From: richard.webb@usda.gov

Sent: Tuesday, November 7, 2023 8:16 AM

To: ndsu.sbare@ndsu.edu

Subject: ND NRCS response to request for public input

Hello,

The below items are topics that NRCS feel could be important for the goals mentioned in the SBARE request for input. These are in no particular order.

- Selection/promotion of varieties for crops and conservation plantings adapted to changing weather conditions of both flood and drought.
- Promotion of strategies that couple agricultural production with climate smart strategies to enable producers to take advantage of opportunities such as carbon markets.
- Strategies, practices, methods, and quantifiable benefits related to community supported ag, urban ag, and small-scale production.
- Expand the number and capabilities of NDAWN stations to provide more and better data for producers.
- Sustainable production methods to address soil erosion concerns on low residue crops such as sugar beet, potato, soybean, and dry bean.
- Research and analysis of methods to reliably establish cover crops in North Dakota. Producers like the
 flexibility of aerial broadcasting into growing crop, but NRCS observations have been that this has a low
 success rate. Are there specific details or methods that could make success more reliable?
- Are there strategies to improve grass establishment in conservation plantings such as rolling fields before and/or after planting to firm the seedbed and improve seed-to-soil contact?
- What effect does an increased seeding rate have on stand establishment and plant vigor for conservation plantings?
- Does an increased forb component (number of species and/or overall % of the mixture) result in more blossoms in future years (perhaps years 3, 6, and 10)?
 - How do certain management practices (grazing, fire, clipping) impact forb blossom expression in years
 3, 6, and 10?
- Selection/promotion of additional varieties of forbs that can be commercially available for conservation plantings.
- Strategies to protect the grassland resource of North Dakota's landscape, such as:
 - Keeping livestock on the landscape to provide economic returns to grassland.
 - o Priority/focus areas to address woody encroachment on grasslands.
 - What management strategies best combat the expansion of cool season invasive grasses on native grasslands (Kentucky Bluegrass, Smooth Bromegrass, Crested Wheatgrass)?
- More efficient nutrient management strategies in response to high fertilizer costs.
- More efficient, economical, and environmentally friendly methods to address soil salinity.
- Verification of the impacts of pollinators on soybeans.
- Methods to prevent and treat soil acidification, particularly in southwest ND.
- Development/selection/promotion of adapted tree species that could be available as alternatives to Green Ash
 (as Emerald Ash Borer gets closer and closer) or Russian Olive/Rocky Mountain Juniper (two of the few species
 with wide adaptation to western ND, but both with invasive tendencies)

Thank you for the opportunity to provide this input.

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