedstock for renewable fuel. FF **The Potential** Marginal inflationary Farmers substitute About the Research Manufacturers pressure on consumer alternative products **Future Without** accelerate production spending on proteins **Glyphosate** Aimpoint Research conducted a open-source research, economic of other herbicides study into a U.S. farming value modeling, subject-matter expert 10% of all acres chain without access to glyphosate interviews, and military wargaming receive additional as a pest control tool. For this techniques. The actions and Increase herbicide tillage pass study we leveraged several impact are categorized by key Increased input costs by +2-2.5 times increasing emissions research and analytical methods areas of consideration and costs to farmers to understand the complexities assessed against the overall surrounding glyphosate, including impact to the value chain. Manufacturers try to bring +\$1.9B machinerv and new products to market fuel costs of additional Short or misaligned supply full conventional tillage of alternative products (4)£ Advocacy groups Loss of significant soil IMPACT AREAS shift focus to FF carbon sequestration Loss of off-farm income other chemicals Biological, mechanical, Agriculture resulting from more and other non-chemical on-farm labor demand alternatives increase Environmental Increased emissions from marketing PRIMARY ACTIONS conventional tillage Innovation Small farms hit hardest from additional costs Increased labor cost Food Prices Accelerated farm consolidation Geopolitics EPA requests 5–10-year FUTURE ACTIONS & IMPACTS EPA overwhelmed with extension to deal with new registrations and regulatory backlog Reduced investments in new approval requests agrichemical research and patents Aimpoint Research based on EPA data <sup>2</sup> USDA Natural Resources Conservation Service, Conservation Practices on Cultivated Cropland: A SECONDARY ACTIONS & IMPACTS Other major corn-, soybeans-, and Comparison of CEAP I and CEAP II Survey Data and cotton-producing countries are unlikely Modeling, March 2022 China continues using glyphosate <sup>3</sup> Greenhouse Gas Equivalencies Calculator I US EPA to change their acceptance or usage of for production efficiency and glyphosate based on U.S. regulatory conservation benefits Access the full report at positions www.AimpointResearch.com

## **Environmental Impact**











