





- **657 Wetland Restoration, 659 Wetland Enhancement and 658 Wetland Creation**
  - These practices are recommended for increased cost share rate because of their multiple environmental benefits including water quality improvement, water storage, and improved wildlife habitat which can increase recreation and local economic returns with increased hunting opportunities. Wetlands are estimated to provide 52% Nitrate-N reduction (INRS Science Assessment). These practices are underutilized (657 planned 17 times; 659 planned 4 times; 658 planned 3 times), but are long-lived practices at 15 years, thus ensuring a positive rate of return for public investment. We believe the barrier to adoption may be primarily costs and thus an increase in cost-share rate will provide added incentive for landowners to apply for these practices.
- **381 Silvopasture**
  - Silvopasture integrates perennial forage crops (potentially even native grasses and forbs) with trees, addressing multiple resource concerns. Because of the cost of tree planting, it is a highly capital-intensive practice for producers to undertake. It has a long lifespan, making it attractive from a cost-benefit standpoint, but also a long establishment time, which means that the producer won't realize immediate benefits. It's also a new practice, relatively unknown amongst producers and conservation professionals alike. When implemented effectively, with appropriately managed grazing activities, silvopasture has the potential to benefit soil health, wildlife and water quality. Increasing the payment rate to 90% will allow more producers to pursue this new practice.
- **612 Tree & Shrub Establishment**
  - Tree & Shrub Establishment is another capital intensive, under-adopted practice. Because of the long lifespan of the practice, however, and because the practice treats multiple resource concerns, the return on investment is high. Given the long establishment time for the practice, producers are unlikely to see many direct benefits for this practice to their operations. Increasing the payment rate for this practice and providing better incentives for adoption is necessary given the high initial cost and extended timeframe until a producer begins to see benefits.
- **656 Constructed Wetlands**
  - Constructed wetlands are built in areas that were not previously considered to be wetlands and can intercept tile drainage prior to discharging to a stream. They can offer large reductions in nitrate concentration and often treat drainage areas ranging from 30-200 acres. If the wetland is in the floodplain, the wetland must be protected from inundation and damage from a 25-year flood event. The performance in terms of amount of nitrate removed varies based on the wetland to drainage area, but as the ratio nears 2%, reductions of >50% can be realized.
  - The cost of the practice varies based on size and amount of earthwork required. Work completed by The Wetlands Initiative in Illinois has shown a range of \$42,000-\$80,000 per practice. In the past 5 years, constructed wetlands were planned 10 times in Iowa with a NRCS funding obligation of \$150,892. The cost efficiency of a constructed wetland has been shown to be an efficient \$1.30-\$1.50 per lb of nitrogen removed.
  - [https://static1.squarespace.com/static/567070822399a343227dd9c4/t/568d5fb1a12f449ad8076d89/1452105649684/Growing Wetlands for Clean Water compressed.pdf](https://static1.squarespace.com/static/567070822399a343227dd9c4/t/568d5fb1a12f449ad8076d89/1452105649684/Growing+Wetlands+for+Clean+Water+compressed.pdf)
- **604 Saturated Buffers**
  - Saturated buffers utilize the organic matter in the soil profile of a vegetated filter strip located between the field edge and a stream to remove nitrogen from tile transported water. A typical saturated buffer treats a drainage system that outlets through a 6-12" main and ranges in size from 20 – 80 acres. A saturated buffer needs a 30 ft width of

- perennial vegetation and has a typical distribution line that runs from 500-1,000 feet. Research conducted by the University of Illinois Urbana-Champaign has shown that Iowa has 70,500-102,000 potential sites, and the potential to treat 21% of state's drained acres.
- There were 5 saturated buffers planned by the Iowa NRCS from 2016-2020 with a financial obligation of \$14,778. Saturated buffer installations can range in costs from \$3,500-\$6,000. Utilizing 20 site years of data collected by ADMC, the median cost of nitrogen removal efficiency was \$1.22/lb of N removed.
  - [http://www.saturatedbufferstrips.com/docs/final\\_report\\_3.pdf](http://www.saturatedbufferstrips.com/docs/final_report_3.pdf)
  - **605 Denitrifying bioreactor**
    - Bioreactors utilize a carbon source, typically wood chips, to remove nitrates carried in tile water and have fewer siting criteria than saturated buffers. They are often options for landowners when a saturated buffer will not work due to either grade concerns or soil conditions. A bioreactor also treats drainage outlets that range in size from 6-12" and drain 20-80 acres. Due to the expense, it is important to install on a tile system known to have consistent flow and high enough nitrate concentrations to warrant treatment. A typical bioreactor size is 100 feet long by 20 feet wide. The Iowa Nutrient Reduction Strategy has found that bioreactors have an average nitrate removal efficiency of 42%.
    - There were 20 bioreactors planned by the Iowa NRCS from 2016-2020 with an obligation amount of \$257,964. The average cost of the practice ranges from \$10,000-\$20,000. The average nitrogen removal efficiency of denitrifying bioreactors has been shown to be \$0.95 per pound of nitrogen removed.
    - [https://northcentralwater.org/files/2018/03/Ten-Ways-to-Reduce-Nitrate-Loads\\_IL-Extension-2016.pdf](https://northcentralwater.org/files/2018/03/Ten-Ways-to-Reduce-Nitrate-Loads_IL-Extension-2016.pdf)
  - **327 Conservation Cover**
    - Because conservation cover can be used as both an in-field and edge-of-field practice, few practices address as many resource concerns and provide as much return on investment as conservation cover. Though the practice is already popular and widely adopted, if it were to be cost-shared at 90%, the potential for increased adoption is even higher. Additionally, when used as part of an approved wildlife management plan, this increase in practice adoption will help to achieve the 10% required minimum towards wildlife practices.
  - **314 Brush Management**
    - If Brush Management were to be cost-shared at 90%, this practice has the potential to gain popularity in two unique Iowa landscapes that multiple partners prioritize in various landscape initiatives and strategic plans; the Loess Hills and the Iowa Driftless Region. Multiple partners have observed the current cost-share rate of 75% is not enough to incentivize private landowners and producers to implement the needed conservation in these landscapes due to certain landscape features (i.e., slope) that act as a barrier to adoption by driving up costs. When Brush Management is implemented in these landscapes, the response from the native plant communities' results in additional resource concerns, thus achieving a high return on investment. Though the practice is already popular and widely adopted, it is a long-lived practice at 10 years. When used as part of an approved wildlife management plan, this increase in practice adoption will help to achieve the 10% required minimum towards wildlife practices. Lastly, if one considers Congressional intent, if 10 practices are allowed to be cost-shared at 90% and at least 10% of EQIP spending needs to be allocated to wildlife practices, at least one of those 10 priority practices can be a wildlife focused practice. The EQIP subcommittee feels Brush Management would meet this intent.

- **Potential Cons with 10 Priority Practices @ 90% Financial Assistance (overall):**
  - There are many advantages to adopting the increased financial assistance (FA) rates for the 10 priority practices listed above. There are, however, a few disadvantages that must also be noted with this approach. First, it is reasonable to expect that these practices implemented at the higher FA rate will account for more of the initial state EQIP allocation. With those increases, other initiatives that must also be offered may suffer due to these expenses. Further, due to some initiatives having mandatory allocations and others that must be offered, it is reasonable to expect that some applications that otherwise would have been successfully funded with the current FA percentages will go un-funded. Though this scenario shows a significant backlog (i.e., need) and may result in higher EQIP allocations in future years, this could be perceived as a negative outcome, at least in the short-term. Furthermore, the potential of other initiatives suffering due to the expenses of these practices is exacerbated when one considers the costs of some of the practices being recommended (e.g., denitrifying bioreactors, wetland restoration, and wetland creation). These are expensive practices that will undoubtedly require more of the EQIP allocation. Finally, the other initiatives will suffer when one considers the practices being recommended that are already widely adopted (e.g., Conservation Cover and Brush Management). An increase in financial assistance with these practices will lead to positive resource outcomes, however, this will again be at the cost of other initiatives and otherwise successful applications."

**RECOMMENDATION:** The EQIP Subcommittee is recommending the Priority Practices to the State Conservationist for consideration and adoption.

- Would like to recognize and thank Mustapha Abouli for all his hard work with the EQIP Subcommittee. Mustapha has taken a position in Reno, NV as the ASTC-Programs.

**Conservation Innovative Grants (CIG) – Steve Hopkins**

No Committee meeting minutes available. The minutes will be distributed at the next Quarterly STAC meeting.

**Wetlands Reserve Easements (WRE) – Kelly Smith (See Attachments)**

- The last WRE meeting was held on December 9<sup>th</sup>.
- Sindra Jensen shared the results of the most recent market analysis for FY21 for WRE. Please refer to attachments.
- We are aligned well with the other states with managing.
- The subcommittee agreed to ask for the concurrence of 85% of the market analysis as the offer of the GARC rate.

**RECOMMENDATION:**

- Please let the STC, Kelly, Dave, and Sindra know of any feedback pertaining to the GARC rate.
- The Market Analysis will be brought to the June STAC meeting to plan for FY22 fiscal year.

**CRP – Sean McMahon**

- Have not met since last meeting but will be meeting in the 1<sup>st</sup> quarter of 2021.
- National FSA request for states to update their CRP priority areas. This was already done proactively.
- There are huge dollars being made for payments on CRP.
- A question was raised on where we were at on the total acres for sign-ups. Robin stated that it should be on the public website but will provide this to the STAC.



