April 15, 2021

Mr. Clarence Prestwich
National Agricultural Engineer
Conservation Engineering Division
NRCS, USDA
1400 Independence Avenue
South Building, Room 4636
Washington, DC 20250

Submitted Via the Federal eRulemaking Portal at http://www.regulations.gov, docket ID NRCS-2020-0008

**SUBJ: Comments on the Proposed Revisions to the Cover Crop Conservation Practice Standard Code 340**

Dear Mr. Prestwich,

The undersigned agricultural and conservation organizations appreciate the opportunity to provide comments on the Natural Resources Conservation Services' (NRCS) proposed revisions to the Cover Crop Conservation Practice Standard code 340 (CC-CPS 340), which when finalized will be included in the NRCS National Handbook of Conservation Practices. The undersigned, or their members, own and operate farming or ranching operations, organizations or businesses that support and service these operations. In so doing, they help farmers and ranchers produce and bring to market, row and specialty crops as well as livestock and poultry, and are helping ensure that safe and affordable food, fiber, and fuel is provided to Americans across the United States. The agricultural acres that these farmers and ranchers manage are America's "working lands" and we write you on behalf of the critical need for working lands conservation.

We generally support the revised CC-CPS 340, but we have serious concerns with the proposed change that disallows mechanical harvesting of cover crops for forage. At the core of our concerns lies our belief that this language represents a very serious disincentive to grower adoption of cover crops and as such will unnecessarily result in a net loss of working lands' conservation benefits. We note that the proposed revisions to CC-CPS 340 continue to allow for grazing of the cover crop in a manner that is protective of the conservation purposes of the cover crop, and we wholeheartedly support this measure and encourage its retention in the final version. For many of the same reasons that some producers graze their cover crops, many also mechanically harvest a portion of them for forage and do so without diminishing their conservation benefits. In both instances the uses of the forage are ancillary to the producers' conservation and environment goals from the use of this practice.

We encourage NRCS to strike from the final CC-CPS 340 the language disallowing mechanical harvesting of cover crops for forage.

We are not aware of any conservation-based rationale for disallowing mechanical harvesting of forage and note that NRCS did not offer any such rationale in the Federal Register notice. At a minimum, should NRCS wish to further pursue making this proposed change based on a conservation interest, we encourage the agency to repropose the change for public comment and provide that conservation

rationale. Our own views might change after study and consideration of the justification given, but in either case we would value the opportunity to comment specifically on this topic.

The conservation benefits being sought on agricultural operations when using cover crops can vary from operation to operation, but as a group these benefits include the full range of those normally associated with cover crop use; reducing or preventing erosion and losses of mineral or soluble nutrients, improving soil physical and biological properties, supplying nutrients to the following crop, suppressing weeds, improving soil water availability, breaking pest cycles, and reducing or mitigating greenhouse gas emissions. Fortunately, cover crops being used for any one or subset of these purposes will often provide most or all these benefits.

Producers are increasingly aware of the overall values provided by cover crops, and the undersigned organizations actively promote their adoption and uses. Producers using cover crops can be doing so as part of USDA, state or local conservation financial assistance programs or simply and commonly as a matter of their own self-funded private conservation efforts. For example, the USDA Economic Research Service (ERS) reported earlier this year in Cover Crop Trends, Programs, and Practices in the United States that in 2018, "about one-third of the acreage planted with a cover crop received a financial assistance payment from either Federal, State, or other programs that support cover crop adoption." This leaves about two-thirds of the acres planted at solely private expense.

The ERS study found that farmers reported planting 15.4 million acres of cover crops, which was a 50-percent increase compared to the 10.3 million acres reported in 2012. Similarly, the Iowa Nutrient Research and Education Council (INREC) retailer survey tracks progress farmers are making on a wide range of conservation practices. INREC gathers the conservation information using a statistically sound study of sales data from ag retailers and certified crop advisors to measure and demonstrate progress in conservation practices. Now in its third year, the INREC report verified that farmers planted significantly more acres to cover crops. According to the survey, Iowa farmers planted cover crops on 2.18 million acres in 2019, a gain of 8 percent from the acreage planted in 2018, and a 36 percent gain from the acres planted in 2017.

We are proud of our members' efforts in this regard and the great progress that has been made over the last several years in the adoption and use of this important conservation practice.

Our specific reasons for encouraging NRCS to retain mechanical harvesting for forage in CC-CPS 340 are discussed below.

1. **Dropping from CC-CPS 340 a common cover cropping practices used on working lands will diminish the momentum that NRCS has helped create in farm country about the adoption of cover crops on working agricultural lands.**

The efforts of many organizations, private, NGO, and public (including in considerable measure those of efforts of NRCS through its soil health initiatives and related work), has created tremendous momentum in farm country to advance the adoption of cover crops on working lands, as reported by USDA ERS and many others. Farmers and ranchers, though, are doing what they always do when confronted with a possible new technology or practice that they recognize could be important to agriculture's future – they either figure out how to use it and find ways to offsets its costs, either through higher yields, reducing other costs, or gaining practical value from the technology, or they keep an eye on their peers

that are doing this preliminary work. Mechanical harvesting of forage from a cover crop falls squarely in this category. Farmers always experiment and try things out on portions of their operations, exploring a practice's practicality, working out its kinks that may appear in their unique circumstances, and developing the experience and capabilities needed to ensure that widespread incorporation into their operations makes sense and can be sustained. Many producers are in such an exploratory period with cover crops, including those that are mechanically harvesting them for some forage.

We are midstream in that process, and we strongly encourage NRCS **not** to signal to the farming community that a common cover crop practice somehow now renders what has been previously and widely encouraged into something other than a cover crop. We believe if NRCS now excludes mechanical harvesting for forage from CC-CPS 340 that you will be sending the wrong working lands conservation message to the grower community and hurt the valuable conservation momentum that you have played such a large role in creating.

**2. Given the linkages to Federal Crop insurance, great confusion will result from this change, unnecessarily, and reducing the amount of working lands conservation being practiced.**

Another critical aspect of the proposed change to CC-CPS 340 to the negative consequences for cover crop adoption momentum, is the tremendous confusion this change would create in the grower community over how cover crops can be properly used without jeopardizing cash crop coverage under federal crop insurance. After several years of confusion on this subject, with deleterious effects on cover crop adoption, NRCS, working with the USDA Risk Management Agency has worked out policy and guidance statements widely supported by growers and the cover crop community. Those policy and guidance statements recognize and accept the role that mechanical harvesting of forage could sometimes play in a cover crop system. This is a policy that agricultural organizations supported and promoted. Were some substantial working lands conservation purposes being served by removing mechanical harvesting of forage from CC-CPS 340, perhaps the confusion created for federal crop insurance participants could be justified. But given that mechanical harvesting of forage from a cover crop, as for grazing, can be conducted while still protecting the working lands conservation benefits of cover crops, we see no reason to create this confusion. To put this bluntly, one group of growers told us simply "Don't mess with crop insurance unless absolutely necessary. We want the various pieces of the government to function well to encourage producers to do conservation that fits their farm, but it should not complicate the crop insurance industry. This practice standard is not broken with respect to crop insurance, and we suggest it wise to fix only what needs to be fixed."

**3. Mechanical Harvesting of cover crops is a common practice on working lands.**

Many growers, having incorporated cover crops into their production systems primarily for the conservation or environmental benefits, find it practical and useful to derive some ancillary value from the cover crop. Foraging of a cover crop is often practiced, whether it is harvested mechanically or by allowing animals to graze. Partially offsetting the costs of the adoption of cover crops is the primary reason for harvesting or grazing the forage. The need for this option is heightened in the instance of small to medium mixed crop and livestock operations that need to make efficient use of a limited land base while practicing conservation.

The use of cover crops by growers, whether supported publicly or adopted privately without financial assistance, represent a substantial cost to the grower. Offsetting these costs with some modest mechanically harvest forage value is a meaningful incentive to grower adoption of this practice. Some of

these costs are direct in the form of seed or the fuel to operate the machinery to plant or terminate the cover crop before the cash crop is planted. Time is involved in carrying out this field work, a cost in and of itself. A cost, or the risk of it, can come from cash crop yield drags following cover crops. While research continues to explore the yield effects of cover crops, there are indications that at least in the first few years of adoption some yield drag exists. One of the yield-loss risks comes from the risk of delays in planting the cash crop due to problems with terminating the cover crop.

We know that these costs can deter growers from adopting cover crops. For a discussion of the magnitude of these costs see the 2018 paper by authors from the University of Illinois and Purdue; *Understanding Budget Implications of Cover Crops*. Denying growers the modest economic value of mechanically harvesting forage from the cover to defray these costs will further deter them.

The need to help farmers offset these costs is the reason that cover crop advocates often tout the benefits of grazing and forage production from cover crops. The Midwest Cover Crops Council states this explicitly in their report, Integrating Cover Crops in Soybean Rotations; Challenges and Recommendations for the North Central Region, saying "One of the greatest opportunities for offsetting cover crop costs is to use them as forage for livestock through harvest or grazing."

We communicated with one Iowa producer, a seventh-generation farmer on 700 acres in a continuous no-till, corn-soybean rotation, which was initially implemented in 1986. He now uses cover crops on all his acres every year. He also has his own agronomy consulting business and weekly podcast. This producer supports farmers being allowed to experiment and innovate, and he encourages NRCS conservation practice standards to allow that. Doing so helps farmers discover what works best for them on their farms, with their soils, weather and management systems. Part of that is getting cover crops to help increase economic returns to the farm so that cost-share is eventually less necessary. To do that, this producer has some clients that do benefit from being able to continue to graze, bale and chop cover crops for forage to reduce costs and provide more returns. This kind of flexibility in the national practice standards leads to farmer innovation and serves as a bridge to other ways to improve the economics of cover crops, such as reduced fertilizer and pesticide costs. This kind of flexibility has allowed this producer to reduce fertilizer costs by 50 percent, pesticides for soybeans by 75 percent, and corn pesticide costs by 50 percent.

Practical Farmers of Iowa on Cover Crops and Forage— We note that Practical Farmers of Iowa discuss methods to combine the benefits of cover crops with forage production for livestock in their report Combining Cover Crops and Livestock. They state that "Cover crops are an excellent way for livestock and cash crop farmers to improve their nutrient management and provide extra fodder for livestock." They also give the practical advice that "Silage and hay harvest are difficult early in the season due to often wet or muddy spring conditions. Waiting until later in May or June to harvest improves yield (though quality is reduced after forages hit boot stage) and makes dry-down easier. Planting a shorter-season corn or soybean variety still allows cash crop income from those acres."

Cover Crops as Forage after Corn Silage—Land is expensive and efficiency and productivity matters. Small and medium sized farming or ranching operations that have mixed feed and forage production are often challenged to find enough affordable land to support their operations. Small to medium dairy operations are an example of this. For them, while the forage value of a harvested cover crop may be limited relative to the cover crops' conservation values, gaining some additional forage from the available land base remains important to their operations. Most modest-sized dairy operations in the

Central and Northern Corn Belt have corn silage in their rotations and put down a cover crop for erosion control purposes, to scavenge nutrients and provide a supplemental feed source from a limited land base. They would then use machinery before planting their cash crop. One dairy producer we spoke with in Northern Illinois did not know of any other dairy farmers in the state that are not doing what he was doing to incorporate cover crops to meet his farmland's conservation needs while meeting their animals' nutrition needs. This one farmer stated "NRCS should not make this more complicated for us to do conservation." For a discussion of this practice and its challenges, see the University of Wisconsin's Extension publication *Planting cover crops after corn silage for spring forage harvest: Opportunities and challenges as told by dairy farmers and their consultants in Wisconsin*.

Cover Crops as Forage after Corn and Before Soybeans—As referenced in the in the reports issued by the Midwest Cover Crops Council and by the Practical Farmers of Iowa, it is also common in the Corn Belt for corn producers to follow corn harvested for grain with a cover crop that can be terminated in the spring prior to planting soybeans. A South Dakota State University Extension Publication discusses research where this practice is being used in that state ("The average winter rye biomass (15% moisture) at the SDSU Southeast Research Farm near Beresford was 3581 lbs dry matter per acre. The rye was cut and baled on the same day before planting soybeans."). The Sustainable Agriculture Research and Education (SARE) discusses this practice in great detail in its publication on Crop Rotation with Cover Crops ("In Zone 7 and warmer, you can grow a cover crop every year between your corn and full-season beans. Also, you can use wheat or another small grain to replace the cover crop before beans, in a three-crop, two-year rotation (corn>wheat>doublecrop beans). In all cases, another legume or a grass/legume mixture can be used instead of a single species cover crop. Where it is adapted, you can use crimson clover or a crimson/grass mixture instead of vetch. In cooler areas, plant rye as soon as possible after corn harvest. If you need more time in the fall, try overseeding in rowed beans at drydown "yellow leaf" stage in early fall, or in early summer at the last cultivation of corn.")

4. **This change will lead to a chronic undercounting of the number of acres being treated by a practice that is, for all intents and purposes, cover cropping.**

The previously mentioned confusion as to what is and is not a cover cropping practice that would be created in the countryside by the proposed change in CC-CPS 340, will also lead to confusion about what is to be counted as a cover crop for official accounting purposes done by USDA, state agencies, the land grant universities and the private sector (like the Iowa Nutrient Research and Education Council (INREC).) Under the proposed CC-CPS 340, the harvesting of forage from what is widely understood today to be a cover crop will suddenly throw such acres into some other category. Invariably, growers, enumerators, and others involved in the data reporting, collecting, and compiling efforts will find these changes confusing and lead to cloudy, less reliable data due to uncertainty around the estimates as to the number of acres receiving cover crop treatments. This is important because "official" accountings of conservation practice adoption, like cover crops, is feedback that reinforces further adoption of a practice. Official reports that the acreage under cover crops is increasing will lead more farmers to experiment with it, and lead those farmers already experimenting with them to consider expanding it to more of their acreage.

In closing, cover crops are a critically important working lands conservation practice, one whose adoption NRCS and our organizations and members actively support and promote. We offer the above comments in that spirit and the hope that coming years will see the continued growth in the number of

growers using this practice and the number of acres treated. We greatly appreciate the opportunity to provide NRCS with these comments.

Sincerely,

American Farm Bureau Federation
American Soybean Association
Illinois Corn Growers Association
Illinois Farm Bureau
Iowa Farm Bureau Federation
Minnesota Agricultural Water Resources Council
National Association of Conservation Districts
National Association of Wheat Growers
National Cattlemen's Beef Association
National Cotton Council
National Council of Farmer Cooperatives
National Corn Growers Association
National Milk Producers Federation
Ohio AgriBusiness Association
Ohio Soybean Association
The Fertilizer Institute
United Egg Producers