USDA-NRCS
IOWA STATE TECHNICAL COMMITTEE MEETING
Neal Smith Federal Building
210 Walnut Street, Room 693
Virtual Meeting - Teleconference
Des Moines, Iowa 50309

December 17, 2020 at 1:00 P.M.

MINUTES

Welcome/Opening Comments – Jon Hubbert, State Conservationist

- A quick overview of the budget was provided. We will be very low on program dollars this fiscal year and will request additional funding as we are able. 96% of our budget will be directed to staffing with the additional 4% directed to additional support dollars. We will be operating in a very lean status and hoping to have additional funding incoming.

Approval of Minutes from September 17, 2020

STC asked if there were any additions or corrections to the minutes. There were no additions or corrections, and the September 17th minutes were approved.

Farm Bill Status – Dave Brommel (See Attachment)

EQIP

- EQIP Summary:
  - FY2021 EQIP Initial allocation = $28,630,283
  - Derecho Disaster - We funded 143 contracts at $1,961,762
  - Soil heath is a new initiative Iowa will offer with an initial allocation of $500,000.
  - December 18 is the FY2021 EQIP application sign-up deadline.

CSP

- CSP is moving from 5 State Priority Resource Concerns to 8 State Priority Resource Concerns. Anna Johnson will present the Sub-Committee Recommendations.
- Waiting for National guidance to announce sign-up deadline. Likely will be February or March.
  - FY2021 Initial CSP Allocation = $15,894,500
    - Classic CSP = $7,850,000
    - CSP Renewal = $7,800,000 (Expiring 2015 & 2016 contracts)
    - MRBI CSP = $202,500 (Boone River-Eagle Creek)
    - CSP-GCI = $42,000 (Grassland Conservation Initiative)

ACEP-WRE

- For FY2020 – we had six new easements – Surveys order has been sent for processing.
- FY2021 Initial Allocation = $8.2 million FA for new acquisitions and $1.2 million for stewardship work on existing easements.

ACEP-ALE

- ACEP-ALE – TNC has an agreement for a site in Plymouth County that is at the appraisal phase. INHF has an agreement for a site in Clayton County.
- FY2021 funding is $460,000 for new enrollments.

WREP

- WREP 2019 South Skunk River – We are working to process applications and to secure funding from National Office. (NOTE: The original agreement was for $4.8 million and we are working with the National staff to address a funding shortage for 2021).
- We received two new WREP proposals that are under review.

EWP-FPE

- EWP update – currently funding 65 easements ($70 million in FA).
  - 28 have preliminary title searches back and are working towards submission for acquisition funds.
  - 23 are pending contract for legal services so we can receive the preliminary title searches to move forward.
  - 14 will need the documents done and loaded for preliminary due diligence funds.

EWP-Recovery – Scott Cagle

- The Emergency Watershed Protection Recovery program has obligated over $15 Million to 123 Damage Survey Reports that have transpired into 53 agreements with county entities and expending a little over $7 Million so far.

Non-Farm Bill Program:

At-a-Glance:

- Please refer to attachment 2.
- Dave Brommel provided an overview on the numbers within the publication.

Sub-Committee Reports

Environmental Quality Incentives Program (EQIP) – Steve Hopkins (See Attachments)

Soil Health & Water Quality EQIP Initiative for Iowa's Row Crop Land:

- There were some friendly reminders and key points are below:
  - To be in the program, producer must implement a minimum of 3 of the first 4 of the 5 practices for a three-year + period.
  - All practices will be offered at the Initiative Rate.
  - The following practices are targeted for this program:
    - Residue and Tillage Management, no-till (329)
    - Cover crops (340)
    - Nutrient management (590)
    - Conservation Crop rotation (328), *adding a small grain crop to the rotation*
    - Prescribed grazing (528), *grazing the cover crops*
  - Rules
    - Contract length will be for 3 – 6 years. Cover crop can be up to 5 years.
    - If a practice is established on the tract of land the incentive rate isn't available, but it does count as one of the 3 minimum practices will be maintained for the contract.

Priority Practices:

- The EQIP Subcommittee requests that State Conservationist Jon Hubbert adopt the following practices at a 90% Financial Assistance rate. Practice descriptions and justifications are listed below.

- **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
- **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 conduction by the University of Illinois Urbana-Champaign has shown that Iowa has 70,500-102,00 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
- **605 Denitrifying bioreactor**
    - Bioreactors utilize a carbon source, typically wood chips, to remove nitrates carried in tile water and have fewer citing 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
- **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 9th.
- 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 1st 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.

- General deadlines/signup –
  - A general signup is Jan. 4 – Feb. 12th. Press release was sent out November 2020 for this.
  - A grassland sign-up is Mar. 15-Apr. 23rd.
  - A memo will be coming out shortly to advise which SAF proposals have been approved/denied.

Conservation Stewardship Program (CSP) – Anna Johnson

The subcommittee:

- Reviewed changes to CSP that were announced in the final rule, such as inclusion of soil health as a priority.
- National guidance has stated that states can select exactly eight total Priority Resource Concerns for agricultural land and for non-industrial private forest land. Discussion:
  - Adding additional PRC's will make it easier for more producers to demonstrate they are currently conducting conservation relevant to the program.
  - If NRCS adopts these recommendations, they will be in place for CSP-Classic signups for FY2021.
  - The percent weight for the slate of PRC's will likely need to change.
  - Note: those applying for CSP renewal in 2021 will do so under the 2020 rule & processes.
- Updates on Iowa CSP application status:
  - 470 renewal applications received so far. Received allocation letter from headquarters, expect $7.8 million to be available for CSP renewals for FY21. In FY20, $4.6 million was available.
  - Expecting $7.85 million for Classic CSP signups.
  - Grassland Conservation Initiative – 17 applications, approximately $42,000 expected to be allocated for those contracts.
- Discussion on whether the group has feedback or recommendations on a variety of items:
  - The new CSP focus on soil health?
    - NRCS shared that a new bundle of CSP practices was added nationally this year, recommended by Iowa NRCS: Cropland Soil Health Management System. Bundle includes no-till, nutrient management, and cover crops.
  - Resource Conserving Crop Rotations, and Advanced Grazing Management:
    - Discussed the new Advanced Grazing Management sheet. It was new in 2020 and little used. The 2021 signups should be a good time to solicit feedback on how it is working. Noted that it does not allow for grazing cover crops, this is per national guidance.
    - Iowa NRCS has had unchanged guidelines for Resource Conserving Crop Rotations (E328A) for several years, received very little feedback.
    - If the sub-committee would like to make recommendations for changes to either job sheet, it needs to be within the next 3-4 months.

RECOMMENDATION: The CSP Subcommittee is recommending:

- That soil quality limitations, degraded plant condition, and pest pressure be added as Priority Resource Concerns for agricultural land.
- That fire management, livestock production limitation, and aquatic habitat be added as Priority Resource Concerns for non-industrial private forestland.

Source Water Protection (SWP) – Christina Murphy

- The committee has not met since the last STAC.

Agency Announcements

Gabriele Edwards, Draft 2020 Iowa State Forest Action Plan

- This is a 10-year revision with a highly interactive website. This is not a strategic plan but will help to direct the work for the next 10 years.
- There is quite a bit of information within the website, along with goals and strategies that are broad in scope.
- Please feel free to email Gabriele if there are any questions or concerns with the plan.

Scott Cagle, NRCS Partnerships (See Attachment)

- Regional Conservation Partnership Program –We currently have 3 new classic RCPP agreements in development, which should be implemented by late winter. We also have an Alternative Funding Arrangement RCPP agreement which is also under development and a RCPP Renewal to be initiated in early spring.
- IPC and State CIG – The Request for Funding announcements are being prepared for the Iowa Partnerships for Conservation grant and the State Conservation Innovation Grants. Budget restrictions may play a pivotal role in the offering of these grants.
- WFPO – We have two new Watershed Flood Prevention Operation agreements currently being developed for watershed planning. All future WFPO opportunities will be required to first have a Preliminary Investigation Report completed at the discretion of the State Conservationist.

Steve Hopkins (DNR)

- At the last STAC meeting we mentioned that Gal Garner retired, and Steve Hildress has taken over the position.
- Source water– Jessica Montana is transitioning, and Steve is acting for a while and then will transition to Matt Dvorak.

Closing Comments from STC

- Thank you for dialing in, given the COVID we appreciate the flexibility.
- COVID status: recently used COVID updates/information to regress some of our opening statuses. 2 cases per 10k on a daily basis will change the operating status. The majority of offices are at phase 0-1 and a few are at phase 2.
- Still trying to connect with our Partners through meetings to get a feel of the three questions:
  - What are we doing right?
  - What do we need to do better?
  - What is our biggest opportunity?

Attachments (1-21)

Future Meeting Dates

1:00 pm – NRCS Hugh Hammond Bennett Conference Room, 210 Walnut Street, Room 693, Des Moines
March 18, 2021
June 17, 2021
September 16, 2021

December 17, 2020 State Technical Committee Meeting – Programs Report
Dave Brommel, Acting ASTC-P, NRCS

Review FY2020 At-A-Glance document

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USDA United States Department of Agriculture

At-a-Glance

Iowa NRCS • October 2020

State Conservationist Jon Hubbert
515-284-6655 | Jon.Hubbert@usda.gov

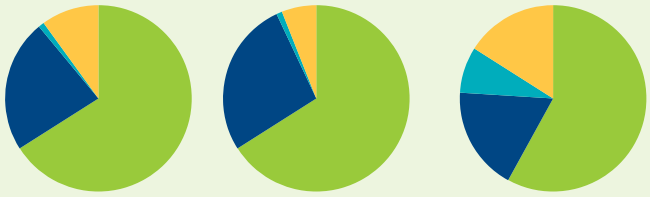
FY20 Total Program Accomplishments

ACEP	*$12.3 M	1,755 AC	7 easements
CSP	$17.4 M	187,981 AC	395 contracts
EQIP	**$30.1 M	126,696 AC	1,022 contracts
TOTAL	$59.8 M	316,432 AC	1,424 contracts

*ACEP includes $1.8 M in funding for stewardship activities on existing easements.
**EQIP includes 3 Conservation Innovation Grant (CIG) contracts totaling $261,760.

Conservation Stewardship Program (CSP)

FY20 Renewal
New FY20
FY20 CSP-GCI
New RCPP-CSP (Monarch)



$4.1 M	50,582 AC	72 contracts
$11.5 M	123,508 AC	228 contracts
$1.7 M	12,101 AC	32 contracts
$161,240	1,790 AC	63 contracts

Ongoing Program Workload

Active Contracts, Easements & Acres

2,634 contracts ($130.9 M)
2,698 contracts ($87.1 M)
1,664 easements

1.3 M acres
398,364 acres
190,689 acres

CSP
EQIP
Conservation Easements

Environmental Quality Incentives Program (EQIP)

Obligations by Sub-Accounts

Conservation Activity Plans	$328,158	14,950 AC	91 contracts
Emergency Animal Mortality	$89,718	21 AC	6 contracts
High Tunnel System	$255,232	55 AC	19 contracts
Historically Underserved	$8.6 M	23,105 AC	263 contracts
MRBI	$3.6 M	16,185 AC	100 contracts
NWQI	$1.8 M	4,594 AC	49 contracts
On-Farm Energy	$510,232	274 AC	8 contracts
Organic	$301,347	2,809 AC	15 contracts
Prairie Pothole	$1 M	556 AC	39 contracts
Source Water Protection	$2.9 M	19,572 AC	55 contracts
Wildlife	$3.9 M	10,842 AC	232 contracts

FY20 Regional Conservation Partnership Program (RCPP)

Driftless Area Habitat for the Wild & Rare Phase 2	$176,160	181 AC	3 contracts
Fox River Water Quality Project	$64,562	190 AC	3 contracts
Innovative Conservation Agriculture	$49,449	1,101 AC	15 contracts
Midwest Agriculture Water Quality Partnership	$778,123	8,667 AC	13 contracts
SmithfieldGro: Sustainable Grain Supply Chains	$22,303	674 AC	3 contracts
Improving Working Lands for Monarch Butterflies (CSP)	$1,739,384	12,101 AC	32 contracts
Totals	**$2,829,981**	**22,916 AC**	**69 contracts**

FY20 RCPP projects are part of EQIP, except for the Monarch Butterfly project. The results above are included in EQIP & CSP totals on the first page.

FY20 Iowa Conservation Innovation Grants (CIG)

Iowa NRCS selected three State CIGs in FY20. These grants help develop the tools, technologies, and strategies to support next-generation conservation efforts on working lands and develop market-based solutions to resource challenges. Grantees match the CIG investment at least one to one.

Sustainable Iowa Land Trust: This project will provide a one-stop-shop for landowners and producers exploring agroforestry resources in Iowa. ($99,000)

Iowa Soybean Association: Using Soil Health Testing data provided by participating farmers, this project will develop an open access and interactive farmer-friendly portal that will provide an easy interface for farmers and landowners to upload data. ($71,075)

Soil and Water Conservation Society: Eight trials over a two-year project period with corn and soybean farmers - 3 reduced tillage and 5 cover crop - will be completed to help develop producer strategies, in cooperation with Land O'Lakes, Inc. ($91,685)

FY20 Iowa Partners in Conservation (IPC)

These funds will be used to help support Iowa NRCS mission areas and increase partner staff in local field offices.

Iowa Department of Natural Resources: The Iowa DNR Technical Partnership #2 will expand and accelerate delivery of direct technical assistance to increase conservation practices and encourage the wise use of land, water, wildlife, and related resources within Iowa. ($1.3 million)

Other Conservation Activities

Watershed and Flood Prevention Operations (Polk County): Provides assistance for the Eastern Polk County Watershed Improvement Project Work Plan - Environmental Assessment (Plan-EA) project. ($600,000)

Conservation Reserve Program (CRP)*
Contracts: **119,743**
Acres: **2 Million**

State Cost-Share (IDALS)*
Funds: $**15.96 M**
Practices Funded: **5,345**

Conservation Plans*
Written: **12,624**
Acres Planned: **889,071**

*Request maps for more details.

Iowa
Natural Resources Conservation Service
ia.nrcs.usda.gov/

Iowa's Soil Health EQIP Initiative for Iowa's row crop lands

(Updated Dec. 4, 2020; Kevin Kuhn, NRCS)

Objective: to encourage the adoption of management practices on Iowa's annual crop production fields that will have the greatest impact on our natural resources by creating incentives for adopting the system rather than just a standalone practice. This initiative will address the following Resource Concern Categories: Soil Quality Limitations; Field Sediment, Nutrient and Pathogen Loss; and Wind and Water Erosion.

To be in the program, producer must implement a minimum of 3 of the first 4 of the 5 practices for a three-year + period. All practices will be offered at the Initiative Rate.

The following practices are targeted for this program:

- Residue and Tillage Management, no-till (329)
- Cover crops (340)
- Nutrient management (590)
- Conservation Crop rotation (328), *adding a small grain crop to the rotation*
- Prescribed grazing (528), *grazing the cover crops*

Rules

1. Contract length will be for 3 – 6 years. Cover crop can be up to 5 years.
2. If a practice is established on the tract of land the incentive rate isn't available, but it does count as one of the 3 minimum practices will be maintained for the contract.

EQIP scenario payments available for each practice:

(These payments are based on F.Y. 2021 payment rates)

1. **329-1 (No-till / Strip-till)**
   a. 329-1 (No-till / Strip till) $16.01

   *must start following the first cover crop and be continuous.

2. **Cover crop (340)**
   a. 340-1 (single species) $51.60
   b. 340-11 (multi species) $63.13
   c. 340-20 (winter kill species) $35.07

   **Producer can choose specific cover crop for each year, if small grain is added to the rotation a cover crop is not required before the small grain. No mechanical harvesting of the cover crop is allowed.*

3. **Conservation Crop Rotation (328)**
   a. 328-1 (adding small grain or other high residue crop) $9.44

   **Producer will receive the incentive for three years of the contract not just for the year the small grain is in place. The small grain can be harvested for grain, straw, or as a silage product.*

4. **Nutrient Mgmt. (590)**
   a. 590-1 (no manure) $6.34

b. 590-4 (with manure) $13.40
c. 590-2 (with manure <u>all injected</u> or surface on cover crop) $25.30
d. 590-5 (precision) $37.87
Comment: avg. 2.5-acre grid size or < and VRT P & K

*In all scenarios the 590 standard must be met. This includes:

- Nitrogen rates

Commercial Nitrogen (0.10 price ratio) *based on 2020*	**Manure (0.05 price ratio)** *based on 2020*	**Commercial Nitrogen (0.10 price ratio)** *based on 2020*	**Manure (0.05 price ratio)** *based on 2020*
Main part of Iowa	*Main part of Iowa*	*SE Iowa*	*SE Iowa*
Corn following Soybeans (CB rotation) = 127-152	Corn following Soybeans (CB rotation) = 144-177	Corn following Soybeans (CB rotation) = 139-167	Corn following Soybeans (CB rotation) = 160-198
Corn following Corn = 175-203	Corn following Corn = 195-228	Corn following Corn = 186-219	Corn following Corn = 218-240

- No P and K application on VH testing soils, 50% of maintenance on H testing soils.
- The first 590 payment must meet the 590 standard for that year. This usually requires soil sampling in year 1 and then the 1st incentive payment coming in the 2nd year of the contract.
- Producer will receive the 590 incentive each year of the contract not just for years the fertilizer is applied.

<u>In addition, the participant must complete (2) of the following for the 590 scenarios b, c, and d:</u>

- Apply N in-season (split application) - according to ISU CROP 3073 (Nitrogen Use in Iowa…)
- End of Season Corn Stalk Nitrate Test (ISU CROP 3154), maximum of 50 acres / sample
- Late-Spring Soil Nitrate Soil Test (ISU CROP 3140), maximum of 50 acres / sample
- Apply manure at P based rates according to PM-1688
- Variable rate N based on MAP or DAP application
- Use a slow release N such as a polymer coated urea (ex. ESN)
- Use nitrapyrin (*only N stabilizer approved*) with fall applied anhydrous ammonia
- Apply manure with low disturbance method in a disturbance strip less than 6" wide, minimum of 30 inch spacing when following with a NT crop.
- Apply commercial nitrogen below ground with low disturbance method when following with a NT crop.

5. Prescribed Grazing (528)

a. 528-4 (strip grazing) $54.54

**this will distribute the manure throughout rather than around the watering facility and congregation areas.*

<u>Requirements</u>

- NRCS developed grazing plan is required. This includes a livestock forage balance work sheet.
- The goal should be to have a <u>minimum</u> of 1 ton of cover crop biomass (i.e. 12" tall cereal rye).
- Move minimum of every 3 days, *daily moves are preferred*.
- Strip grazing doesn't require a back fence.
- Typically plan this practice after corn and before soybeans.
- This practice must be completed for 3 years but doesn't have to be consecutive.

Recommendations of the "EQIP Priority Practices Sub Subcommittee", Oct. 29, 2020

(from Brian Hickman, DNR Private Lands Coordinator, Chair)

The EQIP Subcommittee requests that State Conservationist Jon Hubbert adopt the following practices at a 90% Financial Assistance rate. Practice descriptions and justifications are listed below.

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

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 conduction by the University of Illinois Urbana-Champaign has shown that Iowa has 70,500-102,00 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

605 Denitrifying bioreactor

Bioreactors utilize a carbon source, typically wood chips, to remove nitrates carried in tile water and have fewer citing 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

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."

EQIP Subcommittee Meeting Notes
Virtual Meeting by Google Meet & Phone
Dec. 10, 2020
10:30 am – 12:00 noon

Members Present: Andrew Di Allesandro, USFWS; Joe McGovern, INHF; Emily Martin, INHF; Will Myers, IDALS; Roger Wolf, Iowa Soybean Assoc; Suzan Erem, SILT; Jorgen Rose, PFI; Keegan Kult, Ag Drainage Management; Jorgen Rose, PFI; Bruce Carney, producer; Brian Hickman, Iowa DNR; John Whitaker, CDI; Susanne Hickey, TNC; Amy Crouch, TNC; Rick Robinson, Iowa Farm Bureau; Sean McMahon, Iowa Ag Water Alliance; Cora Fox, Iowa Cattlemen's Association; Omar de-Kok Mercado, ISU; Allie Rath, Pheasants Forever; Steve Hopkins, Iowa DNR, EQIP/CIG Subcommittee Chair; (Dave Petty, producer, called in, but was not able to connect during the meeting)

NRCS Staff advisors/assistance: Kevin Kuhn; Rubyana Neely; Mustapha Abouali, NRCS EQIP Coordinator

Meeting Notes

Soil Health Initiative:

Summary: Kevin Kuhn of NRCS presented the updated "Soil Health Initiative" summary, a pilot initiative to provide cost-share to producers to "bundle" a series of five soil health practices on a graduated rate scale, which was approved by the EQIP subcommittee meeting on Sept. 8, 2020 for recommendation to the State Conservationist. The updated version presented by Kevin included a goal of a minimum of 1 ton per acre of biomass for cover crops when grazing is initiated for soil health (an updated summary is provided separately)

FFY20 Soil Health Initiative Funding: NRCS EQIP Coordinator Mustapha Abouali stated that $500,000 in EQIP funding has been initially set aside for this pilot program in Iowa. There was much discussion that if this initiative proved popular, then only a limited number of producers would be able to utilize the program before reaching the $500,000 program limit. There was discussion about how to extend the limited funding to more producers, such as capping the program at 100 acres per producer. There was also discussion about adding more funding to this pilot program, but doing so would reduce funding from other existing EQIP programs of Iowa's $28.6 million initial allocation in FFY20. It was mentioned that if Iowa were to receive additional EQIP funding later in the year, then it might be possible to add funds to this pilot program. The subcommittee ultimately agree to support the initiative as updated, in the amount of $500,000 for the first year, then evaluate the first year's activities.

Priority Practices:

Summary: Brian Hickman, Chair of the Priority Practices Sub Subcommittee, provided a summary of the "Priority Practices list" discussed by and recommended by the sub subcommittee" at its October meeting. The sub subcommittee compiled a list of 10 priority practices not commonly adopted to be recommended at a cost-share rate of 90%. Three of the practices involved wetlands, so they were combined under one description. The list of practices was diverse, ranging from edge of field practices to perennial practices, and reflected the diversity of the sub subcommittee members. (A description of the priority practices, with pros and cons listed at the end of the document, is provided as a separate document).

Summary of Pros and Cons: At the request of State Conservationist Jon Hubbert, the EQIP Subcommittee had much discussion about the pros and cons of adopting the priority practices cost-share recommendation.

In summary, the EQIP Subcommittee agreed that a 90% cost-share will likely increase demand for the priority practices listed, but doing so may come come at the expense of other EQIP programs, unless Iowa's EQIP funding is increased.

Recommendation: The EQIP Subcommittee voted unanimously to adopt the recommendation to fund the priority practices at 90%.

Prairie STRIPS:
NRCS is still working on a draft technical note for Prairie STRIPS, but it was not ready for review at the time of this meeting.

Other Items:
EQIP Coordinator Mustapha Abouali provided updates on FFY20 EQIP allocations, and forwarded a link to NRCS's year-end "At A Glance" program information.

EQIP Coordinator Mustapha Abouali announced that he had accepted a new position in the state of Nevada, effective Jan. 16, 2021.

Submitted by:
Steve Hopkins, Iowa DNR, Chair EQIP/CIG Subcommittee

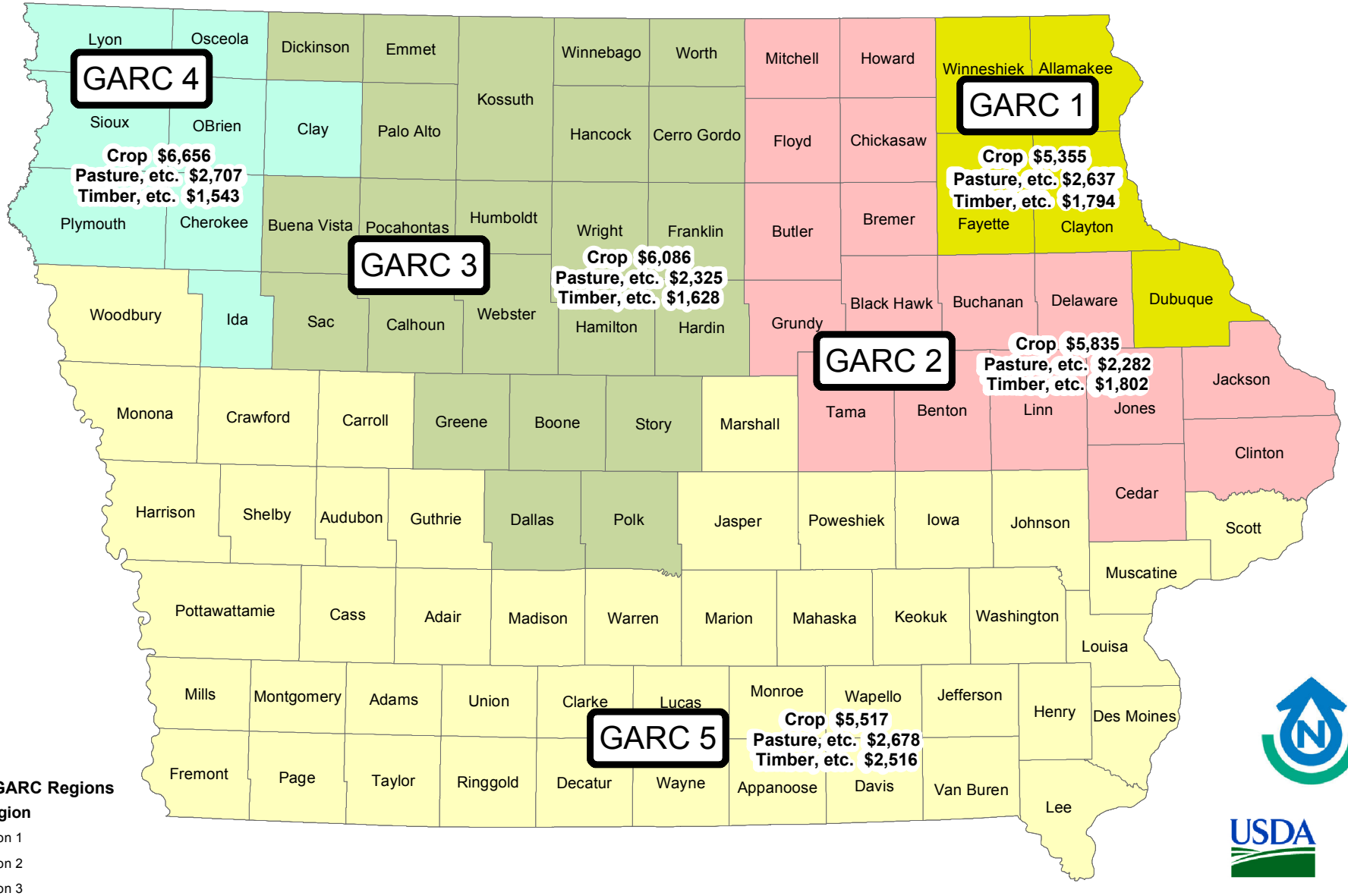
IOWA-GARC AREAS Cropland/CRP ACEP-WRE and EWP-FPE	**2021 GARC Neighbor Comparison**	**GARC $/ac Neighbor 1**	**GARC $/ac Neighbor 2**	**GARC $/ac Neighbor 3**
GARC Area 1	**85%**	**MN -2020**	**WI - 2021**	**NA**
Cropland	**$ 5,355.00**	$ 5,000.00	$ 5,400.00	
Non-Crop Pasture and Pasture-like	**$ 2,627.00**	$ 2,565.00	$ 4,230.00	
Non-Crop Timber and Timber-like	**$ 1,794.00**	$ 2,565.00	$ 2,790.00	
GARC Area 2	**85%**	**MN -2020**	**IL - 2021**	**NA**
Cropland	**$ 5,835.00**	$ 5,000.00	$ 5,400.00	
Non-Crop Pasture and Pasture-like	**$ 2,282.00**	$ 2,565.00	$ 3,400.00	
Non-Crop Timber and Timber-like	**$ 1,802.00**	$ 2,565.00	$ 3,400.00	
GARC Area 3	**85%**	**MN -2020**	**N/A**	**N/A**
Cropland	**$ 6,086.00**	$ 5,000.00		
Non-Crop Pasture and Pasture-like	**$ 2,325.00**	$ 2,565.00		
Non-Crop Timber and Timber-like	**$ 1,628.00**	$ 2,565.00		
GARC Area 4	**85%**	**MN -2020**	**SD - 2020**	**NA**
Cropland	**$ 6,656.00**	$ 5,000.00	$ 5,468.00	
Non-Crop Pasture and Pasture-like	**$ 2,707.00**	$ 2,565.00	$ 1,269.00	
Non-Crop Timber and Timber-like	**$ 1,543.00**	$ 2,565.00	$ 1,269.00	
GARC Area 5	**85%**	**NE- 2021**	**MO - 2019**	**IL - 2021**
Cropland	**$ 5,517.00**	Appraisals	$ 4,057.00	$ 5,400.00
Non-Crop Pasture and Pasture-like	**$ 2,678.00**	Appraisals	$ 2,250.00	$ 3,400.00
Non-Crop Timber and Timber-like	**$ 2,516.00**	Appraisals	$ 2,250.00	$ 3,400.00

Crop Values.
within 20%
greater than 20%

Date Process Reviewed With State Technical Committee	Date Certified by StateTechCom		Date Certified by State Consv.	
GARC Regions	**Cropland and non-crop are $/acre**	**Cropland and non-crop are $/acre**	**Cropland and non-crop are $/acre**	**Cropland and non-crop are $/acre**
Cropland/CRP	**2020**	**2021**	**2020**	**2021**
ACEP-WRE and EWP-FPE	**AWMA**	**AWMA**	**GARC**	**GARC**
GARC Area 1	FMV	FMV	**85%**	**85%**
Cropland	$ 6,020.00	$ 6,300.00	**$ 5,117.00**	**$ 5,355.00**
Non-Crop Pasture and Pasture-like	$ 2,970.00	$ 3,090.00	**$ 2,525.00**	**$ 2,627.00**
Non-Crop Timber and Timber-like	$ 1,820.00	$ 2,110.00	**$ 1,547.00**	**$ 1,794.00**
GARC Area 2	FMV	FMV	**85%**	**85%**
Cropland	$ 6,725.00	$ 6,865.00	**$ 5,716.00**	**$ 5,835.00**
Non-Crop Pasture and Pasture-like	$ 2,680.00	$ 2,685.00	**$ 2,278.00**	**$ 2,282.00**
Non-Crop Timber and Timber-like	$ 2,165.00	$ 2,120.00	**$ 1,840.00**	**$ 1,802.00**
GARC Area 3	FMV	FMV	**85%**	**85%**
Cropland	$ 7,100.00	$ 7,160.00	**$ 6,035.00**	**$ 6,086.00**
Non-Crop Pasture and Pasture-like	$ 2,670.00	$ 2,735.00	**$ 2,270.00**	**$ 2,325.00**
Non-Crop Timber and Timber-like	$ 1,970.00	$ 1,915.00	**$ 1,675.00**	**$ 1,628.00**
GARC Area 4	FMV	FMV	**85%**	**85%**
Cropland	$ 7,870.00	$ 7,830.00	**$ 6,690.00**	**$ 6,656.00**
Non-Crop Pasture and Pasture-like	$ 2,880.00	$ 3,185.00	**$ 2,448.00**	**$ 2,707.00**
Non-Crop Timber and Timber-like	$ 1,865.00	$ 1,815.00	**$ 1,585.00**	**$ 1,543.00**
GARC Area 5	FMV	FMV	**85%**	**85%**
Cropland	$ 5,900.00	$ 6,490.00	**$ 5,015.00**	**$ 5,517.00**
Non-Crop Pasture and Pasture-like	$ 2,935.00	$ 3,150.00	**$ 2,495.00**	**$ 2,678.00**
Non-Crop Timber and Timber-like	$ 2,475.00	$ 2,960.00	**$ 2,104.00**	**$ 2,516.00**
	Residual Justification: . A15% residual was used and resulted in about a 10% dropout rate. The State Technical Committee recommended that NRCS use the 15% residual amount for 2018. The 15% residual value is defendable using current sales of parcels witih WRP or other USDA easements encumbering the land.			

DRAFT

Iowa ACEP-WRE
Geographic Area Rate Caps (GARC) - FY21



Legend

FY21 IA GARC Regions

GARC Region

- Region 1
- Region 2
- Region 3
- Region 4
- Region 5

United States Department of Agriculture

Natural Resources Conservation Service

December 17, 2020

Iowa NRCS State Technical Committee Update

Regional Conservation Partnership Program – We currently have 3 new classic RCPP agreements in development, which should be implemented by late winter. We also have an Alternative Funding Arrangement RCPP agreement which is also under development and a RCPP Renewal to be initiated in early spring.

EWP Recovery – Th Emergency Watershed Protection Recovery program has obligated over $15 Million to 123 Damage Survey Reports that have transpired into 53 agreements with county entities and expending a little over $7 Million so far.

IPC and State CIG – The Request For Funding announcements are being prepared for the Iowa Partnerships for Conservation grant and the State Conservation Innovation Grants. Budget restrictions may play a pivotal role in the offering of these grants.

WFPO – We have two new Watershed Flood Prevention Operation agreements currently being developed for watershed planning. All future WFPO opportunities will be required to first have a Preliminary Investigation Report completed at the discretion of the State Conservationist.